



Understanding Changes in Employees' identification and Professional Identity

The Case of Teachers in Higher Vocational Education in the Netherlands

Max Aangenendt

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Chapter 1

different

Introduction

■ 1.1. Background of the research

As organisations are challenged to keep up with the changing environmental demands (Volberda, van der Weerdt, Verwaal, Stienstra & Verdu, 2012) the understanding of how to match organisational demands to individual qualifications is crucial in order to explain, enhance and guard organisations- and employees' development and productivity (Paauwe, 2008; Jiang, Lepak, Hu & Baer, 2012; Shin & Konrad, 2014). This is of exceptional relevance in contexts where employees form the most important production factor, such as in knowledge- intensive, service- and educational institutions. It is the quality and flexibility of the workforce that is the key factor for organisations in addressing the turmoil of globalization and technological developments (Alvesson, 2000; Alvesson & Karreman, 2007; OECD, 2008).

This applies to institutions for Higher Education (HE) in particular, as these are the cornerstones of the national educational systems and these institutions are faced with new developments and demands on a wide scale. The challenges resulting from globalization, technological innovation, demands for accountability, civic and regional development and rapidly changing professional qualifications within professions are but a few of the issues for which new responses are needed (Nussbaum, 1997; OECD, 2008, 2010; Rienties, Brouwer, Lygo-Baker, 2013; Cummings & Shin, 2014; van Dusen, 2014). Changing societal demands seem to accompany the educational sector more permanently than in former times; there is now a continual impetus for educational reform at both the institutional and at the individual level (Boyd & King, 1977; Gardner, 1995; Marginson, 2006; OECD, 2010; Bleiklie & Michelsen, 2013). A recent worldwide comparative study (Shin & Cummings, 2014) on systems of HE showed that although there are differences in institutionalization in educational sectors across nations, for example such as in the Netherlands (Weert & vd Knaap, 2014), in the UK (Locke, 2013) and in South Korea (Shin, 2011), the increased societal dynamic is indeed a global phenomenon, which poses challenges to the adaptivity of the workforces of these institutions (Kessels & Ehlen, 2006; OECD, 2008, 2010; Teichler, Arimoto & Cummings, 2013; Shin & Cummings, 2014).

Against this background, the insight that employees develop a certain 'professional identity', which defines the 'me' in the context of their study, work and career, has drawn the attention of many scholars (Beijaard, Verloop & Meijer, 2004; Cornelissen, Haslam & Balmer, 2007; Ashfort, Harrison & Corley, 2008). Several studies have shown that employees' identity provides guidance to their professional lives and is linked to employees' organisational behaviour (Rousseau, 1998; Alvesson, 2000; Christ & van

Dick, 2003; Haslam, 2004; van Dick, Grojean, Christ & Wieseke, 2006a; Ullrich, Wieseke, Christ, Schulze & van Dick, 2007; Ashforth et al., 2008; Canrinus, Helms-Lorenz, Beijgaard, Buitink & Hofman, 2012; Moss, Gibson & Dollarhide, 2014).

In the current study, we will call upon the so-called Social Identity approach to capture teachers' self-understanding in terms of their identification with relevant foci in the context of work and career (Tajfel, 1978; Tajfel & Turner, 1987; Haslam, 2004; Ellemers, Haslam, Platow & van Knippenberg, 2003). In this approach, identifications are seen to form the social identity of the individual; in other words the part of one's identity that stems from the adherence and membership to social groups, such as organisational- and occupational sub-collectives (Tajfel, 1978; Haslam, 2004). One of the major contributions of the Social Identity approach has become known as the 'identity matching principle', proclaiming that employees' behaviour is strongly related to the foci he or she identifies with most (Ullrich et al., 2007). Although research on the determinants and consequences of various organisational- and occupational foci of identification is abundant, several reviews indicate that two research gaps have yet to be addressed (Haslam, 2004; Ullrich et al., 2007; Ashforth et al., 2008; He & Brown, 2013). One call is to focus on changes in employees' identifications, clarifying the processes through which they emerge and shift over time (Ashforth et al., 2008; He & Brown, 2013). A second call is to investigate the issue of 'identity complexity', because little is known about how multi-group membership is integrated and evolves into the higher order social identity of employees (Roccas & Brewer, 2002; Ashforth et al., 2008).

General aims

Research on the process and antecedents of changes within the professional self-understanding of employees, seems imperative to grasp the opportunities for organisations to cope with changing societal demands. Still, in the educational sector, research on teachers' foci of identification has been scarce, focusing on a limited set of foci primarily within secondary education (van Dick & Wagner, 2002; Christ & van Dick, 2003; Rhodes, 2006) and within research universities (Collinson, 2004; Jones & Volpe, 2011; Shin, 2011). To our knowledge, no empirical studies are known in which the full range of the conceivable foci of the workforce of an educational institution, for instance in the context of a university of applied sciences, has been systematically delineated.

This thesis aims to contribute to the understanding of changes in identifications and in the professional identity of teachers in HE by investigating the prominent foci of identification, their mix in higher-order social identities and the factors that are involved in the change of these professional self-definitions at the intra-individual level. The studies purpose is to map the arena in which organisational- and individual strategies meet, how changes at the intra-individual level relate to management and HRM

interventions, contribute to their knowledge-base, and to examine the opportunities to provide strategic support for the continuous reform within educational institutions (Shin, 2011; Bednall, Sanders & Runhaar, 2014). The overall research question of this study is formulated as:

What are the antecedents and consequences of changes in the foci of identification and their mixes in the professional identities of teachers in Higher Education?

In the following section, the theoretical framework upon which the studies in this thesis are based will be elaborated upon. Thereafter a recapitulation of the research gaps, the final overall problem statement and the specific research questions that guide the four studies will be presented. Next an overview of the four studies is given, whereupon the methodology and the data sources of each of the studies is described. After a discussion of the theoretical and practical relevance of the studies and the thesis as a whole, this chapter concludes with an overview of all the chapters in this dissertation.

■ 1.2. Theoretical background

This section starts with the introduction of the key concepts 'identification' and 'professional identity'. Next, the perspectives on changes in employees' professional identification are presented, from which the organisational- and personal factors are drawn that guide the investigation of the process of change in employee identifications in this thesis.

1.2.1. Employees' identifications and professional identity

Social Identity Theory (SIT) and Social Categorization Theory (SCT) are two complementary building blocks of what has been called the Social Identity approach (van Dick, Christ, Stellmacher, Wagner, Ahlswede, Grubba, Hauptmeier, Hohfeld, Moltzen & Tissington, 2004; Ulrich et al., 2007). SIT proposes that the self-concept of an individual includes membership and adherence to social groups, resulting in what has been labelled a 'social identity'. According to the founders of SIT (Tajfel, 1978; Tajfel & Turner, 1987), the theory's basic proposition is that "social identification with a group involves the incorporation of the groups' norms and values into the individual's self-concept" (van Dick et al., 2004: 352). SCT on the other hand, proposes that individuals use mental schemata to categorize themselves and relevant others, for instance with regard to gender, age, profession and that an individual's sense of belonging is activated by the salience of a specific group in a given situation (van Dick et al., 2004).

When reasoning from the Social Identity approach, the notions of 'personal identity' and 'social identity' can be distinguished. Personal identity "refers to self-knowledge that derives from the individual's unique attributes" whereas social identity is the "individuals knowledge that he (or she) belongs to certain social groups together with some emotional and value significance ... of this group membership" (Haslam, 2004: 21). "Social identification, therefore, is the perception of oneness with or belongingness to some human aggregate" (Ashforth & Mael, 1989: 21). A sizeable set of social aggregates or foci can be relevant for employees, as the "individual's social identity may be derived not only from the organization, but also from his or her work group, department, union, lunch group, age cohort, fast-track group, and so on." (Ashforth et al., 1989: 22)".

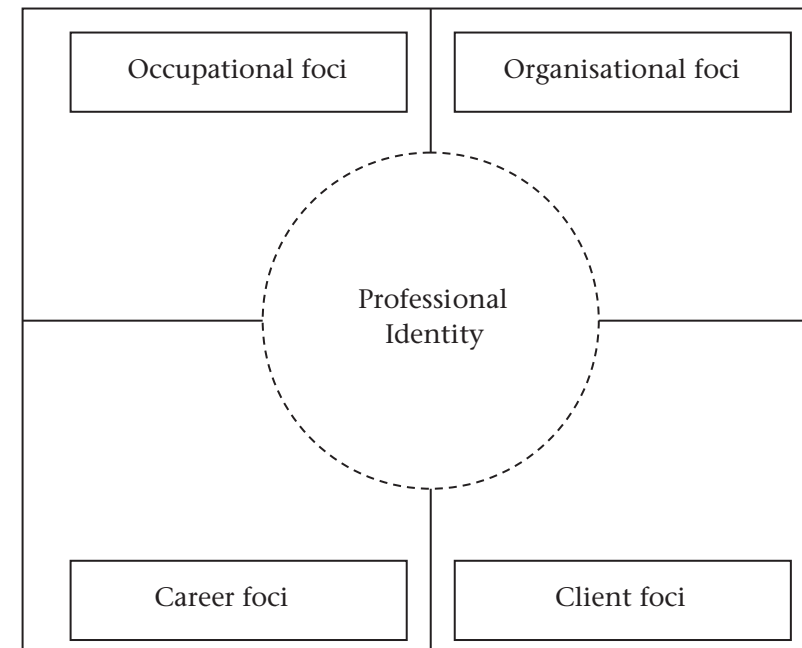
Indeed, research from the field of organizational psychology- and management studies, has provided satisfactory support for the notion that employees themselves do distinguish between foci of identification (Alvesson, 2000; Haslam, 2004; van Dick et al., 2004; Riketta, 2005; van Dick et al., 2006b; Ashforth et al., 2008; Chen, Chi & Friedman, 2013). Employees have been found to identify with the organisation, with the occupation, with clients and with the personal career. Further fine graining reveals organisational sub-collectives that are also identified with, such as departments, teams, workgroups, different locations, and various occupational roles (Scott, 1977; Kanter, 1989; Scott & Lane, 2000; van Knippenberg & van Schie, 2000; Haslam, 2004; van Dick et al., 2002, 2004, 2006b; Meyer, Becker & van Dick, 2006; Ashforth et al., 2008; Edwards & Peccei, 2010; Millward & Haslam, 2013; Chen et al., 2013). The variety of employees' foci of identification, their antecedents and the consequences for employees' organisational behaviour has been depicted in several meta-studies and reviews (Haslam, 2004; Riketta, 2005; Ashforth et al., 2008; He & Brown, 2013).

However, with regards to the concept of 'professional identity', several reviews have shown that the variety in conceptualizations of professional identity is abundant and has been widely proliferated (Beijaard et al., 2004; Ashforth et al., 2008; Trede, Macklin & Bridges, 2012). What is missing is a shared and stringent empirical foundation and this has resulted in the fact the "professional identity" is not necessarily perceived as a beneficial or useful concept (Beijaard et al., 2004; Ashforth et al., 2008; Trede et al., 2012). This diversity came about in part due to scholars' use of a variety of theoretical perspectives through which to understand and explain the concept (Pillen, Beijaard & Brok, 2013) – perspectives such as: social constructionist (Dialogical Self Theory), hermeneutic phenomenological, narrative and more functionalist (SCT/SIT) paradigms (Kelchtermans & Ballet, 2002; Ashforth et al., 2008; Akkerman & Meijer, 2011; Volkmann & Anderson, 1998; Trede et al., 2012). Another source of the diversity in the conceptualizations of professional identity, stems from the contextual variation of the studies. The "development of a professional identity" has for instance been presented as the goal of a initial education program to initiate newcomers in a profession (Hallier

& Summers, 2010; van Rijswijk, Akkerman & Koster, 2013; Pillen et al., 2013; Liddell, Wilson, Pasquesi, Hirschy, Boyle, 2014), as a developmental task of professional identity formation in study- and career guidance (Meijers & Lengelle, 2012) and as an ongoing process of the professional identity formation during the career (Moss et al., 2014), amongst other aims.

Following the call to address this multiplicity and "confusion of tongues" (Beijaard et al., 2004; Ashforth et al., 2008), in this thesis, a functionalistic perspective is chosen so that both the call to address social identity complexity (Roccas & Brewer, 2002) and the call to develop "more parsimonious models of identification that incorporate multiple foci" (Ashforth et al., 2008: 360) can be addressed in tandem. In this way and for this context, the professional identity of a teacher can be regarded as an overarching higher-order social identity and will be defined as 'a mix of identifications with a selection of relevant foci in the context of work and the career'. Figure 1 is drawn to illustrate the concept of professional identity that is used here. The positioning of the four categories in the figure does not imply any underlying dimension, but is at random.

Figure 1. *Professional Identity, A Social Identity approach.*



1.2.2. Perspectives on changed identification in the current study

As this thesis is dedicated to mapping the arena in which organisational- and individual strategies meet with regards to the process of change in teachers' set of professional identifications and to investigate the effects of employees' initial identification, with an eye to identify links between HR-tactics and employee outcomes, this section introduces the perspectives together with the derived concepts that guide the investigation of the change process.

1.2.2.1. Understanding changed identification as employees' response to HRM tactics

As organisations seek to attract and maintain a highly-qualified, well-trained and motivated workforce to achieve their strategic goals, the focus on expanding the role of Human Resources Management (HRM) is still rising (Kaufman, 2007; Boon, Den Hartog, Boselie & Paauwe, 2011; Jiang et al., 2012; Bednall, Sanders & Runhaar, 2014). Various scholars have proposed that HRM activities have the potential to influence employees' attitudes and behaviours, including identifications (Paauwe, 2008) and organizational performance (Jiang et al., 2012; Shin & Konrad, 2014). At the individual level, HRM tactics are considered to be "instrumental in constituting and sustaining the identity projects of the employees (...)" for they "(...) concern efforts of constructing identity of individuals within the frame of organizational identity and of HRM providing a facilitating and controlling structure for these projects" (Alvesson et al., 2007: 721). From studies on organisational control of employee identification in knowledge-intensive firms, it is clear that next to the technocratic, (e.g. -hard- organisational control arrangements such as the performance appraisal system, hierarchical structure, regulated career paths, feedback procedure and work methodology), it is the -soft- organisational control that is executed through group orientations and expectations that communicates meaning and provides strong cues for employees to adopt a specific social identity (Karreman & Alvesson, 2004). Indeed, employees' identification has been linked to the usage of HR-tactics in organisations (Alvesson et al., 2007; Paauwe, 2008; Peters, Haslam, Ryan & Fonseca, 2013). In order to communicate these organisational demands, a wide range of HR-tactics has been developed (Boselie, Dietz & Boon, 2005). Among these tactics, procedures for introducing newcomers to the organisation and the use of systems for performance appraisal, aimed at the established workforce, are considered the most influential (Boselie et al., 2005).

1.2.2.2. Understanding changed identification as a response to supervisory support

There is accumulating evidence that the role of the line-manager in the implementation of HR-tactics is crucial in understanding its effects (Nehles, van Riemsdijk, Kok & Looise, 2006; Purcell & Hutchinson, 2007; Guest, 2011; Spence & Keeping, 2010 & 2011; Alfes, Truss, Soane, Rees & Gatenby, 2013). More specifically, research has provided substantial empirical support for the link between aspects of supervisory behavior, such as applying procedural justice in the application of HR-tactics and providing feedback, and the strength of employees' organisational- and occupational identification (Rhodes, 2006; Collinson, 2004; de Cremer, van Dijke & Bos, 2006; Loi, Chan & Lamb, 2013). Research springing from Leader-Member Exchange theory (LMX) has underpinned the importance of the quality of the leader-member dyad in reducing "the uncertainty of employees about their duties and responsibilities", and in contributing to role clarity (Hsiung & Tsai, 2009: 95). In line with the conceptualization of job definition as a subjective and socially construed process (Rousseau, 1998), Hsiung and Tsai (2009) summarized the evidence for the proposition that high-quality LMX would reduce the level of role ambiguity and would contribute to role clarity (Hsiung et al., 2009: 95). Their research provided support for the linkage between LMX and congruency between employee's and supervisor's job descriptions and showed that discrepancy in job definition is reduced with high-quality LMX, therewith putting leadership behavior forward as a potential trigger for changes in employees' identification. Hence, with regard to the explanation of changes in teachers' identifications, the concept of supportive leadership is interesting as it represents an important aspect of the quality of the leader-follower relationship (Schriesheim & Cogliser, 2009; Schyns & Day, 2010) and has been conceptualised as one of the key dimensions of transformational leadership (Rafferty & Griffin, 2004 & 2006).

1.2.2.3. Understanding changed identification as the result of newcomers' deliberate activity

For newcomers entering an organisation, the changes in employees' identification have been labeled as outcomes of a socialization process: "the process by which the goals of the organisation and those of the individual become increasingly integrated and congruent" (Hall, Schneider & Nygren, 1970: 176). Meta-studies underpin this proposition by portraying the widespread use of introduction programs and corresponding socialization tactics that organisations develop and deliver to their new employees (Arbeits et al., 2001; Bauer, Bodner, Erdogan, Truxillo, & Tucker, 2007; de Cooman, de Gieter, Pepermans, Hermans, Du Bois, Cares & Jegers, 2009; Kammeyer-Mueller, Wanberg, Rubenstein & Song, 2013). In general these organisational tactics

are aimed at increasing employees' organisational and occupational identification and to contribute to the bond or 'fit' between employee and relevant sub-collectives within the organization (Kristoff-Brown, Zimmerman & Johnson, 2005; Ashforth, Sluss & Harrison, 2007; Yang, Levine, Smith, Ispas, Rossi, 2008; Saks & Gruman, 2011). Identification and fit are important because numerous studies have linked both high identification and strong experience of person-to-organization (P-O) fit with various beneficial employee outcomes, such as: an intention to stay, well-being and work engagement, pro-social organisational citizenship behaviors and job satisfaction (Boon et al., 2011; Cooper-Thomas, Paterson, Stadler & Saks, 2014). Although in the past, research was pre-occupied with measuring the impact of organisational tactics that were deployed, recent research on effectiveness of socialization tactics has turned from the examination of individual characteristics to the investigation of the role of the employee as an active agent – in other words, focusing on employees' pro-active behavior. Nowadays research has shown that newcomers can influence their accommodation, for instance they can accelerate and optimize their socialization process by behaving pro-actively (Cooper-Thomas et al., 2014).

In this perspective on change, it is clear that teachers' own deliberate activities just before and during organisational entry are relevant phenomena through which the process of change may be studied. Following this avenue of research, the concept of 'career competency' can serve as an indicator of employees' activity in the process of a career transition. Career competencies refer to the deliberate activities that individuals use to navigate their career, such as: reflection on career qualities, reflection on career motives and work exploration (Kuijpers & Scheerens, 2006a; Kuijpers, Schyns & Scheerens, 2006b; Kuijpers & Meijers, 2012; Meijers, Kuijpers & Gundy, 2014). A second indicator for teachers' activity in the process of a career transition can be found in the concept of 'customization strategy'. Customization strategies refer to the strategies that individuals can use in the process of balancing their professional identification with the organizational demands made upon them in a new job (Pratt, Rockmann & Kaufmann, 2006); the strategies include terms such as identity splinting, identity patching and identity enriching, which will be explained in greater detail in Chapter 4.

1.2.2.4. Understanding changed identification as an employee's individual response to reduce discrepancy between self definitions and organisational demands

The process of change in identification has also been regarded as a response of the employee to a situation wherein a discrepancy is experienced between the personal professional self-definitions and demands made by the organization. Based upon an

extensive discussion of the commonalities and differences in identification research, Ashforth, Harrison and Corley (2008) present discrepancies between the employee and the organization as phenomena that can impact the individuals' sense-making behavior, which can then lead to change in identification (Ashforth et al., 2008). Considering that employees strive to gain and hold on to a certain fit between their set of professional identifications and organisational demands, these researchers proposed that the experience of a discrepancy is a cue that triggers seekership behaviour in employees (Ashforth et al., 2008). From the perspective of the 'process model of identification', changes in employees' identifications can be understood as an individual response to "experienced identity deficits" (Pratt, 2000; Foreman & Whetten, 2001; Alvesson & Willmott, 2002; Alvesson et al., 2007; Ashforth et al., 2008: 342). What follow from this line of reasoning, is that professional-identity fit, a specific form of values congruence between the individual and the organisation, can serve to explain changes in teachers' identifications.

1.2.2.5. Understanding employees' pre-existing identifications as predictor of the effects of a performance appraisal system

Following calls to examine the effect of employees' characteristics and attitudes as this relates to HR activities and employee outcomes (Paauwe, 2008; Boon et al., 2011), it seems appropriate to investigate the role of pre-existent identifications as an imaginable intervening variable in the explanation of the effect of HR tactics on teacher outcomes (Van Rijn, Yang & Sanders, 2013; Van Rijn, 2014). From the variety of HR tactics, performance appraisal is taken as a model, for it is an HR tactic common in most educational institutions and have been linked to ongoing professional development (Bednall et al., 2014). Performance appraisal has generally been described as "an evaluative process whereby managers rate and deliver feedback regarding employees' performance" (Spence & Keeping, 2011: 85). Performance-appraisal systems are widely applied within performance enhancement programs, career-development programs and programs to support the professional development of the workforce (Barnhart, 1987; Paauwe, 2008; Spence & Keeping, 2011; Bednall et al., 2014). Considering that systems for performance appraisal vary greatly across organisations, they can be best described as a bundle of HR practices and techniques (Boselie, 2005), that consist of multiple components which can be tailored to the strategic needs of the organisation (De Nisi & Pritchard, 2006). Research on the process of performance appraisal has shown that next to the design-quality in terms of strategic fit of its components with the organisation, it is the actual implementation of the procedure as intended that is crucial in terms of influencing employees' behaviour (Alfes et al., 2013; Bos-Nehles, van Riemsdijk, & Looise, 2013).

■ 1.3. Research gaps and problem statement

The main purpose of the present research is to contribute to a better understanding of the emergence and change of employees' professional identifications amongst teachers in HE. This dissertation will address four research gaps. The first gap is the lack of research concerning the foci of identification and their determinants that are relevant for this specific sample of employees (teachers in HE). The second gap deals with the need to understand social-identity complexity and the call for a conceptual framework for 'professional identity', therewith addressing the ambiguity and variety of conceptualisations of 'professional identity' that currently exists (Roccas et al., 2002; Beijgaard et al., 2004). The third gap to address is the role that teachers' identification can play in the HR-performance link, investigating the role of pre-existent identifications as intervening variables in the explanation of the effect of HR tactics on the intended employee outcomes (Paauwe, 2008; Van Rijn, Yang & Sanders, 2013; Van Rijn, 2014). The fourth gap to address, is the need to understand changes in organisational- and occupational identification over time, investigating the stability and dynamic not only amongst newcomers but also within the established workforce in a given organization over an extended period of time (Ashforth et al., 2008; Eggins, Reynolds & Haslam, 2003; Peters, Haslam, Ryan & Fonseca, 2013).

■ 1.4. Overview of the four studies

The first study concerns the understanding of the concept of professional identity in its search for relevant foci of identification of teachers in the context of HE, the combinations thereof (or "mixes") in professional identities and their determinants. The three corresponding research questions to be addressed here, are:

What are the distinct foci of identification for teachers in Higher Education? (RQ 1); What professional identities, conceptualized as higher order social identities in which identification with foci are clustered, can empirically be distinguished? (RQ 2), and
To what extent is the variance in identification with foci and with professional identities accounted for by career stage and gender? (RQ 3)

In this chapter the theoretical framework of the Social Identity approach is introduced from which various foci of teachers' identification and teachers' professional identity can be conceptualized.

This first study will provide a lens and a procedure through which foci, and mixes thereof in higher order-social identities amongst teachers, can be discerned. It is argued

that this procedure might also be applied to unravel the professional identities of workers in other knowledge-intensive and service institutions and professions. The main theoretical contribution of this study lays in the conceptualisation and test of 'professional identity', grounded within the SIT/SCT theoretical frameworks, thereby addressing its current multiplicity and subsequent "confusion of tongues". To supervisors and HR professionals, this study will provide a sketch of the professional diversity in the profession and does this by depicting the differences and communalities in teachers' self definition, their foci of identification and their professional identity.

The second study addresses the role of employees' identification and leadership support as interaction variables in the link between the HR tactic performance appraisal and the intended employee outcomes. The main research question to be addressed in this chapter is:

What is the linkage between the application of the performance-appraisal system and opportunities for and active consideration of professional development (RQ 4), and
To what extent is this relationship affected by leadership support and employees' identification with the organization, the career and the occupation? (RQ 5).

This study will contribute to the development of evidence-based HR practice in the context of HE, while it examines the role of teachers' organisational-, occupational- and career identification in the link between the application of the performance-appraisal system and professional development. By taking the role of the direct supervisor into account, results could provide guidelines for HR professionals and supervisors to enhance their joint efforts in promoting continuous professional development.

The third study highlights the process of changes in organisational-, occupational- and career identification over a period of four months. The aim of this study is to examine the activities that newcomers perform just before and during the process of organisational entry and up to four months. The main research questions that guide this study are:

What kind of changes in employees' organisational-, occupational- and career identification can be observed during the first four months of organisational entry? (RQ6), To what extent can these changes be explained by the career competencies that employees use, just before organisational entry? (RQ 7) and
How does changed employee identification unfold in terms of the customization processes that can be distinguished in the narratives? (RQ 8).

This study will add to our understanding of the processes involved in changing identifications amongst organisational newcomers, by focussing on the employee as an actor

with his/her own goals and strategies and extending the use of the concepts 'career competencies' and 'customization strategies' to newcomers entering the organisation. HR professionals and supervisors could benefit from the insights on teachers' activity and response to the perceived organisational demands in the fine-tuning of HR-tactics targeted at new employees, such as procedures for attracting and selecting new staff and the creation and implementation of introduction programs.

The fourth study addresses the process of change in organisational- and occupational identification within the current workforce over a time frame of two years. The aim of the study is to contribute to the knowledge base of changed employee identification by testing the 'Process model of identification', that was developed and based upon a systematic review (Ashforth, Harrison & Corley, 2008). For this purpose, the main implications of the process model of identification are extracted and put to the test. The research question is:

To what extent do professional identity fit and leadership support and their interaction explain changes in employees' organisational- and occupational identification? (RQ 9).

The approach selected to test Ashforth's model is a comparative approach focused on both organisational and occupational identification and investigates changes within a time frame of two years. The observed changes in organisational and occupational identification within the workforce studied over the two-year period, will be explained by highlighting the role of the direct supervisor and the discrepancy between the set of employees' identifications and the organisational demands. The value of the contributions of this study can be attributed to the comparative nature of the approach and the longer time frame studied. The results should deliver ideas for institutions about how to influence the organisational- and occupational identification of their workforce.

■ 1.5. Research methods and data sources used in the studies

To answer the different questions posed, the four studies were conducted in which different qualitative and quantitative research methods were used. In order to address the first, second and third research questions, a mixed-method research design was used, which included policy research, in-depth interviews, a card sorting technique and an employee survey. The fourth and fifth research questions were answered using a single-survey design. The research questions six, seven and eight were addressed using a mixed-method two-wave research design, utilizing two surveys with a time lag of four months together with the employee's résumé, application letter and the transcript of an in-depth interview conducted after nine months on the job. Finally, research

question nine was addressed using a two-wave design, drawing upon the data collected through two surveys with a time lag of two years. The data sources of the four studies are presented in Table 1 (page 22).

■ 1.6. Relevance of the study

With regards to theoretical relevance, as is indicated above, each of these studies address research gaps in the current knowledgebase within the field of organisational psychology and HRM. The studies also have theoretical relevance in their own right. Taken together, these studies can add to our understanding of the antecedents and the consequences of teachers' identification, while focussing in particular on the processes of change amongst newcomers and within the established workforce and on the roles of HR and supervisory behaviour. With regards to practical relevance, this research will primarily provide a better understanding of the factors that are involved in employees' responsiveness to organisational tactics in the explanation of changes in identification at the intra-individual level. This study will provide information and views upon which guidelines can be made for the use of managerial and HR tactics. This information can support organisational attempts to increase the responsiveness of HE institutions in the context of changing societal demands and enhance the opportunities for educational reform within such organizations.

■ 1.7. Outline of the thesis

As relayed in this introduction, a set of four related studies is presented in this dissertation. The next chapter, Chapter two, contains the mixed-method study on the professional identity of teachers in HE investigating its foci, patterning and determinants. Chapter three reports on the effects of the performance appraisal system on professional development meanwhile zooming in on the role of employees' pre-existent identifications and the role of the direct supervisor as possibly intervening variables. In Chapter four, the two-wave study on changes in organisational, occupational and career identification is presented, wherein the role of career competencies and customization strategies is explored amongst newcomers to the organisation during their first four months of work. Chapter five contains the two-wave study wherein the deductions from Ashforth's process model are put to the test thereby investigating the role of professional identity fit and leadership support on changed organisational and occupational identification over a period of two years. In the sixth chapter, the main results of the four studies are summarized and discussed, followed by a synopsis of the implications for practice and suggestions for future research.

■ TABLE 1

Overview of studies, research questions and data sources

Research questions		Surveys workforce		Interview / CST		
Studies	Research questions	Survey wave 1	Survey wave 2 after two years	Transcript of Interview	Photograph Card-Sort Technique	
Study 1	1, 2, 3	x		x	x	
Study 2	4, 5	x				
Study 3	6, 7, 8			x		
Study 4	9	x	x			
	N	561	574	12	11	

Note. The numbers of respondent presented here are bruto. The exact number enrolled in

	Surveys newcomers		HRM file	
	Survey wave 1 before start	Survey wave 2 after four months	Résumé	Application Letter
	x	x	x	x
	60	41	29	18

each analysis differ and are depicted in each Chapter.

Chapter 2

Professional identity of teachers in Higher Education:
Foci, patterning and determinants ¹

identity

¹ An earlier version of this chapter was presented at the 8th biannual International Conference of the Dutch HRM Network in 2013, Leuven, Belgium.

■ ABSTRACT

In this paper, two studies are presented examining the professional identity of teachers in Higher Education from the Social Identity perspective, by unravelling the foci of identification, the clustering of these foci in higher-order social identities and their antecedents. Applying a mixed-method approach, using triangulation on data obtained through in-depth interviews and a card-sort technique ($N = 12$), Study 1 shows teachers identify with ten distinct foci, covering organisational (sub)collectives, occupational roles, client groups and personal career. The ten foci could be clustered into four clusters: 1. Organisational identification, 2. Teaching professional, meaning identifying with the field of work, expertise and students, 3. Professional teacher, meaning identifying with didactics, society and being a coach, and 4. Personal career and colleagues. Using a survey research design, Study 2 ($N = 538$) underpins the distinctiveness of the ten distinct foci. In line with the results of the qualitative study, factor analyses show satisfactory fit indices for a four-factor model of professional identification consisting of the same four social identities: identification 1. with the organisation, 2. as a teaching professional, 3. as a professional teacher and with 4. colleagues and career. Multiple group CFA reveals no variation in the underlying factor structure of professional identities across gender, organisational- and professional tenure within the workforce. Both linear and quadratic effects of gender and career stage on identification-strength were found. The theoretical and empirical value of the proposed conceptualisation of professional identity is discussed against the background of continuous stimuli for educational reform.

■ INTRODUCTION

More than ever globalisation, competition between nations, and economic crises fuel the ongoing attention paid to the value of the educational system, its structure, its quality and its outcomes (Schwab, 2011; Bleiklie & Michelsen, 2013; Cummings & Shin, 2014). Especially the effectiveness of Higher Education (HE) institutions, as the final keystone of educational systems, is under scrutiny as critical aspects such as accessibility, study success, cost benefit ratios and the quality of graduates are examined (OECD, 2005; Bleiklie et al., 2013; Cummings et al., 2014). These institutions are faced with new developments and demands on a wide scale, for instance the effects of globalization, technological innovation, greater pressure regarding accountability, civic and regional development and the rapidly changing qualifications of professions (Nussbaum, 1997; OECD, 2005; Rienties, Brouwer, Lygo-Baker, 2013; van Dusen, 2014; Cummings & Shin, 2014). This increased pressure on institutions for HE is a worldwide phenomenon (Shin & Cummings, 2014), and means that HE draws more heavily upon the adaptivity and innovativeness of their workforce (OECD, 2005; Kessels & Ehlen, 2006; OECD, 2008; Teichler, Arimoto & Cummings, 2013) – a workforce that is challenged to address and keep up with the calls for continuous educational reform (Shin, 2011; Locke, 2013; Teichler et al., 2013; Shin & Cummings, 2014; Griffioen & de Jong, 2014).

This turbulence is expected to have a continuous impact on teachers' professional lives, permanently challenging a teacher's self definition and leading to questions such as: 'who am I as a teacher?' and 'who do I want to be as a teacher?' and thus requiring an ongoing re-orientation of teachers' professional identity (Beijaard, Meijer & Verloop, 2004; Geijsel & Meijers, 2005; Clarke, Hyde & Drennan, 2013). Self definitions of teachers are important, since meta analyses on students' achievement across educational systems and levels have shown that teachers contribute strongly to the learning outcomes of students, next to student factors such as abilities and motivation (Fraser, Walberg, Welch & Hattie, 1987; Hattie, Biggs & Purdey, 1996; Shin, 2011): "It's what teachers know, do and care about which is very powerful in this learning equation" (Hattie, 2003: 2). Against this background, the insight that employees develop a certain 'professional identity', which defines the 'me' in the context of their study, work and career has gained popularity amongst scholars (Beijaard, Verloop & Meijer, 2004; Cornelissen, Haslam & Balmer, 2007; Ashfort, Harrison & Corley, 2008). Abundant studies have shown that employees' identity in the context of work provides guidance to the professional life and is linked to employees' organisational behaviour (Rousseau, 1998; Alvesson, 2000; Christ & van Dick, 2003; Haslam, 2004; van Dick, Grojean, Christ & Wieseke, 2006a; Ullrich, Wieseke, Christ, Schulze & van Dick, 2007; Ashforth et al., 2008; Canrinus, Helms-Lorenz, Beijaard, Buitink & Hofman, 2012; Moss, Gibson & Dollarhide, 2014). However, in several reviews it is emphasized that

while the use of employees' 'professional identity' has been widely proliferated, its conceptualisations vary strongly (Beijaard et al., 2004; Ashforth et al., 2008; Trede, Macklin & Bridges, 2012; Pillen, Beijaard & den Brok, 2013). As a result of this multiplicity and confusion of tongues, a shared conceptual and stringent empirical foundation is lacking, which takes away from the perception that it is a potentially useful concept with which to examine employee's self-understanding and behavior (Beijaard et al., 2004; Ashforth et al., 2008; Trede et al., 2012).

Regardless of this fact, societal demands calling for innovativeness and continuous educational reform makes research on the professional self understanding of teachers in Higher Education an interesting topic of study for several reasons. First, the quality of evidence-based expectations of the effects of Human Resources Management (HRM) and by extension of managerial interventions on teacher behaviour and teachers' professional development, is preceded by a coherent knowledge base of employees' characteristics such as teachers' professional identity and its determinants (Boselie et al., 2005; Bednall, Sanders & Runhaar, 2014). Secondly, research on employees' foci of identification in the educational sector has been scarce, focused on a limited set of foci of identification and studied mainly within secondary education (van Dick & Wagner, 2002; Christ & van Dick, 2003; Rhodes, 2006) and research universities (Collinson, 2004; Jones & Volpe, 2011; Shin, 2011). Moreover, there are no empirical studies in which the full package of the conceivable foci of the workforce of an educational institution, for instance in the context of a university of applied sciences, is systematically delineated.

The first gap that needs addressing is the lack of research concerning the foci of identification and their determinants that are present within this specific sample of employees (teachers in Higher Education). The second gap relates to the combined call to increase our understanding of social identity complexity and the call to address the ambiguity and variety of conceptualisations of 'professional identity' (Roccas et al., 2002; Beijaard et al., 2004; Ashforth et al., 2008). Therefore, the aim of this paper is to add to the clarification and empirical foundation of the concept of professional identities of teachers in Higher Education by developing and testing a conceptual framework that enables the investigation of their professional identities.

■ A SOCIAL IDENTITY APPROACH TO PROFESSIONAL IDENTITY

Social Identity

In the current study, we draw on Social Identity - and Social Categorization Theory in which employees' self-understanding is understood in terms of employees' identification with relevant foci in the context of work and career (Tajfel, 1978; Tajfel & Turner,

1987; van Dick & Wagner, 2002; van Dick, 2004; Haslam, 2004; Haslam & Ellemers, 2005; Ashforth, Harrison & Corley, 2008; Ellemers, Haslam, Platow & van Knippenberg, 2013). From this perspective, employees' identifications are important and matter because these are linked to their organizational behaviour (Rousseau, 1998; Alvesson, 2000; van Dick et al., 2006a; Haslam, 2004; Ashforth et al., 2008). Abundant meta-analyses have provided support for the 'identity-matching principle' (Ullrich, Wieseke, Christ, Schulze, & van Dick 2007), proposing that employee behaviour is more strongly related to the foci the employee identifies with most (Haslam, 2004; Riketta & van Dick, 2005; Riketta, 2005; van Dick, Becker & Meyer, 2006b; Ashforth et al., 2008).

The concept of 'identity' is generally used to indicate just those unique attributes considered to be distinctive and typical for a particular 'entity' (Cornelissen et al., 2007). "Identity is one of the key foundational concepts helping to explain why people think about their environments the way they do and why people do what they do in those environments" (Ashforth et al., 2008: 334). Indeed, 'identity' is considered a rich and powerful concept for it seems applicable to entities of a different kind, which span multiple levels of analysis, for instance at an individual, group and organizational level (Brown, 2001; Cornelissen et al., 2007). As a result 'identity' has been conceptualized in a variety of ways and levels such as 'personal identity', 'organizational identity', 'corporate identity' and 'social identity' (Cornelissen et al., 2007).

A 'social identity' is considered a specific part of the personal identity (Haslam, 2004) and is defined as "that part of an individual's self-concept which derives from his knowledge of his membership of a social group (or groups) together with the value and emotional significance attached to that membership" (Tajfel, 1978: 63). The concept of social identity "(...) refers to the group category that the individual identifies with: company, division, occupation, gender, nationality, ethnicity, age" (Alvesson, 2000: 1105). In recent years, it is thought that a 'social identity' is not exclusively based on meanings attached to the membership of social collectives (groups or organizations), but is also based on meanings attached to the fulfilment of specific roles in a differentiated society (van Dick, Wagner, Stellmacher & Christ, 2004; Meyer, Becker & van Dick, 2006; Ashforth et al., 2008).

Therefore 'identification' is defined as "the process by which people attach themselves to groups, organizations and roles; by viewing a collective's or role's essence as self defining" (Ashforth et al., 2008: 329). Identifications form the social identity of the individual, which can be described as the part of one's identity that stems from the adherence and membership of social groups, such as organisational- and occupational sub-collectives (Tajfel, 1978; Haslam, 2004).

Foci of identification

Research on the distinctiveness of foci of social identification, from the field of organizational psychology and management studies, has provided satisfactory support for the notion that employees themselves do distinguish between foci of identification (Alvesson, 2000; Haslam, 2004; van Dick et al., 2004; van Dick et al., 2006b; Ashforth et al., 2008; Chen, Chi & Friedman, 2013). However, studies report different combinations of foci of employee identification that are relevant for specific groups of employees in specific settings. Scott, Corman and Cheney (1998) suggested that to most organizational members four categories of foci of identification are important: 1. organization, 2. work group, 3. occupation and 4. the individual self. However, in research on employees' identification within knowledge-intensive companies, Alvesson (2000) combined organization and work group in one focus, transformed the individual self into two foci 1) career and 2) personal (entrepreneurship) and added 'client' as a new object of identification for employees. And for employees in secondary education, empirical evidence was found to distinguish between three foci of teacher identification: school (organization), occupation and career, leaving client and work group out (Van Dick & Wagner, 2002). In 2004 they added 'team' (work group) as a fourth focus of identification and found empirical support for their proposition that organization, work group, occupation and career can be differentiated (van Dick et al., 2004).

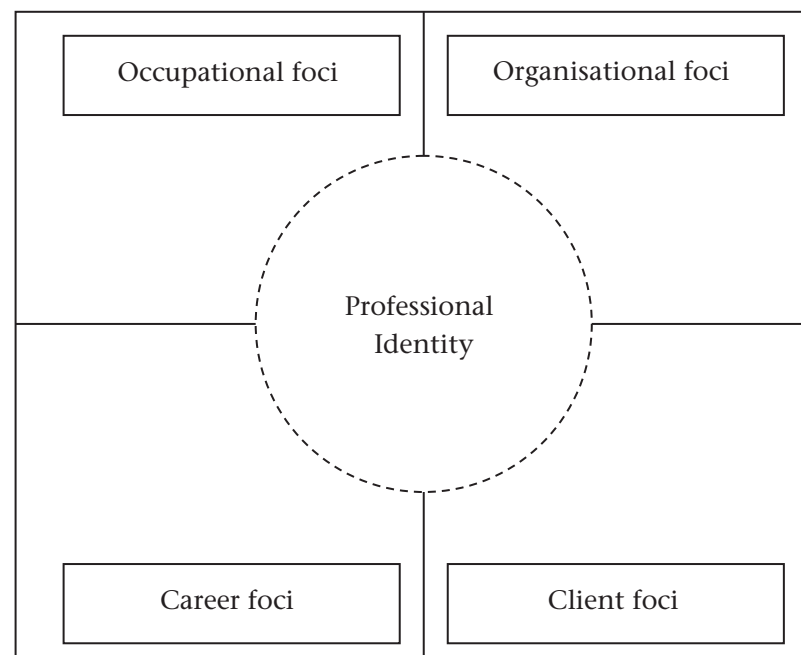
In addition, further diversification has been provided for these foci. Organizational identification has been differentiated into sub-foci connected to a variety of organizational sub-collectives (sub-organizations, teams or workgroups, different locations), because organizations in the (inter)national arena are multi-layered and multi-faceted entities (Scott, 1977; Ashforth & Mael, 1989; Scott & Lane, 2000; van Knippenberg & van Schie, 2000; van Dick & Wagner, 2002; Edwards & Peccei, 2010; Millward & Haslam, 2013; Chen et al., 2013). Likewise, calls for the diversification of occupational identification into sub-foci have been made (Ashforth et al., 2008) especially for employees working in knowledge-intensive organizations, where professionals are "defined by what they do" (Alvesson, 2000; Pratt, Rockmann & Kaufmann, 2006: 236). Analogously, Kanter's (1989) dual conceptualization of career identity indicates the existence of multiple perspectives within the career identity of an employee. Kanter's first focus is on career development conceptualized as a career path, taking horizontal or vertical career steps across differing roles or functions. The second focus is on career development understood as a continuing in-depth development of competencies within the profession (Kanter, 1989; Patton & McMahon, 2006). Finally, the application of the stakeholder approach (Scott et al., 2000) to client identification (Alvesson, 2000), leads us by analogy to the proposition that next to different sub-foci within the organizational and occupational identification, context-specific clientgroups can be selected that can serve as a distinct focus of identification for employees.

From these studies, it appears that there is some consensus among scholars on the existence of four overall objects of employee identification wherein specific sub-foci can be differentiated (Haslam, 2004; van Knippenberg et al., 2000; van Dick et al., 2004, 2006b; Meyers et al., 2006; Ashforth et al., 2008). These four overall objects of identification are: 1. identification with the organization itself (as a whole and/or sub collectives such as work groups, and colleagues), 2. identification with the occupation (as a whole and/or sub collectives), 3. career identification, and 4. identification with the client group(s).

Professional identity

Employees are connected to multiple relevant others, collectives, stakeholders and roles at a specific level at specific times (Alvesson, 2000; van Dick et al., 2004, 2006b; Ashforth et al., 2008) and can identify with various foci of identification at any given time or situation (Chen et al., 2013). Moreover the causal attribution of employee behaviour to one focus of identification only (Kelley, 1973) neglects the existence and imaginable interactions of multiple foci. This brings Ashforth and colleagues to call for the development of "more parsimonious models of identification that incorporate multiple foci" (Ashforth et al., 2008: 360). Such an approach is provided by Roccas and Brewer (2002) who introduced the concept of 'social identity complexity', the perceived degree of overlap "between groups of which a person is simultaneously a member" (Roccas & Brewer, 2002: 88). This was intended to address the fact that within the social identity of an individual, the various foci of identification for each individual can be ordered, can be in conflict, can be nested, compartmentalized and integrated with one another. It is also meant to account for situations in which individuals experience a sense of membership in multiple in-groups at the same time. Roccas and Brewer (2002, 88) proposed that "when the overlap between multiple in-groups is perceived to be high, the individual maintains a relatively simplified identity structure whereby memberships of different groups converge to form a single in-group identification".

In line and based on this reasoning, we conceptualize the 'professional identity' of an employee in the current study as an overarching social identity, wherein employee's professional self definition is captured by looking at the levels of identification with distinct collectives, stakeholders or roles in the context of work and career (Alvesson, 2000; Roccas et al., 2002; Meyer et al., 2006; Ashforth et al., 2008) and define it as 'a mix of identifications, with a selection of relevant collectives and roles, in the context of work and career'. Figure 1 illustrates this conceptualization of employees' professional identity.

Figure 1. *Professional Identity: A Social Identity approach.*

Determinants of identification

When investigating the foci of identification and their “merge” in professional identities within a particular portion of the workforce, it is important to consider the role of career stage and gender as possible antecedents. Research on stages of career development suggests that family roles, personal needs and interests vary with career stage across the life-cycle (Pratt et al., 2006, Richter et al., 2011) and differ for men and women (Greenhaus, Peng & Allen, 2012). Generally lower levels of employee participation in professional development are found with increasing age (Richter et al., 2011). This explains the special attention paid to the career identification of faculty in their middle years (Baldwin, Lunceford & van der Linden (2005) and in their mid-career (Romano et al., 2004). Next to the conceptualisation of career stage as ‘age group’ (Baldwin et al., 2005), career stage has also been conceptualised as ‘professional tenure’, which has been defined as years of experience in the professional field (Lynn, Cao & Horn, 1996; Richter et al., 2011) and as ‘organisational tenure’, defined as years of being at work within a specific organisation (Romano et al., 2004; Riketta, 2005). Although these aspects of career stage are clearly related, because careers nowadays are regarded as boundary-less (Sullivan, 1999) and progress discontinuously (Lynn et al., 1996), different measures should be used to examine different aspects of career progression (Lynn et al., 1996). Gender-related differences in identification in the context of work

have been reported by Cross and Madson (1997), Ng and Feldman (2008) and recently by Greenhaus, Peng and Allen (2012). Therefore, both career stage and gender deserve further investigation.

Research questions and studies

This brings us to the central theme of our study: the search for relevant foci of identification in the context of Higher Education, the combinations thereof (or “mixes”) in professional identities and its determinants. Our research questions are:

1. ‘What are the distinct foci of identification for teachers in Higher Education?’
2. ‘What professional identities, conceptualized as higher order social identities in which identification with foci are clustered, can empirically be distinguished?’
3. ‘To what extent is the variance in identification with foci and with professional identities accounted for by career stage and gender?’

The above line of reasoning leads us to a set of propositions that are addressed in two subsequent studies. In the first qualitative study, we explore the foci of identification among teachers in higher education, their distinctiveness, the variety in the adherence to the foci and their possible patterning in a mix of higher-order professional identities. In the second quantitative study, we put the propositions – derived from the qualitative study – to the test and pay attention to the antecedents career stage and gender.

■ STUDY 1

Study 1 is a qualitative mixed-method study aimed at determining the conceivable foci of identification of teachers in higher education, using triangulation on data obtained through in-depth interviews and a card-sorting technique. Self definitions as they are expressed by teachers themselves in interviews are examined and compared with foci of organisational-, occupational-, career- and client- identification that are derived from a card-sorting technique in order to assess their content validity, distinctiveness and patterning.

■ METHOD

Context of the study

Since nations differ in their national policies regarding higher education and its forthcoming institutionalization in organizations (Schimank & Winnes, 2000; Weert & vd Knaap, 2013; Shin & Cummings, 2014), the specific set of foci that are relevant for employees in Higher Education can vary across national educational policy arena’s.

Considering the purposes of the study and while noting existing differences between nations within the educational sector (Shin, 2011; Locke, 2013; Weert et al., 2013), in this study a mixed-method research design is applied to investigate the current self definitions within the workforce of one institution in one country. Namely at a University of Applied Sciences in the Netherlands², which provides 46 full-time bachelors' and seven masters' degree programs to 26.000 students, representing a nationwide market share of 5%.

Sample and procedure

Participants were selected from a sample of 18 employees participating in a career study; at that time, these individuals had been employed for the last ten months at the university. Maximal coverage of professional tenure was ensured by ranking the participants in the career study according to their previous experience as a teacher and randomly selecting nine teachers. In addition three teachers with no former experience in the job were added. All twelve invited teachers agreed to participate in this study, which represented a sufficient sample size for interviews and case-study research based upon experiment-based guidelines for qualitative sampling (Guest, Bunce & Johnson, 2006). Participants were between 27 and 53 years of age (Mean = 37.2; SD = 7.9); their previous experience as teachers in other institutions varied from no experience to 20 years (Mean = 3.33; SD = 6.2); seven teachers had no previous teaching experience; four of the participants were men. All interviews took place face-to-face except for one, which was done by phone with a teacher who had left the organization. All interviews were recorded and fully transcribed. Interviews varied in duration from 60 to 90 minutes. The phone interview was excluded from further analyses, for no photographs of card patterns were available for that particular teacher, therefore the available dataset was made up of eleven complete interview transcripts and photographs of the cards patterns.

Instruments

The interview procedure was developed combining the methodology and accompanying guidelines of semi structured in-depth interviews (King, 2004) and the Card Sort Technique, an elicited response technique (Jahrami, Marnoch & Grey, 2009). The data collection procedure was pre-tested during two simulation-sessions. The interview procedure consisted of various phases. In the introductory phase, some open questions were put forward to encourage each respondent to tell his/her personal story of being a teacher. By inviting teachers to describe themselves, in this interview phase '*open self definitions*', were collected that were as unaffected by the interviewer as possible (King, 2004; Rees & Nicholson, 2004). With structured open questions such as 'if you think of yourself as a teacher, what words do you have to describe the essence of who you are as

a teacher?' teacher's articulation of the professional self (i.e. '*core self definitions*') were elicited. In addition, a teacher's environment as it related to the presence of various stakeholders and their relative importance for the teacher, were explored with questions like 'what does your environment look like?' and 'with what (or whom) do you feel connected?'. These aspects were addressed before the cards were introduced.

The Card Sort Technique (CST) (Santos, 2006; Jahrami et al., 2009) was used in the next phase of the interview. Ten cards were introduced in the interview, each representing one of the conceivable foci of identification that were extracted from documents regarding the national educational policy arena³, thus taking the contextual variety of foci into account (Shin et al., 2014). Each card represented a statement concerning the self definition of a teacher, describing the 'professional me' in relation to that specific sub collective of the organization, stakeholder or occupational role. Within these descriptions, the object of identification (collective, group or role) was combined with a characteristic activity related to that focus. The statements were written and rewritten in an iterative process; outcomes were discussed with two researchers, one curricular consultant and one HRM consultant. Table 1 shows the self definitions that were printed on each card and their linkage to foci of identification.

Interviewees were invited to rank these ten cards, putting the cards that most resembled their 'professional self' closest to them. Contrary to the regular application of CST (Pratt et al., 2006; Jahrami et al., 2009), individuals were not forced to choose or asked to make a single or one-dimensional ranking of the cards; it was done in a way that explored similarities and patterning of foci. Interviewees were encouraged to create any card pattern they wished, on the condition that their pattern represented their own inner professional world at the moment of the interview. As a consequence, cards could be grouped into clusters of equal importance or put on top of one another if they were considered identical; therefore the distance between cards could vary. Teachers were encouraged to think aloud during the process of re-arranging the cards, which enabled the researchers to follow teachers' thoughts, their individual associations and reasoning. A photograph of the card pattern displayed on the table was taken at the end of each interview fragment. Each photo was considered a self portrait of the interviewee, a condensed summary of the answers, reflecting the teacher's individual patterning of identifications at specific moment in his career. The self definitions of teachers coming from this interview phase were obviously influenced by the card sort assignment; therefore these are considered '*elicited self definitions*'.

² <http://www.verenighogescholen.nl/english>

³ The documents covered the time period of 2005-2010 and were obtained from three sources: 1) official policy and guidelines for higher education as communicated by the Ministry of Education and the Education Inspectorate, 2) policy advice and analyses put forward by the independent Education Council and the National Organisation for Scientific Research. Thirdly, reviews underpinning research programs at the national level and of various research institutes were selected.

Analysis

To prepare the interview transcripts for content analysis, the verbal narratives were entered into the software program ATLAS-TI and partitioned into fragments according to the various phases of the interview procedure. The text fragments that contained self-defining statements by teachers were identified and extracted from the transcripts, analogously to the procedure used by Whaley and Longoria (2009). The extracted text fragments were condensed into the smallest possible meaningful syntactical units, a single sentence or a small group of sentences that represented the 'me' of the respondent (Krippendorff, 1981). Thus three categories of self definitions were extracted from the transcripts: 1. 'open' self definitions, 2. 'core' self definitions and 3. the self definitions that were elicited by the card sort process.

A two-step procedure for content analysis of the interview fragments was executed to assess the content validity of the statements used to measure foci of identification (Schwab, 2005). First a 'fixed' or 'a priori' coding procedure was chosen to determine the resemblance between the freely-uttered self categorizations of teachers and the predefined foci derived from desk research (Stemler, 2001). This top-down content analysis was guided by a coding scheme that included the ten original foci and an open-ended eleventh category for the text fragments in which the teacher mentioned other self definitions. Thus both the '*open self definitions*', and the '*core self definitions*', were examined in order to ascertain whether there were (dis)similarities in connection with the predefined foci. To warrant an independent and reliable coding process, these self definitions were coded by two independent researchers, neither of whom were involved in this research; both were also unfamiliar with the aim of the study (Armstrong, Gosling, Weinman & Marteau, 1997).

Inter-rater reliability of the coding process was assessed with Cohen's Kappa, indicating the level of agreement that exceeded the level of agreement that can be expected only by chance (Warrens, 2008; Stemler, 2001). Because no specific marginal distribution based on a priori reasoning was expected, kappa was calculated with a proportional marginal distribution of agreement by chance (Brennan & Dale, 1981; Perreault & Leigh, 2001). For 71% of the self definitions, both raters gave similar ratings whether the self definition represented one or more of the predefined foci or whether it contained other self-defining information. Interrater agreement on this assignment of self definitions is with Cohen's Kappa of .42 on a moderate level⁴ (Brennan & Dale, 1981; Stemler, 2001).

⁴ Note: Cohen's Kappa was calculated as agreement controlled for chance, controlling for the tendencies of the raters themselves, by using the row and column percentages to calculate the expected agreement. Two other strategies for calculation include: 1) percentage agreement controlled for the expected partitioning based upon theory, and 2) percentage agreement as reflected by the raw percentage agreement solely.

Secondly, a procedure for 'free' or 'emergent' coding was chosen to analyse the content of the remaining self definitions that contained alternative self-defining information (Cassel & Symon, 2004; Mittendorff, den Brok & Beijgaard, 2010). Self definitions were scrutinized and evaluated one by one to categorize content into mutually exclusive categories, giving codes to the connotations of each self definition. This procedure is in line with the grounded theory approach in which categories are derived from observations rather than from theory (Straus & Corbin, 1998; Cassel et al., 2004). Following the reasoning of Armstrong et al. (1997) on the value of using independent raters in qualitative research, the analysis was conducted by the independent researchers (Armstrong et al., 1997). Differences in initial coding were discussed with the first author, interview fragments were re-read with the aim to strive for consensus.

To assess the discriminant validity of the ten foci and their patterning across teachers, a method for qualitative factor analysis was used (Santos, 2006; Jahrami et al., 2009). After calculating the descriptions of the positioning of cards, a hierarchical cluster analysis was conducted to examine whether overarching mutually exclusive clusters or profiles in the foci of identification could be identified. Hierarchical cluster analysis refers to a set of procedures for classification of objects or variables for which no prior assumptions about the underlying structure in the data are known (Punj & Stewart, 1983; Romesburg, 2004). To determine the clusters of cards that show optimal similarity within the cluster while showing optimal differences across clusters, the procedure and method as proposed by Rickards, den Brok and Fisher (2005) and Mittendorff et al. (2011) was followed. Thus Ward's minimum variance clustering method was chosen as the method of analysis in combination with squared Euclidian distance coefficients as a measure for similarity (Rickards et al., 2005; Mittendorff et al., 2011). For this analysis the position of each card on the photographs was coded on a scale from 1-10, reflecting the level of resemblance with personal and professional identity (1 = high, 10 = low). Proportionate scores were given to cards of equal importance. Scores were transformed into a standardised z-score to decrease the impact of possible outliers as recommended by Punj (1983) and Romesburg (2004). To determine the reliability of outcomes, the analysis was repeated with another superior method for clustering 'average linkage', as recommended by Punj et al. (1983) in their review on the use of hierarchical cluster analysis across disciplines (see also Romesburg, 2004).

■ RESULTS

Descriptives

The descriptives of the positioning of cards is shown in Table 2. The average importance of foci for teachers, as can be derived from their respective means, varies from 2.5 (SD=2.01) for identification with the organisation as a whole to 7.7 (SD=2.13) for occupational identification as a coach. Taking the standard deviation as the indicator for the homogeneity of scores across teachers, results show highest homogeneity for identification with the organisation, with the curricular program and identification as a coach (SD < 2.15). The lowest homogeneity across teachers is found for career identification, identification with the field of work and identification with society (SD > 2.9).

Content validity of foci of identification

The results of the fixed coding procedure on 39 'core' - and 107 'open' self definitions, showed that on average, 67% of these self definitions was judged by independent raters to be synonymous to one or more of the ten foci that were presented later in the interview on the cards.

The outcomes of the emergent coding procedure on the 28 self definitions, which could not be considered a representation of one or more of the ten predefined foci, suggests the existence of three supplementary categories of foci. The first forms an expansion of foci of organizational identification; it concerns previous, current and co-employers (five respondents), furthermore family and private life (four respondents) and society in general (one respondent) are important points of reference. Most of the remaining self definitions contain descriptions of teacher's personality or character (six respondents).

Content analysis on the 'open and core self definitions', shows that most teachers describe their own professional identity, '*being me as a teacher*' by using phrases that explicitly contrast themselves with colleagues—specifically with their prior professional experience or with what the organisation asks of them. The following quotes serve as an illustration: "*I am not going to be like some of my colleagues..., they are people who are very enthusiastic about passing knowledge on, for me that is bit of a riddle*" and "*I invest a lot of time in getting to know and develop my field of expertise, but I am not going to spend extra hours with them (students) to study what can be improved about their papers*".

The range of self definitions suggest variations in occupational identification across teachers; some teachers define themselves as experts on content (three respondents) whereas others proclaim that they are not and definitely don't want to be experts on content (three respondents). Others make a distinction between teachers with real expertise and expertise that every teacher can provide and teachers who know how to

get the message across to the students but without any focus on with content of expertise whatsoever. Some teachers make explicitly clear that they feel they are part of the 'real professional world' outside the university or find themselves navigating between differing professional worlds, as opposed to those teachers who have been teaching their entire professional lives.

Analogously, teachers use labels to define themselves within the teaching profession, labels such as "professional teacher", "teaching professional", "trainer" and "coach". These labels convey meaning for teachers: "*there is something in the word well... I am a trainer*" and serve to communicate their identities: "*I also tell my students that I am not a professional teacher, but a teacher in a profession*". Respondents report that they experience status differences and animosity between subgroups of teachers within the team. Two teachers report that those colleagues who are strongly oriented towards expertise look down on teachers who focus on the development of personal competencies in students. Animosity between the category of newcomers in the organization versus the group of more experienced and older teachers was also said to exist and was reported by four teachers. Differences in organizational appraisal of the professional orientation was also reported; real experts are "*those who write books*" and are not rewarded by the organization.

Patterning of cards in clusters

Table 2 shows the descriptives of the positioning of cards, indicating the average importance of distinct foci and the variety between respondents. The result of the hierarchical cluster analysis, conducted to reveal the patterning of foci, is plotted in a dendrogram in Figure 2. This tree shows the (dis)similarities between all pairs of foci and reveals at what level of synthesis the foci are considered similar to each other. At the bottom of the tree, on the left, each focus is distinct and "*similar only to itself*" (Romesburg, 2004: 22), while as we become more tolerant towards increased differences between foci, clusters of foci arose based on the similarity. A dendrogram shows the patterning of foci that arise at various levels of distinctiveness⁵. The dendrogram reveals these patterns of similarity on a scale from total distinctiveness (left) to total similarity (right), where the actual distances between foci are rescaled from 0-25, retaining the original distances.

Within hierarchical cluster analysis as a taxonomic method, there are various strategies to assess the 'right' number of clusters that should be used in combination (Romesburg, 2004; Mittendorf et al., 2011). We followed a two-step strategy of analysis by first cutting the tree at a point "*within a wide range of similarity-coefficients wherein the*

⁵ Comparison of results obtained with another preferred method for cluster analysis -average linkage-, provided similar patterning, with that supporting the external validity of the structure of these clusters.

number of clusters remains constant" (Romesburg, 2004: 213) to strive for as few clusters as possible in combination with visual inspection of the dendrogram to obtain interpretable results. Following the first step in this line of reasoning, the dendrogram in Figure 2 shows that the widest range of similarity coefficients, in which the cluster solution remains constant, is situated between the rescaled distances 10 and 20, suggesting a three-cluster solution to be the most stable outcome. Visual inspection of the dendrogram, the second step, reveals that at first a cluster of two organisational foci emerges, consisting of the educational organisation as a whole and the curricular program, apparently these are more similar to each other than to all other foci, which is an enduring juxtaposition as compared with other foci. We call this first cluster '*organisational identification*'. Secondly, a cluster is formed consisting of the focus on expertise and students, quickly followed by field of work. In this cluster, two client foci are merged with an occupational focus, which we call identification as a '*teaching professional*'. At the next level of similarity, a third group of foci emerges that unites the orientation on society, on didactics and as a coach, thus linking the remaining occupational- and client foci; which we call identification as a '*professional teacher*'. Of all foci, identification with career and with colleagues, remains on its own the longest. The dendrogram shows identification with career and colleagues to be more similar as compared with other foci, for they merge just before they simultaneously enter the third cluster, which was already formed. This fourth cluster we call '*personal career and colleagues*'. In summary, the application of the decision rule in combination with visual inspection of the dendrogram, suggests that not a three- but a four-cluster solution is a stable and appropriate outcome.

■ DISCUSSION STUDY 1

As to our first research question, concerning the foci of identification among teachers in Higher Education, this qualitative study provided support for the distinctiveness of ten foci of identification in the self definitions of teachers. The discriminant validity of these foci is illustrated by both the variety of the open and core self definitions in the narratives and by the differences in adherence to foci obtained by the card-sort technique. The construct validity of the ten foci is supported by their resemblance to the associations that arose from the freely uttered self definitions. After all, almost 70% of the un-elicited self definitions by teachers represented identification with one focus or a mix of foci, as assessed by independent raters. Next to the ten foci derived from the national educational policy arena, our results revealed the existence of three supplementary foci of identification amongst teachers: other employers (previous, current and co-employers), private life, and society in general.

With regards to our second research question, exploring the patterning of foci, analysis of interviews show that teachers use verbal labels and tags to distinguish themselves from others. This use of labels, such as '*professional teacher*', '*teaching professional*' and '*coach*' combined with the reported status differences and animosity between categories of teachers, reflects the existence of processes of self categorization and illustrates the variety of sub-collectives within the teacher profession.

When it comes to patterning of foci, the hierarchical cluster analysis produced a four-cluster solution in line with two labels that were found in the interviews. Identification with the field of work, expertise and the students is merged in the sub-collective '*teaching professional*'. Self categorization as '*professional teacher*' is reflected by the cluster solution that encompasses identification with didactics, society and being a coach. In this patterning, both client- and occupational foci are merged. For the label '*coach*' emerging from the interviews, no corresponding cluster of foci was found. Identification with curricular program and educational organisation merged into one cluster of organisational identification, while identification with career and colleagues remained distinct before they merged into the fourth cluster.

In summary, Study 1 shows that teachers do not only differ in their adherence to foci, but also make distinctions in professional subgroups within the teaching profession, thus signalling higher order identities in which identification with foci is merged. This finding provides some support for our conceptualization of professional identity as a higher order identification-mix. Although the results of these qualitative analyses showed strong consistency due to the use of source and method triangulation (Yin, 2014), the qualitative approach and the limited number of participants in the study means that strong inferences regarding the distinctiveness of foci of identification and their patterning in teachers' professional identity cannot be made. Therefore we tried to replicate these results using a quantitative strategy, which is described below.

■ STUDY 2

Study 2 is a large-scale quantitative replication (N = 538) which presents extended evidence about the distinctiveness of foci of identification and their patterning in higher order professional identities. Furthermore gender and career stage are explored as their antecedents.

■ METHOD

Sample and procedure

The data of this study was gathered using an employee survey done at an institution for HE, a university for applied sciences in the Netherlands, which was conducted in a two- year sequence and aimed at measuring several aspects of job and organizational satisfaction of employees. For the purpose of this study, items concerning foci of professional identification of teachers were added to the survey. The survey was electronically administered to all employees (response rate was 54%). The sample consisted of 538 teachers. Of these teachers 50.6% were male; 53.8 % were younger than 50 years of age, 36% were between 50 and 60 (modus). The characteristics of respondents, as reflected by various modes with regards to work experience and length of employment were as follows: 57.7% of the teachers had ten years or more professional experience in education, 31% had ten years or more experience in the current job and 48% of the respondents had less than five years of experience as a teacher. Also 43.9% of the teachers had worked for the organization for more than 10 years, while 35.8% of the respondents had been there for less than 5 years. The majority of teachers had a permanent contract (82%).

Instruments

Identification with various foci was measured one item each. The phrasing of the items in the survey was identical to that used in the card-sort technique and in the fixed-coding procedure used in the first study. Thus the phrasing of items included the focus of the identification combined with a characterizing activity linked to that focus. The introduction of the items in the survey was standardized as follows: 'The following motivation applies to me....'. Examples of items are: '*pursuing my ambitions and continuing to develop myself*' (career identification), '*developing the educational organization*' (organizational identification) and '*being a subject expert*' (occupational identification). All items were measured using a 5-point Likert scale (1 = 'not at all' to 5 = 'completely') with 6 used for the response 'don't know', which was coded as missing values.

Six potential determinants of identification with foci were included in the study. Pre-structured questions were used to assess gender (0 = male, 1 = female) and size of appointment in fte (< .26, .26 -< .51, .51 -< .76, > .75). In line with the reasoning of Lynn et al. (1996), Sullivan (1999) and Richter et al. (2011) different aspects of career stage were included in the study: age, organisational and professional job and field tenure. Age was operationalized using the classifications of Baldwin et al. (2005) and Shin (2011), for which the ranges were set as follows: early career (aged < 40), early mid career (aged 40 -< 50), late mid career (aged 50 -< 60) and late career (aged > 60). Organisational tenure was operationalized as years of experience of an employee within this particular organisation; professional tenure was operationalized as years of experience in the

professional field. Ranges were set as follows: early career (< 2 years of experience), early mid career (2- >5 years), late mid career (5 ->10 years) and late career (> 10 years).

Analysis

A correlation matrix was created, showing descriptives and associations between variables as an indication of the covariance and (in)dependence of foci and determinants. Confirmatory factor analyses (CFA) were conducted with Mplus to evaluate the validity of the various factor structures in the identification mix of teachers, as was suggested by the outcomes of the qualitative hierarchical cluster analysis. Fit of factor structures was tested in the order in which items appeared in the dendrogram in Study 1, including the hypothesised model, by assessing the extent to which the CHI2 value was less than that of the single factor model (Byrne, 2012). To explore differences in patterning of foci between subgroups, additional multiple-group factor analyses were conducted on gender, organisational and professional tenure (Asparouhov & Muthen, 2009).

Compliance with the minimal requirements for factor analysis was assessed conform guidelines as recommended by Kline (Kline, 2011). Multicollinearity was assessed by running the squared multiple correlation between each foci and all the other foci. Listwise deletion could be applied because missing data proved to be at the maximum 6% (average missing over items = 2.1%, SD = 1.43), therefore the selection of methods for dealing with missing observations made no great difference.

The assumption of univariate normality was evaluated following procedures proposed by Kline (2011). Although there is no consensus about what absolute value of kurtosis violates the assumption of normality and functions as an "early departure points of nonnormality" (Byrne, 2012: 99), the most stringent standard (Boomsma & Hoogland, 2001) suggests kurtosis may be a problem from + 2.0 onwards. In this study, the average kurtosis of the observed variables, at 1.21 (SD = .98), is below this standard; it ranges from -.01 (field of work) to 3.23 (societal identification). The average skewness of variables is -1.1 (SD = .21) and ranges from -1.5 (identification with society) to -.77 (identification with students). Therefore the estimator WLMSV (mean- and variance-adjusted weighted least squares) was preferred due to the ordinal character of the items, the limited number of variables, the considerable size of n and the absence of markedly skewed variables, following guidelines of Byrne (2012) based upon the work of Flora and Curran (2004), Boomsma and Hoogland (2001).

To assess the relative strength and significance of determinants on foci and latent variables, standardised regression coefficients and explained variances were estimated using multiple regression analysis with Mplus. Next to linear effects, the presence of curvilinear relationships was examined by polynomial regression analysis using the quadratic term for each of the six predictors (Yang, Levine, Smith, Ispas & Rossi, 2008;

Richter et al., 2011). To assess their relative importance, the predictors were entered block-wise as covariates into the model, thus taking effects of co variances between predictors into account. With this strategy, n being 538, sufficient power is generated to detect large and medium size effects (Miles & Shevlin, 2001; Field, 2009).

■ RESULTS

Descriptives

Table 3 shows the means, ranges, standard deviations and correlations of the foci of identification. Results showed high mean scores for almost all sub foci. From the observed ranges, it is clear that for seven out of ten statements the full range of answer categories is used. For three sub foci the observed ranges are more limited, suggesting stronger conformity among teachers in their orientation on 'field of work', 'students' and as a 'coach'. The linkages between foci vary from almost zero; between the orientation on 'curricular organization' and 'expert' ($r = .02$, n.s.) to medium size between 'curricular organization' and 'curricular program' ($r = .50$, $p < .01$). No negative relationships were found. Table 3 shows the correlations between the aspects of career stage to vary between $r = .45$ for age and professional job tenure, and $r = .80$ for organisational and professional field tenure, thus reflecting different but linked aspects of career stage.

The multicollinearity statistics showed that the height of the squared multiple correlations between each variable and all the rest is .26 on average⁶, with a maximum of .35. Multicollinearity amongst foci of identification is lowest for identification with colleagues and career, and highest for both remaining organizational foci, for didactics and for identification as a coach. These scores form no concern for extreme multicollinearity as is indicated when R^2_{smc} would exceed $> .90$ for a particular variable (Kline, 2011).

Modelling professional identity

Results of the confirmatory factor analyses conducted to test the patterning of foci, derived from the qualitative study, are presented in Table 4. Model 1 shows poor fit indices of the single-factor model in which all ten foci are combined. Apparently the items don't measure only one latent variable, a finding that supports the overall discriminant validity of observed variables (Byrne, 2012). In Model 2 the hypothesised model

is tested. The fit indices of this model are better than the single factor model, for a decrease of the test value of the Model fit and an increased strength of comparative fit measures was found. Although at first glance the fit indices appeared to be satisfactory, this model is not satisfying, because a correlation higher than one is found between the second and third latent variable, undermining their statistical distinctiveness⁷. Additional multi-group analyses conducted to test this hypothesised model in subgroups of gender, organisational and professional tenure, shows this linkage between latent variables to appear in all sub-groups.

Inspection of model results revealed that this correlation between the latent variables is produced by one item: identification with students. Apparently the focus on students bridges both the 'professional teacher' and 'teaching professional' identity. Considering that students are part of the context of all employees in HE regardless of their preferent pattern of identification we chose to remove this item from the analysis. Subsequently Model 3 shows satisfactory model results for this revised four-factor model while the correlations between the four latent variables are acceptable, varying from $r = .45$ between factor 1 and factor 2 to $r = .95$ between factor 2 and factor 3. This means that the quantitative study reveals the same four social identities as Study 1: organisational identification, identification as a professional teacher and as a teaching professional, and identification with the personal career and colleagues.

Antecedents of foci

Table 5 presents the beta's (standardised estimate) and explained variances of determinants of the distinct career, organisational-, occupational- and client foci of employee identification. Career identification is best explained by gender ($b = .138$, $p < .05$), female teachers showing stronger career identification. No career-stage effect on teachers' career identification was found.

Different predictors for the various occupational and client foci are found. As to the client foci, identification with students is only explained by gender, woman showing a stronger identification ($b = .177$, $p < .01$). For identification with the field of work, only a positive linear age effect was found ($b = .211$, $p < .01$), aged teachers showing higher identification. Teacher's identification with society is best explained by a negative curvilinear effect of professional tenure ($b = -.317$, $p < .01$), reaching a peak in mid career while being lowest within early and late career, thus showing an inversed U-shape. The positive quadratic effect of organisational tenure approaches significance ($b = .175$, $p < .10$), showing an U-shape effect.

⁶ R^2_{smc} , squared multiple correlations, and significance of F change of respective variables: P = .17, F = 10.563***; M = .24, F = 16.128***; S = .28, F = 20.499***; OO = .32, F = 24.494***; D = .32, F = 24.227***; OP = .35, F = 28.694***; W = .26, F = 18.582***; PE = .31, F = 23.204***; E = .22, F = 14.497***; C = .17, F = 10.502***.

⁷ Estimated correlations between latent variables in Model 2: 0.453 between f1 and f2, 0.647 between f1 and f3; 1.124 between f2 and f3.

Also differences between determinants of occupational foci were found. Identification as an expert is explained by organisational and professional tenure. There is a positive linear effect of professional tenure ($b = .329, p < .05$), and a negative linear effect of organisational tenure ($b = -.308, p < .05$), showing higher expert identification amongst teachers with less experience within the organisation and greater experience in the field of education. Identification with didactics is best predicted by professional tenure ($b = .412, p < .001$), showing higher identification amongst teachers with more experience in the field of education. Identification as a coach is only explained by age ($b = .151, p < .05$), showing stronger identification with increasing age, while linear effects of age and size of appointment approach significance.

With regard to foci of organisational identification, Table 5 shows identification with colleagues is best explained by gender ($b = .192, p < .001$); female teachers showing higher identification. Identification with the organisation was explained by size of appointment ($b = .190, p < .001$) and by the negative quadratic function of age ($b = -.109, p < .05$), showing stronger organisational identification with greater size of appointment and highest identification amongst teachers in mid career, representing an inversed U-shape effect. In addition, near significant negative quadratic age effects are found for identification with colleagues and the curricular program, reaching a peak in mid career, while being lowest within early and late career.

Antecedents of professional identity

In Table 5, the last four columns present the determinants of the four latent factors that were derived from the best-fitting model of professional identity⁸. Investigation of the determinants of factor 1, labelled 'organisational identification', in which two organisational foci are merged, shows a positive effect of size of appointment ($b = .168, p < .01$) along with a negative quadratic age effect ($b = -.131, p < .05$). Thus teachers' organisational identification is stronger among teachers with greater size of appointment, reaching a peak in mid career and being lowest in early and late career, showing an inversed U-shape effect.

With respect to the second factor, labelled 'professional teacher', in which the foci didactics, society and coach are merged, Table 5 shows no direct effects of the determinants being studied; one negative curvilinear effect of professional field tenure was found ($b = -.279, p < .05$), suggesting weaker identification in early and in late career, showing an inversed U-shape effect.

The third factor, labelled 'teaching professional', in which identification with the field

of work and as an expert is merged, is best predicted by age ($b = .216, p < .01$), while a near significant negative curvilinear effect of organisational tenure was found ($b = -.229, p < .10$), showing an inversed U-shape effect.

As to the fourth factor, consisting of the foci colleagues and career, a substantial gender effect was found ($b = .296, p < .001$).

■ GENERAL DISCUSSION

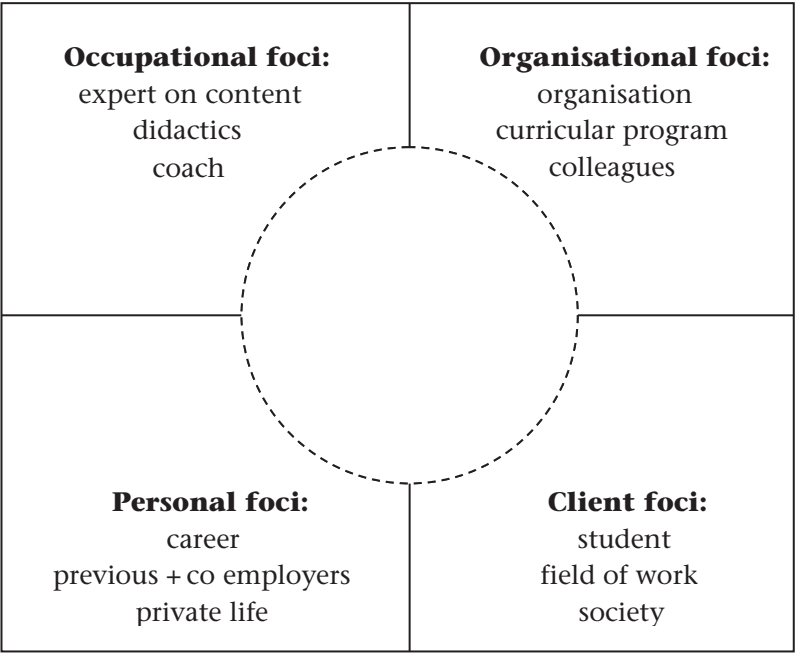
Summary and discussion of findings

As part of Human Resources Management (HRM) growing importance and role in educational institutions (Shin, 2011; Bednall et al., 2014), this study investigated the foci of teachers' identification, their clustering in higher order social identities and determinants. The first aim of this study was to assess the '*distinct foci of identification that are relevant for teachers in higher education*'.

Study 1 showed that identification is part of the self definition of teachers and that participating teachers do vary in their adherence to foci of identification. Moreover Study 1 showed that 1. organisational (sub-) collectives, 2. client groups, 3. occupational roles and 4. the personal career, form distinct foci of identification. Additional foci of identification appeared, such as previous and co-employers and the private life. Clearly our study indicates that occupational identification should not be considered a homogeneous construct in this context. Study 2 ($N = 538$) provided further support for the distinctiveness of the ten foci, for only low to moderate correlations between foci were found, levels that in earlier research on identification of teachers have been regarded as an indicator for their distinctiveness (Van Dick & Wagner, 2002: 139). The study replicates the distinctiveness of employees' overall career, organisational and occupational identification, which were also found in earlier studies on employee identification (Knippenberg et al., 2000; Van Dick et al., 2002; Ashforth et al., 2008). Its contribution to the body of knowledge lies in the specification of the full comprehensive set of professional identifications of a workforce, and in picturing the considerable professional diversity within the teachers' identifications, see Figure 3 for an illustration.

⁸ Fit indices for this model are good with CHI2 for model fit = 130.277***, $df = 66$, $p\text{-value} < .001$, RMSEA = 0.045, .033, 90%CI > .056, probability RMSEA < .05 = .765, CFI = .945, TLI = .903, WRMR = .814.

Figure 3. Foci of teachers' identifications.



Secondly, we focussed on the question: ‘Which patterns of foci, professional identities can empirically be distinguished?’. Our conceptualisation of ‘professional identity’ as ‘a mix of identifications, consisting of distinct parallel identifications varying in strength, with a selection of relevant collectives and roles, in the context of work and career’, was examined through qualitative and quantitative analyses. Indeed, Study 1 showed that teachers use labels to define themselves and to point to professional subgroups, such as ‘professional teacher’, ‘teaching professional’ and ‘career coach’. In addition they report status differences and animosity, in sum signalling professional diversity within the teaching profession. Study 2 showed that client- and occupational foci merged into two latent factors, in line with the labels ‘professional teacher’ and ‘teaching professional’, while adding the combination of the organisation and the curriculum as a latent factor to identify with. Thus both studies show that while teachers do relate to the distinct occupational- and client foci, they also relate to more inclusive and complex higher-order identifications in which identification with foci is merged in a new higher order subgroup, using a single label as a representation. However only merges between client and occupational foci were found, leaving combinations of organisational and personal foci out. Taken together the proposed conceptualization of professional identity as a higher-order social identity (Roccas & Brewer, 2002) gained support from our

studies. This use of the concept ‘social identity complexity’ as a lens through which to focus on the diversity of identifications in the context of employees and work specifically, adds to other applications of the concept of ‘social identity complexity’ recently investigated in other area’s within the social sciences (Roccas & Brewer, 2002; Bodenhause, 2010; Brewer, 2010; Schmid, Hewstone & Al Ramiah, 2013; Knifsend & Juvonen, 2013). Additional multiple group CFAs provided no indications that the structure of teachers’ professional identity differs across gender or career phase, for instance there was no difference amongst novice as compared with more experienced workers, therefore results suggest that the merge of identification with foci is a stable phenomenon in the workforce studied.

When we evaluate the communalities and differences from a methodological perspective and reflect on the use of the card-sort technique and hierarchical cluster analysis as an qualitative approach for exploratory factor analysis (Santos, 2006), it is important to note that the scaling techniques of both methods are not alike, differing not only in range but also in stimuli for the differentiation of responses. Even though forced choice was not applied in the qualitative study and the interviewer explicitly encouraged a free positioning of cards, the card-sort technique by itself primes respondents to compare and order the cards. On the other hand, responding to distinct items in a survey stimulates nor requires any mutual ordering, they can be answered as if the items are of equal importance, an approach that can conceal differences in individual appreciation which are only noticeable when a form of comparative measurement is used.

Another explanation for the discrepancy between the outcomes of the interview as opposed to the survey for the professional identity ‘career coach’ can perhaps be found in the fact that the adoption of new foci into the workforce of the organisation will first be visible in the enrolment of new organisational members who are selected for a new professional profile. Indeed the implementation of career-guidance programs that would relate to ‘career coach’ as a professional identity of employees in Dutch Higher Education is a new perspective (OECD, 2008) and recent research has shown that its implementation is very limited as yet (Kuijpers & Meijers, 2012), therefore signalling a low adoption of the career-guidance orientation across institutions.

Thirdly, we turn to the final research question ‘To what extent is variance in identification accounted for by career stage and gender?’. Responding to the call to use different measures for career stage in order to fine grain its effects (Lynn et al., 1996; Sullivan, 1999), Study 2 showed that age-effects should be distinguished from the effects of accumulated experience in the professional field and from organisational tenure. Moreover, this study leads to a re-specification of the proposition that occupational identification increases with growing experience in the current job (Pratt et al., 2006) because the results indi-

cate that its constituent foci grow and shrink with age, organisational tenure, and with experience in the professional field. Greenhouse's et al. (2012) suggestion that men and woman differ in the way they construe their work and family identity, prompted us to explore the effects of gender on identification. Identification with students and identification with colleagues was predicted by gender and by gender only, female teachers showed stronger identification with students and colleagues. However, recalling that multiple group CFAs provided no indications that the structure of teacher's professional identity differs across gender, therefore we concluded that this study indicates that gender effects on identification and professional identity are limited to the foci of client identification.

When we evaluate these results from a methodological perspective, it is important to note that our approach to assess determinants of identification has sufficient power to detect strong and medium effect sizes, but is less powerful in detecting small effect sizes (Miles et al., 2001; Field, 2009). Although norms for practical relevance of effect sizes differ across research contexts (Kirk, 1996; Field, 2011; Richter et al., 2011) and the breadth of explained variance may be considered relatively small to moderate (Field, 2011), it does not make these irrelevant on a theoretical or practical level. Effect sizes found in this study are in line with research on the linkages between career stage and the uptake of different kinds of formal and informal learning opportunities, as reported by Richter et al. (Richter et al., 2011), all supporting the impression that teachers' identification and professional development is only influenced by career stage to a limited extent.

Practical implications

With regards to the practical implications of the study, we highlight two points. First, when we consider permanent professional development to be the cornerstone of Human Resource Development (HRD) strategies (Bednall et al., 2014), it is important to note that no link between age or career stage on one hand and the career identification of teachers on the other hand was found. Therefore, this study does not support concerns about a lower drive for professional development amongst experienced or aging teachers. However, our studies do show substantial professional diversity within the teaching profession. This diversity in social identification emerges as an important facet of the knowledge base concerning the employee characteristics amongst teachers in this sector (Boselie et al., 2005; Alvesson & Willmott, 2002; Alvesson & Karreman, 2007; Paauwe, 2008). The degree and scope of the professional diversity within the current workforce is a challenge for management and HR-practitioners alike, because they must design and implement interventions with this complexity in mind. Indeed, taking the professional diversity into account as a design requirement when developing and implementing a HRD strategy targeted at professional development and educational reform would strengthen the chance of success.

Second, when applying the 'identity-matching principle' (Ullrich et al., 2007) to the context of this study, it is proposed that teachers' set of identifications will be related to their teaching behavior and thus indirectly to students' learning activities and student outcomes. With this in mind and recalling the evidence for the presence of status differences and animosity between categories of teachers, we suggest that some dialogue and consensus at the institutional level is needed regarding the degrees of freedom of the professional diversities in the workforce, in order to make the diversity profitable for the realization of the organisational goals and students' learning outcomes while preserving the necessary mutuality of the employment relationship (Boxall, 2013). A dialogue and consensus on the needed strategic degree of professional diversity of the workforce is a prerequisite for the goal oriented application of horizontal task differentiation and HRD strategies to ensure the process of systematic and permanent synchronization of job demands and employee qualifications (Schimank & Winnes, 2000; Shin, 2011).

Limitations and future research directions

Some limitations of this study have to be taken into account. The most important one relates to the generalizability of outcomes, as data collection for this study was limited to one organisation in one European country. On the other hand, the organizational representativity of this study is strong, due to the high response rates. Considering that countries differ in their national policies regarding higher education and consequently in the division of labour at the national, institutional and individual level (Weert & vd Knaap, 2013; Shin et al., 2014), the aim of generalizability presses the need to proceed with a series of case studies to investigate and compare the construction of professional identities of teachers in higher education across nations and institutional contexts. A second restriction of this study is the use of single item measures for foci of identification, although this limitation has in part been addressed by the use of source and method triangulation (Yin, 2014) and the use of identical measures across studies. A third limitation arises from the operationalisation of career-stage variables into fixed categories. Because models of career stages do significantly differ in definition and range of phases (Baldwin et al., 2005; Shin, 2011; Richter et al., 2011), research studying the determinants of identification should refrain from defining the career stages according to a predefined model such as the model of Baldwin et al. (2005) or Huberman's career-stage model (Richter et al., 2011). This is because preliminary categorization of the distribution hampers the possibility of finding linear and curvi-linear relationships.

Our approach to unravel the complexity of higher order social identity formation (Roccas & Brewer, 2002; Ashforth et al., 2008) by conceptualising professional identity as a mix of identifications, brings with it methodological challenges for which no fixed rules exist. Our approach included the application of exploratory and confirmatory

techniques in tandem, as recommended by Asparouhov et al. (2009), replacing the quantitative exploratory techniques by alternative qualitative exploratory techniques such as the Card-sort technique, coding strategies for in-depth interviews, and Hierarchical cluster analysis (Santos, 2006; Jahrami et al., 2009). The most important methodological challenge is to resolve the contradiction between the distinctiveness of foci and the distinctiveness of their clustering in higher-order identities. Obviously quantitative CFA and procedures for structural equation modelling cannot prove distinctiveness of both types in one and the same analysis. The rules for CFA are commonly regarded to be too stringent due to their exclusion of latent variables that show considerable linkages (Asparouhov et al., 2009). This proves to be even more of a limitation when foci of identification are interrelated by definition, due to their inclusion in a professional identity, conceptualised as an identification-mix.

Future research, therefore, should focus on the conceptual and methodological challenges faced when trying to unravel the shared and varying aspects of higher order social identities of employees (Roccas et al., 2002; Ashforth et al., 2008). The mixed methodology used in this study can serve as a starting point. Proceeding with the conceptual discourse on the measurement of complex social identity and the use of international comparative research across organizations for higher education (Shin et al., 2014), will reveal theoretical as well as practical outcomes for institutions. Secondly, future research should focus on the professional diversity amongst employees, starting with the investigation of the (in)stability of identification with foci and professional identity over time, unravelling the processes by which its development and change takes shape. In addition future research should focus on the relationship between teachers set of identifications, teacher behavior and students learning activities. This joint endeavour will add to the knowledge base concerning the impact of managerial and HR tactics on employee identification and professional identity and students learning outcomes, which is a prerequisite to effectively support the permanent synchronization of job demands and employee qualifications in the dynamic context of educational reform in Higher Education. Surely these questions imply that a longitudinal approach would be useful.

■ **TABLE 1**
Categories and foci of employees' professional identification & self definitions

Category of employee identification	Focus of identification	Self definition
Career	CAREER	<i>Pursuing my ambitions and continuing to develop myself</i>
	STUDENTS	<i>Having contact and being close to the students</i>
	FIELD OF WORK	<i>Delivering good professionals to the field of work</i>
Client	SOCIETY	<i>Contributing to opportunities for students in the world</i>
	EXPERT	<i>Being a expert on content</i>
	DIDACTICS	<i>Being a teacher good in didactics</i>
Occupation	COACH	<i>Getting every student to get the best out of themselves</i>
	COLLEAGUES	<i>Working together and coordinate with my fellow teachers</i>
	PROGRAM	<i>Developing the curricular program</i>
Organisation	ORGANISATION	<i>Developing the educational organisation</i>

Note. Table shows the linkages between the four overall categories of employees' identification, the foci of identification of teachers in HE and the phrasing of the self definition, that was printed on card for Card Sort Technique (Study 1) and later used as item in the survey (Study 2).

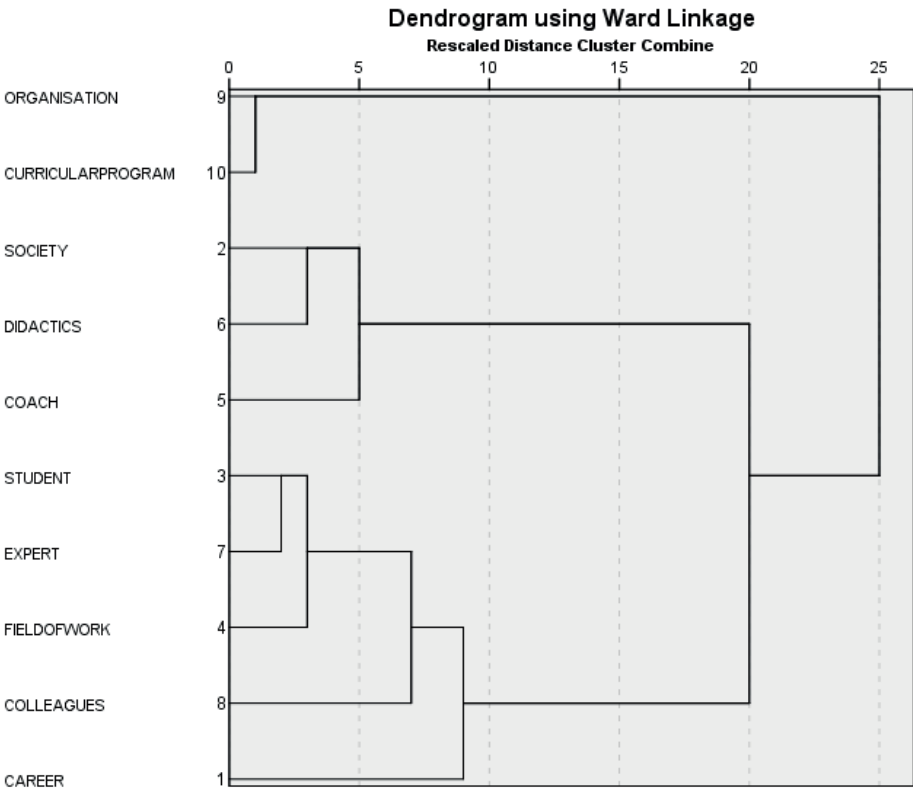
■ TABLE 2

Hierarchical Cluster Analysis: descriptives

Foci on cards	N	Mean	Median	Range	SD	Rank
1. Career	10	6.05	6.5	9	3.22	4
2. Student	11	5.86	6	8	2.35	6
3. Field of work	11	6.73	7	9	3.09	3
4. Society	11	5.59	6	8	2.78	5
5. Expert	11	6.95	7	6.5	2.38	2
6. Didactics	11	4.55	4	7	2.43	8
7. Coach	11	7.73	8.5	6	2.13	1
8. Colleagues	11	5.64	6	7	2.59	7
9. Program	11	3.86	3	6.5	2.16	9
10. Organisation	11	2.5	2	6	2.01	10

Note. Table shows characteristics of the importance of foci in teachers' self definitions on cards in a Card Sort Technique session. Variety between respondents is indicated by range and SD, average importance is indicated by mean and rank.

Figure 2. Hierarchical Cluster Analysis



Note. Dendrogram shows results of Hierarchical cluster analysis on foci of identification, using Ward's minimum variance method and squared Euclidian distance coefficients as a measure for similarity, values are transformed to z-scores by case, actual distances are rescaled from 0 to 25. Table shows (dis)similarities between all pairs of foci and reveals at what level of synthesis the foci are considered to be similar to each other (N = 11).

■ **TABLE 4**
Models of Professional Identity

Model	Type	CHI-Square Test of Model Fit	df	RMSEA (90% CI)	prob. RMSEA < .05	CFI	TLI	WRMR
1	CFA one factor model	335.769***	35	.130 (.117-.143)	.000	.824	.773	1.781
2	CFA hypothesed four factor model	106.570***	29	.072 (.058 -.087)	.006	.955	.929	.967
3	CFA revised four factor model	80.397***	21	.074 (.058-.092)	.009	.960	.932	.888

Notes. Confirmatory Factor Analysis and Structural Equation Modelling with MPLUS: CHI square test for model fit, estimator = Mean and Variance adjusted Weighted Least Squares (WLSMV); RMSEA = Root Mean Square Error of Approximation; CFI = Comparative Fit Index; TLI = Tucker-Lewis Index (= NNFI); WRMR = Weighted Root Mean Square Residual; Model 1 = one-factor model which includes all foci within one factor; Model 2 = four-factor model: factor 1 = 'organisation' (organisation & curricular program), factor 2 = 'professional teacher' (society, didactics and coach), factor 3 = 'teaching professional' (expert, field of work, students), factor 4 = colleagues and career; Model 3 = revised four-factor model: factor 1 = 'organisation' (organisation & curricular program), factor 2 = 'professional teacher' (society, didactics and coach), factor 3 = 'teaching professional' (expert, field of work), factor 4 = colleagues and career, student is excluded from third factor; * = correlation between factor 2 and 3 exceeds 1.0; N = 510.

■ TABLE 5

Determinants of identification

	Career	Client foci			Occupational foci			
	CAR	STU	FOW	SOC	EXP	DID	COA	
Gender	.138*	.177**	.036	-.016	-.068	.057	.109#	
Age	-.082	.024	.211**	.102	.074	-.055	.151*	
Age*Age	-.022	-.043	-.071	-.010	.040	.022	-.005	
Size appointment (Size)	.049	.043	.054	.017	-.041	-.011	.096#	
Size*Size	.026	.008	.020	.035	.038	-.047	.016	
Organisational tenure (OT)	-.036	.007	-.068	.136	-.308*	-.111	.092	
OT*OT	-.105	.033	.072	.175#	-.113	.042	.055	
Professional tenure (PT)	-.109	.076	-.062	-.216	.329*	.412**	-.038	
PT*PT	-.027	-.053	-.111	-.317**	.006	-.073	-.157	
R square	.058	.040	.040	.042	.071	.121	.068	

Notes : Beta = standardised regression coefficients, R-square = explained variance, respective p values are: # p < .10, * p < .05, ** p < .01, *** p < .001, two-tailed. Foci of identification are: Career identification: CAR = teacher's career identification; Client identification: STU = student, FOW = field of work and SOC = society; Occupational identification: EXP = expert, DID = didactics and COA = coach; Organizational identification: COL = colleagues, CUP = curricular programme and ORG = educational organization. Model of professional identity contains four latent variables: 1 = organisational (curricular program & organisation), 2 =

	Organisational foci			Model professional identity			
	COL	CUP	ORG	1	2	3	4
	.192***	-.016	.003	-.008	.076	-.016	.296***
	.064	-.005	.005	.000	.096	.216**	-.017
	-.097#	-.094#	-.109*	-.131*	.004	-.035	-.104
	-.110	.078	.190***	.168**	.057	.020	.040
	-.050	-.085	-.024	-.088	.030	.040	.043
	-.159	.019	-.034	-.013	.071	-.229#	-.179
	-.046	.074	.056	.085	.137	.000	-.137
	.103	-.013	-.113	-.083	.043	.120	.001
	-.019	-.139	-.141	-.182	-.279*	-.093	.041
	.054	.036	.059	.066	.110	.064	.132

professional teacher (didactics, society & coach), 3 = teaching professional (expert & field of work), 4 = career and colleagues. Determinants are: Gender: 0 = male, 1 = female, Age = years of age: 1 = < 40, 2 = 40 < 50, 3 = 50 < 60, 4 = > 60; Size = size of appointment in fte 1 = < .26, 2 = .26-50, 3 = .51-.75, 4 = > .75; Organisational tenure = years of experience within organisation: 1 = < 2, 2 = 2 < 5, 3 = 5 < 10, 4 = > 10; Professional tenure = years of experience in field of education: similar categories; N = 485.

Chapter 3

The effects of performance appraisal on professional development:
Do leadership support and employees' professional identification matter?¹

development

¹ A previous version of this chapter is presented at the 7th biannual International Conference of the Dutch HRM Network in Groningen, November 2011, and published as: Aangenendt, M., Kuijpers, M., & Sanders, K. (2014). The effects of performance appraisal on professional development: Do leadership support and employees' professional identification matter? In: *Dynamic Dialogue, sustainable professional development in HVE*, The Hague University of Applied Sciences, Research Group Pedagogics and Vocational Learning.

■ ABSTRACT

In this study we examine the relationship between the application of a performance-appraisal system and teachers' opportunities for- and active consideration of professional development. In addition, we examine whether leadership support and employees' organizational-, career- and occupational identification moderate these relationships. We hypothesize that leadership support and employees' organizational identification will strengthen this link, while career identification will weaken this relationship.

To test the hypotheses we used survey data from an institution for Higher Education in the Netherlands (N = 538 teachers). Results show that the application of a performance-appraisal system is related to the opportunities for professional development and to the active consideration of professional development. Leadership support strengthens the relationship between the application of the performance-appraisal system and active consideration of professional development, while with regards to opportunities for professional development, a full mediating effect of leadership support is found. As expected, organizational identification strengthens the relationship between performance appraisal and active consideration of professional development. However organizational identification shows a direct effect on opportunities for professional development. For career identification no interaction effects were found. Results and consequences for promoting professional development in institutions for Higher Education are discussed.

■ INTRODUCTION

Institutions for Higher Education (HE) are currently being challenged to develop their flexibility and innovativeness to adapt to new societal demands (Shin, 2011; Teichler, Arimoto & Cummings, 2013; de Weert & van der Kaap, 2013; Cummings & Shin, 2014) and as a result, employees in Higher Education have to cope with new developments on a wide scale (Shin & Cummings, 2014). External demands that spring from globalisation, technological innovation and the labor market preoccupy educational organizations at present and seem to influence their workforce more permanently than in the past (Boyd & King, 1977; Gardner, 1995; Bleiklie & Michelsen, 2013). This turbulence is expected to have a continuous impact on the professional lives of employees in HE, permanently challenging their self-definitions, and demanding a permanent re-orientation of employees' professional identity (Beijaard, Meijer & Verloop, 2004; Clarke, Hyde & Drennan, 2013). Like other knowledge-intensive organisations, the workforce in HE has to be regarded as the most important production factor because employees' organizational behavior is critical to student development and organizational output (Fraser, Walberg, Welch & Hattie, 1987; Hattie, Biggs & Purdey, 1996). As a result, the disentanglement of employees' professional identity, organizational behaviour and professional development offers a pertinent and thriving area of research (Beijaard et al., 2004; OECD, 2005; Bednall, Sanders & Runhaar, 2014).

Indeed, the increased attention for the development of Human Resources Management (HRM) in educational institutions within the last decade is not surprising. Unfortunately, the strategic use of HRM policies and tactics is relatively new in the field of secondary and higher vocational education (Coonen & Sanders, 2008; Runhaar & Sanders, 2013). HRM departments within educational institutions are confronted with a strategic challenge: they are being asked to contribute to the design and implementation of various evidence-based HR practices, like training, promotion and (performance for) pay (Boselie et al., 2005). Therefore the knowledge based accountability of high performance HR policies and instruments remain a challenge, because their added value to organizational- and employee level outcomes is not yet clear (Boselie, Dietz & Boon, 2005; Combs, Liu, Hall & Ketchen, 2006; Crook, Todd, Combs, Woehr & Ketchen, 2011).

Amongst the wide range of HR practices, performance-appraisal systems form one of the most important categories of strategic HRM work (Boselie et al., 2005). Performance-appraisal systems are seen as crucial, because they serve as a necessary condition for and component of quality programs such as performance-enhancement programs, productivity-improvement efforts and career-development programs (Barnhart, 1987; Paauwe, 2008; Spence & Keeping, 2011; Bednall et al., 2014). Research on performance-appraisal systems is promising because such activities can be linked to the

employee outcomes that “HR practices actually can affect”, such as changes in employee attitude and behaviour (Paauwe, 2008:15). Following a recent review of Spence and Keeping (2011), we describe performance appraisal in general as “an evaluative process whereby managers rate and deliver feedback regarding employees’ performance” (Spence et al., 2011; 85). Performance-appraisal systems can be regarded as a bundle of HR-practices and techniques (Boselie, 2005), consisting of multiple components tailored to the strategic needs of the organization (De Nisi & Pritchard, 2006). In addition to the alignment of the performance-appraisal system with the organizational strategy, the system needs to be implemented and applied by a supervisor in the way it was intended by senior management for earlier research shows that the implementation is more crucial in terms of influencing employee behaviour than other factors (Alfes, Truss, Soane, Rees & Gatenby, 2013; Bos-Nehles, van Riemsdijk, & Looise, 2013). In this study we focus on the ‘*application of performance appraisal*’ and define it as ‘the degree to which the components of the performance-appraisal system, as designed are actually applied in the supervisor-employee dyad’.

In order to stimulate employees to respond to changing organizational realities, performance-appraisal systems in knowledge intensive and educational institutions have been linked to the need for ongoing professional development of the work force (Bednall et al., 2014). Research on professional development has focused on various individual- and collaborative learning activities, for instance on antecedents of employees’ overall involvement in work related learning (Kyndt & Baert, 2013), on reflection and feedback asking as indicators of informal learning (Runhaar, Sanders & Yang, 2010; Bednall et al., 2014), as well as on antecedents of transfer of training in the context of formal learning (De Rijdt, Stes, van der Vleuten, Dochy, 2013). However little is known about the contribution of the performance-appraisal system to intermediate conditions for professional development, such as the extent to which employees observe *opportunities for professional development* within the organization and the extent to which employees *actively consider* their professional development. Observing opportunities and active consideration are relevant intermediate conditions for professional development as they can contribute to the development of a learning intention, which is related to actual participation in work-related learning behaviour (Kyndt & Baert, 2013). Moreover opportunities and active consideration of professional development belong to the employee outcomes that HR practices could possibly affect (Paauwe, 2008).

Although researchers studying the validity and objectivity of the performance-appraisal system have long been fascinated by measurement problems, recently this research has evolved into the examination of linkages between performance appraisal and supervisory behaviour. Research shows that supervisor attitudes do influence their rating behaviour of employees’ performance (DeNisi et al., 2006; Spence et al., 2011).

Spence and Keeping (2010, 2011) showed that one of the non-performing goals managers consider when they use performance-appraisal systems is to maintain a positive relationship between supervisor and employee. Based on this work, we can conclude that rather than being accurate or implementing a performance-appraisal system ‘by the book’, managers pursue conscious goal-oriented behaviour while applying the system of performance appraisal as it is handed down by the organization. Because HR tactics such as performance appraisal are implemented and applied within a relationship with a supervisor (Nehles, van Riemsdijk, Kok & Looise, 2006; Purcell & Hutchinson, 2007), we examine the effects of ‘*leadership support*’ (Banai & Reisel, 2007) as a moderator on the relationship between the performance-appraisal system and intended employee outcomes. Leadership support represents an important aspect of the quality of the leader-follower relationship (Schriesheim & Cogliser, 2009; Schyns & Day, 2010) and is conceptualized as one of the dimensions of transformational leadership (Rafferty & Griffin, 2004; Rafferty & Griffin, 2006). In the current study, *leadership support* is defined as “*helping facilitate goal accomplishment by guiding subordinates to be effective and learn in their roles*” (Banai et al., 2007: 466).

Finally, since an employee is not a tabula rasa upon which professional development can be engraved by organizational controls, *employees’ identifications* deserves further inquiry and is taken into account in this study. Identification as a state of affairs has been defined as “*that part of an individual’s self-concept which is derived from his/her knowledge of his/her membership of a social group (or groups) together with the value and emotional significance attached to that membership*” (Tajfel, 1978: 63). Currently, the ‘social identity’ of an individual is no longer exclusively based on meanings attached to the membership of social collectives (groups or organizations), but is also based on meanings attached to the fulfilling of specific roles in the society (Ashforth, Harrison & Corley, 2008). Research on identifications of employees suggests the existence of at least three categories of foci for professional identification: organizational-, career- and occupational identification (Ashforth & Mael, 1998; Knippenberg & van Schie, 2002; van Dick & Wagner, 2002). *Organizational identification* is defined as ‘the extent to which membership of the organization is included in their self-definition’ (Ashforth et al., 1989). In line with Kanter’s (1989) dual conceptualization of ‘career identity’ the *career identification* of teachers is defined as: ‘the extent to which permanent professional development is included in the self definition as teacher’ (Kanter, 1989; Patton & Mc Mahon, 2006). *Occupational identification* is defined as ‘the extent to which the membership of a specific occupation is included in the self definition’ (Ashforth et al., 1989; Dick et al., 2005; Ashforth et al., 2008). Recent research in the field of secondary and higher education suggests the existence of various foci of occupational identification *within* the profession of employees in HE (Shin, 2011; Moerkamp & Hermanussen,

2011; Aangenendt, Kuijpers & Sanders, 2013¹). From this work, three distinct occupational identities can be derived (Moerkamp & Hermanussen, 2011; Aangenendt et al., 2013): being a 'teaching expert' with emphasis on identification with the content of expertise; being an 'expert teacher' focused on didactics; and being a 'career coach' above all contributing to the life-time career of the student. In summary, next to organizational- and career identification, we distinguish three additional occupational identifications, reflecting the professional diversity within the teacher profession.

The goal of the present study is to contribute to the understanding of the link between the performance-appraisal system of an organisation, as a high performance HR tactic, and professional development, while taking differences in the delivery by the supervisor and employees' present identifications into account. Our research questions are:

1. 'What is the relationship between the application of the performance-appraisal system and opportunities for and active consideration of professional development?' and
2. 'To what extent is this relationship affected by leadership support and by employees' identification with the organization, the occupation and the career?'

■ PERFORMANCE APPRAISSAL, LEADERSHIP SUPPORT AND PROFESSIONAL DEVELOPMENT

Since the 1920s abundant research has been done on performance-appraisal systems, its goals, development, implementation, and its effects (Toops, 1923; Telford, 1924; Paterson, 1924; Barnhart, 1987; Brown, 1989; De Nisi et al., 2006). In the 1990s Brown critically summarized some myths about the use and effects of performance-appraisal systems and concluded: "*The truth is, most performance appraisal systems are far from objective, do little or nothing to improve motivation or performance, and take a great deal of time to implement properly*" (Brown, 1989: 26). At present, the rationale for performance-appraisal systems is still a subject of debate. This debate is fuelled by the fact that the empirical evidence for the effectiveness of these systems in terms of improvement of performance and productivity still remains scarce (De Nisi et al., 2006). Subsequently, guidelines for HR developers and practitioners are lacking, because "*although there are numerous books giving advice on the handling of the appraisal session, little of the content could claim a strong research base*" (Fletcher, 2001: 478). An important hampering factor in the development of a sound knowledge base is the uniqueness of performance-appraisal systems. Outcomes of studies are difficult to compare, because "*performance appraisal has become a general heading for a variety of activities through which organizations*

seek to assess employees and develop their competencies" (Fletcher, 2001: 473; DeNisi & Smith, 2014). Next to this lack of evidence-based persuasiveness, the belief in the benefits of performance appraisal is lacking amongst employees; some ten percent "believe that their firms' appraisal system helps them to improve performance" (DeNisi & Pritchard, 2006: 253).

The aims and components of performance-appraisal systems can differ *across* organizations, due to the necessary strategic fit that relates directly to demands of the organization. Performance-appraisal systems can vary from exclusively one activity such as making up an appraisal (rating and communicating its outcome) to a set of associated activities of performance management aimed at improving individual performance (De Nisi et al., 2006; Spence et al., 2011). An example of such a set of activities is provided by Barnhart (1987), who developed a three-step appraisal cycle, consisting of a self appraisal, a mid-year progress review and an annual performance appraisal (Barnhart, 1987). In the last decade, performance-appraisal systems of organizations have evolved into "*open hybrid models*" (De Nisi et al., 2006: 260). Those models combine the more traditional goals of performance appraisal, such as increasing performance and productivity, with other outcomes relevant to the organization, for example customer satisfaction and professional development of employees. These "*non traditional systems*" (De Nisi et al., 2006: 260) are less focussed on the rating process itself but more on using the system as an instrument to improve performance. These approaches are less structured and may include components such as developmental meetings between supervisors and employees (De Nisi et al., 2006). Next to conceivable differences in systems across organizations, *within* organizational differences can be observed when the actual application of the performance-appraisal system deviates from the intended structure of the system as it was designed by the organization.

In the current study, we focus on the extent to which the components of a performance-appraisal system are actually applied. In doing this, we follow the recent call for the exploration of different predictors of employee reactions on performance appraisal (Pichler, 2012), build upon research on the effects of participation in the performance-appraisal process (Cawley et al., 1998) and avoid the disadvantages of cross-sectional studies as much as possible by using measures different from respondents' self evaluation (Cable & DeRue, 2002).

That said, employees' perception of the performance-appraisal system and the quality of the appraisal discussion differs substantially from the evaluation of supervisors (Mount, 1984). As a result, recent research on the effects of performance-appraisal systems focuses on 'employee reactions' to them, defined as "*individual-level attitudinal evaluations of and responses to the performance appraisal process*" (Pichler, 2012: 710; Bowen & Ostroff, 2004). One factor is the perception of the goal of the system. Perceiving

¹ See chapter two of this dissertation.

the performance-appraisal system as an aid to individual professional development, appeared to be closely related to satisfaction with both the appraisal and the appraiser, which is one of the important stepping stones to the improvement of performance (Kluger & DeNisi, 1996; Boswell & Boudreau, 2001). In addition, it is employees' active participation in the performance appraisal process that accounts for satisfaction with the appraisal process and the adoption of feedback (Cawley, Keeping & Levy, 1998). Recent research in the context of secondary vocational education showed that *perceived performance appraisal quality*, defined as "the extent to which respondents' view feedback from their supervisor as clear, regularly communicated, and open", explained increased collaborative learning activities such as informal reflection, knowledge sharing and innovative behaviour (Bednall et al., 2014).

Building upon this research, we propose that a performance-appraisal system can contribute to employees' professional development, when it includes components such as the making of a personal professional development plan and discussion with the supervisor (Cawley, Keeping & Levy, 1998; Boswell et al., 2001; Bowen & Ostroff, 2004; Pichler, 2012; Bednall et al., 2014). Such components can be perceived as serving employees' interest for professional development and give them the opportunity to actively participate. The extent to which the various meetings of the performance-appraisal system have actually taken place, the more the performance appraisal system functions as a platform for dialogue between employee and supervisor. The application of such a performance-appraisal system is expected to elicit active consideration of professional development by putting it on the agenda. Moreover, these components structure employees' orientation with regards to opportunities for professional development. In conclusion, a performance-appraisal system is expected to contribute to professional development as follows:

Hypothesis H1: The application of the performance-appraisal system is positively related to the opportunities for professional development (H1a), and to the active consideration of professional development (H1b).

The role of supportive leadership

From an HRM perspective, it has been stressed that HR tactics need to be implemented by people and therefore are subjugated to interpretation and communication (Purcell et al., 2007; Nehles et al., 2006), thus when applying HR tactics, supervisory attitudes and behaviour count. As mentioned previously, Spence and Keeping (2010; 2011) showed that one of the non-performing goals managers consider when they apply performance appraisal is to maintain a positive relationship with their employee. Based on this work, we can conclude that rather than being accurate or implementing a performance-appraisal system 'by the book', managers pursue conscious goal-oriented behaviour while applying the system of performance appraisal, as it is handed

over by the organization. As a result there are differences in the application of the systems across employees. Referring to the main premise of Leader Member Exchange Theory (LMX), the leader employee relationship will be different for different leader-member dyads (Henderson, Liden, Glibkowski & Chaudhry, 2009). From this theoretical framework, we focus on 'supportive leadership' as it represents an important aspect of the quality of the leader-follower relationship (Schriesheim et al., 2009; Schyns et al., 2010). The task-oriented conceptualization of leadership support, e.g. providing guidance to employees to be 'effective and learn in their roles' (Banai et al., 2007: 466) is closely related to professional development.

Summarizing this line of reasoning, we conclude that next to the actual delivery of the components of the performance-appraisal system, it is leadership support that has the potential to influence employees' attitude and behaviour with regards to professional development (Paauwe, 2008; Sanders et al., 2010; Bednall et al., 2014). Extrapolating the proposition of Bowen and Ostroff (2004) on effectiveness of HR tactics, to supervisory behaviour, we would expect that the effects of HR tactics on employee outcomes will be more substantial when the application of the HR tactic and the behaviour of the supervisor correspond. Together they represent 'HR strength'; the extent to which employees perceive the goals and application of a HR system as aligned and congruent. Applying this proposition in our study, we propose that the link between the application of performance appraisal and professional development will be stronger in cases where there is strong supportive leadership, rather than in situations when the components of the performance appraisal system are applied within a less supportive relationship. Therefore we hypothesize:

Hypothesis H2: leadership support strengthens the link between the application of performance appraisal and opportunities for professional development (H2a), and the active consideration of professional development (H2b).

The role of employees' professional identification

Within the organizational arena, the employee is not only 'object' of performance appraisal, but must be approached as actor as well. In line with Social Identity Theory and Social Categorization Theory (Tajfel & Turner, 1987), we conceptualize the 'professional identity' of an employee as a specific type of social identity, wherein the employee's professional self definition can be captured by looking at the adherence to distinct collectives or roles in the context of work and career. From this perspective employees' professional identification has been described as the process by which people attach themselves to groups, organizations and roles; by "viewing a collective's or role's essence as self defining" (Ashforth, et al., 2008: 329). Three foci of identification are generally put forward as determinants of employees' organizational behaviour: identifying with the organization, the career and the occupation.

Organizational identification

Identifying oneself in terms of the organisation or its sub collectives can be a prominent social identity of employees (Haslam & Ellemers, 2005; van Knippenberg & van Schie, 2000). The consequence of employees' organizational identification for their organizational citizenship behaviour, has been an important research theme in management- and organizational-psychology studies (Ashforth et al., 1989; Haslam & Ellemers, 2005; van Dick, 2003; van Dick et al., 2006; Ashforth et al., 2008). It is thought that the more employees identify themselves with the organisation, the more they will be committed to their goals and values and are prepared to put effort into the realization of the goals of their organisation, even to the point of making sacrifices through extra role behaviour (Tajfel & Turner, 1987; van Dick et al., 2006). This proposition has inspired many researchers to seek empirical evidence for the relationship between levels of organizational identification and divergent aspects of organizational citizenship behaviour (Haslam, 2004; Dick et al., 2006; Ashforth et al., 2008).

In line and based upon these studies, we propose that employees with a strong organizational identification, will respond with a positive attitude to HR practices, be more willing to participate in interventions and subsequently will show greater positive employee effects with regards to these practices. This is precisely because they identify themselves as part of the organization, committed to serve its goals. In summary, organizational identification is expected to influence the link between the application of the performance-appraisal system and the intended employee outcomes, as follows:

Hypothesis H3: Organizational identification strengthens the relationship between the application of performance appraisal and opportunities for professional development (H3a), and the active consideration of professional development (H3b).

Career identification

Employees with a strong career identification are focused on their professional development within their jobs (Kanter, 1989; Patton & Mc Mahon, 2006). Predictors of this need for personal and professional development have been found at the personal level, such as having a 'learning goal orientation' (Runhaar et al., 2010) and a 'personal growth need' (Hensel, 2010), and have also been ascribed to the career phase of the employee (Arthur, Inkson & Pringle, 1999). Regardless of the source of career identification, we suggest that employees with a strong career identification will seek opportunities for professional development no matter what stimulants are delivered by the organization, simply because their professional identity already incorporates an autonomous focus on professional development. Due to their internal motivation to seek opportunities for professional development, their active consideration of their professional development will be at a relatively high level regardless of the effects of the appraisal system that is implemented by the organization. Additional stimuli

forthcoming from the performance-appraisal system will result in only limited gains. Low career identifiers however, could profit more directly from the stimuli provided by the appraisal system. Therefore our final hypothesis is formulated as follows:

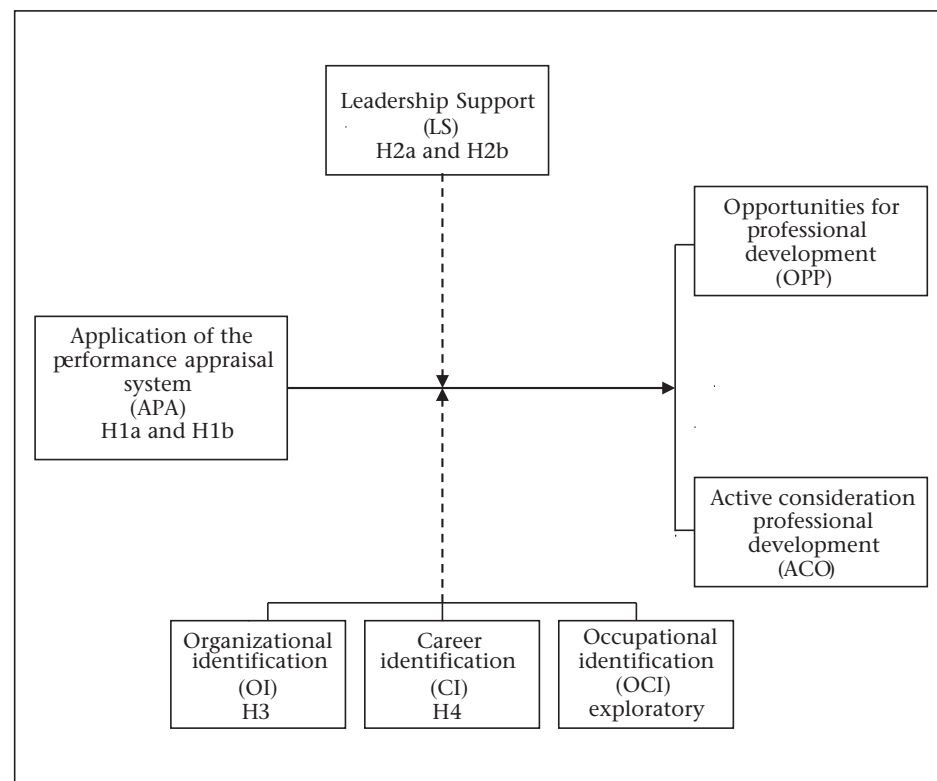
Hypothesis H4: Career identification weakens the relationship between performance appraisal and opportunities for professional development (H4a), and the active consideration of professional development (H4b).

Occupational identification(s)

Various studies have tried to clarify the process of the development of employees' occupational identity. Studies have for instance been carried out to determine how starting teachers form their occupational identities (Sachs, 2001; Beijgaard et al., 2004; Pillen, Beijgaard & den Brok, 2013). The effects of occupational identification or commitment has also been studied among academic staff with regards to organizational and occupational turnover (Youssaf, Sanders & Shipton, 2011). However, in the research mentioned, occupational identification is usually tailored to examine the development of occupational identification within one and the same job. And employees within the same occupation can show strong differences in their primary orientation – as a result it is questionable whether an 'occupation of the teacher or researcher' even exists (Nixon, 1996; Clarke et al., 2013; Shin, 2011; Shin et al., 2014). In the field of secondary and higher education, recent research suggests the existence of various foci of occupational identification within the job (Moerkamp & Hermanussen, 2011; Shin, 2011; Aangenendt et al., 2013). That's why in this study the occupational identification of teachers in HE will be divided into a set of occupational sub-identifications. Three distinct occupational identities are selected: being a '*teaching expert*' with an emphasis on identification with the content, being an '*expert teacher*' focused on didactics, or being a '*career coach*' or '*pedagogue*' which refers to being above all contributing to the life time career of the student (Aangenendt et al., 2013). At this point we are taking an exploratory perspective on the contribution of various occupational identifications on the link between performance appraisal and employee outcomes.

The four hypotheses are drawn in Figure 1.

Figure 1. Research model and hypotheses.



METHOD

Sample

The data for this study was gathered with an employee survey within an institution for HE, conducted to measure several aspects of job satisfaction and internal communication. For the purpose of our study, items were added and adopted concerning the professional identification of employees and their professional development. The survey was electronically administered to all personnel².

² The author is grateful and indebted to Kim Kruis, Nando Rense and Watte Zijlstra for the opportunity to introduce items in the KOMPAS employee monitor. Obviously not all wishes could be fulfilled, on the other hand the resulting dataset shows a very satisfying response rate, due to the good imago and careful executed procedures (Kruis, Rense & Zijlstra, 2010).

The sample consisted of 538 teachers (54% response rate). Of these teachers 50.6% were males; 36% was 50 to 60 years of age (modus), 53.8 % were less than 50 years old. Characteristics of professional and organizational tenure as reflected by various modes were: 57.7% had 10 years or more experience in education, 43.9% had worked for more than 10 years for the organization and 31% had 10 years or more experience in the current job. The majority of teachers had a permanent labour contract (82%) and the size of their appointments exceeded .75 fte (67.2%). A total of 48% of respondents had fewer than 5 years of experience as a teacher, 35.8% of the respondents had been appointed for fewer than 5 years at the organization and 25.3% of the respondents had fewer than 5 years of work experience in education.

Measures

Opportunity for professional development, was measured by two items, using 5-point Likert scales (1= totally disagree, 5= totally agree). The respective items are: 'I have enough opportunities for development within my academy.....' and 'There are enough opportunities for me to develop myself at(University)'. Internal reliability proved to be good (Cronbach's alpha = .84).

Active consideration of professional development, conceived as teachers' experience of active consideration of professional development as a result of the performance-appraisal process, was measured with two items on a 5-point scale. Items are 'The R&D³ cycle has made me more actively consider my professional development' and 'The R&D cycle has contributed to my professional development', with satisfactory Cronbach's alpha = .90.

Application of the performance-appraisal system was measured by assessing a teachers' experience of the actual delivery of the five components as designed by the organisation. Each component was measured with one item using a two-point scale (answer categories: yes/no). The items were: 'I had an planning discussion', 'I had a progress discussion', 'I had an assessment discussion', 'I have created a Personal Development Plan (PDP)' and 'My competencies were discussed during the last R&D cycle'. Taken together, the five items form an index, constructed by counting the number of experienced components ($X = 4.10$; $s = .90$). The descriptives on the application of performance appraisal show that 40% of the respondents report the experience of both the construction of a personal professional development plan and having discussed their professional competencies with their supervisor, 30% of the respondents report having experienced only one of these components, 10% reports having had none of the components. As for the meetings of the performance-appraisal system, grossly 20% of the teachers experienced

³ R&D-cycle 'result and development' is the local name for the performance appraisal system in the University where this study is conducted.

none or only one meeting, 20% of the teachers experienced two meetings, while 58% reports having experienced all three meetings.

Leadership support, was measured with five items using 5-point Likert scales (1 = totally disagree, 5 = totally agree). The internal reliability of the scale proved to be good (Cronbach's alpha = .92). Examples of the statements include: *'I can approach my manager(s) with my problems and observations'* and *'I feel sufficiently encouraged to present ideas and issues'*.

Employees' identifications were measured by one item each. The introduction of these items is as follows *'The following motivation applies to me....'*, using 5-point Likert scales (1 = not at all, 5 = completely). The phrasing of each item included the focus of the identification along with a characterizing activity linked to this focus. Examples are: *'pursuing my ambitions and continuing to develop myself'* (career identification), *'developing the faculty organization'* (organizational identification) and *'being a subject expert'* (occupational identification). The procedure of the development of these items, their testing and validation is described elsewhere⁴ and will not be presented here (Aangenendt et al., 2013).

When using self-reported data, collected at one moment with one questionnaire for all study variables, the possibility of bias in data collection, due to common-method variance, has to be accounted for. In line with suggestions made by Podsakoff (Podsakoff & Organ, 1986) and Lindell (Lindell & Whitney, 2001) several preventative measures were taken in the phases of development of the questionnaire and data collection to minimize bias. These measures include: the distinct introduction of each topic in the questionnaire, stressing the relevance of all possible answers, stressing respondents' anonymity and the alternation of answer categories across the survey. A complete list of variables, items, answer categories and factorloadings is presented in the Appendix.

Data analysis

Standard procedures were followed to assess the possible effects of common method variance, in addition to the use of preventative measures. Harman's one factor test (Podsakoff et al., 1986) was used to assess the possible effects of common-method variance in this sample. Nine items measuring leadership support, opportunities for professional development, active consideration of professional development were entered in a factor analysis (principal components analysis, Varimax with Kaiser normalization), to examine the underlying factor structure. Results are presented in Table

⁴ see Chapter two: Professional identity of teachers in Higher Education: Foci, patterning and determinants.

1. Three components could be extracted with Eigenvalue >1, together explaining 74% of the total variance. The three components correspond with the variables leadership support (48% variance explained, item loadings .72 - .90), active consideration of professional development (14,1% variance explained, item loadings .90 - .95) and opportunities for professional development (12,2% variance explained, item loadings .83 - .91). According to this test no influence of common-method variance could be determined. The results of this factor analysis support the distinctiveness of the variables leadership support, opportunities for professional development and active consideration of professional development.

To test hypotheses 1a and 1b, stepwise regression analyses were conducted one by one. First the application of performance appraisal was entered, after which leadership support and the interaction were included. Interaction effects were tested following the procedure described by Aiken and West (1991): creating interaction variables by regressing the dependent variables to their means and computing the centered (deviation) score. Age, gender, years of experience and size of appointment were introduced as controls. Due to the ordinal measurement level of the controls and skewness of the distribution, the variables were transformed into dichotomous dummy variables, following the procedure of Field (2009), approaching a 50-50 distribution. The categories are: gender (male, female); age (< 50 years, > = 50 years); yrs of experience: < 10 yrs, > = 10 yrs and size of appointment: < .75 fte, > = .75 fte.

Hypotheses 3 and 4 were tested with a similar approach: in addition to the analyses for hypotheses 1 and 2, the various professional identifications (organizational, career and occupation) and accompanying interaction variables were hierarchically introduced.

■ RESULTS

The means, standard deviations, correlations and Cronbach's alpha reliabilities of the variables (scales) are shown in Table 2. Table 2 shows that application of the performance-appraisal system is not related to any of the background variables nor to any of the professional identifications ($r < .35$). Leadership support is positively related to the application of the performance-appraisal system ($r = .34$, $p < .01$). Experiencing opportunities for professional development and active consideration of professional development show a moderate relationship ($r = .25$, $p < .01$).

Results of the stepwise hierarchical regression analyses conducted to test the hypotheses 1-4 are presented in Table 3. The multicollinearity statistics calculated in the regression analyses, as indicator for the strength of the relationship between predictors, show that the variance inflation factors (VIF) in the presented analyses are close to one,

none is greater than 10 as prescribed by Myers (1990) and Bowerman and O'Connell (1990) (see Field, 2009). Analogously the tolerance statistic ($1/VIF$) does not exceed the norm of 0,1 for having concerns that multicollinearity biases the regression model⁵ (Field, 2009).

Contribution of performance appraisal to employee outcomes (H1a and H1b)

Gender and size of appointment are related to opportunities for professional development; male employees tend to report fewer opportunities for professional development ($b = -.09$, $p < .05$), while size of appointment contributes positively to the prediction of opportunities for professional development ($b = .11$, $p < 0.05$). No effects for age and experience in work were found. No effect of the controls on employees' active consideration of professional development was found.

Hypothesis H1a, was confirmed. Model 2a shows that the application of performance appraisal was significantly related to opportunities for professional development ($b = .21$, $p < .01$); the more components of the performance system were applied, the more opportunities for professional development were perceived.

Hypothesis H1b, was also confirmed. Model 2b shows a distinct effect of application of performance appraisal on the explanation of active consideration of professional development ($b = .11$, $p < .05$). Analogous to the first hypothesis, the more components of the performance system were applied the stronger active consideration of professional development was reported.

Effect of leadership support on linkage performance appraisal and employee outcomes (H2a and H2b)

Hypothesis H2a, which states that the effect of performance appraisal on opportunities for professional development is moderated by leadership support, is not confirmed by the data: model 3a shows no significant interaction effects. Findings show that leadership support does not alter the strength of the relationship between performance appraisal and opportunities for professional development. However, the comparison of models 2a and 3a, shows that the initial effect of performance appraisal ($b = .21$, $p < .01$) disappears when we introduce the level of leadership support into this equation ($b = .41$, $p < .01$) representing a mediation effect of leadership support. Mediation indicates that the effect of performance appraisal as an independent variable (IV) is transmitted through leadership support as mediating variable (MV) with regards to this employee outcome (DV) (Edwards & Lambert, 2007). Following procedures proposed

⁵ To test the assumption of lack of correlation between residuals we used the Durbin-Watson statistic, values are close to 2 (opportunities for professional development = $2.004 < 2.094$; active consideration of professional development = $1.941 < 1.978$) indicating the residuals are uncorrelated.

by Baron and Kenny (1986) and Shrout and Bolger (2002) to test the significance of mediation effects, Sobel's test statistic for significance of mediation effects within large samples was used (Sobel, 1982)⁶. According to this test statistic, the mediation effect is significant (Sobel's test statistic = 6.879, p value < 0.01 ; between IV and MV: $a = .199$, $S_a = .024$, between MV and DV: $b = .618$, $S_b = .044$). Therefore, a full significant mediating effect of leadership support was found in this study.

Hypothesis H2b states that leadership support strengthens the relationship between performance appraisal and active consideration of professional development. This hypothesis was tested in model 3b and confirmed. The introduction of the interaction variable results in a significant interaction effect ($b = .15$, $p < .01$), while the initial direct effect of performance appraisal ($b = .11$, $p < .05$) disappears after the introduction of leadership support ($b = .02$ ns). Figure 1 is drawn to illustrate the nature of this interaction effect. These findings show that the positive effect of performance appraisal on active consideration of professional development is stronger when employees experience more leadership support.

Effect of organizational identification on linkage performance appraisal and employee outcomes (H3a and H3b)

Hypothesis H3a states that organizational identification strengthens the relationship between the application of performance appraisal and opportunities for professional development. The results presented in model 4a do not support this hypothesis, instead a direct effect of organizational identification on opportunities for professional development was found ($b = .17$, $p < 0.01$). Thus, Hypothesis H3a cannot be confirmed.

Hypothesis H3b states that organizational identification strengthens the relationship between the application of performance appraisal and active consideration of professional development. Results in model 4b confirm this hypothesis; a moderating effect of organizational identification ($b = .10$, $p < .05$) is shown, next to a direct effect ($b = .14$, $p < .01$). Figure 2 is drawn to illustrate this interaction effect. These findings show that the positive effect of performance appraisal on active consideration of professional development is augmented when employees report strong organisational identification.

⁶ <http://www.quantpsy.org/sobel/sobel.htm>

Effect of career identification on the link between performance appraisal and employee outcomes (H4a and H4b)

Hypothesis H4a postulates that a strong career identification weakens the relationship between performance appraisal and opportunities for professional development. The results are presented in model 5a, results showed no interaction effect of career identification on the relationship between performance appraisal and opportunities for professional development. It is interesting to note that results show a significant direct effect of career identification on the explanation of opportunities for professional development ($b = .20, p < .01$). Thus we cannot confirm Hypothesis H4a.

Hypothesis H4b states that career identification weakens the relationship between performance appraisal and active consideration of professional development. The results in model 5b in Table 3 shows no interaction effect of career identification with regards to the relationship between performance appraisal and active consideration of professional development, therefore hypothesis H4b is not confirmed. No direct contribution of career identification to active consideration of professional development was found.

Finally, the exploration of the role of occupational identification on the link between performance appraisal and conditions of professional development provided no significant and substantial results. Only identification as a 'student career coach' was found to add to the explanation of active consideration of professional development, albeit to a limited extent ($b = .09, p < .05$). For identification as a 'teaching expert' or 'expert teacher', direct nor interaction effects were found.

■ GENERAL DISCUSSION

Summary and discussion of findings

Understanding how performance appraisal systems are developed and implemented in order to influence employee behaviour, helps practitioners to improve the chain of performance management (Mount, 1984; DeNisi et al., 2006). In this study, we examined the relationship between the application of a performance-appraisal system and two indicators of professional development: perceived opportunities and active consideration, while especially focusing on the role of leadership support and employees' professional identification.

This study presents indications for the contribution of the application of a performance-appraisal system in particular to explain for opportunities for professional development and the active consideration of professional development, as was hypothesised. These findings relevant for employees' professional development broaden the set of

empirically established employee outcomes to which the use of performance-appraisal system with a developmental approach can contribute, such as job satisfaction and various informal learning activities (Boswell et al., 2001; DeNisi et al., 2006; Bednall et al., 2014).

This study highlights the importance of the quality of leadership, since the results show that the *final effect* of the performance-appraisal system on employees' active consideration of professional development is dependent upon leadership support. Employees who experience leadership support and a more integral implementation of the performance-appraisal system, report a higher level of active consideration of professional development, which exceeds the initial effects of performance appraisal and leadership support substantially. As for opportunities for professional development, this study shows a full mediating effect of leadership support; here the contribution of the application of the performance-appraisal system to opportunities for professional development is transmitted through leadership support, which overrules the initial effect of the system. In summary, leadership support proves to be an important carrier of this HR practice, by at least *channeling* the application of performance appraisal, and by *amplifying* the initial effects of the HR practice. These findings are in line with recent reports on supervisory behaviour in educational institutions. Kuvaas (2011) found that the positive relationship between employees' reaction to performance appraisal and work performance was only evident amongst employees who reported that they received regular feedback (Kuvaas, 2011). Bednall et al. (2014) reported that clear, regularly communicated, and open feedback from a supervisor explained for the increase in informal learning activities such as reflection, knowledge sharing and innovative behaviour amongst employees in secondary vocational education (Bednall et al., 2014). As a final example, a recent study on the effects of a teacher evaluation system on the intent to undertake professional development, i.e. reflective learning, conducted in the context of secondary education, reported limited effects of the system. However effects were stronger when employees experienced a more positive attitude of the principal towards the evaluation system and when the utility of the feedback was perceived as high (Delvaux, Vanhoof, Tuytens, Vekeman, Devos & Van Petegem, 2013). The results of the current study underpin and extend the widely presented proposition that "people are likely to be influenced by the perceived and experienced HR practices but also by their managers leadership behaviour" (Purcell & Hutchinson, 2007: 4; Henderson et al., 2009; Schyns et al., 2010; Spence & Keeping, 2011) by pointing to the interaction effects of both stimulants as a distinct third category.

Responding to the call to explore the multiple foci of identification and the flexibility of its impact in broadening the range of employee outcomes for which identification matters (Dick et al., 2006), the current study shows that the effect of the application of a performance-appraisal system varies in relation to employees' identification with

the organisation and career. While organisational identification contributes to both outcome measures, an interaction effect was found only for active consideration of professional development. Employees with higher organizational identification appear to react more sensitively to the performance-appraisal system. The effects of the performance-appraisal system did not vary with employees' career identification, thus no support for the stronger susceptibility of employees with lower career identification was found. Similarly, there was no indication that effects of the application of a performance-appraisal system on professional development varied in relation to occupational identification. Only occupational identification as an 'student career coach' added to the explanation of active consideration of professional development and did so to a very limited extent.

While recent meta-studies show that "... high-quality relationships are associated with positive work-related outcomes (such as) job satisfaction, commitment and performance" (Schyns et al., 2010: 2; Pichler, 2012), our study shows that next to the interaction of the application of a performance-appraisal system with a high-quality relationship, it is *employees' identification as such* that accounts for different aspects of professional development. Results suggest that organisational identification adds to the perception of opportunities for professional development and active consideration of professional development, while career identification fuels the perception of opportunities for professional development.

When reflecting on this study from the perspective to develop a culture of professionalisation to promote organisational innovation and educational reform (Kuijpers, 2012), the results show that both the professionalisation capacity of the organisation (by providing opportunities for professional development) and the professionalisation capacity of the individual (by actively considering professional development) are enhanced by leadership support. This finding is in line with the results of a recent study done amongst 1096 teachers in primary and secondary schools and schools for vocational education (Kuijpers, Evers, Kreijns, Klaijnsen & Kessels, 2014a & 2014b).

Limitations

Most limitations of this study are related to the use of a self-reported questionnaire and the cross-sectional nature of the research design itself. Despite all measures taken to prevent and control for the hazardous effects of studies relying on self-reported measures (Podsakoff, 1986), this data still represent facts and appreciations collected with one instrument at one moment in time, therefore causal inferences cannot be made in this study. Although the measurement of the performance-appraisal system by counting the delivery of its components is rather straightforward and does not include any evaluation or appreciation (see Boselie, Diets & Boon, 2005 for other measures), the questionnaire is still a self-report of an experience. In addition, the scores for leader-

ship support and outcome measures might be subject to motivational bias. Although the within-organization representativity of the study is strong due to the high response rate, the generalizability is by definition poor. Considering the differences in educational programs and levels within and across nations (Weert & van der Kaap, 2014; Shin & Cummings, 2014) and keeping in mind that performance-appraisal systems and intended employee outcomes can vary with the strategy of organizations, the results have to be handled with caution.

Practical consequences and lines for future inquiry

The process of the application of HR tactics by supervisors deserve the full attention of practitioners and leaders alike, because it is the double bind of HR tactics and leadership behaviour that disables, enables or can multiply the realization of HR's tactical potential. With this in mind, the practical consequences of this study for the collaborative design, implementation, monitoring of HR tactics and training of supervisors are numerous. One consequence for the development of a performance-appraisal system is that the diversity in employees' identifications should be taken into account when applying a performance-appraisal system. In order to create impact for low and high career identifiers and employees with higher and lower organisational identification, this professional diversity should be estimated and evaluated as a design requirement. Only then the performance-appraisal system can provide an effective platform for dialogue between supervisor and employee, upon which the continuous synchronization of job demands and professional qualifications can take place.

In realizing the goals of a performance-appraisal system, the role of the supervisor cannot be underestimated. This is because the effects on an employee's professional development depend strongly on the quality of the employee-supervisor relationship. The current study highlighted task-oriented leadership support, one evidence-based characteristic of such a relationship, which involves an open dialogue, vertical communication, supervisory encouragement and frequent feedback. Therefore training in performance appraisal should not been focused on using the tool itself but on facilitating a coherent management development approach that enhances supervisors' capabilities in developing and sustaining these high-quality relationships. This plea for a management-development approach instead of 'tool- training' approach is supported by the results of other studies (Kuvaas, 2011; Bednall et al., 2014). There is reason to bring forward the consequences of this finding more urgently, as recent meta-analysis showed it has not been adopted in guidelines and handbooks for HRM yet (Pichler, 2012).

In conclusion this study conducted in the context of Higher Education shows that the use of a performance-appraisal system can contribute to the professional development of teachers in HE. However, its effects are strongly influenced by leadership support

and to a lesser extent by organisational identification. Unraveling these dynamics, preferably in a longitudinal study, will contribute to the theoretical and practical understanding of the interaction between HRM, supervisory behaviour, differences in identification strength and professional development. At present, this still remains one of the black boxes in HR practice and employee- and organizational performance, which should be opened in order to provide evidence-based support for the promotion of professional development in educational institutions (Paauwe, 2007; Pichler, 2012).

■ APPENDIX

■ TABLE 1

Standardised factor loadings: leadership support, opportunities for- and active consideration of professional development and jobsatisfaction

Items
I give the following overall score to how I feel about my work
I give the following overall score to working conditions
The R&D cycle has made me more actively consider my professional development
The R&D cycle has contributed to my professional development
There are enough opportunities for me to develop myself at the (name University)
I have enough opportunities for development within my academy/unit/lectorate
I can approach my manager(s) with my problems and observations
I believe my manager keeps me sufficiently informed of developments that concern me
I can discuss my work effectively with my manager(s)
I receive sufficient feedback about my work
I feel sufficiently encouraged to present ideas and issues

Notes: Extraction Method Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 5 iterations. LS= leadership support; ACO = active consideration of professional development; OPP = opportunities for

Components			
1	2	3	4
LS	ACO	OPP	JS
			.809
			.858
	.946		
	.921		
		.911	
		.840	
.846			
.845			
.899			
.811			
.716			

professional development; JS = job satisfaction, included to test for multicollinearity; R&O cycle = local label for the performance appraisal system in this University.

■ TABLE 2

Means, standard deviations, and correlations of variables (N = 538)

	Mean	SD	1	2	3
1. Gender	1.51	.50	1		
2. Age	4,23	1.08	.22**	1	
3. Professional tenure	4.17	1.16	.21**	.52**	1
4. Size of appointment	3,51	.80	.21**	-.10*	.03
5. Application of performance appraisal	3.39	1,65	.06	.10*	.21**
6. Leadership Support	3.76	.99	.02	.04	-.00
7. Opportunity professional development	3,85	.96	-.06	-.02	-.04
8. Active consideration professional dev.	2.63	1.15	-.04	-.06	-.10
9. Career identification	4.33	.78	-.14**	-.14**	-.12**
10. Organisational identification	3.75	1.06	.00	-.05	-.04
11. Expert occupational identification	4.36	.74	.09*	.11*	.16**
12. Coach occupational identification	4,51	.60	-.04	.12**	.14**
13. Didactics occupational identification	4,39	.67	.02	.09*	.28**

Note. N = 538. ** p < 0.01 two-tailed, * p < 0,05 two-tailed; Cronbach's' alpha, if applicable, is reported on the diagonal. Gender: 1 = female, 2 = male; Age: 1 = < 20, 2 = 20-29, 3 = 30-39, 4 = 40-49, 5 = 50-59, 6 = > 60; Professional tenure = work experience in education in years: 1 = < 1 yr, 2 = 1-2 yrs, 3 = 2-5 yrs, 4 = 5-10 yrs, 5 = >10 yrs; Size of appointment: 1 = < .26 fte 2 = .26 - .50 fte, 3 = .51-.75 fte, 4 = >.75 fte; Application of performance

4	5	6	7	8	9	10	11	12	13
1									
.14**	1								
.07	.34**	(.92)							
.15**	.22**	.46**	(.84)						
-.01	.20**	.33**	.25**	(.90)					
.02	-.03	.05	.21**	.10	1				
.20**	-.00	.20**	.19**	.16**	.32**	1			
-.03	.05	-.03	-.02	.05	.17**	.02	1		
.04	.07	.05	.01	.09	.18**	.17**	.18**	1	
-.00	.08	.03	.04	-.04	.11*	.10*	.36**	.34**	1

appraisal; sum of the applied components, index 0-5; Leadership support: 5 items scaled 1-5; Opportunities for professional development: 2 items scaled 1-5; Active consideration of professional development: 2 items scaled 1-5; Various identifications: one item each scaled 1-5.

■ TABLE 3

Results of the hierarchical regression analyses

Model Variables	Opportunities for professional development		
	1a	2a	3a
1. Gender	-.09*	-.09*	-.10*
2. Age	.00	-.00	-.00
3. Professional tenure	-.01	-.04	-.02
4. Size appointment	.13**	.11*	.11**
5. Application of performance appraisal (APA)		.21**	.07
6. Leadership support (LS)			.41**
7. APA*LS			-.05
9. Organisational identification (OI)			
10. APA*OI			
11. Career identification (CI)			
12. APA*CI			
R2	.01	.05	.21
F Values	2.451*	7.133**	21.852**

Notes. $N = 538$; ** $p < 0.01$, * $p < 0.05$; All beta coefficients in the table are standardized; Opportunities for professional development: 2 items, scale 1-5; Active consideration of professional development: 2 items, scale 1-5; Gender: 0 = female, 1 = male; Age: 0 = < 50 years, 1 = > 50 years; Professional tenure: 0 = < 10 yrs, 1 = > 10 yrs; Size of appointment: 0 = < .75 fte, 1 = > .75 fte; Application of performance appraisal: number of meetings index 0-5; Leadership support: scale 5 items; Various identifications: one item each scaled 1-5.

development		Active consideration of professional development				
4a	5a	1b	2b	3b	4b	5b
-.09	-.07	-.02	-.02	-.02	-.01	-.01
.00	.02	.01	.01	.01	.01	.02
-.03	-.02	-.08	-.08	-.07	-.07	-.07
.08	.11*	-.02	-.03	-.04	-.05	-.03
.22**	.22**		.11*	.04	.11*	.11*
				.29**		
				.15**		
.17**					.14**	
.04					.10*	
	.20**					.08
	-.01					.01
.08	.09	.00	.01	.08	.03	.01
7.771**	8.395**	.627	1.773	7.893**	3.729**	1.735

10 yrs; Size of appointment: 0 = < .75 fte, 1 = > .75 fte; Application of performance appraisal: number of meetings index 0-5; Leadership support: scale 5 items; Various identifications: one item each scaled 1-5.

Figure 1. Model showing moderating effect of leadership support on link performance appraisal – active consideration of professional development.

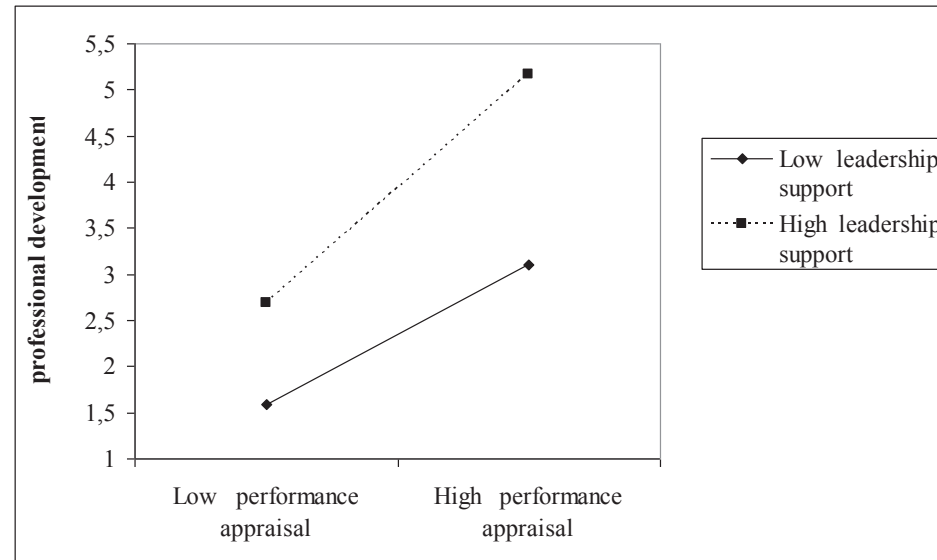
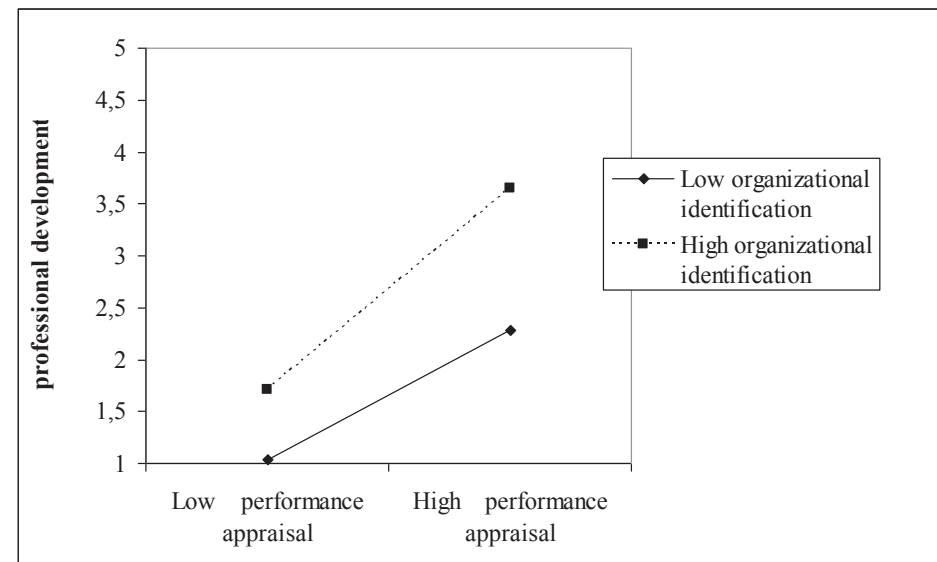


Figure 2. Model showing moderating effect of organizational identification on the link performance appraisal – active consideration of professional development.



■ LIST OF VARIABLES

Opportunities for professional development : respondents judgment of the opportunities within the organization for further professional development is measured with two items on a 5 point scale (1 = totally disagree, 5 = totally agree, 6 = don't know), alpha = .84, (item loadings factor 3 in parentheses):

1. *There are enough opportunities for me to develop myself at the (name university) v14b (.91)*
2. *I have enough opportunities for development within my academy/unit/lectorate v14c(.84)*

Active consideration of professional development : Teacher's judgment of the effects of the planning and review process is measured with two items on a 5 point scale (1 = totally disagree, 5 = totally agree, 6 = don't know), alpha = .90 (item loadings factor 2 in parentheses):

1. *The R&D cycle has made me more actively consider my professional development. v50b (.95)*
2. *The R&D cycle has contributed to my professional development v50c (.92)*

Application of performance appraisal : The actual application of components of performance appraisal system was measured with five items each addressing the delivery of one of its components (yes-no), together forming an index 0-5:

1. *I had a planning discussion v48a*
2. *I had a progress discussion v48b*
3. *I had an assessment discussion v48c*
4. *My competencies were discussed during the last R&D cycle v49a*
5. *I have created a Personal Development Plan (PDP) v49b*

Leadership support : Leadership support is measured with five items on a five point scale (1 = totally disagree, 5 = totally agree, 6 = don't know), alpha = .92, (item loadings factor 1 in parentheses):

1. *I can approach my manager(s) with my problems and observations v12a (.89)*
2. *I believe that my manager keeps me sufficiently informed of developments that concern me v12b (.82)*
3. *I can discuss my work effectively with my manager(s) v12c (.90)*
4. *I receive sufficient feedback about my work v12d (.70)*
5. *I feel sufficiently encouraged to present ideas and issues (IN2AC1) v12j (.62)*

Organizational-, Career- and Occupational identification(s): The following is a list of various possible motivations for teachers in performing their duties. Please indicate the extent to which these apply to you. The following motivation applies to me (1 = completely unimportant, 5 = very important, 6 = don't know):

1. *Pursuing my ambitions and continuing to develop myself* (CI = Career identification)
2. *Developing the faculty organisation* (OI = Organizational identification (v60dPDOO))
3. *Being a subject expert* (OCCEI = Occupational identification on expertise: 'teaching expert')
4. *Coaching every student to get the best out of themselves* (OCCPEI = Occupational identification as 'student career coach')
5. *Being a good pedagogue* (OCCDI = Occupational identification on didactics: 'expert teacher')

Background variables

Gender: female (0), male (1).

Age in years, categories : 0 < 20, 20 – 29, 30 – 39, 40 - 49, 50 - 59, 60 +.

Years of experience in education, categories : < 1, 1 < 2, 2 < 5, 5 < 10, 10 >.

Size of appointment, categories: < .26 fte, .26 -.51 fte, .51 -.76 fte, .76 > fte.

Changes

Chapter 4

Changes in employees professional identification; Exploring the role of career competencies and customization strategies among starting teachers in Higher Education'¹

¹ This chapter was presented at the EAPRIL Conference 2014, Nicosia, Cyprus. This study is one of the cases to be discussed at a mini symposium on educational reform and professional development, during the ORD Conference in June 2015 in Leiden.

■ ABSTRACT

This study addresses the process of change in newcomers' organizational, occupational, and career identification within the first four months of entering an organization and focuses on the activities that employees perform, by looking at their use of career competencies and customization strategies. A mixed-method two-wave design was applied: Part 1 of the study encompasses a two-wave design, using data from surveys conducted just before organisational entry and after four months ($n = 41$), while in part 2 a comparative case-study design is applied by investigating additional data obtained from an employee's application letter, the resume, and a career interview held after nine months.

Results of part 1 showed that most individuals do experience substantial intra-individual non-uniform changes in one or two of their identifications, while the average career and organisational identification of newcomers is stable at a group level. Results indicate that the career competencies; '*reflection on motives*', '*reflection on qualities*' and '*work exploration*', do not explain intra-individual changes in employee identifications after four months, although they are linked to career and occupational identification at wave one. Part 2 showed the existence of six different customization strategies that newcomers can use in order to manage change in their set of professional identifications: '*identity conservation*', '*identity splinting*', '*identity hopping*', '*identity patching*', '*identity enriching*' and '*identity development*'. Verbalizing these results in terms of an overarching professional identity, findings suggest that newcomers' use of career competencies contribute to the emergence of a professional identity at the start, while newcomers' customization strategies play a role in the process of change with regards to the set of professional identifications.

■ INTRODUCTION

Employees' identification has generally been regarded as one of the factors that Human Resources Management (HRM) tactics can affect and the integration of new employees in the organisation, by increasing their organisational identification for instance, has been one of the main objectives of HRM (Ardts, Jansen & van der Velde, 2001; Boselie, Dietz & Boon, 2005; Cooper-Thomas & Anderson, 2006; Paauwe, 2008; Saks & Gruman, 2011; Ehrnrooth & Bjorkman, 2012; Lapointe, Vandenberghe & Boudrias, 2014). While our present knowledge about the emergence of and changes in employees' identifications is still considered scarce and fragmented (Ashforth, Harrison & Corley, 2008; Peters, Haslam, Ryan & Fonseca, 2013; Ashforth, Joshi, Anand & O'Leary-Kelly, 2013), the entrance of newcomers into the organisation has drawn special attention because the start of an appointment at an organisation may be considered as one of the 'socialization turning points' in the career biography of individuals and therefore at which changes in employees' organisational and occupational identification can be more readily observed (Bullis & Bach, 1989; Ashforth, Sluss & Harrison, 2007; Sluss & Thompson, 2012; Lapointe et al., 2014).

Abundant studies on newcomer adjustment have focused on the institutionalized socialization tactics that organisations use to manage the identifications of employees and on employees' responsiveness to the organisational demands that are communicated through these organisational controls (Ashforth et al., 1996; Ardts et al., 2001; Saks, Uggerslev & Fassina, 2006; Bauer, Bodner, Erdogan, Truxillo & Tucker, 2007; Saks et al., 2011; Lapointe et al., 2014). From these studies, it is clear that the "accessibility of employees' identity for organisational regulation" through organisational controls is only indirect (Alvesson & Willmott, 2002; Karreman & Alvesson, 2004: 172; Alvesson & Karreman, 2007) which makes an investigation of the personal factors involved of potential value. Personal traits such as extraversion (Wanberg & Kammeyer-Mueller, 2000), curiosity (Harrison, Sluss & Ashforth, 2011) and with that a 'more proactive personality' (Kammeyer-Mueller & Wanberg, 2003; Fang, Duffy & Shaw, 2010) have been found to explain differences in aspects of newcomer adjustment. A second line of inquiry highlights the role of specific proactive adjustment behaviours, such as information and feedback seeking (van der Velde, Ardts & Janssen, 2005; Bauer et al., 2007). Such research shows that newcomers can influence their accommodation by accelerating and optimizing their socialization process by behaving pro-actively (Cooper-Thomas, Paterson, Stadler & Saks, 2014). A third research angle highlights the role of employees' pre-entry perceptions in organisational socialization, such as pre-entry knowledge and perceived similarity (Kammeyer-Mueller et al., 2003; Fang et al., 2010; Kammeyer-Mueller, Livingstone & Liao, 2010). Fourth, still other studies have focussed on specific processes during organisational entry, for example on the interaction between an individual and the organisation (Smith, Amiot, Callan, Terry & Smith,

2012) and on the quality of the leader-member exchange (Sluss & Thompson, 2012; Jokisaari, 2013).

Notwithstanding the richness of this research, little attention has been paid to the role of the individual employee as an active agent with his or her own goals and strategies, which relates to employees' individual behavior in the process of job transition (Ibarra, 1999; Bullis et al., 1999; Cooper-Thomas et al., 2006; Sluss et al., 2012). This perspective on employees' conscious activities while preparing for and coming onboard a new organisation seems crucial, since scholars from various research paradigms have shown the importance of the employee as an actor in the development and change of changing person-work alliances during the life span (Savickas, 1997; Ibarra, 1999; Pratt, Rockmann & Kaufmann, 2006; Ashforth et al., 2008; Cooper-Thomas et al., 2014; Moss, Gibson & Dollard, 2014). Indeed it has been proposed in career theory, that instead of career-maturity it is career-adaptability which enables individuals to cope with changes at work within the reality of post-modern boundaryless careers (Savickas, 1997). Against this background, the goal of the present study is to contribute to the understanding of the process of change in newcomers' organisational, occupational, and career identification, by exploring this dynamic through the lens of employees' deliberate activity just before and during organisational entry. For this purpose, the current study will examine the role of career competencies and customization strategies that employees use to respond to organisational demands.

The concept of 'career competency' is drawn from research on employees' career-development behaviour. This concept refers to the deliberate activities that individuals use to navigate their careers, such as reflection on career qualities, reflection on career motives and work exploration (Kuijpers & Scheerens, 2006a; Kuijpers, Schyns & Scheerens, 2006b; Kuijpers & Meijers, 2012; Meijers & Kuijpers, 2014). The concept of 'customization strategy' is derived from research on employees' responsiveness to new organisational demands. Customization strategies refer to the deliberate activities that individuals' can undertake in the process of balancing their professional identification with new organisational demands which may be incongruent to previous self-definitions (Pratt et al., 2006). Finally the concept of 'organisational controls' is used, which refers to the processes through which organisational demands are communicated to employees, including so-called hard and soft controls like particular HRM tactics and supervisory behaviour (Alvesson et al., 2002; Karreman et al., 2004). Together these three concepts form the set of sensitizing concepts that guide the current exploration of the dynamic of changes in employees' identification in studying employees' deliberate activity.

■ CHANGES IN EMPLOYEES' IDENTIFICATION

Employee identification

Building upon decades of theorizing and research, Ashforth et al. (2008) define identification as: "the process by which people attach themselves to groups, organizations and roles; by viewing a collective's or role's essence as self-defining" (Ashforth et al., 2008: 329). Identification of individuals as a state of affairs refers to the concept of the social identity, the "individuals knowledge that he (or she) belongs to certain social groups together with some emotional and value significance ... of this group membership" (Tajfel, 1978; Tajfel & Turner, 1987; Haslam, 2004: 21). Extant research has shown that employees can identify with various distinct foci in the context of their work, among which: organisational (sub)collectives, occupational roles and their career (Ashforth & Mael, 1989; Alvesson, 2000; Christ & van Dick, 2003; van Dick & Wagner, 2002; Haslam, 2004; Johnson, Morgeson, Ilgen, Meyer & Lloyd, 2006; Ashforth et al., 2008; Cooper & Thatcher, 2010; Millward & Haslam, 2013).

However, the social identity of individuals is complex (Roccas & Brewer, 2002; Brewer, 2010; Bodenhausen, 2010; Knifsend, & Juvonen, 2013) and employees can identify with various foci of identification at any given time or situation (Knippenberg & van Schie, 2000; Meyer, Becker & van Dick, 2006; Ashforth et al., 2008; Aangenendt, Kuijpers & Sanders, 2013; Chen et al., 2013; Millward et al., 2013). In order to reveal changes in employees' identification, the current study addresses three of these conceivable foci of identification in tandem: identification with the *organisation*, identification with the *occupation* and identification with the *career*. Following Ashforth et al.'s (2008) conceptualization of identification, employees' identifications are captured by looking at the self-definition and self-categorization of the employee through the use of self-defining statements such as "I am ...", "I value ..." and "I feel about ...", for each of the foci of identification (Ashforth et al., 2008: 330). In addressing the issue of social-identity complexity (Roccas et al., 2002), in the current study the phrase '*professional identity*' is used as an equivalent for the integral set of 'employees' identifications', referring to the professional self-definitions in the context of their work (Aangenendt et al., 2013).

Being a newcomer

Changes in organisational and occupational identification of employees have often been seen as the outcome of a socialization process: "the process by which the goals of the organisation and those of the individual become increasingly integrated and congruent" (Hall, Schneider & Nygren, 1970: 176). The wide-spread use of introduction programs and corresponding socialization tactics that organisations set into motion for their new employees, depart from this very same proposition (Ardts et al., 2001; Bauer et al., 2007; de Cooman, de Gieter, Pepermans, Hermans, Du Bois, Cares & Jegers,

2009; Kammeyer-Mueller, Wanberg, Rubenstein & Song, 2013). Such organisational tactics are developed and implemented to increase employees' organisational and occupational identification, contributing to the bond or 'fit' between employee and organization and to enhance employees' task performance (Kristoff-Brown, Zimmerman & Johnson, 2005; Ashforth et al., 2007; Yang, Levine, Smith, Ispas, Rossi, 2008; Saks et al., 2011). Although conceptualisations of person-organization fit do differ (Hoffman & Woehr, 2006), P-O fit is generally been described as the "compatibility between people and the organizations in which they work" (Kristoff, 1996: 389). High fit is related to various favourable employee outcomes such as job performance, low turnover intention and organisational citizenship behaviour (Kristoff et al., 2005; Hoffman et al., 2006; Tak, 2011; Leung & Chaturvedi, 2011), which are considered beneficial to the realisation of organisational goals.

Research on the 'boundaryless' (Arthur & Rousseau, 1996) and protean career (Hall, 2004) has shown that being a newcomer in an organisation and being a novice in a profession is not a once in a life time event anymore (Arthur et al., 1996; Meijers, 1998; Kuijpers et al., 2006b; Sullivan & Baruch, 2009; Kovalenko & Mortelmans, 2014; Ng & Feldman, 2014). As a consequence, recent conceptualizations of 'career' include both changes, such as in the definition: "the evolving sequence of a person's work experiences over time", which can encompass experiences in different occupations and organizations (Jepsen & Choudhuri, 2001: 3). Because the organisational and occupational career stability of individuals differs (Jepson et al., 2001; Kovalenko et al., 2014), the career step of entering a new organisation can have different meanings for individuals. In each single career transition, specific changes with regards to entering a (new) organisation, a (new) occupation, a (new) sector and a (new) functional level can be represented (Jepson et al., 2001; Baruch, 2006). Building upon this idea, the concept of 'career-step discrepancy' is used in this study, to refer to the accumulation of distances within the career transition between the previous and the new job.

Career competencies

Research on employees' career development behaviour and especially on the type of activities that individuals perform to navigate their career, has shown the existence of five career competencies. These competencies are: reflection on career qualities, reflection on career motives, work exploration, career control and networking (Kuijpers et al., 2006a, Kuijpers et al., 2006b). 'Reflection on qualities' is defined as reviewing one's own competencies with respect to one's career, while 'motivation reflection' is defined as reviewing one's own desires and values with respect to one's career. 'Work exploration' is defined as matching one's own identity and competencies to the required values and competencies in a specific work situation. 'Career control' is defined as career-related planning and influencing of learning and work. Finally 'networking' is defined as setting up contacts that are relevant for one's career (Kuijpers et al., 2006b: 169).

While for two of these competencies significant linkages with measures of internal- (career actualization success) and external career success (salary and occupational status) were found¹, the competencies *reflection on motives*, *reflection on qualities* and *work exploration* produced different results. Results obtained from 1579 employees working within 16 organizations showed that the competencies *reflection on qualities* and *work exploration* did not significantly add to the explanation of internal and external career success. Moreover *motivation reflection* was found to be negatively related to both internal and external career success; indeed employees who scored lower on reflection on one's own desires and values, showed higher on career success. To explain these results for reflection on qualities, the authors suggested that the respondents were possibly in a stable career phase and proposed that "reflection on career capacities is more important in earlier stages, that is, in job searching behavior" (Kuijpers et al., 2006b: 176). Progressing with this line of reasoning, the proposition was made that reflexive competencies, e.g. *reflection on motives*, *reflection on qualities* and *work exploration* could be of relevance during periods of transition and change (Kuijpers et al., 2006b). Indeed, other authors have suggested that changed identification of employees is accompanied by feelings of uncertainty at the individual level (Sullivan, 1999), which elicits personal reflection and ultimately identity change (Haslam, 2004; Ashforth et al., 2008). That's why the linkage between these reflexive career competencies and changes in the organisational, occupational, and career identification of newcomers deserves further exploration.

Customization processes

As a result of the instability of careers in our age and the differences in career-step discrepancy across newcomers (Jepson et al., 2001; Baruch, 2006; Sullivan et al., 2009; Kovalenko et al., 2014; Ng et al., 2014), Rockmann and Kaufmann (2006) proposed that employees' professional identity "may not begin as a tabula rasa, but rather might from the beginning involve important previous identities that serve as a temporary means of making sense of work" (Pratt et al., 2006: 254). Pratt's re-construction of the process of professional identity formation of newcomers², showed that the process of identity construction was elicited by what they called "work-identity integrity violations", a discrepancy between the professional identity and the job's demands (Pratt et al., 2006: 235). Professionals with strong, well-developed identities used a different

¹ Results showed career actualization ability and networking to be positively associated with both measures of internal (career actualization success) and external (salary and occupational status) career success, while career control only added to the explanation of internal career success (Kuijpers et al., 2006b).

² Based upon a six year qualitative study amongst medical residents, a population deliberately chosen in order to explore differences in professional identities of subgroups within a segmented profession (see also Koelewijn, 2014).

type of customization strategy³ to new identity-incongruent work as compared to professionals with less-developed professional identities, who were more uncertain about their professional identity (Pratt et al., 2006: 254). Further fine graining of this dynamic of change, revealed that change could be realized through three different customization processes. The first customization process '*identity splinting*', is a strategy individuals use when they experience insufficient support for the development of a new professional identity, in that case another prior professional identity is used as temporary identity (Pratt et al., 2006: 248). Professionals with strong, well-developed professional identities showed '*identity patching*', a strategy of attaching new identifications to the existing professional identity, "thus filling holes and deficiencies in their pre-existing notions" (Pratt et al., 2006: 247). The third type of customization, '*identity enriching*', is described as a process that results in a more "deepened and nuanced understanding of professional identity of which the basic tenets remain the same" (Pratt et al., 2006: 246). These three customization processes will be used in the current study as a lens through which to examine the process of change in employees' identifications during organisational entry.

Research questions and studies

The main research questions that guide this study are:

- 1) *What kind of changes in employees' organisational, occupational, and career identification can be observed during the first four months of organisational entry?*
- 2) *To what extent can these changes be explained by the career competencies that employees use, just before organisational entry?*
- 3) *How does changed employee identification unfold, what customization processes of employees can be distinguished as a response to the organisational demands?*

In the current study, a mixed-method design was applied, in which a two-wave study and a comparative case study was combined. This mixed-method design is appropriate to assess the prevalence of specific changes in employees' identification and to try to understand and elucidate the factors and processes that underlie these changes (Bainbridge & Lee, 2014). In part 1 of the study, the first two research questions are addressed using the framework of a two-wave study. This quantitative part of the study is designed to assess the intra-individual changes in employees' organisational, occupa-

tional, and career identification and the antecedents of change, such as career competencies and controls among which career-step discrepancy. Part 2 of the study is designed to explore and unfold the customization strategies that individuals use in the process of change, which addresses the third research question. For this qualitative part, a comparative case-study design was chosen, incorporating a set of cases that represent a variety of changed identifications; the intention in opting for this strategy here was to find out about possible additional strategies using a grounded-theory approach (George & Bennett, 2005; Strauss & Corbin, 2008; Yin, 2014).

■ PART 1: A TWO-WAVE STUDY

Sample and procedure

The study was conducted at a University for Applied Sciences in the Netherlands. The data of this study was gathered amongst individual employees who had recently been appointed as teachers in the organisation, but had not yet fulfilled any duties. These new employees were identified by HR consultants during the appointment procedure. In accordance with privacy regulations, HR consultants delivered a letter of invitation from the Twente University Centre for Career Research and explicitly asked for permission to pass on the email address of employees to the researcher. New employees, who agreed to participate in this career study, received the first electronically-administered survey just before the start of their appointments. The second survey was sent to them after four months of work. This four-month timeframe was chosen because it was limited enough to be considered a 'socialization turning point' (Bullis et al., 1989; Ashforth et al., 2007), while the period also corresponded to one semester within the organisation, which meant a clear start and end point.

To get a significant number of respondents, the research program took two and a half years. Data was gathered in batches at eleven different moments of organisational entry by teachers. A total of 118 new employees were invited to take part in the study, of which 60 employees agreed to participate (51%⁴). The second questionnaire – the one used after four months of being on the job – was returned by 41 teachers, which represented a response rate of 68%. To monitor the selection process and guard the homogeneity of the research population, specific control questions were included in the first survey, such as the starting date of the appointment, job type (should be teacher) and organisational tenure (should be zero). Respondents who did not fit these criteria were excluded from the data set.

³ In Pratt's study (Pratt et al., 2006: 254) the labels "strategy" and "process" are used to indicate the same phenomenon from a different perspective. Obviously labeling change in terms of a strategy implicates an active role and deliberate choice of the individual. On the other hand for some employees change seems to be just something that happens, more in line with the connotations of a process than with the connotations of a strategy.

⁴ In the first year 29 out of 59 (49%) invited employees participated, in the second year 21 out of 32 participated (66%) and in the final year 10 out of 27 (37%).

Respondents

The final sample for the two-wave study consisted of 41 teachers, 27 of them being female (66%). The mean age of respondents at the first wave was 38 years, ranging from 23 to 57 years ($SD = 9.57$). Previous experience in the field of education was on the average 4.9 years, ranging from a half year to 25 years ($SD = 6.96$), while 18 participants (44%) reported that they had no professional tenure in the field of education at all.

Measures

Organisational, career, and occupational identification were based upon Ashforth et al.'s (2008) conceptualization of employee identification. A set of four items was developed for organisational and for career identification probing into teachers' in-group partnership teachers' core task, teachers' primary source of job satisfaction and primary professional challenge on the job. An example for organizational identification is: "My main task is to contribute to the organization of the educational program as a whole" and for career identification: "I would like to be seen as a person who has developed him-herself and has unfolded his/her abilities". For occupational identification a composite scale was used that included three subcategories of occupational identification: 'professional teacher', 'teaching professional' and 'coach' (Aangenendt et al., 2013). Examples of items included: "My main task is optimizing my teaching methods to reach the educational goals" and "I would like to be known as a specialist within my area of expertise". Respondents were asked to indicate the extent to which each statement represented their own opinion or feeling, using the expression 'doesn't fit me at all' (1) to 'fits me well' (5), adding a final category (6) for 'I don't know'. Identical items for employee's identification were embedded in both surveys to enable the assessment of changed identification. Respective alpha's for waves one and two respectively were: .77 and .74 for organisational identification (4 items) .62 and .73 for career identification (4 items) and .82 and .74. for occupational identification (12 items). Because of the small sample size of the study, no factor analysis could be conducted on the scales of the identifications. The Kaiser-Meyer-Olkin measure for sampling adequacy (Kaiser, 1974), which was calculated to assess the appropriateness of conducting a factor analysis, appeared to be insufficient with $KMO = .45$ (Hutcheson & Sofroniou, 1999; Field, 2009).

Career competencies: reflection on motives, reflection on qualities and work exploration were measured using scales, proven reliable in earlier research (Kuijpers et al., 2006). *Reflection on motives* was measured with six items, for example "I reflect on which norms and values are important to me". The scale for *reflection on qualities* consisted of seven items, including "I am exploring how I can use my qualities in my future career". The scale for *work exploration* encompassed six items, including "I investigate the possibilities at work to be able to do things which are important to me in life". Career

competencies were measured at wave 1, just before the new employees started their work. All scales proved to be reliable, alpha's being .78, .81 and .72 respectively.

Pre-structured questions were used to determine *gender*, *type of function*, *size of appointment* in fte (0 – 1.00), *previous experience in the organisation* (teaching periods of 12 weeks that had already been fulfilled at this organisation) and *organisational belonging*, the academy to which respondents were appointed. Finally, *career step discrepancy* was included as a measure to control for the distance between the previous and the current job. For this purpose, three types of transitions were taken into account: transfer across occupations, type of organisations and sectors⁵ (Jepson et al., 2001; Baruch, 2006). To assess the transitions, a dichotomous scale was applied to the career biography as presented in the resume, using zero for similarity and one for discrepancy, the final three-item index ranged from zero to three ($M = 2.12$, $SD = 1.11$, $n = 33$)⁶.

Analysis

Non-response analyses, which were conducted as a preparatory step to discover selective dropout between the waves, showed that none of the central constructs of the study nor any of the background variables were significantly related to selective dropout in the second wave. These tests were conducted for the central constructs: organisational, career, and occupational identification at wave one and career competencies, and for the controls: gender, age, size of appointment and professional tenure. Taken together, the findings indicate that selective dropout was probably not an issue in this study.

A correlation matrix was constructed showing the descriptives, alphas and associations between variables, using a non-parametric technique (Spearman's rho); this was done because of the limited number of respondents. To assess change in the average identification with foci at group level over time, dependent T-tests were used. To detect changes in the relative positioning of individual employees, the Related-samples Wilcoxon signed-rank test was applied, showing lower, higher or similar ranks of the identification with foci. To investigate the intra-individual changes, all 41 respondents were ranked with regards to the stability of their identifications; for this purpose, the absolute difference in observed identification between waves was taken as point of reference. The 12.5% interval in the distribution of changed identification was used as a cut-off point to detect highly increased or decreased identification. This meant that participants who showed the 25% greatest change in identification over time were

⁵ The concept of 'career step discrepancy' is the direct opposite of 'occupational career stability', as has been conceptualised by Gottfredson (1977) and Jepson et al. (2001).

⁶ Pearson's r between CSD and professional tenure (number of years experience in the field of education) is $-.87^{**}$, the more experience in the field of education, the smaller the career step discrepancy with the new job is.

identified, from this group subsets of employees could be looked at that showed identical patterns of stability and change. To address the second research question, stepwise regression analyses was conducted as an exploratory strategy to assess the antecedents of changed employee identification, taking the absolute difference between waves as the dependent variable.

Results two-wave study

The results of the quantitative analyses are presented in three tables, after that the findings will be summarised for the three following changes: organisational, occupational, and career identification.

Table 1 shows the means, ranges, standard deviation and correlations between variables within and across both waves. Close inspection shows that moderate positive correlations between occupational and career identification and between occupational and organisational identification at both waves can be seen, while career and organisational identification are not correlated.

Table 2 presents the number of individuals that show stable, increased and decreased organisational, occupational, and career identification across waves, using the 12.5% and 87.5% interval as a point of reference.

Table 3 portrays the diversity in patterning of changed employee identification that is observed at the intra-individual level. Most newcomers ($N = 25$; 61%) showed changes in one or two of their identifications during the first four months of work. Twelve of the twenty-seven theoretically possible combinations of changed identifications are actually observed (30%), leaving out most combinations of changed organisational identification with changes in occupational and/or career identification. As to the direction of the observed changes: thirteen respondents (52%) showed 'stable' combined with increased identification(s), nine respondents (36%) showed 'stable' with decreased identification(s), while three participants (12%) showed a mix of both increased and decreased identifications.

In order to provide an integrated picture of the results for occupational, organisational and career identification, the findings as they are presented in the Tables are summarised briefly below.

Occupational identification at wave one is moderately correlated with all three career competencies and higher occupational identification for employees is associated with a stronger use of career competencies. For occupational identification at wave two, only a moderate positive correlation between it and 'reflection on motives' was found. Decreased occupational identification at group level was found between wave one and

wave two (T test: $t(40) = 2.549$, mean difference = $-.013$, $p < .005$). Two respondents were found whose relative positioning in occupational identification remained the same (ties), while 23 respondents showed lower negative ranks at the second wave, reflecting a size effect of $r = -.26$ (related-samples Wilcoxon signed-rank test: $Z = -2.429^7$, $p < .05$). Changed occupational identification after four months was negatively correlated with occupational and organisational identification at wave one, employees reporting higher occupational and organisational identification at the start showed less change in occupational identification, all in all suggesting stronger occupational stability amongst those with high occupational and organisational identifications. Regression analyses predicting occupational identification at wave two by the wave one score, showed a moderate positive link ($b = .683^{***}$, $R^2 = .467$, $F\text{-value} = 34.104$). Effects attributable to gender, age, career competencies or career step discrepancy were not found.

Career identification is the strongest identification of newcomers at both waves, if one considers the average score. Career identification at wave one was positive but weakly associated with two of the career competencies, showing higher career identification for employees who reported stronger reflection on motives and work exploration. No correlations between career identification and career competencies were found at wave two. With regards to career identification, no significant changes over time in average, nor in rank order identification was found at group level. Predicting career identification at wave two using auto regression, showed a substantial positive link between identification at both waves ($b = .658^{***}$, $R^2 = .433$, $F\text{-value} = 29.776$). Changed career identification over time was strongly associated with gender, women showing less change, and positively associated with career and occupational identification at wave two; stronger identifications were associated with greater change. Regression analyses on changed career identification showed no effects relating to gender, age, career competencies, nor of career-step discrepancy.

Organisational identification appears to be the weakest identification of the newcomers within the university at both waves when considering the average score. Organisational identification at wave one is not associated with any of the career competencies. Organisational identification at wave two was positively associated with all identifications at wave one: most strongly and significant with organisational and occupational identification, but less significantly and more weakly with career identification. For organisational identification at group level, no significant changes in average nor in rank order identification were found. Prediction of organisational identification at wave two, using auto regression, showed a substantial positive link between identification at both waves ($b = .678^{***}$, $R^2 = .459$, $F\text{-value} = 33.129$). Changed organisational

⁷ (b) test is based on positive ranks: the number of lower ranks exceeds positive ranks

identification after four months was negatively correlated with the wave one score, whereas higher identification at wave one was associated with less change over time. In addition, high identification at wave two was associated with greater change during the first four months. No effects of gender, age, career competencies nor of career-step discrepancy were found.

■ DISCUSSION PART 1

Before moving on to the second qualitative part of this mixed-method study, this section provides a brief evaluation of the inferences that can be made so far. First, the results of this exploratory study indicate that the majority of the respondents (61%) do show substantial changes in one or two of their organisational, occupational and career identification during the first four months, while the average organisational, occupational and career identifications appear to be relatively stable phenomena at group level. Further fine graining at the intra-individual level shows a considerable diversity in the patterning of these changes. In explaining these changes in employees' use of career competencies before entering the organization, no indications were found that career competencies would serve as antecedent or driver of change during the first four months. However, all career competencies appear to be relevant for the explanation of occupational identification at wave one, although their importance for occupational identification decreases over time, when considering the strength and significance of the correlations at wave two. Apparently career competencies generally serve to prepare employees for transition and organisational entry, leaving the changes in employees' identification after organisational entry unexplained. Therefore we turn to the third research question, which will be the subject of part this chapter.

■ PART 2: COMPARATIVE CASE STUDY

Part two of this mixed-method approach addresses the third research question, which looks at the strategies that newcomers use to customize their identifications to organisational demands; this was studied using a qualitative comparative-case study approach.

■ METHOD

Sample and procedure

The sub-sample for part 2 was taken from the participants in the previous two-wave study, for whom researchers had an application letter, resume and career interview, which served as additional data sources. Access to employees' HRM-file, containing the application letter and the resume was granted by 39 (65%) of all participants from the first survey. Of those there were 29 *résumés* (71%) and 18 application letters (44%) which could be collected. In accordance with privacy regulations, the analyses were conducted on the spot and HRM-files did not leave the HRM department. Transcriptions of career interviews were available only for a selection of the participants in the first batch of the study. The 12 participants were between 27 and 53 years of age (Mean = 37.2; SD = 7.9); their previous experience as teachers in other institutions varied from no experience to 20 years (Mean = 3.33; SD = 6.2); seven teachers had no previous teaching experience; four of the participants were men⁸.

Respondents

The sub-sample of respondents used in the comparative case study, was identified through a case-selection process called 'theoretical sampling'. Theoretical sampling is "done to discover categories and their properties and to suggest the interrelationships into a theory" (Strauss, 1967: 62). In a pursuit for optimal theoretical saturation⁹, those cases were selected for further analysis that showed maximal and contrasting changes (Glaser & Strauss, 1976: 62; Yin, 2014). The final selection of cases was based upon two criteria: 1) the prevalence of specific combinations of intra-individual stability and change in employees' identifications, and 2) the availability of a complete dataset including an interview transcript. As a result, eight cases were ultimately selected, – two respondents from each of the four most frequently observed combinations of stable and changed identifications. This number of cases represents a sufficient sample size for interviews and case-study research based upon experiment-based guidelines for qualitative sampling (Guest, Bunce & Johnson, 2006). See the last column of Table 3 for more details.

Measures

Qualitative data was taken from the application letter and resume, from the answers on the open questions in the two surveys, and from the interview transcript. The survey at wave one contained open questions regarding the application and selection proce-

⁸ The procedure for the selection of respondents and for the development of the semi-structured interview are described in detail in Chapter two.

⁹ theoretical saturation "means that no additional data are being found whereby (the researcher) can develop (new) properties of the category" (Glaser & Strauss, 1967: 61).

ture of the job. Open questions in the second survey included: 'What is the most important aspect regarding your own functioning that you want to develop?' and 'What is the most important aspect in your work, that you want to change?'. A semi-structured in-depth interview was used to elicit information about respondents' professional self-definitions at various moments in their careers (King, 2004). Firstly, respondents were encouraged to tell their 'personal career story' of becoming and being a teacher. Themes that were explored next included: the process of applying for the new job, the experience of change in professional self-definition during one's career, the presence and relative importance of stakeholders (e.g. organisational sub- collectives and client groups) and the personal needs and plans for future professional development. Interviews varied in duration from 60 to 90 minutes, were audio taped and fully transcribed (see for more details Chapter 2).

Analysis

After completion of the data preparation process in which a case-study database was created that included all available data concerning each participant (Yin, 2014), a stepwise procedure for within and cross-case analysis was applied.

A procedure for *within-case analysis* was used to unravel employees' narratives concerning the change process, the role of organisational factors and the personal self, in line with procedures for exploratory research from the perspective of Grounded Theory (Glaser et al., 1967 & 2012; Strauss et al., 2008). For instance, to investigate the role of organisational demands, the concepts 'hard' and 'soft' organisational controls (Karreman et al., 2004) served as sensitizing concepts to label and classify the material. All text fragments concerning the role of the personal self were identified and coded creating provisional categories and first order codes (Pratt et al., 2006), highlighting the themes in the narrative concerning the respondent as an actor: such as personal aims, responses to the perceived organisational demands and objectives for professional development. For each case, an extensive in-depth case description was created wherein all interpretative statements concerning the case were summarized grounded upon explicit and detailed reference(s) to citations and other data in the case study database, without losing coherence and meaning of the narrative (Krippendorff, 1981; Miles & Huberman, 1994; Frank, 2012). Due to the volume of each case study description, they are not included in this paper but available on request.

A procedure for *comparative case study analysis* was used to identify and extract the customization strategies of employees that are apparent in the narratives of changed identification (Glaser et al., 1967 & 2012; George et al., 2005; Yin, 2014, Moss et al.,

2014)¹⁰. In order to unravel and label the customization strategies of individual employees, a strategy for cross-case analysis and synthesis was applied by stepwise juxtaposing and evaluating, comparing and classifying the organisational and personal factors and drivers within the change stories based on what was uncovered in the within-case analyses (Miles et al., 1994; Yin, 2014: 164). The concepts of 'identity splinting', 'identity patching' and 'identity enriching', which were derived from the theoretical framework for the re-construction of professional identity (Pratt et al., 2006), served as starting points and were introduced as preliminary templates in the analysis (Strauss et al., 2008; King, 2012). The within and cross-case analyses were conducted as an iterative process by two researchers in tandem, at the time blind to the specific pattern of (in)stability of employees' identifications, as it was discovered in Part 1 of this study.

■ RESULTS

As we started to uncover the 'what' and 'how' of the process of change in employees' identification through the lens of the sensitizing concepts, the comparison of first-order codes lead to the emergence of some dimensions that are likely involved in the process of change. This section starts with a short presentation of these dimensions, illustrating them with exemplary quotations. After clarifying these dimensions, the six customization processes that were distinguished are presented in Table 4. Next, each strategy is addressed in more detail with explicit reference to fragments derived from the case-study descriptions. At the end of this section, the main findings are summarised and discussed.

Original template of customization

Reading and re-reading to dissect and compare the process of change that was apparent in the eight narratives, it seemed that more strategies were present than the three referred to as *identity splinting*, *identity patching* and *identity enriching*, which operated as primary templates. In addition to these three labels referring to partial and adoptive customization, some additional categories were observed in the narratives. One newcomer explicitly said he/she had not experienced any changes in self-definition from the moment of completing the initial training: "*That (self-definition) ... has really always remained the same*", all in all communicating a stable and a fixed set of professional

¹⁰ Comparative case study analysis has evolved into a generic term for a bundle of methods aimed at different results, among which a strategic method to generate theory across a variety of sciences (Glaser and Strauss, 1967; Strauss & Corbin, 2008; George & Bennett, 2005; Yin, 2014). The RQ's in the current study clearly point to the third of the five aims that have been connected with comparative studies: 1) replication, 2) empirical generalization, 3) specifying concepts, 4) verifying theory, 5) generating theory (Glaser & Strauss, 1967)

identifications during the career. On the other side of this spectrum, another newcomer presented his 'being at work as a teacher' as an entirely new experience, involving the development of a completely new set of professional identifications: *"really I had no idea about that yet"*. This variety in the narratives led us to differentiate between stable, partial, and more comprehensive situations of change.

Dimensions in responses to organisational demands

As we analysed the narratives and focussed on employees' response to organisational demands, various soft and hard organisational controls, which could convey meaning about the organisational demands on the newcomers, could be identified. Next to the differences across cases in the presence of specific controls, the narratives revealed clear differences in employees' responsiveness to these organisational controls, especially with regards to two dimensions: the expressed need to know what organisational demands existed (1) and the experienced clarity of the demands that were communicated (2). One respondent did not need any additional information, beyond the information that was obtained from the job description: *"What the organization expects of me is in the job description. That's where it's clear written."* With regard to the clarity of the organisational demands, another said: *"especially from more experienced colleagues I get the feeling they want to protect me in all sorts of ways from making the same mistakes that they've made"*. Another teacher states: *"how little time people had to talk to me about it, that I found really noticeable."*

As a third dimension with strong variation, it was employees' readiness to adopt the professional self-definition to specific organisational demands that emerged (3). One respondent declared: *"if something were asked of me that I am able to do and I knew the organization needed it, I would probably tend to say 'yes' quickly"*, another said, *"...yes, I just do what they ask."* On the other side, one respondent explained proudly that he ignored organisational demands: *"It doesn't matter to me who my colleagues and team leaders are and what their program is, as long as I can do my work and can enjoy it"*. And still another teacher ignored the organisational demands, but here it seemed to be a temporary strategy: *"This choice to keep the organization at bay, I think that was a smart choice to protect myself and to really stick to my field."*

A fourth theme that emerged while working through the narratives was the sense of belonging to the organisation and to the profession (4). Some newcomers perceived being at work in their profession in their organisation as 'coming home', clarifying the personal biography and the experience of a kind of goal orientation in the course of life: *"that whole world of knowledge, that excited me, it almost feels like coming home that I work here"* and *"I have a sense that being a teacher is what I'm made to do"*, while for others, the profession seemed to be merely a job.

The fifth dimension that was detected, highlighted the differences in the need for further professional development (5), responses varied from considering professional development as a continuous need belonging to the profession, such as in *"contributing to my students by continuing to develop myself"* to a conditional or short-term view, *"within my own perceptions of what a good teacher is...or what someone should do...in those things I am willing to change. Outside that it would be nonsensical to do so... like asking a dog to be a cow"* and another said: *"that is an area where I'd like to grow, but at my own speed."*

Customization strategies

Iterative consideration of the original templates and the dimensions that were discerned from the rich and detailed data, lead us to distinguish between three general categories of change and to identify six customization strategies. Together they provide a conceptual framework through which the observed differences and communalities in the narratives can be understood. Table 4 shows the basic tenets of this typology of customization processes, which represent the six different strategies that employees can use to manage change in their professional identifications as these have been observed in this study. In the column on the right, the actual observed change, including its direction, is presented for each case.

a) *Crystallized identification* is used to label a situation where the characteristics of employees' professional identification remains the same; employees' identifications are fixed. When we consider this situation as the outcome of a deliberate strategy, in terms of the customization process, it is a *conservation strategy* used to hold on to a specific professional identity.

b) *Compartmentalization* also refers to a situation in which the professional identity remains the same. But contrary to crystallized identification, 'compartmentalization' refers to a situation where individuals adjust to organisational demands by using one or more identities at specific times, without trying to converge these identities into an overarching identity or a new identity. In this study, two strategies are found that constitute a specific kind of compartmentalization: *identity splinting* which was described earlier by Pratt et al. (2006) and a new one, which we will call: *identity hopping* and is explained in detail below.

c) Finally employees' professional identifications can be *under construction*, this label signals a situation where the professional identity is fluid and an object of change, where the professional identification is in a deliberate process of transformation. In this category, three associated customization strategies can be discerned: *identity patching* and *identity enriching*, both described earlier by Pratt et al. (2006) and a new one: *identity development*.

Strategies in short

In this subsection, each customization strategy is illustrated in more detail, with explicit reference to the excerpts and first-order codes in the case-study descriptions.

1. IDENTITY CONSERVATION: In this customization strategy *the employee sticks to a fixed identity, the professional self-definition is conserved and remains the same*. In the current study it is seen in a newcomer (female, 30-40 years, with a tenure of 9 years of experience as a teacher in secondary and vocational education¹¹) who reports a fixed and stable identity since being at work as a teacher. The employee expresses no need for professional development, nor further career ambition and seems satisfied with the job. Here, a person's readiness to adopt the professional identity based on organisational demands is limited to the boundaries of one's own identity. The employee knows what is expected of her without explicit dialogue; organisational demands were not the subject of her application interview, she experienced no need for an introduction program nor for further mentoring or would have asked for it if needed. The organisational demands seem clear – they were derived from the job description and instructions. The most important soft organisational controls are the direct colleagues within the 'faculty'.

2. IDENTITY SPLINTING: In this strategy, the employee uses a prior professional identity as a temporary identity (Pratt, 2006). This strategy, *to revert to a professional identity that was dominant at an earlier career stage*, is in the current study applied by a newcomer (female, aged 40-50, with 20 years of experience in secondary & tertiary education¹²), for whom becoming a teacher 'again' was the prominent motive to apply. This employee deliberately disengages from the previous employer, where the pressures on her professional identity were increasing due to changing organisational demands, which had resulted in a diminished fit. In the current job, the newcomer experiences lower organisational pressures and higher work-life balance, but shows ambivalence: being a teacher is not satisfactory enough, while on the other hand, following the cue to develop a stronger organisational identification is experienced as very risky with the previous job in mind. The need for professional development here has dual meanings, reflecting both the teacher and organisation-oriented identifications. Her coping strategy in the current job includes doing what is requested without explicit dialogue about how to accommodate organisational demands. The desire for a fixed labor contract seems to encourage public compliance, reducing one's efforts to practice freedom of speech (e.g. resulting in hiding one's own opinions, not speaking out).

¹¹ case study database no 20

¹² case study database no 12

3. IDENTITY HOPPING: Identity hopping is a new strategy *used to switch between professional identities in line with organisational demands*. A newcomer (male, aged 20-30, tenure two years in secondary vocational education¹³) shows this strategy. Having two parallel part-time jobs at the time, he responds to the different organisational demands with different fixed role behaviours and is exploring his opportunities to increase fit. The reason to work in two institutions is the lack of professional challenge in secondary vocational education (SVE) (Y) and the desire to pursue his personal ambition at HE level (X). The primary identification in Y is on curriculum development and management, while identification as a newcomer at X is on being a content expert. With identity hopping comes the experience of repeatedly transitioning between the different professional self-definitions. Identity hopping seems a demanding strategy that can put one's work-life balance in danger; tensions that are mentioned as a result of identity hopping are a) related to transferring between the professional identities during the week, b) related to the energy it takes to fulfill a professional identity that is not in line with the perceived personality and c) connected to the realization that the actual work in each organisation is not fully consistent with the professional identity that this employee aims to enact. In this case, the decision whether or not to continue this strategy is fuelled by doubts and dilemma's about the opportunities to realize one's personal ambitions. Identity hopping, with its dual professional identity, is a deliberate strategy to realize one's personal objectives. In this strategy, it is the search for opportunities to balance the two identities and jobs in line with the personal mission that is prominent.

4. IDENTITY PATCHING: Patching is a strategy in which *a new identification is attached to the existing professional identity*, as described by Pratt et al. (2006). In the current study, two newcomers adopted this strategy, neither had experience as a teacher.

In the first casus (female, aged 30-40¹⁴, working nine years as an intercedent and a mobility coach) the combination of a strong personal career identification and identification as a career coach, trying to get the most out of people, is a stable ingredient of the professional self-definition. However, the first lessons taught are experienced as a shock. She realizes teaching requires not only expertise on a content level and that different groups require different approaches. The newcomer desires to become a teacher good in didactics and to enhance the expertise on content. As for organisational controls, the newcomer feels supported by colleagues and by the perceived fit with the developmental style of the teamleader.

¹³ case study database no 18

¹⁴ case study database no 6

The second case illustrating this strategy was that of a newcomer (female, aged 30-40, with 20 years of experience in a professional field¹⁵) for which the continuance of the former professional identity, in this case being part of one's professional field, stayed prominent. The newcomer wants to add a new element to the professional self-definition in line with the perceived organisational demands, which is to develop didactical competencies, while staying a professional role model for students. The organisational controls such as an introduction to the organization, feedback and mentoring were not perceived as very important, while professional education as a teacher is explicitly missed. The lack of organisational support arouses some anxiety which affects an adequate and rewarding introduction to the new job. The respondent feels ready to deal with the organisational demands, but wants to develop only at her own pace and feels free to change jobs when fit is threatened.

5. IDENTITY ENRICHING: Identity enriching, is a customization process in which '*a deepened and nuanced understanding of professional identity is gained of which the basic tenets remain the same*' (Pratt et al., 2006: 246). This is a developmental strategy that builds upon the existing framework of employees' professional identification(s). In the current study the strategy of identity enriching was seen among a newcomer (male, aged 20-30¹⁶) with 6 months of experience teaching at another university. He experiences a strong fit between being a teacher and his personal biography. The primary identification was being a content expert and defining students as primary client group, that is served best by continuously developing one's expertise on content. His professional identity as a teacher is strengthened, although not in line with organisational demands. As for the organisational controls, although in the eyes of the teacher, conformity to organisational policy was encouraged and sanctioned through performance appraisal and rewards; the newcomer shows an explicit aversion to other professional identifications, such as being a teacher good in didactics and to organisational identification. The respondent resists being compliant regarding organisational demands and to the obligatory activities of professional development and experiences dis-encouragement that force him from the organisation. For this respondent, colleagues nor a supervisor's agenda are important points of reference. The coping strategy here is a mixture of non-conformance to organisational demands, the continuation of developing oneself as an expert, being good at work and focusing on good student evaluations.

6. IDENTITY DEVELOPMENT: A strategy used to develop a new professional identity, applied by two respondents where *being a teacher is put forward as a process of becoming and mastering a new profession*.

¹⁵ case study database no 10

¹⁶ case study database no 7

For the first respondent (female, aged 30-40, professional tenure is four positions in three sectors¹⁷), working as a teacher is like 'coming home', being a (starting) teacher has a good and respectable public image and is consistent with childhood aspirations. She defines herself as a starting teacher, which she sees as a challenge that creates some uncertainty and works hard to learn more about content and didactics to master the job. The respondent reaches out for organisational demands due to a knowledge gap attributed to a strong career-step discrepancy with the previous job. She feels frustrated by the lack of a substantial introduction program, the absence of a mentor and team-leader, and by the lack of a knowledge infrastructure that connects new and experienced teachers. Student evaluations and complaints and the course-coordinator are important resources of information. This newcomer counts on the possibility of an open dialogue in case of new organisational demands.

The strategy of identity development is also applied by a former manager (male, aged 40-50)¹⁸, transferring from a managerial to the teacher profession and who wants to concentrate on the development of a new identity as a teacher. Two changes are experienced as a result of this career choice: a) being a teacher instead of being a (project-) manager, and b) the need to develop in didactics next to being a content expert. Here becoming a teacher is a process that creates tension and includes: reflection and exploration, gaining experience and being confronted in practice. The respondent experiences several organisational demands, communicated through hard (i.e. application procedure, introduction program, professional development trajectory) and soft organisational controls (e.g. mentor, corporate communications). This respondent ignores and resists his tendency to respond to the perceived cues for the adoption of organisational tasks, in line with the emphasized desire to develop a new professional identification as a teacher.

■ SUMMARY PART 2

Before moving on to the general summary and discussion, the main findings of part 2 are summarised briefly here. In-depth comparative analysis of the case-study descriptions led to five dimensions upon which the observed differences amongst the individual responses to the organisational demands can be positioned. These dimensions are: 1) the need to know what organisational demands are, 2) the experienced clarity of those demands, 3) employees' readiness to adopt the professional self-definition regarding specific organisational demands, 4) the sense of belonging to the organisation

¹⁷ case study database no 13

¹⁸ case study database no 19

and the profession, and 5) the need for further professional development. The variety in the narratives led us to differentiate between situations of stable, partial, and more comprehensive changes in employees' identifications. Further within case and cross-case comparison showed that six customization strategies could be discerned that employees can use to manage changes in their set of professional identifications.

The expressed need for, openness to and responsiveness to the organisational demands, differs strongly across individuals. In one case, an identity enriching strategy is combined with a strong aversion and renouncement of strongly communicated organisational demands, while in another case a more open identity patching strategy is combined with an explicit need for a more tangible and focused introduction to the job. This finding is in line with research wherein curiosity was found to predict aspects of newcomer adjustment behavior, such as information seeking and positive framing (Harrison et al., 2011). In the current study, this difference in seekership behaviour (Ashforth et al., 2008) seems to be fuelled by career-step discrepancy in part only. The appearance of each customization process is to a great extent presented as a deliberate personal choice in order to balance one's own goals with the perceived organisational demands.

■ GENERAL DISCUSSION

Summary and discussion of findings

This exploratory study investigated the dynamics of newcomers' organisational, occupational and career identification in their first four months on the job through the lens of employee activity, using the concepts of career identification (Kuijpers et al., 2006a; Kuijpers et al., 2006b) and customization strategies (Pratt et al., 2006).

Part 1 showed that substantial non-uniform changes in one or two of their professional identifications are found for most individuals at the intra-individual level. When considering the co-occurrence and the direction of the observed changes within employees' organisational, occupational and career identification, considerable diversity is found. The observed changes in organisational, occupational and career identification were not dependent upon career-step discrepancy (the gap between a former and a new job) nor upon the use of career competencies. The findings in the current study show that the career competencies 'reflection on qualities' and 'work exploration' are not important for the observed changes in employees' identification, nor for employees' identifications after four months of work, but are linked to one's career and occupational identification at the start. When evaluating these results from a job-transition process perspective, findings suggest that career competencies serve employees in preparing for a job transition, rather than guiding the adjustment process after organi-

sational entry is realized. This explanation is in line with the proposition that career competencies are more important during the process of orientation and the transition to new work than during the (new) appointment itself (Kuijpers et al., 2006a). That proposition provides an explanatory framework for the zero effect of career competencies on changes in identification, which is suggested considering the findings of this exploratory study. Following this line of reasoning, it may be proposed that employees' active use of career competencies is most relevant during the job-transition process – the period that precedes organisational entry and therefore competencies constitute preparatory activities in the context of job transition. Finally, by highlighting the relevance of career competencies for the development of occupational and career identification, this study contributes to former research in which the benefits for both employees and students have been depicted in terms of career success and with regards to a sense of certainty or trust about one's career choices and transitions (Kuijpers et al., 2006a, 2006b; Kuijpers et al., 2012, Meijers et al., 2014).

Part 2 of the study focused on the role of employee activity in changing professional identification in terms of customization processes, the coping strategies that are used by newcomers to manage their identifications. Elaborating on the work of Pratt et al. (2006) the existence of three new customization strategies is revealed; 'identity conservation', 'identity hopping' and 'identity development', adding to the three strategies that were found earlier: 'identity splinting', 'identity patching' and 'identity enriching'. In order to propose a coherent framework, these six customization processes are put together in a typology that ranges from complete stability of employees' professional identifications to more fundamental change with partial degrees of identity change in between.

From the narratives analyzed, it is clear that the expressed need for, openness to and responsiveness to the organisational demands differs strongly across individuals. In one case an identity enriching strategy is combined with a strong aversion and renouncement of the strongly communicated organisational demands, while in another case a more open identity patching strategy is combined with an explicit need for a more tangible and focused introduction. These qualitative observations are in line with recent quantitative research wherein curiosity was found to predict aspects of newcomer adjustment behavior, such as information seeking and positive framing (Harrison et al., 2011) and in research in which personality traits such as openness and extraversion were related to employees' experience of changes in their career adaptability over time (Savickas, 1997; Zacher, 2014). One of the questions that remains is what it is that drives the choice for a specific customization strategy and explains the differences in seekership behaviour (Ashforth et al., 2008). In the narratives, the appearance of each customization process by newcomers seems to imply a deliberate personal choice that aims to balance one's own goals with the perceived organisational de-

mands. Here it appears to be the imaginary career biography of the individual and its perceived fit with the organisational demands that seems to be at the root of a specific customization strategy, which at the same time explains newcomers' level of responsiveness to organisational demands.

To conclude, this exploratory study provides indications that the antecedents that are involved in changes in employees' identification, differ from the antecedents that predict employees' identifications at wave one and two. Verbalizing this conclusion in terms of development and change of employees' 'professional identity', the current study indicates that career competencies do add to the formation of employees' professional identity at the start of the job transition phase, while employees' particular customization strategy plays a role in the process of change of newcomers' professional identity during the first four months at a new job. Finally, results underpin the importance of both career competencies and customization strategies as deliberate activities in the process of job transition (Zacher, 2014).

Strengths and weaknesses

For the current study, the use of a mixed method design was preferred above a strict quantitative or qualitative approach, in an attempt to draw upon the "best of both worlds" (Lin & Sanders, 2014: 140). However, this research design brings with it some challenges and limitations, that have been recently summarized for the domain of HRM by Bainbridge and Lee (2014). More specifically, the exploratory design used in this study makes the interpretation of findings conservative as the aim of the study is to better understand phenomena in order to add to the development of theory instead of putting a theory to a rigorous test. Moreover this study does not allow one to draw strong conclusions, since the number of respondents is too few to allow for statistical generalization. These constraints are important to mention because the limited number of respondents (N = 41) only allows one to assess large effects of a very limited number of factors and overlooks the conceivable small and medium sized effects by definition, with that risking a Type 2 error. Although the case selection strategy was optimized from the perspective of theoretical saturation and was aimed at ameliorating the chance that different coping strategies of individuals are represented in the sample (Glaser et al., 1967: 55), the analytical generalization is hampered because only 25% (4/12) of the observed changes in sets of identification were represented in the final case selection (George et al., 2005). Therefore, the results of this exploratory study cannot be used to draw far-reaching conclusions.

The strengths of this study include the deliberate use of various types of triangulation, with regards to data (multiple data sources), investigators (multiple raters or researchers) and methodology (using multiple research methods) and the subsequent enhancement of reliability and validity (Patton, 2002; Yin, 2014). A formal case-study database

was created wherein all data was merged, thus providing opportunities for other researchers to repeat the analyses and evaluate the findings (Yin, 2014). As we shifted "from data collection to within-case analysis to cross-case analysis and to overall findings and conclusions" (Yin, 1981: 64), the chain of evidence was enhanced through the transparent use of sensitizing concepts. This applies also to the incremental development of case-study descriptions linking first order codes and dimensions to explicit quotes taken from the narratives of individuals. The strategy to use sensitizing concepts as templates of analysis, enabled us to find and describe new phenomena, which enlarges the original outline of customization strategies of employees.

Future research directions

The current knowledge base of the HRM-arena, wherein both organisational and individual strategies meet to enhance employee and organisational performance, still contains many gaps (Paauwe, 2008; Sanders, Cugin & Bainbridge, 2014). Based upon the current study, some suggestions can be put forward to promote a better understanding of employees' activity in the process of changing professional identifications. First, it seems appropriate to continue with this type of exploratory study amongst newcomers in educational institutions and professionals in other organisations, in order to discover possible additional customization processes that employees use to adjust their identifications to organisational demands. An interesting area of study would for instance be to examine or determine which antecedents may influence an employees' choice of customization strategy. One question is for instance whether there is a kind of ranking of the strategies in line with increased professional tenure and/or whether the choice of a customization strategy can be negotiated in a dialogue with the supervisor thus showing that a choice of strategy may be influenced by the organisation. If this were the case, such an interactive process could be beneficial to stimulate teachers to accustom themselves to new foci that are needed in a specific setting and incorporate them into their self-definition.

Continuing upon the use of sensitizing concepts in this study, the 'building block strategy' for theory development in the social sciences can be followed in which "each case study contributes to the cumulative contingent refinement of contingent generalizations on the conditions under which particular causal paths occur, and fills out the cells or types of a more comprehensive theory" (George et al., 2005: 112). The mixed-method approach, as applied in this study, can provide a methodological starting point for the examination of customization strategies. Finally, in order to focus on and unravel the underlying processes, the use of a longitudinal research design in combination with a longer timeframe, more than the four months, would provide useful (van der Velde et al., 2005; Bednall, 2014). This approach would enable an investigation into whether employees' choice and use of customization strategies changes over time and varies across socialization turning points during one's career (see for ex-

ample the four-wave study of Kammeyer-Mueller et al., 2003 and the 14-wave study of Kammeyer-Mueller et al., 2013).

Practical implications

Two implications for practice based on this study are proposed here. The typology of customization strategies may be used in the process of looking at changing identifications, and increase our understanding of the activities in which employees are involved when entering the organization as a newcomer. The current research illustrates clearly that those entering a new organisation use different customization strategies in order to balance their personal goals with perceived organisational demands. Also, because newcomers may have very different goals, they may experience different information gaps and needs, as a result of which they can differ in their response to the organisational messages that are communicated by organisational controls. Increasing the sensitivity of current HR- and leadership practices to become attuned to these differences and customization strategies will add to their effectiveness, for instance by the explicit accommodation of certain activities in introduction programs and supervisory behavior to the needs and demands of newcomers by engaging in an explicit dialogue. These suggestions are in line with recent studies on newcomer accommodation that underpin the importance of social validation (Smith et al., 2012), social networks and the quality of the leader-member relationship (Sluss & Thompson, 2012; Jokisaari, 2013) and relationship building opportunities for newcomers (Lapointe et al., 2014). Finally, the explication of these six strategies and the description of the processes that are observed can be used to enable and support an open dialogue between employees, supervisors and HR-professionals, therewith facilitating the continuous process of the synchronization of employees' set of professional identifications with changing organisational demands in the context of permanent educational reform.

■ **TABLE 1**

Means, standard deviations and correlations

VARIABLES	Mean	SD	1	2	3
1. Gender	.66	.48			
2. Career step discrepancy	2.16	1.11	.05		
3. Reflection on motives	4.18	.59	.21	.14	(.78)
4. Reflection on qualities	4.19	.58	.19	.22	.82**
5. Work exploration	4.20	.55	.21	.09	.68**
6. Organisational identification t1	3.73	.67	-.11	-.02	.07
7. Occupational identification t1	4.27	.42	.31	-.09	.44**
8. Career identification t1	4.47	.45	.21	.04	.35*
9. Organisational identification t2	3.71	.68	-.05	.16	.25
10. Occupational identification t2	4.14	.39	.12	-.03	.37*
11. Career identification t2	4.51	.53	-.21	.14	.25
12. Delta organisational identification	-.02	.54	.09	.05	.15
13. Delta occupational identification	-.13	.32	-.24	.01	-.12
14. Delta career identification	.04	.41	-.42**	.14	-.07

Note. Spearman's rho correlation, two tailed, * $p < 0.05$, ** $p < 0.01$; Alpha's are shown on the diagonal. Gender: 0 = male, 1 = female. Delta is absolute difference score between identifications over time, calculated by taking the absolute score of

	4	5	6	7	8	9	10	11	12	13
(.81)										
.80*	(.72)									
.06	.18	(.77)								
.43**	.45**	.62**	(.82)							
.24	.36*	.28	.67**	(.62)						
.09	.26	.60**	.55**	.39*	(.74)					
.26	.26	.43**	.66**	.50**	.47**	(.74)				
.17	.29	.21	.34*	.52**	.28	.41**	(.73)			
-.06	-.02	-.38*	-.11	-.04	.40*	-.01	-.07			
-.23	-.24	-.38*	-.54**	-.25	-.19	.20	.07	.19		
-.02	.02	-.03	-.22	-.27	-.10	-.04	.62**	-.08	.31*	

the second wave minus the absolute score of the first wave, positive delta indicates increased identification at wave two. Because age showed no significant linkages, it was not included in the Table, Mean age = 38.28 years, SD = 9.67. $N = 41$.

■ **TABLE 2**
Number of respondents with stable, decreased and increased identifications after four months of work

Category	Organisational identification	Occupational identification	Career identification
Stable	29	31	28
Increased	7	6	8
Decreased	5	4	5

Note. To select the individuals who showed greatest change, the 12.5% percentile in the distribution was used as a cut-off point. *N* = 41

■ **TABLE 3**
Patterning of intra-individual changes in identification after four months: number of respondents with stable, decreased and increased identifications

Category	Organisational identification	Occupational identification	Career identification	N respondents	selection for case study
1	stable	stable	stable	16	2
2	increase	stable	stable	5	2
3	stable	increase	increase	4	2
4	decrease	stable	stable	3	
5	stable	decrease	decrease	2	2
6	stable	stable	increase	2	
7	stable	stable	decrease	2	
8	stable	decrease	stable	2	
9	decrease	stable	increase	2	
10	increase	increase	stable	1	
11	increase	stable	decrease	1	
12	stable	increase	stable	1	
Total				41	8

Note. The number of individuals that share a specific pattern of stability and change in the observed organisational, occupational, and career identifications across waves is displayed. To select the 25 % of 'greatest change', the 12.5% percentile was used as a demarcation point. The last column 'selection for case study' anticipates on part 2 of the study by showing the result of the case-selection process.

■ TABLE 2

Typology of Customization Processes in changed Professional Identification

Changed Identification?	
Crystalized	<i>professional identification remains the same</i> = fixed identification
Compartementalized	<i>professional identification changes with task</i> = hybrid identification
Under Construction	<i>professional identification is under deliberate construction</i> = fluid identification

Note: Elaborated model of customization processes, building upon and expanding Pratt, Rockmann and Kaufmann's original strategies for the reconstruction of professional identity: splinting, patching and enriching (Pratt et al., 2006). Customization processes are extracted through within and cross-case content analyses on Application

Customization Process	Resp no	Observed Change
Identity Conservation = sticking to a fixed professional identity	20	stable CI & OCI increased OI
Identity Splinting = using a prior professional identity as temporary identity	12	decreased CI & OCI stable OI
Identity Hopping = taking on that identity that belongs to the job (coat)	18	all identifications are stable
Identity Patching = attaching new identifications to the existing professional identity	6 10	stable CI & OCI, increased OI decreased CI & OCI stable OI
Identity Enriching = gaining a deepened and nuanced understanding of the existing professional identity	7	increased CI & OCI stable OI
Identity Development = developing a new professional identity from scratch	13 19	increased CI & OCI stable OI all identifications are stable

Letter, Resume and Interview after nine months. Observed change refers to the calculated difference (12,5% highest and lowest interval) using scales in surveys just before start and after four months.

explaining

Chapter 5

Explaining changes in organisational and occupational identification, a two wave test of Ashforth's process model using professional-identity fit and leadership support ¹

¹ An earlier version of this chapter was presented at the 8th biannual International Conference of the Dutch HRM Network in 2013, Leuven, Belgium.

■ ABSTRACT

In this paper a two-wave study is presented that examines the dynamics in employees' organisational and occupational identification over a two-year time frame. Drawing on the process model of identification of Ashforth, Harrison and Corley (2008) we tested their proposition that changes in identification can be understood as the result of two processes: sensebreaking and sensegiving. Building upon this model, the current study explains changes in organisational and occupational identification through professional-identity fit (sensebreaking), leadership support (sensemaking) and their joint influence. The study was conducted within an institution for Higher Education in the Netherlands ($N = 263$ teachers).

As predicted, change in organisational identification is negatively related to professional-identity fit at wave 1 and positively related to professional identity fit at wave 2, which, taken together, supports the proposition that changed organisational identification functions to reduce the gap with perceived organisational demands. Also the direct effect of leadership support on change in organisational identification, as predicted, was indeed found, while the predicted interaction effect with professional-identity fit was not shown. With regard to changes in occupational identification, only the predicted direct effect of leadership support was found, while the predicted effects of professional identity fit and its interaction with leadership support were not observed. Fine graining the analyses showed all observed effects to be relevant especially for employees with increased identifications.

Although indications of a different dynamic are found, taken together, both professional-identity fit and leadership support are important in the explanation of changes in employees' organisational and occupational identification over time. Theoretical and practical consequences for future research are discussed as well as practical implications and perspectives for HR policy development.

■ INTRODUCTION

Research on the antecedents of employees' identification, and their consequences in terms of employee behaviour has been a prominent area of research for several decades (Tajfel, 1978; Tajfel & Turner, 1987; Haslam, 2004; van Dick, Grojean, Christ & Wieseke, 2006; Alvesson et al., 2007; Cornelissen, Haslam & Balmer, 2007; Ashforth, Harrison & Corley, 2008; He & Brown, 2013). Identification with various foci; such as the organisation as a whole, its sub-collectives and occupations has generally been defined as the extent to which the adherence to specific foci is included in the self-definition of an individual (Ashforth et al., 2008; He & Brown, 2013). Strengthening the knowledge base on employees' identifications is important because at present, many studies have provided empirical support for the identity-matching principle (Ullrich, Wieseke, Christ, Schulze & van Dick, 2007) emphasizing the strength of the link between employees' identifications and employees' behaviours (Ashforth & Mael, 1989; Christ & van Dick, 2003; Haslam, 2004; Riketta, 2005; van Dick et al., 2006; Ashforth et al., 2008; Riketta, 2008; Fuchs & Edwards, 2012).

Various scholars have made a call to focus on the disentanglement of the processes through which employees' identification with foci emerges and changes over time (Haslam, 2004; Pratt, Rockmann & Kaufmann, 2006; Ashforth et al., 2008). Unravelling these processes are a prerequisite for effective Human Resource Management (HRM) and effective leadership, especially within those organisations where employees are the most important production factor, such as in knowledge-intensive companies and in educational and service institutions (Fraser, Walberg, Welch & Hattie; 1987; Hattie, Biggs & Purdey, 1996; Alvesson, 2000; Shin, 2011; Bednall, Sanders & Runhaar, 2014). Following this call, some theoretical models that were developed a decade ago have more recently been put to the test. Examples of these studies include the test of the ASPIRe model of identification, which provides a series of structured activities to both develop employees' organisational identification and the organisational identity of an institution at the same time (Eggins, Reynolds & Haslam, 2003; Peters, Haslam, Ryan & Fonseca, 2013). Another study examined the transferability of the 'Extended model of organisational identification' to the field of occupational identification, finding evidence for the empirical distinctiveness of (dis-)identification, ambivalent identification and neutral identification within both organisational and occupational identification (Kreiner & Ashforth, 2004; Ashforth, Joshi, Anand & O'Leary-Kelly, 2013).

The aim of the current study is to examine the dynamic of changes in organisational and occupational identification by putting the 'Process model of identification' to the test, which was developed in 2008 by Ashforth, Harrison and Corley. This is an interesting avenue of research because the process model claims to explain both changed

organisational and occupational identification alike, providing an overall conceptual framework for changed employee identification. Moreover the model presents a set of convergent constructs grounded within an extensive review of employees' organisational and occupational identification, encompassing the work of many scholars in the field of organisational psychology, management- and communication research (Ashforth et al., 2008). Finally, by proposing that the process model of identification can explain episodes of stability and change during the career of an employee, it claims a wider applicability than models that try to explain changed identification during specific career stages only – such as when entering a new profession or when being a newcomer in an organisation (Ashforth & Saks, 1996; Ards, Jansen & van de Velde, 2001; Saks & Gruman, 2011; Jokisaari, 2013; Lapointe, Vandenberghe & Boudrias, 2014).

Changed employee identification, in terms of the process model, is considered to be an individual response to the organisational processes of 'sensebreaking' and 'sensegiving'. *Sensebreaking* is used as a label for those processes that accentuate employees' experience of identity uncertainty and identity incongruence, widening the gap between organisational and individual demands that in turn are supposed to evoke identity exploration and identity learning (Ashforth et al., 2008). Following this line of reasoning, it is the experience of sense breaking that triggers 'seeker' behaviour, because sensebreaking "involves a fundamental questioning of who one is when one's sense of self is challenged . . . [creating] a meaning void that must be filled" (Pratt, 2000: 464; Ashforth et al., 2008). *Sensegiving* on the other hand refers to the organisational "attempts to guide the meaning construction of others toward a preferred redefinition of organizational reality" (Gioia & Chittipeddi, 1991: 442; Ashforth et al., 2008). Within this framework, both sensegiving and sensebreaking are regarded as organizational attempts at managing employees' identity, by providing elements for identification which are communicated through soft- and hard organisational controls (Alvesson & Willmott, 2002; Alvesson & Karreman, 2007). In addition, the model explicitly proposes a joint effect of these processes: "sensebreaking and sensegiving often work in tandem, sensegiving serves as a response to sensebreaking, providing the organizationally sanctioned answers to the questions associated with identity deficits" (Ashforth et al., 2008: 342).

In order to test some inferences that can be drawn from this model, two key indicators are used in the current study. First, as an indicator for the situation of sensebreaking, the concept of '*professional-identity fit*' is used here, defined as the congruency between the perceived organisational demands and employees' identification (Kristof-Brown, Zimmerman & Johnson, 2005; Edwards & Cable, 2009). Using this approach, we build upon a conceptualization of person-organisation fit (PO-fit) presented in a meta-analysis (Yang, Levine, Smith, Ispas & Rossi, 2008). Secondly, the concept of '*leadership*

support' is used as an indicator for the process of organizational sensegiving, defined here as "helping facilitate goal accomplishment by guiding subordinates to be effective and learn in their roles" (Banai & Reisel, 2007: 466). Leadership support represents an important aspect in Leader-Member Exchange (LMX) research (Schriesheim & Cogliser, 2009; Schyns & Day, 2010) and has also been conceptualized as one of the six dimensions of transformational leadership (Rafferty & Griffin, 2004; Rafferty & Griffin, 2006). In the current study, leadership support is selected as the key channel through which organisational sensegiving can be facilitated (Alvesson & Willmott, 2002; Alvesson & Karreman, 2007). The research question in this study is as follows:

To what extent do professional identity fit and leadership support and their interaction explain changes in employees' organisational and occupational identification?

In the next part of this article, after introducing employee identification briefly, the characteristics and constituent processes of Ashforth's process model of identification are elaborated on, the selection of the key indicators *professional identity fit* and *leadership support* is explained and the hypotheses are formulated as well as their role in the explanation of changes in employees' organisational and occupational identification.

■ CHANGES IN EMPLOYEE IDENTIFICATION

Employees' identification can be regarded as "that part of an individual's self-concept which is derived from his or her knowledge of his or her membership of a social group (or groups) together with the value and emotional significance attached to that membership" (Tajfel, 1978: 63). In line with the Social Identity Theory (SIT) and Social Categorization Theory (SCT), originally based on the work of Tajfel and Turner (Tajfel, 1978; Tajfel & Turner, 1987; Haslam, 2004), this notion of a '*social identity*' has to be distinguished from a personal identity which refers to the "self-knowledge that derives from the individual's unique attributes" (Haslam, 2004: 21), such as personal characteristics, traits and competencies.

Employees' identification, *as a state of affairs*, is conceived of as a specific type of social identity, wherein employee's self-definition is captured by looking at the adherence to different foci of identification, distinct sub-collectives and roles in the context of work and career. Two prominent categories of identification in the context of work are 1) identification with the organisation as a whole or with specific sub-collectives, and 2) identification with 'the' occupation or with occupational roles (Knippenberg & van Schie, 2000; Christ et al., 2003; Dick et al., 2006; Ashforth et al., 2008; Shin, 2011;

Aangenendt, Kuijpers & Sanders, 2013¹). Thus organizational- and occupational identification refer to the extent to which membership of the organization or membership of the occupational (sub)group is included in the self-definition of the individual (Tajfel, 1978; Ashfort & Mael, 1989; Haslam, 2004; Ashforth et al., 2008).

Identification, *as a verb*, refers to the “process by which people attach themselves to groups, organizations and roles by viewing a collective's or role's essence as self-defining” (Ashforth et al., 2008: 329). With regards to the emergence of identification, from the theoretical SIT and SCT perspective, it is postulated that situational cues determine what foci of identification will become dominant in a specific context and will guide the behaviour at that time (Ashforth & Mael, 1989; Haslam, 2004; Ashforth et al., 2008). Taylor and Fiske (1978) contributed to the insight that “(...) a category (focus) is more likely to be salient if the individual is predisposed to perceive that category as relevant (accessibility) and if both the category and the situation match the individual's expectations, and if reality is matching these expectations” (van Dick, Wagner, Stellmacher & Christ, 2005: 275).

Group, field and organisational studies have shown that the salience of cues indeed adds to the explanation of the identification-strength with particular foci in a specific situation (Haslam, 2004; van Dick et al., 2005; Ashforth et al., 2008). Some of these studies have focussed on the manipulation of cues to make a specific identification salient (Ashforth & Johnson, 2001; Christ et al., 2003; Haslam, 2004; Dick et al., 2005; Riketta, 2005; Bartels, Pruyn, de Jong & Joustra, 2007; Millward & Haslam, 2013), while other studies investigated the effects of organisational tactics that were designed to increase employees' identification (DiSanza & Bullis, 1999; Alvesson & Willmott, 2002; Alvesson et al., 2007; Peters et al., 2013). Many of them focussed on changes in employee identification at specific ‘socialization turning points’ of those employees (Bullis & Bach, 1989), such as during educational programs to become a professional (Price, 2009), during a merger of organisations (Bartels, Douwes, de Jong & Pruyn, 2006) or during organisational entry as a newcomer (Ashforth et al., 1996; Ards et al., 2001; Ashforth, Sluss & Harrison, 2007; de Cooman, de Gieter, Pepermans, Hermans, du Bois, Cares & Jegers, 2009; Sluss, Ployhart, Cobb & Ashforth, 2012; Sluss & Thompson, 2012). Most of these studies focussed on short-term effects (i.e. of up to a year).

A process model of identification

In Ashforth's et al's process model of identification (2008) both conceptualisations of identification are fused. The strength of identification is conceptualized as a state of affairs, which can vary across episodes, while the process of identification is conceptualized as “a cycle that iterates between organizational sensebreaking and sensegiving

and individual identity enactment, sensemaking, and identity narrative construction” (Ashforth et al., 2008: 359). Thus changes in employee identification are understood as an individual response to the identity deficits that are created by organizational sensebreaking, in response to organisational sensegiving and as the result of their joint effect (Pratt, 2000; Foreman & Whetten, 2001; Alvesson & Willmott, 2002; Alvesson & Karreman, 2007; Ashforth et al., 2008: 342).

Sensebreaking: the role of professional identity fit

In this study, the notion of employees' P-O fit is used as an indicator to detect the gap that is created by sensebreaking. Various scholars have suggested that a better fit is linked to beneficial outcomes for employees, among which identification (Cable & DeRue, 2002; Kristof-Brown et al., 2005; Yang et al., 2008; Leung & Chaturvedi, 2011) and can mediate and moderate employees' responses to HR practices (Boon, Den Hartog, Boselie & Paauwe, 2011). Based upon and in line with this work, the *professional-identity fit* of an employee is conceptualised as a specific form of values' congruence between the individual and the organisation and defined as the ‘congruence between employees' identification and the perceived organisational demand for that identification’ (Turner, 1984; Cable & DeRue, 2002).

That brings us to the elementary consequences that can be deduced from Ashforth's process model of identification. According to this process model, it is the experience of a discrepancy or meaning void that triggers the seekership behaviour of employees. The underlying assumption that employees try to reduce discrepancies with organisational demands in order to achieve and maintain a certain degree of person-organisation fit has gained some empirical support, for instance from the meta-analysis on the link between feedback interventions and employee performance (Kluger & DeNisi, 1996). The first set of hypotheses of this current study addresses the proposition that ‘changed identification’ functions to fill the gap that is indicated by low professional-identity fit. They represent the notion that changed employee identification is elicited by the gap that is created by sensebreaking and that change functions to fill that gap. Thus in terms of our indicators, we would expect that changes in identification will be preceded by low professional-identity fit at wave 1 and will be accompanied by high professional identity fit at wave 2, therefore:

H1a & b = Professional identity fit at wave 1 is negatively related to changed employees' organisational (H1a) and occupational identification (H1b) over time and

H2a & b = Changed organisational (H2a) and occupational identification (H2b) over time is positively related to professional identity fit at wave 2.

¹ See chapter two of this dissertation.

Sensegiving: the role of leadership support

In the process model, *sensegiving* is used as the second concept to explain changes in identification. Sensegiving is regarded as the process of identity regulation of employees through organisational controls, referring to those organizational practices that are "concerned with identity definition that condition processes of identity formation and transformation" (Alvesson et al., 2002: 627; Ashforth et al., 2008). Several soft- and hard organisational controls have been distinguished that can be part of the management of employees' identification. These include various managerial- and HR systems and the relationship with the direct supervisor (Alvesson & Willmott, 2002; Alvesson & Karreman, 2007). In explaining employees' identity regulation, Alvesson and Willmott proposed that "leadership' is effective when it coalesces and regulates identity, de-activating alternative constructions" (Alvesson & Willmott, 2002: 627).

Many studies have provided explicit support for the link between supervisory behaviour and organisational and occupational identification of employees. For instance, it has been shown that employees show stronger organisational identification when experiencing procedural justice of supervisory behaviour (de Cremer, van Dijke & Bos, 2006; Loi, Chan & Lamb, 2013). Examples of the impact of leadership on occupational identification include the role of supervisors in the construction of the professional identity of school learning mentors (Rhodes, 2006) and the validation of the occupational identity of contract researchers through feedback from their research directors (Collinson, 2004). Additional evidence that shows the role of leadership is underpinned by research from the LMX- theory perspective (Schriesheim & Cogliser, 2009; Schyns & Day, 2010; Dulebohn, Bommer, Liden, Brouer & Ferris, 2012). Several studies focused on the effects of the quality of the leader-member exchange on the discrepancies and congruencies of employees' and supervisory views, especially with regards to job definition and job breadth (Hsiung & Tsai, 2009) and on the effects of values' congruency (Edwards & Cable, 2009). Following the conceptualization of job definition as a subjective and socially-construed process (Rousseau, 1995), Hsiung and Tsai (2009) summarized the evidence for the proposition that high-quality LMX would reduce the level of role ambiguity, defined as "the uncertainty of employees about their duties and responsibilities", and would contribute to role clarity (Hsiung & Tsai, 2009: 95). Their research provided support for the link between LMX and congruency of an employee's and a supervisor's job description and showed that discrepancy in job definition is reduced with high-quality LMX. The explanation for this convergence in job definition through supervisory support has been described as the *congruence effect*, the notion "that social interaction leads to perceptual congruence" (Hsiung & Tsai, 2009: 93) a situation of open dialogue and frequent communication elicits and sustains values' congruency.

The research described above supports the proposition that leadership support can provide a channel through which organizational sensegiving is delivered to employees. Building upon Ashforth's proposition that organisational sensegiving provides ingredients for identification and considering the idea that leadership support can function as a carrier for such organisational control, it is proposed here that employees who experience high levels of leadership support will show greater change in identifications. Therefore the hypothesized distinct effect of leadership support on changes in identification reads as follows:

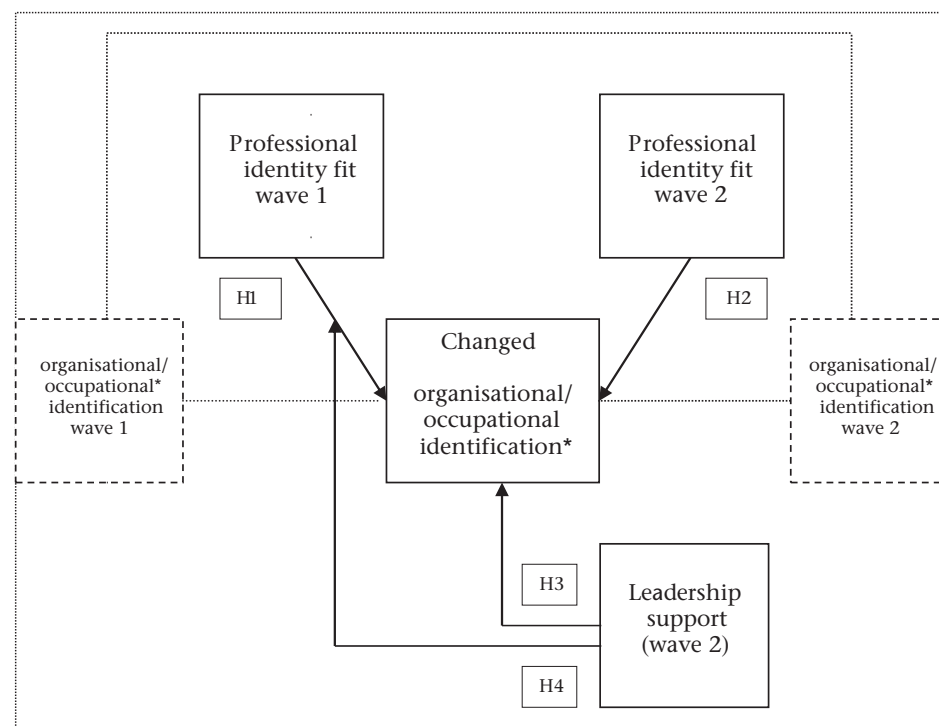
H3a & b = Changed employee organisational (H3a) and occupational identification (H3b) over time is positively related to leadership support.

In addition to this direct effect of leadership support, the process model assumes a joint effect between leadership support together with professional identity fit. This line of reasoning would be as follows: when sensitivity for organisational controls arises because the perceived professional-identity fit is low and employees' seekership behaviour is triggered, then the effect of leadership support will be stronger as compared with situations of high perceived professional-identity fit which are considered more stable. This joint effect of professional identity fit and leadership support on changed employee identification, a moderation effect, is formulated as follows:

H4a & b = Leadership support strengthens the relationship between professional identity fit at wave 1 and changed employees' organisational (H4a) and occupational identification (H4b).

Two final remarks have to be made here: first, because Ashforth's model explicitly seeks to unfold a general process for both organisational and occupational identification and does not provide an additional specification of the dynamics of changed identification across foci of identification, the same line of reasoning is applied to employees' organisational and occupational identification (Cable & DeRue, 2002; Pratt, 2000; Ashforth et al., 2008: 339). Thus a comparative approach is taken in order to test the models' applicability to explain changes in organisational and occupational identification alike (George & Bennett, 2005; Ashforth et al., 2013). Secondly, with regard to the conceivable distinction between processes of increasing and decreasing identification, we take an exploratory approach because Ashforth's model aims to explain changes in identification as such and does not include the direction of change as an explicit dimension.

Figure 1. Hypothesized model predicting changed employee identification.



Note. * The model will be tested on changed organisation identification (H1a, H2a, H3a, & H4a) and on occupational identification (H1b, H2b, H3b, & H4b) alike.

METHOD

Context

The study was conducted in a University of Applied Sciences in the Netherlands. This university provides 46 full-time bachelors' and 7 masters' degree programs to 26.000 students, representing a nationwide market share of 5%². At the time of the study 64% of the 1742 employees (1349 fte.) were appointed as teachers, of which 51% were male. Employees are nested in teams that develop and deliver curricular programs for undergraduate (bachelor) and graduate (master) degrees, which in turn are nested within academies (i.e. disciplines/topic areas).

² <http://www.vereniginghogescholen.nl/english>

Participants and procedure

The sample for this two-wave study was taken from a larger dataset, which was collected by means of two employee surveys that were electronically administered in a two-year sequence. The dataset included a total of 791 unique respondents, of which 561 responded to wave 1 (response rate = 61.0%) and 574 responded to wave 2 (response rate = 61.3%). Only those respondents (344), who defined themselves as teachers during both waves were selected, controlling for: 1) non response, 2) drop out due to external turnover, and 3) internal turnover because of a career step from the teaching profession to management or support staff or vice versa. Furthermore we controlled for 4) internal turnover, by focussing only on the respondents who showed 'stable organizational belonging'³. Therefore all employees who showed internal turnover across organisational sub-units (educational programs) or whose stability in relation to organisational belonging was unclear (e. g. respondents who worked for more than one organisational subunit) were excluded from the sample.

The final sample consisted of $N = 263$ respondents, of which 51% were males. Mean age of respondents was 46,3 years ($SD = 10.00$) varying from 24 to 65 years. Mean size of appointment was .80 fte. ($SD = .21$). The characteristics of respondents at wave 1, as reflected by various modes, were as follows: 59% of the teachers had more than 10 years of experience in the field of education (10% less than 2 years), 45% of the respondents had worked for the organization for more than 10 years (18% less than 2 years). The majority of respondents (84%) had a fixed labour contract. Respondents were nested within 45 organizational subunits delivering educational programs, their distribution varied from 1 to 24 (mean = 6; $SD = 4.66$). Those teams were subsequently nested within 13 academies ($M = 20$, $SD = 10.29$).

Instruments

To measure teachers' identification strenght with regards to various foci, the following instruction was applied: "The following is a list of various possible motivations for teachers in performing their duties. Please indicate the extent to which these apply to you". *Occupational identification* was measured by three items, 'being a teacher good in didactics', 'contributing to opportunities for students in the world' and 'getting every student to get the best out of themselves'. *Organizational identification* was measured by two items: 'developing the educational organization' and 'developing the curricular

³ As to internal turnover as a teacher, three patterns could be distinguished: full transfer, between organisational subunits (educational programs) could be observed for 19 respondents, partial transfer was shown by 10 respondents who transferred from working for one program only to more programs and by 9 respondents who transferred from working for many programs to one program only (total 38). For 43 respondents the presence and type of internal turnover could not be assessed due to missing data in one of the surveys, this category includes 8 employees whose specific organisational belonging remained unclear because they continuously worked for several programs. Internal turnover appeared mainly at program level, transfer of employees between academies was observed only for three of the 344 respondents.

program'. A 5-point Likert scale was used (1 = 'not at all' to 5 = 'completely') adding 6 for the response 'don't know'. The measures for organizational- and occupational identification were drawn from a related study amongst 538 participants in the first wave only; there the fit indices of a four-factor model of identification and its determinants showed satisfactory results⁴ (Aangenendt et al., 2013). In the current study, confirmatory factor analysis (CFA) on the measures for organizational and occupational identification, was based on all 791 respondents to one or both waves⁵. Results show satisfactory model fit indicators, with: CHI2 for model fit = 131.450, df = 29, p-value < .0000, RMSEA = 0.067, .056 < 90%CI > .079, probability RMSEA < .05 = .008, CFI = .959, TLI = .937, WRMR = 1.088 (WLSMV, MPlus version 6.12).

Various methodological approaches were considered to assess the *change in identification strength* over time. Because the current study aims to express the power of independent variables in terms of changed identification, we opted to calculate the dependant variable change across waves by taking the standardised residual score of the regression of the latent variable estimates of identification of wave 2 on wave 1 (see for instance Schaufeli, Bakker & Van Rhenen, 2009; Kooij & van der Voorde, 2011). In this way, the standardized residual score is taken as the indicator for change, that part of identification at wave 2 that is not explained for by wave 1. For this purpose the latent variable estimates of organisational and occupational identification were calculated in one run with MPLUS version 6.12, using WLSMV as estimator. Estimation was based upon the overall set of participants (N = 791) who responded to one or both waves in order to support non-response analysis. The model fit indices for the calculation of these estimates were satisfactory with: RMSEA = 0.065, .053 < 90% CI > .076, probability RMSEA < .05 = .016, CFI = .960, TLI = .942 and WRMR = 1.126. Obtained estimates for organisational and occupational identification were exported to SPSS to calculate the respective standard residuals, as dependent variable.

Leadership support, was measured during both waves using a five-item Likert scale (1 = totally disagree, 5 = totally agree (Banai et al., 2007; Schriesheim et al., 2009). Examples of items include: 'I can approach my manager(s) with my problems and observations' and 'I feel sufficiently encouraged to present ideas and issues'. The CFA to inspect the distinctiveness of leadership support in both waves, that was calculated for all 791 respondents in order to enable non-response analysis, showed satisfactory results with CHI2 for model fit = 78.176, df = 34, p-value < .000, RMSEA = 0.041, .029 < 90%CI > .052,

⁴ CHI2 for model fit = 130.277, df = 66, p-value < .001, RMSEA = 0.045, .033 < 90%CI > .056, probability RMSEA < .05 = .765, CFI = .945, TLI = .903, WRMR = .814 (WLSMV).

⁵ CFA was conducted on the total set of participants for two reasons: the inclusion of all respondents to the first wave is necessary to enable non response analysis and we did not want to restrict the assessment of the internal validity of these measures to the specific subset of respondents whose organisational belonging remained the same.

probability RMSEA < .05 = .901, CFI = .997, TLI = .996, WRMR = .675 (WLSMV). The internal reliability of the scale as indicated by Cronbach's alpha amongst the selection of participants of the two-wave study was good, with wave 1 = .92 and wave 2 = .91 (n = 263).

In order to measure *professional identity fit*, the creation of a composite indirect fit index (Yang et al., 2008) was preferred above the use of direct measures, which are obtained by directly asking employees their experienced level of fit, since the latter procedure is considered to be more vulnerable to bias and collinearity when other satisfaction measures are included (Cable & DeRue, 2002). Therefore professional identity fit was calculated by taking an employee's reported strength of identification as a point of reference and subtracting from that the perceived organisational demand for that identification. Perceived *organisational demand* for each employee's identification, was assessed at both waves by adding a question to each of the foci of identification, phrased as: "How important you think they are to the faculty, the faculty sees this motivation as.....", using a 5-point Likert scale (1 = 'completely unimportant' to 5 = 'very important', 6 = don't know). Positive scores for professional identity fit indicate higher employee identification compared to the perceived organisational demand, while negative scores indicate lower employee identification compared to perceived organisational demand. A zero score reflects a balance between the reported strength of identification and perceived organisational demand (high fit). To obtain the measure for professional-identity fit in terms of a percentage regardless of the direction of the discrepancies, all difference scores were transformed by calculating 1 minus the summed absolute observed discrepancies divided by the summed maximum discrepancy⁶. This index for professional-identity fit was calculated for organisational as well as for occupational identification respectively; ranges varied from zero to 1.00.

Five demographic variables were included as controls. Pre-structured questions were used to assess *gender* (0 = male, 1 = female). *Organisational tenure* was operationalized as the years of working experience within this organisation (1 = < 2 years, 2 = 2-< 5 years, 3 = 5-< 10 years, 4 = > 10 years), while similar ranges were set for *professional tenure* which was operationalized as the years of experience in the field of work. *Size of appointment* was measured in 'full time equivalent', ranging from .00 to 1.0, finally *age* was measured in years.

Since data was collected from employees nested in academies and curricular programs, the inter-class correlation coefficient (ICC) (Bliese, 2000) was computed to check for the proportion of variance in changes in employees' organisational and occupational identification, which is attributable to their organisational belonging. The ICC1 with

⁶ for instance $PIFT1F1 = 1 - ((\text{abs}(PIFOO09) + \text{abs}(PIFOP09)) / 8)$.

respect to changes in organisational identification for academies was .01, for curricular programs it was 0.006, showing that less than one percent of the variance occurs at the organisational level, leaving 99 percent of the variance explained by the individual level. The ICC1 for changed occupational identification turned out to be .005 for academies and .008 for curricular programs, showing again that 99 percent of the variance was related to the individual level. Considering this result and the purpose of this study, we refrained from controlling for organisational belonging by using multi-level analyses techniques in this study.

A Harman's one factor test was conducted to assess whether common method variance would provide a serious problem in both waves (Podsakoff & Organ, 1986; Lindell & Whitney, 2001). For this purpose all indicators of organisational and occupational identification, of leadership support and the calculated professional identity fit indices of each wave were set to load on a single factor (Kooij & van der Voorde, 2011). Results indicate that common methods bias does not appear to seriously threaten validity in this study, because in both waves, the single factor model did not fit the data well (wave one: = CHI2 for model fit = 557.689, df = 90, p-value < .0000, RMSEA = .141, .13 < 90% CI > .152, probability RMSEA < .05 = .0000, CFI = .413, TLI = .315, WRMR = 1.804, N = 263; and wave two: CHI2 for model fit = 750.057, df = 90, p-value < .0000, RMSEA = .167, .156 < 90% CI > .178, probability RMSEA < .05 = .000, CFI = .303, TLI = .187, WRMR = 2.304, N = 263).

Analysis

In line with the general approach for a two-wave study, the following preparatory analyses were conducted. To discover selective dropout between waves, non-response analyses were conducted using paired T-tests on the core constructs and selected background characteristics. To detect changes in the average identification across waves, T-tests and Wilcoxon signed-rank tests were applied.

Then we assessed the model fit indices of the comprehensive model explaining for changed organisational and occupational identification, through leadership support and professional-identity fit across both waves, into one comprehensive model. Next we tested the hypothesized model separately for changed organisational and occupational identification, fitting the calculated standard residual, the calculated indexes of professional identity at both waves and the items of leadership support into one model each. Analyses were run to test the hypothesized direct effects on changed organisational and occupational identification, including the controls age, gender, organisational and professional tenure and fte, using Mplus 6.12. Since Mplus 6.12 does not allow for the calculation of mediating effect of an exogenous variable, we opted to use SPSS to test the hypothesized indirect effect of leadership support via professional-identity fit; here a step-by-step approach was followed. For this purpose the interaction

variable was obtained by taking the product of both mean centered variables.

Finally, in order to interpret the results correctly in terms of their relevance for employees with strengthened and weakened organisational and occupational identification, additional exploratory regression analyses were conducted to compare these subgroups. To classify respondents, the differences across waves in latent factor scores of identification were taken as indicators, distinguishing between the category of individuals who showed a 33% (strongest) increase in identification and the subgroup with (relatively) the 33% strongest decrease in identification, leaving the 33% of individuals with zero or modest changes out.

■ RESULTS

Non-response analysis

Selective dropout was related to the size of the appointment, signalling lower response amongst employees with a smaller size of appointment (T test, $t(426) = -2.374$, $p < .05$). In addition, leadership support at wave one was linked to drop out, signalling less participation of employees who reported lower leadership support at wave one (T test, $t(464) = -2.238$, $p < .05$). No further differences with regards to the central constructs of the study were found.

Model results

The model fit indices of the model calculating the predicted direct effects on changed organisational identification are satisfactory with CHI2 for model fit = 80.316, df = 44, p-value < .0007, RMSEA = 0.064, .041 < 90%CI > .086, probability RMSEA < .147, CFI = .986, TLI = .982 (WLSMV). The indices for the model of changed occupational identification estimating the predicting direct effects were mediocre, with CHI2 for model fit = 113.824, df = 44, p-value < .0000, RMSEA = 0.088, .068 < 90%CI > .108, probability RMSEA < .05 = .001, CFI = .964, TLI = .954 (WLSMV).

Descriptives

Table 1 shows the means, ranges, standard deviation and correlations between variables within and across the two waves. The table shows a substantial positive link, 94** ($p < .01$), between changed organisational and occupational identification, suggesting that this occurs together some of the time. Correlations between the measures of professional-identity fit across waves are positive but small at < .35 ($p < .01$). The correlation between the two measures of leadership support across waves is moderate at .48 ($p < .01$). Leadership support at wave two is related to both changed organisational and occupational identification. T-tests and Wilcoxon signed-ranks tests showed no change in average score and rank-order stability of professional-identity fit and leadership support.

Process model of identification

Table 2 shows the results of the analyses in testing the four hypotheses. The betas and explained variances for the hypothesized direct effects that were found with Mplus and the (in)direct effects calculated with SPSS, are presented next to each other, after which the results are shown for the subgroups with increased and decreased identification. Results show that the controls age, gender, size of appointment, professional- and organisational tenure did not provide significant explanations of change.

For changes in organisational identification, the results in Table 2 provide support for H1a; indeed changed organisational identification is predicted by low professional-identity fit at wave 1. H2a is also supported by the results, showing that changed organisational identification of employees is explained for by high professional-identity fit at wave 2. As for H3a, the hypothesized role of leadership support on changed organisational identification, the results are in line with its hypothesized direct effect. Fine graining these analyses to subgroups with strong increased and decreased identifications shows that these results on H1a, H2a and H3a are found amongst employees with strong increased identifications in particular. With regard to H4a, explaining changed organisational identification as a result of the interaction between leadership support with professional-identity fit, results show that the interaction variable contributes significantly to the explanation of changed organisational identification, while at the same time the initial direct effect of leadership support ($b = -.152$, $p = < .05$) becomes insignificant ($b = -.105$, $p = < .10$). In order to examine the nature of this interaction effect, it is graphically illustrated in Figure 2, using procedures by Aiken and West (1991) and Dawson (2014). Taken together, the evidence here is in line with the hypothesis that leadership support strengthens the negative relationship between professional-identity fit at wave one and changed organisational identification. Further examinations of subgroups did not provide any specification of this effect for subgroups with increased and decreased identifications.

Results for changed occupational identification in Table 2 show that H1b and H2b are not supported by the data: professional-identity fit does not explain changed occupational identification. Hypothesis H3b, proclaiming that leadership support has a direct effect on changed occupational identification, is supported by the results, just like it does for changes in organisational identification. Fine graining the analyses to subgroups with increased and decreased identification, shows that the contribution of leadership support in changed occupational identification applies to the category of employees with increased identifications in particular. No interaction effect for occupational identification (H4d) was observed.

■ GENERAL DISCUSSION

Summary and discussion of findings

As organisations target employees' organisational behaviour by means of influencing their identifications, the current study investigates the dynamics of stability and change of organisational as well as occupational identification. This research represents a systematic way to test the empirical viability of Ashforth's process model of changes in identification (Ashforth et al., 2008). Their model proposes that it is organisational sensebreaking that evokes identity-uncertainty and identity-incongruence, which in turn gives rise to identity development processes driven by organisational sensegiving activities, thus accounting for changes in identification over time (Pratt, 2000; Alvesson et al., 2007; Ashforth et al., 2008). The basic dynamic of this process model proclaims direct and joint effects of organisational sensebreaking and sensegiving in order to explain for changes in organisational and occupational identification, for which in the current study 'professional-identity fit' and 'leadership support' were taken as respective key indicators. Using a comparative approach (George & Bennett, 2005; Ashforth et al., 2013), this model was tested for changes in both organisational and occupational identification alike.

First, although at first sight both organisational and occupational identification can be considered to be stable phenomena, the current study shows that over the time frame of two years indeed change at the intra-individual level occurs, which corresponds with the proposed alternation of episodes of stability and change in employees' identification over time (Ashforth et al., 2008). Apparently employees use different coping strategies to deal with the discrepancy between individual and organisational demands. Next to the traditional coping strategies reflected in such things as various forms of internal and external turnover (Kristof-Brown et al., 2005; Heavey, Holwerda & Hausknecht, 2013) and when taking the non-response analyses into account, there is empirical evidence for a third strategy: the process of customization by changing the organisational and occupational identification.

For changes in organisational identification, our observations do fit the predicted changes reasonably well. Professional-identity fit, conceptualized here as the congruency between employees' organisational identification and the perceived importance of that identification for the organisation, does contribute to the explanation of changes in organisational identification, specifically when it comes to increased identifications. Results show that an increase in organisational identification is indeed preceded by low professional-identity fit as measured at wave 1 and accompanied by strong professional-identity fit at wave 2. These results are in line with Ashforth's proposition (2008) that changes in identification function to reduce a gap with regards to organisational demands and are in line with the basic assumption of P-O fit research that em-

employees seek to realize some balance between themselves and various organisational demands (Kristof-Brown et al., 2005; Yang et al., 2008; Leung & Chaturvedi, 2011). Our results provide strong support for the proposition that the search for congruency between employees' organisational identification and the perceived organisational demands is part of the mechanism that triggers change. Thus this study shows that in the context of teachers in HE, the professional-identity fit in relation to organisational demands is a helpful and relevant indicator in the explanation of changes in organisational identification.

With respect to the role of the supervisor, results show that the direct effect of professional-identity fit on changes in organisational identification is strengthened, especially amongst employees with low professional-identity fit at wave 1, when they experienced a high level of leadership support onwards. Perhaps employees who experience sense breaking, will experience some kind of seekership behaviour which can lead to an increase in their receptiveness to organisational strategies such as leadership support. This result contributes insight to earlier studies that reported that leadership support should be considered foundational to sensegiving (Schyns & Day, 2010; Kammeyer-Mueller, Wanberg, Rubenstein, Song, 2013). Indeed, the current study shows that leadership support is especially powerful when employees experience low professional-identity fit; while little change can be observed when both professional-identity fit and leadership support are strong as if they these taken together provide a stable situation.

Yet, for the explanation of changes in occupational identification, the results here suggest a different dynamic. Contrary to our expectations, the professional-identity fit at wave one plays no role in the explanation of change, while professional-identity fit at wave two negatively contributes to changes in occupational identification, showing less change for employees with a stronger fit. Thus the professional-identity fit with perceived organisational demands, does not function as a driver to elicit changes in occupational identification, leaving the question open as to what serves as indicator of fit and provides a trigger for change in occupational identification. Nevertheless, the predicted direct and positive effect of leadership support on changes in occupational identification was found, especially amongst employees with increased identification. Here leadership support clearly affects changes, especially growth, in occupational identification. Taken together, leadership support does impact change with regards to occupational identification in the group studied here and does so over a longer span of time than has been previously investigated (Kammeyer-Mueller et al., 2013).

To conclude, the findings of this quantitative two-wave study show support for the role of professional-identity fit and leadership support in the prediction of change in employees' identifications. Using these indicators as proxies for the situation of sense-

breaking and for the process of sensegiving, the results add to our understanding of these social phenomena that have been described before in several qualitative case studies (Pratt, 2000; Alvesson & Willmott, 2002; Ashforth et al., 2008), but not in a two-wave study across a two-year time frame. Results show that both the professional-identity fit with perceived organisational demands and leadership support are important in the explanation of changes in employees' organisational and occupational identification.

Limitations and strengths

When evaluating the relevance of this study, some contextual parameters have to be taken into account. First, the generalizability of results obtained within one organization is by definition low, although the number of respondents here provides strong organisational representativeness. The study was also conducted on a very homogeneous sample in which various forms of external and internal turnover are controlled for, nevertheless the stability of all dyads of employee-supervisor relationships is not guaranteed. Critics may argue that results are in part due to a selection and maturation effect, saying that through this selection procedure, only employees with stable identifications were selected. Indeed, low leadership support at wave 1 was linked to internal turnover with exclusion from this sample as a result and the sample characteristics such as age and career phase suggest the sample to be relatively experienced and older. However the extensive non-response analyses revealed no differences in initial identifications between participants and dropouts. Finally, the effect sizes in this study despite being small, form relevant output, especially when taking the time lag and the choice to take the standard residual score as a dependent variable into account (Kooij & Van De Voorde, 2011).

The strength of this study is likely that it tests the inferences that were drawn from the process model on a very homogeneous sample over a timeframe of two years. This study is new in the provision of evidence for the continuity of the dynamics in organisational and occupational identification at the intra-individual level during one's career. The results show that the processes of identification occur even within a stable workforce and are not restricted to specific career transitions. Indeed, episodes of intra-individual stability and change alternate, as a result of the levels of professional-identity fit and leadership support.

Future research directions

The findings of this first empirical test of Ashforth's process model point to directions for further inquiry, in particular into the dynamics involved in the processes of increased and decreased identifications. The proposition can be made that the kinds of discrepancies that create a meaning void and function as triggers to customize one's occupational identifications, can differ across professions and sectors (Alvesson &

Karreman, 2007; Shin, 2011). Based upon our findings, we suggest that alternative congruencies and discrepancies should be examined as drivers for changes in occupational identification. Especially in organisations where employees form the most important production factor, such as in educational institutions, there are a wide range of stakeholders that can serve as reference points for professional-identity fit, such as various organisational sub-collectives, client groups, occupational roles and one's personal career needs (van Dick et al., 2002; Shin, 2011, Aangenendt et al., 2013; Shin & Cummings, 2014). Future research into the dynamics of employees' identification, should take different sources of congruency and discrepancy as indicators of sense-breaking and potential triggers for change into account, which is in line with and extends earlier recommendations to investigate the effects of occupational- and group fit (Vogel & Feldman, 2009).

As well, subsequent studies would benefit from considering the individual employee as an active agent with his or her own goals and strategies, who deliberately responds to situations of professional-identity discrepancy and professional-identity fit. Interesting starting points for this approach can be provided by research into provisional selves (Ibarra, 1999), employees' coping strategies in handling discrepancies between organisational demands and performance (Kluger & DeNisi, 1996) and employees' customization strategies to work out professional identity incongruences (Pratt et al., 2006).

Finally, with regard to methods, future research should preferably be comparative (George & Bennett, 2005), based upon a minimum of 600 respondents necessary to assess the possibly small (in)direct effect sizes (Byrne, 2012) and based upon a longitudinal design, including a series of assessments to detect curvilinear and recursive effects in changed identification over time (Byrne, 2012; Bednall, 2014). Based upon the current study, we promote the cooperation with regularly administered employee monitors of HR departments and social policy research, while adding dedicated non-invasive intermediate data sampling techniques such as the use of an electronic diary in order to collect a series of frequent short self-reports. To replicate the findings of this study, such an approach would enable the recruitment and retention of an adequate number of participants (Bednall, 2014).

Consequences and practical implications

In order to facilitate organisations and employees in the continuous synchronization of organisational demands and professional qualifications, the transfer of knowledge about the changeability of employees' identification in the development and implementation of HRM and managerial practices should be a cooperative endeavour by practitioners and scholars alike (Pichler, 2012). Two suggestions are made here for a start.

For the development and implementation of new HR practices, it is important to keep in mind that none of the changes in employee identification relate to general employee characteristics such as gender, age, professional, and organisational tenure. The age independence of changes in organisational and occupational identification confirms the age independence of other employee characteristics such as the activity level in professional development of teachers in secondary education (Richter, Kunter, Klusmann, Lüdtke & Baumert, 2011), the stability of work related values even above personality traits (Jin & Rounds, 2012) and innovative role behaviour and resistance to change (Ng & Feldman, 2013). Therefore a priori expectations and stereotypes regarding the role of gender and tenure of employees (van Dalen, Henkens & Schippers, 2009) and specific calls for age or tenure specific HRM policies are not supported by the empirical findings.

In evaluating the impact of leadership support on changes in employees' professional identification, it appears that the direct supervisor should be regarded as an actor through which sensegiving is facilitated by the organisation. The results of this study show that getting feedback, being informed by the supervisor concerning the developments, feeling free and encouraged to approach the supervisor with problems and suggestions, experiencing an effective dialogue concerning one's work – in sum experiencing guidance and the opportunity to learn in an open dialogue – has a direct effect on and increases both organisational and occupational identification. This finding is relevant for the selection process of supervisors, for instance with regard to the assessment of their potential for supportive behaviour. Results can also corroborate management development programs, which should be aimed at facilitating and maintaining an open constructive dialogue in the supervisor-employee dyad, for which some guidelines for selection and training have been provided recently (Paustian-Underdahl, Shanock, Rogelberg, Scott, Justice & Altman, 2013).

TABLE 1

Means, standard deviations, ranges and correlations concerning changed identification after two years

	Mean	SD	1	2
1. Delta organisational identification	-.050	1.33		
2. Fit organisational identification (wave 1)	.84	.18	-.145*	
3. Fit organisational identification (wave 2)	.85	.17	.207**	.242**
4. Delta occupational identification	-.021	1.32	.942**	-.098
5. Fit occupational identification (wave 1)	.86	.14	.014	.451**
6. Fit occupational identification (wave 2)	.88	.13	-.030	.223**
7. Leadership support (wave 2)	3.88	.93	.148*	.172**
8. Gender	.49	.50	.036	-.056
9. Age	46.30	10.01	.013	-.037
10. Organisational tenure	3.86	1.32	-.038	-.050
11. Professional tenure	4.22	1.12	.000	-.023
12. Size appointment	.80	.21	.014	.180**

Notes. * correlation is significant at the $p < 0.05$ level, ** correlation is significant at the $p < 0.01$ level, two-tailed. $N = 263$. Delta organisational-and occupational identification is the standardised residual that is calculated by regressing the latent factor score of identification at wave two on identification at wave one. Fit is percentage of fit; Leadership Support is scale based

	3	4	5	6	7	8	9	10	11
	.187**								
	.146*	.047							
	.365**	-.052	.348**						
	.250**	.157*	.215**	.492**					
	.017	.019	-.029	-.010	-.115				
	-.094	-.004	-.004	.021	.098	-.227**			
	-.044	-.075	-.061	-.009	.133*	-.216**	.496**		
	-.012	-.040	-.011	.007	.139*	-.245**	.537**	.800**	
	.049	.048	.110	.045	.057	-.327**	-.022	.159*	.162**

upon 5 items; Gender: 0 = male, 1 = female; Age in years; Organisational tenure and Professional Tenure in categories: 1 = < 2 years, 2 = 2-5 years, 3 = 5-10 years, 4 = > 10 years. Size appointment in full time equivalent ranging from 0 - 1.0.

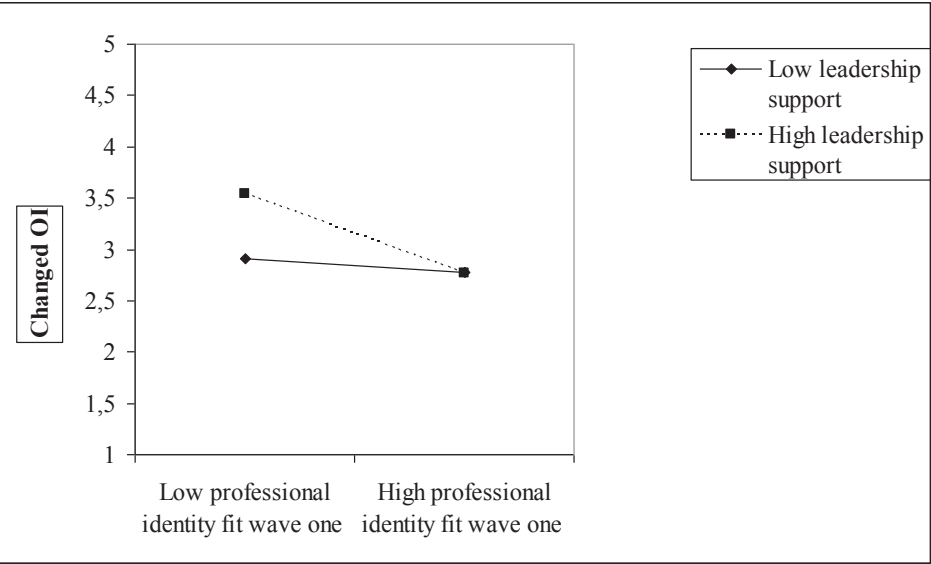
■ TABLE 2

Patterning of intra-individual changes in identification after four months: number of respondents with stable, decreased and increased identifications

Changed Organisational Identification				Changed Occupational Identification				
	all direct effects for all respondents	all direct & indirect effects for all respondents	all (in)direct effects for subgroup with increased identifications only	all (in)direct effects for decreased	all direct effects for all respondents	all direct & indirect effects for all respondents	all (in)direct effects for subgroup with increased	all (in) direct effects decreased only N = 87
	N = 263	N = 263	N = 87	N = 87	N = 263	N = 263	N = 87	N = 87
Age	.085	.062	.004	.286	.044	.049	-.006	.263*
Gender	.087	.063	.056	.047	.084	.049	.197	.020
Fte	.078	.065	.083	.100	.040	.072	.047	.099
Professional tenure	.057	.058	.198	-.217	.098	.025	.201	-.155
Organisational tenure	-.092	-.112	-.163	.005	-.165	-.145	-.301#	-.033
Professional identity Fit wave 1	-.227**	-.224***	-.343***	-.071	.091	.030	.033	-.104
Professional identity Fit wave 2	.245**	.246***	.450***	-.025	-.094	-.177**	-.233#	-.051
Leadership support wave 2	.152**	.105#	.208#	-.036	.204 **	.231***	.346**	.065
interaction LS*OIPiFit wave 1	.	-.158**	.001	.166	.	.	.	.
interaction LS*OCIPiFit wave 1	.	.	.	.	.	-.046	-.047	.132
R2	.117	.123	.330	ns	.071	.023	.164	ns

Note. N = 263, # =< .10. * p =< .05, ** p =< .01, *** p =< .001; Beta's and explained variances of hypothesised direct effects (Mplus) and (in)direct effects (SPSS) are shown for various subgroups.

Figure 2. Interaction effect of leadership support and professional identity fit at wave one on changed organisational identification.



Chapter 6

General Discussion

discussion

■ 1. Introduction

Building upon the assumption that institutions for Higher Education and their workforce are being continually challenged to keep up and adapt to changing societal demands and that it is the quality and flexibility of the workforce which is the key factor to address this turmoil, this thesis focused on the understanding of changes in teachers' professional identity. Making use of the Social-Identity approach (Tajfel, 1978; Tajfel & Turner, 1987; Haslam, 2004; Ellemers, Haslam, Platow & van Knippenberg, 2003), teachers professional identity is conceptualised here as a social identity in which the relevant foci of identification in the context of their work and career can be mixed into higher-order social identities. The central aim of this thesis is to increase our understanding of changes in identifications and in the professional identity of teachers in Higher Education by investigating the prominent foci of identification, their mix in higher-order social identities and the factors that are involved in the change of these professional self definitions at the intra-individual level.

The rationale for this approach is based upon the empirically founded and well-established identity-matching principle that proclaims that employees' behavior will be strongly related to the foci with which he or she identifies most (Haslam, 2004; Riketta, 2005; Riketta & van Dick, 2005; van Dick, Becker & Meyer, 2006b; Ullrich, Wieseke, Christ, Schulze & van Dick, 2007; Ashforth, Harrison & Corley, 2008). In summary, the purpose of this thesis is to unravel the processes in the arena in which organisational and individual strategies meet in order to determine how changes at the intra-individual level relate to management and Human Resource Management (HRM) interventions and contribute to both their knowledge-base and the opportunities to provide strategic support for the continuous reform within educational institutions. The central research question is therefore:

What are the antecedents and consequences of changes in the foci of identification and their mixes in the professional identities of teachers in Higher Education?

To explore answers to this question, four empirical studies have been conducted to investigate the foci of identification, their mix in higher-order social identities and the factors that are involved in the process of change of employees' identifications – not only amongst organisational newcomers, but within the current workforce as well. In the next sections, the results of these four studies will be summarized and discussed. First the findings of each study are briefly presented, followed by an integrative presentation of the overall findings and conclusions. Next, the main theoretical implications and possibilities for future research as well as the overall strengths and weaknesses of the studies are discussed and finally, the implications for practice are put forward.

■ 2. Main findings and conclusions of the four studies

In Chapter 2, a study is presented which focuses on discerning the foci of identification within the current workforce of teachers together with their mix in higher-order social identities and the antecedents, which was conducted within Dutch higher education. The research questions in this study were:

What are the distinct foci of identification for teachers in Higher Education? (RQ1); What professional identities, conceptualized as higher order social identities in which identification with foci are clustered, can empirically be distinguished? (RQ2), and To what extent is the variance in identification with foci and with professional identities accounted for by career stage and gender? (RQ3).

A mixed-method approach was applied to answer these questions. In the first qualitative study, method-, investigator- and data triangulation was applied using policy documents, transcripts of in-depth interviews and photographs of a card-sort technique as data sources ($N = 12$). In the second part – a quantitative study – a research survey was used to put the propositions to the test ($N = 538$).

From both the qualitative and quantitative part of this study, it became clear that teachers can identify with at least ten distinct foci in the context of their work, covering organisational (sub)collectives, occupational roles, client groups and the personal career. Results showed that teachers differ strongly in the identification-strength regarding the distinct foci. For instance, on average teachers identified the least with the organisation, a finding which is in line with other studies on the importance of organisational identification for workers in knowledge-intensive organisations (Alvesson, 2000; Pratt, Rockmann & Kaufmann, 2006). At the same time, the range and distribution that was observed in the study, indicated the presence of very strong inter-individual differences. Occupational and client identifications also did not turn out to be homogeneous one-dimensional constructs, but rather consisted of various sub-foci, which corresponds to what other studies on organisational identification have shown (Christ & van Dick, 2003; Chen, Chi & Friedman, 2013).

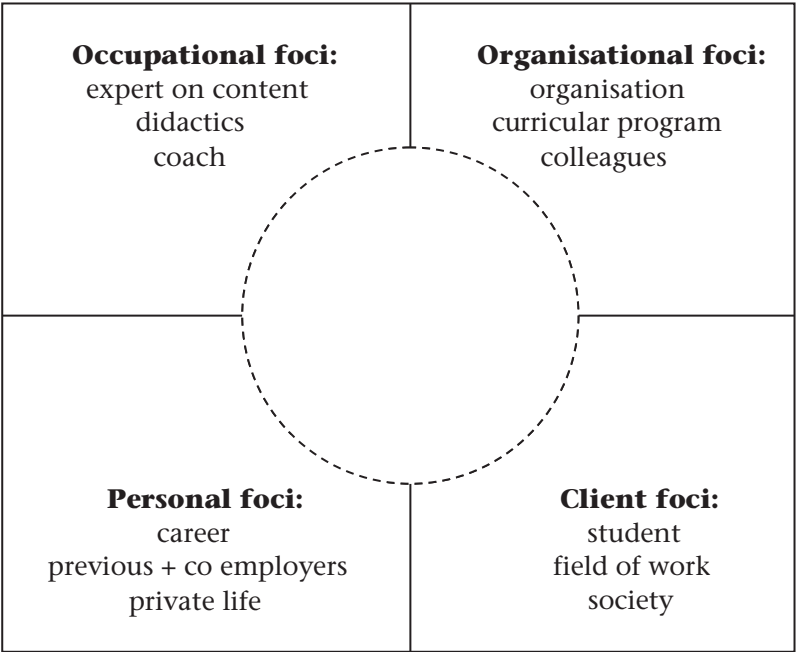
While employees indeed relate to distinct foci, they also simultaneously relate to more complex and inclusive higher-order identifications when identifying themselves. Their usage of labels and tags in interviews point to their identification with professional subgroups within the teaching profession. Investigation of this structure showed that the ten distinct foci could be merged into four higher-order clusters. In line with the results of the qualitative study, the quantitative factor analyses showed

satisfactory fit indices for a four-factor model of professional identification consisting of the same four higher-order social identities, namely: identification 1. with the organisation, 2. as a teaching professional, 3. as a professional teacher and 4. with colleagues and career. The composition of these higher-order social identities did not differ with gender or with career-stage indicators, such as organisational- and professional tenure and seemed to be a stable phenomenon within this population.

Finally, with regards to the antecedents of identification-strength with distinct foci, both linear and quadratic effects of gender and career stage on various foci were found. The strength of identification with occupational sub foci within the current workforce was found to increase and decrease with age, organisational and professional tenure, which is contrary to the career-stage based proposition that occupational identification increases with growing job experience (Pratt et al., 2006).

In conclusion, results show considerable professional diversity within the workforce, when looking at the differences in the strength of teachers' identification with foci and with their merge into higher-order professional identities. Figure 1 is drawn to summarize the different foci.

Figure 1. Foci of identification



In Chapter 3, a study is presented in which the intermediate conditions for teachers' professional development are explained by the application of a performance-appraisal system, while specifically focusing on its joint effect together with employees' initial identification and leadership support. The research questions for this study were:

What is the relationship between the application of the performance-appraisal system and opportunities for and active consideration of professional development? (RQ4) and
To what extent is this relationship affected by leadership support and by employees' identification with the organization, the career and the occupation? (RQ5).

To test the hypotheses, survey data from an institution for Higher Education in the Netherlands was used (N = 538 teachers).

Results showed that the application of a performance-appraisal system is indeed related to increased opportunities for professional development and to the active consideration of professional development. As expected, organizational identification strengthens the relationship between performance appraisal and active consideration of professional development, but not for opportunities for professional development on which a direct effect of organizational identification was found. However, with regards to career identification no interaction effects were found. As for the role of employees' initial identifications, results indicated that employees with stronger organisational identification respond more sensitively to the performance-appraisal system, while on the other hand no interaction effects related to career identification were found. Leadership support was found to strengthen the relationship between the application of the performance-appraisal system, and active consideration of professional development was stronger amongst employees who experienced higher degrees of leadership support. With regards to opportunities for professional development, a full mediating effect of leadership support was found, in which the initial effect of the performance-appraisal system was overridden in cases of strong leadership support. Taken together, these findings broaden the set of empirically established employee outcomes to which the use of a performance-appraisal system can contribute, such as job satisfaction and various informal learning activities (Boswell & Boudreau, 2001; Bednall, Sanders & Runhaar, 2014). Moreover this study adds to the evidence base of HRM by highlighting differences in the level of sensitivity of employees to HRM tactics that can be attributed to variations in the strength of pre-existing identifications.

In Chapter 4, an exploratory mixed-method study is reported, in which the process of change in organisational, occupational and career identification amongst organisational newcomers is investigated through the lens of employee's activities, using career

competencies and customization strategies as sensitizing concepts. The research questions here were:

What kind of changes in employees' organisational-, occupational- and career identification can be observed during the first four months of organisational entry? (RQ6);

To what extent can these changes be explained by the career competencies that employees use just before organisational entry? (RQ7), and

How does changed employee identification unfold in terms of the customization processes that can be distinguished in the narratives? (RQ8).

For this purpose a mixed-method two-wave research design was applied. In part 1 of the study, a two-wave design is applied using data obtained from two surveys that were conducted just before organisational entry and again after four months of work ($n = 41$), while in part 2 of the study, a comparative case-study design was used to investigate additional data obtained from the application letter, the resume and a career interview held after nine months on the job.

Results showed that most individuals do experience substantial non-uniform intra-individual changes in one or two of their identifications during the first four months of their new appointment. At the same time the average career- and organisational identification of newcomers appeared to be stable at group level. Furthermore, the results indicated that career competencies such as 'reflection on motives', 'reflection on qualities' and 'work exploration', are linked to career- and occupational identification at wave 1, but do not explain intra-individual changes in employee identifications over four months. In order to discover the processes that are involved in these changes, the investigation was continued in part 2 of this study using a qualitative comparative case-study approach. Six different customization strategies that newcomers use to manage change in their set of professional identifications were detected: 'identity conservation', 'identity splinting', 'identity hopping', 'identity patching', 'identity enriching' and 'identity development'. Taken together and verbalizing these results in terms of an overarching professional identity, the findings of this study suggest that newcomers' use of career competencies contribute to the emergence of a professional identity at the start of new work, whilst newcomers' customization strategy play a role in the process of change with regards to their set of professional identifications during organisational entry. Within-case analysis of the narratives provided indications that it is the imaginary career biography and the perceived fit with the organisational demands that drives employees' choice for a specific customization strategy.

The focus in this study on employees' deliberate strategies adds to previous research, wherein particular personality traits and characteristics predicted specific aspects of

newcomer adjustment behavior, for instance curiosity led to information seeking and positive framing behavior (Harrison, Sluss & Ashforth, 2011). This research also showed that the trait openness and extraversion were related to employees' experience of changes in their career adaptability over time (Savickas, 1997; Zacher, 2014). When considering the results from a job-transition process perspective, the findings of the current study suggest that career competencies serve employees to prepare for job transitions, rather than to guide the adjustment process after their organisational entry is realized. This explanation is in line with the earlier proposition that career competencies could be more important during the process of orientation and the transition to new work than during the (new) appointment itself (Kuijpers & Scheerens, 2006a; Kuijpers, Schyns, & Scheerens, 2006b). By highlighting the relevance of career competencies for the development of occupational- and career identification, this study adds to previous research in which the use of career competencies for both employees and students is depicted in terms of internal and external career-success and the development of feelings of certainty/trust for the intended job transition or vocational career choice (Kuijpers et al., 2006a, 2006b; Kuijpers & Meijers, 2012; Meijers & Kuijpers, 2014). Finally, the detection of six different customization strategies amongst newcomers, doubles the number of empirically established strategies that employees can use to deal with identity-incongruent work, thereby expanding the previous work of Pratt et al. (2006).

In the final study, described in Chapter 5, the process of change in organisational and occupational identification within the present workforce within an institution for Higher Education was investigated. Changes in organisational and occupational identification were explained pursuing the inferences that were drawn from the process model of identification developed by Ashforth, Harrison and Corley (2008), investigating the role of professional-identity fit as indicator for sensebreaking, the role of leadership support as indicator for sensegiving, and their joint influence. The corresponding research question here was:

To what extent do professional identity fit and leadership support and their interaction explain changes in employees' organisational and occupational identification? (RQ9).

Here a two-wave study design was applied using two electronically administered surveys over a time period of two years ($N = 263$ teachers).

As expected, change in organisational identification was negatively related to professional-identity fit at wave 1 and positively related to professional-identity fit at wave 2. The hypothesised direct effect of leadership support on change in organisational identification was also observed. With regard to occupational identification, the predicted

direct effect of leadership support was found, while the hypothesised effects of professional-identity fit and its interaction with leadership support were not observed here. Fine graining the analyses showed these findings to be applicable for employees who had shown increased identifications in particular. Taken together, both professional-identity fit and leadership support appear to be important in the explanation of changes in employees' organisational and occupational identification over a time period of two years, however these findings could represent a different dynamic underlying the process of changes in organisational identification when compared with occupational identification. All in all, this empirical test of Ashforth's process model of identification adds new information to previous research in a number of ways: it puts a theoretical model to the test, it focus on the investigation of changes within a current workforce and does so in a two-year time frame.

■ 3. Theoretical implications and implications for (further) research

Based upon the main results that are summarised in the previous sections, three major implications of this thesis for theory development and future research will be put forward here, addressing the contribution to 1) the conceptualisation of professional identity, 2) the modelling of the process that explains changes in identification and 3) the role of HR and leadership with regards to changes in employees' identification.

Social-identity complexity and the concept of professional identity

First, the advantages and limitations of the selection of the Social-Identity perspective require consideration, because it is a new approach in addressing the issue of social-identity complexity (Roccas & Brewer, 2002) and in addressing the lack of a stringent conceptualisation of the concept of professional identity (Beijaard, Meijer & Verloop, 2004; Ashforth et al., 2008). Indeed, these seminal reviews encouraged us to explore the foci of identification, and to conceptualise and investigate "professional identity" as a mix of employees' identification. The theoretical contribution of this approach in conceptualising the professional identity as "a mix of identifications", lies in its being anchored in and being an extension of the Social-identity approach. This approach is used to refer to Social Categorization Theory and the Social Identity Theory, which taken together, are widely considered to be the theoretical and empirically well-established bundle of theories that have proven powerful in the explanation of human behaviour (Rousseau, 1998; Alvesson, 2000; Christ et al., 2003; Haslam, 2004; van Dick et al., 2006a; Ullrich et al., 2007; Ashforth et al., 2008; Canrinus, Helms-Lorenz, Beijaard, Buitink & Hofman, 2012; Moss, Gibson & Dollarhide, 2014). Indeed, the results depicted in Chapter 2 did not only show clearly that teachers distinguish between distinct foci, but also that they perceive subgroups within the teaching profession in which client and occupational foci appear to be merged. Together with the reported dialectic

and animosity amongst individuals, this study provides strong indications for the existence of higher-order social identities of teachers in which identification with foci is merged. Thus the advocated conceptualization of professional identity as a higher-order social identity, grounded within the Social-Identity perspective, provides a productive lens with which to explore the communalities and differences in teachers' self definitions. The most important theoretical contribution of this lens lies in its ability to observe and extract the different foci of employees' identification that are important at the individual level, highlighting the phenomenon of professional diversity in the occupation. The presented conceptualization of professional identity, conceived here as a higher-order social identity, e.g. as a mix of identifications, can help provide a better understanding of the variety in employees' organisational behavior. Moreover it can increase its explanatory power for organisational behavior by bringing the one-to-one attribution to specific distinct foci to a higher level (Kelley, 1973).

That said, the concept of employees' professional identity still requires further conceptual and empirical underpinning. Starting at the employee level, some important conceptual and methodological questions remain, such as investigating the presence of other foci in other institutions for HE and the existence of other kind of mixes of employee' identification. Another line of research should focus on the contribution of specific foci and professional identities to the explanation of specific teachers' organisational and teaching behaviors, which are important in the realization of organisational goals, for instance with regards to students' learning activities. Finally, although this dissertation focussed on the professional identities of teachers in the context of Higher Education only, there is reason to argue that the approach taken here could be used elsewhere as well. It might, for instance add to the understanding of the professional self and primary orientations of individuals within other professions, in particular where similar professional diversity within the occupation can be observed, such as amongst physicians (Koelewijn, 2013).

Modelling changes in professional identity and professional development

Reflecting on the idea of *change* in employees' identification, several questions arise that impact the further conceptualization of the process of changing identifications. A prominent theoretical question is whether the process of identification, *becoming* identified, and the process of *change* in identification are conceptually the same or follow a different logic. As was elaborated on in chapters 4 and 5, research has shown that the emergence of identifications as such, have been attributed to the salience or vulnerability of individuals in response to specific cues from the environment, such as the need for identification, perceived status, the idea of being compared to other groups and career phase (Ashforth & Johnson, 2001; Smidts, Pruyn & van Riel, 2001; Haslam, 2004; van Dick & Wagner, 2002; Riketta, 2005; Bartels, Pruyn, de Jong & Joustra, 2007; Millward & Haslam, 2013). From this perspective, identification is re-

garded as a triggered response of the individual, a somewhat automatic reaction to the available cues. The accessibility of the identification, the strength of the cues and their interaction together explain the actual level of identification. Indeed, research in the context of secondary education shows that the average organisational and occupational identification of teachers can be manipulated by creating the impression that teachers are being compared to other schools and professions (van Dick et al., 2002; Christ et al., 2003). Such research has been used to develop communication strategies to increase or favor specific identifications of employees over others (DiSanza & Bullis, 1999; Smidts et al., 2001; Smith, Amiot, Callan, Terry & Smith, 2012). This way of understanding changes in identifications means seeing the changes between two different points of time, by comparing the variety of the responses made over time to perhaps changing cues and filtered for example by changes in the need for identification, need for status and career phase.

However, the results of this dissertation show that although career phase indeed functions as an antecedent for some identifications (Chapter 2), it does not directly account for changes in identification (Chapter 5). In addition, the findings of the studies reported in Chapters 4 and 5 give reason to propose that the antecedents that are involved in changes of employees' identifications differ from the antecedents that predict identification at a specific point in time. In addition, the findings of Chapter 4 indicate that employees' career competencies do add to the formation of employees' professional identity in the job-transition process, while employees' customization strategy plays a role in the process of change of newcomers' professional identity during the first four months of employment in a new position. Finally, findings of the quantitative study in Chapter 5 support the proposition that change in employees' organisational identification serves to increase professional-identity fit, e.g. functions to bridge the gap between the identification and the organisational demand for that identification.

Thus, when these findings are phrased in terms of development and change of 'employees' professional identity', then results urge us to distinguish between the emergence of a professional identity and its change. Reflection on the process of change amongst newcomers and within the current workforce adds to this conception that processes of identification and processes of identification-change are not necessarily and by definition the same.

Recapitulating the findings of both studies on change, the notion is supported that sensebreaking and sensegiving, as represented by professional-identity fit and leadership support, are indeed involved in the process of change in employees' identification, in line with the process model of Ashforth et al. (2008). The results here show empirical support for the role of organisational sensebreaking and sensegiving processes in ex-

plaining changes in identification, social phenomena that have been described in qualitative case studies (Pratt, 2000; Alvesson, 2002; Ashforth et al., 2008), but had not been investigated empirically over a longer time period. In addition, results suggest that a different dynamic could be involved that explains changes in organisational and occupational identification. Finally, the benefit of the use of customization strategies as a concept to understand the differences and commonalities within employees' deliberate activities in the process of change is manifest. Therefore it is likely that the triangle of organisational sensebreaking, organisational sensegiving and individual sensemaking, indicated by professional-identity fit, leadership support and employees' customization strategies, taken together provides a helpful conceptual framework to guide the further investigation of the dynamics that are involved in changes in employees' identifications.

The results of the quantitative two-wave study highlight the plausibility of differences across identifications in response to a specific kind of discrepancy which can create a meaning void and functions as a trigger to customize one's identification. Future research should investigate alternative stakeholders that can serve as reference points for professional-identity fit. Perhaps professional-identity fit between colleagues or peers is a better predictor of change with regards to the occupational identification of workers in knowledge intensive organisations, more so than professional-identity fit used here as it relates to organisational demands of the organisation as a whole. Moreover further investigation of the process through which a discrepancy becomes pressing for an employee, - whether that is because of the experience of organisational demands, prompted by individual goal setting, due to career reflection or relates to their interaction-, will contribute to the understanding of drivers of change and professional development.

Employees' choice of customization strategy and the behavior that is performed to manage the change in professional identifications, provides an interesting field of inquiry, especially when it is combined with the growing knowledge-base about what affects professional development.

Applying this social-identification approach to understanding the professional development of teachers in the context of educational reform, provides a complementary perspective to the dominant paradigms that have been used such as the motivational (Runhaar, Sanders & Yang, 2010) and interaction approach (Lodders, 2013; van Rijn, Yang & Sanders, 2013). From these perspectives, various forms of (in)formal individual and collaborative workplace learning have been explained, using concepts such as internal and external motivation, learning-goal orientation and transformational leadership (Runhaar et al., 2010; Lodders, 2013; van Rijn et al., 2013). In addition to these studies, evidence from this thesis suggests that pre-existent identifications of teachers

do influence the perceptions of and responses to HR tactics. Therefore, in line with recent recommendations to include employees' self identity into the equation (van Rijn, 2014), it is proposed here that the notion of 'professional diversity' of the teacher population can be used to explain varying individual responses to new organisational demands. A second complementary advantage of the use of this professional-identity approach, is the attention that it draws to the content or direction of professional development. Indeed, a growing body of research has been conducted in educational organisations to reveal employees' behaviors which are considered to be part of professional development, such as reflection, feedback asking and knowledge sharing, and their antecedents (Runhaar et al., 2010; Rijn et al., 2013; Bednall et al., 2014). However, these behaviors are considered to be relatively neutral activities, which don't take the content, focus or direction of professional development into account. Considering employees' deliberate choice of a specific customization strategy to proceed within the same fixed professional identity or transform to and across foci of identification, the use of this conceptualization of professional identity can add to our understanding of the relationship between employees' present identifications, goals, internal motivation and professional development behavior. In this vein, it is proposed here that the use of the Social-Identity approach can provide further fruitful contributions to uncover both the drivers and counter-forces of aspects of professional development amongst employees in Higher Education at macro, meso and individual levels, such as the uptake of (in)formal learning activities (Bednall et al., 2014) and the engagement in various forms of individual and collaborative learning (Lodders, 2013).

HR and leadership

As scholars seek to enhance the knowledge base of evidence-based HR, especially with respect to its present relative insignificance in institutions of Higher Education, this thesis provides several theoretical contributions.

Firstly, with regard to changes in identifications, findings of the fourth study support the proposition that change in employees' organisational identification serves to increase professional-identity fit, e.g. functions to bridge the gap between the identification and the organisational demand for that identification. Compared with previous studies that have suggested that aspects of leadership behavior should be considered a carrier for organisational sensegiving (Schyns & Day, 2010; Den Hartog, Boon, Verburg & Croon, 2013; Kammeyer-Mueller, Wanberg, Rubenstein, Song, 2013), the quantitative two-wave study adds to our existing knowledge by showing specifically that leadership support is powerful in the explanation of changes within organisational and occupational identification alike. That applies to changes within the current workforce of an institution for Higher Education and does so within a time frame of two years, as studied here.

Secondly, the link between the application of an HR performance-appraisal system and the promotion of conditions for professional development such as seeing opportunities for and active consideration of professional development, have not been studied before. With regards to this aspect, the study depicted in Chapter 3 showed that the leadership support derived from the direct supervisor (Banai & Reisel, 2007; Schriesheim & Cogliser, 2009; Schyns et al., 2010) is an important carrier for this HR practice, not only by channelling the application of a performance-appraisal system but also by amplifying the initial distinct effects of this HR practice. This result adds to recent studies in the context of educational institutions in which specific supervisory behaviors were found to impact professional development, such as giving clear and open feedback (Bednall, et al., 2014), on a regularly basis (Kuvaas, 2011; Bednall, et al., 2014), with a high perceived utility (Delveaux, Vanhoof, Tuytens, Vekeman, Devos & Van Petegem, 2013), by a supervisor who has a positive attitude towards the feedback system (Delveaux et al., 2103).

Taken together, these findings show the importance of line managers as active agents in the "HRM-performance causal chain" (Purcell & Hutchinson, 2007: 3). In addition to the perspective of LMX theory from which the quality of the leader-member relationship and the development of a psychological contract between employee and supervisor is studied (Henderson, Liden, Glibkowski & Chaudhry, 2009; Schyns et al., 2010; McDermott, Conway, Rousseau & Flood, 2013), the results in this thesis lead us to emphasize and encourage the development of a perspective in which HR tactics and aspects of supervisory behavior are combined. Both aspects are relevant for the investigation of the first of the three tests of mutuality in employment relationships as recently proposed by Boxall, which is "the quality of the match between the organisation's needs for human capabilities and the individuals needs to deploy and develop them" (Boxall, 2013: 3). The joint inclusion of theories regarding HR and leadership behavior in one theoretical structure that overarches the distinct perspectives could accelerate the building of a knowledge-base concerning the evidence-based alignment of employees and organisations.

At the organisational level, it is important to note that the size of the evidence-base of HRM practices in the context of Higher Education is still rather undeveloped. Taking the situation in Dutch Higher Education as an example, the OECD noted that realities such as aging of the workforce and attempts at creating incentives to recruit and retain high-quality faculty were not addressed properly, which was attributed to the fact that HRM is the responsibility of the distinct institutions and as a result the "staffing in tertiary educational institutions has not received any policy attention" at the national level yet (OECD, 2008: 47). In more recent studies on educational reform and professional development, this lack of systematic research on HR policies and tactics with

regards to the implementation of educational reform and the promotion of employees' professional development has been emphasized (Meijers et al., 2012; Lodders, 2013).

It is clear that the role of supervisors or academic directors at a middle management level, who are positioned to lead team members who teach, has been rarely researched up to now (Vilkinas & Ladyshewsky, 2014). Because of the relatively strong professional freedom of employees in universities and the lack of formal authority, Vilkinas et al. suggested that supervisors "must lead and manage using distributed methods of leadership" (Vilkinas et al., 2014: 102; Fitzsimons, James & Denyer, 2011; Jones, Lefoe, Harvey, Ryland, 2012). Considering the dynamic context of Higher Education, it is emphasized here that future research should investigate how supervisors engage in leader-member dyads and how their use and implementation of HR tactics actually contributes to the organisational dialogue with regards to the continuous process of matching employees' identifications and qualifications with changing organisational demands. In summary, research on the interfaces between the characteristics of HR tactics on one hand, aspects of supervisory leadership behavior on the other, together with the pre-existent identifications and customization strategies of employees themselves, is important. In such an research approach the permanent drive for educational reform and professional development is balanced with the urge to promote and preserve the necessary mutuality of the employment relationship (Boxall, 2013).

■ 4. Strengths and limitations (methodological considerations)

In addition to the strengths and limitations of the distinct studies that have been addressed before in the previous chapters, the two most important limitations and strengths of the study as a whole are discussed in this section.

To begin with, the mixed-method design applied in two studies in this thesis contributed to its scientific rigor by using the "best of both worlds" of both research paradigms (Lin & Sanders, 2014: 140). For instance, the use of the card-sorting technique in combination with a large-scale survey adds not only to the in-depth understanding of the foci of identification, but also provided a procedure to increase the generalizability of findings within a greater sample. Especially when investigating phenomena such as the dynamics of change in HRM-research, the use of a mixed-method design is recommended in order to attain a better understanding of the key characteristics involved while at the same time making sure that these phenomena can be tracked down as they develop during a specific span of time (Bainbridge & Lee, 2014). Moreover, the use of indirect fit and calculated change indicators helps to avert certain problems that have been associated with the use of single-moment and single-source methods, such as common method bias, the consistency motif and the tendency of participants to

demonstrate social desirability in self-reported measures (Podsakoff & Organ, 1986; Podsakoff, MacKenzie & Lee, 2003).

However, the fact that all studies in this thesis have been conducted at one university within one country, presents a serious limitation for the transferability of results to other HE institutions and professions. Here low generalizability is accompanied by high representability, when taking the response rates into account. In addition, the different institutionalizations within the higher-education sector across countries, can give rise to the presence of different foci amongst employees working in different Higher Education contexts. Finally, with regard to sampling, although the case selection strategy was systematically optimised from the perspective of representativeness and theoretical saturation (Glaser & Strauss, 1967) and the sample sizes for interviews and case-study research were based upon experiment-based guidelines for qualitative sampling (Guest, Bunce & Johnson, 2006), the most important remaining drawbacks of this study are the overrepresentation of newcomers to the profession and the organisation, and the fact that only the four most prominent actual observed changes could be addressed in the comparative case-study research. Thus, because foci and customizations strategies that are present within the workforce as a whole may have been overlooked, the theoretical saturation could be hampered.

Finally, when reflecting upon the strengths and weaknesses of the present research, the use of a comparative longitudinal case-study design in which respondents are sampled from different contexts, would surely augment the scientific rigor of future studies because it would preserve strong external and contextual validity by enabling the inclusion of possible local foci of identification (Yin, 2014; Bainbridge et al., 2014: Bednall et al., 2014). Thus a building-block strategy for theory development in the social sciences is recommended here – one in which inferences with regard to the process of changing identifications are tested within different educational contexts by means of a series of comparative case studies (George & Bennet, 2005).

■ 5. Implications for practice

In this section, the opportunities and challenges that are posed by the conceptual framework for the understanding of the processes that are involved in innovation and educational reform in HE are discussed, after which five specific practical implications are put forward.

Innovation and educational reform in HE

The theoretical framework and empirical findings of this thesis can provide a contribution by offering institutions for Higher Education a grip on the challenges to innovate

at the individual employee level so they may adapt to new societal demands. When looking at the response by educational institutions to new challenges from the Social-Identity perspective, it is proposed here that educational reform can be conceived of as a call or demand to assimilate a new occupational role or a new client-group within employees' existing professional identity. An example of this opportunity, springs from the OECD-Institutional Management in Higher Education (IMHE) project, which drew attention to the need to strengthen teachers' awareness of pedagogical improvements and the importance of student-teacher interactions as the aim that is pursued by education lies far "beyond their own knowledge area" (OECD, 2014: 7). In this review of the reasons for and the effectiveness of initiatives to improve the quality of teaching in 29 institutions in 20 countries, the emphasis on didactical and pedagogical foci are presented as additional perspectives necessary to guide the work. Another example can be derived from the statement that although the traditional academic roles in research universities have been generally depicted as research, teaching and administration (Teichler & Hohle, 2013), the scholarship of teaching and learning is for many academics a new challenge that demands the adaptation to new methodologies and modes of inquiry (Mathison, 2014). Examples from Dutch HE can also be found to illustrate this point, in particular when we consider the series of reforms that have been initiated to increase differentiation and diversification, since the OECD commented in 2008 that the Dutch tertiary educational system appeared in many respects to be "on the autopilot" (OECD, 2008: 3), which meant it was not able to respond to the contemporary challenges, nor was it shaping the system in the national interest (OECD, 2008: 61). These reforms include the introduction of a career-guidance policy (Meijers et al., 2012), the increasing emphasis on quality of teaching (OCW, 2011), the need to accommodate a diverse student population (Wolff & Pasztor, 2010), the legal obligation to provide 'tailor-made' (so-called "op maat") education to disabled students (WGBh/cz, 2003), the call for practice-oriented research (de Weert & Leijnse, 2010; OCW, 2013) and the need to increase HE's labour market engagement (OECD, 2008: 62). Indeed, when considering these examples of new organisational requirements it is clear that changes at the intra-individual level in terms of employees' set of identifications would follow.

The relevance of this perspective for educational reform is substantiated by research on the effectiveness of educational reforms in a range of sectors and countries that showed that real educational reform is successful only, when it is anchored in changes in the professional views and identity of the workforce (Geijsel & Meijers, 2005), includes changes in cognition and beliefs (Avalos, 2011) and has penetrated the daily practice of management and teachers themselves (Hallinger & Bryant, 2013; Zhu & Engels, 2014; van Dusen, 2014; Griffioen & de Jong, 2014). The contribution of the theoretical framework presented and the empirical findings in this thesis of our understanding about how employees can respond and relate to demands for change in identifications,

is evident. For instance, the study amongst organisational newcomers showed how employees, when they were confronted with identity-incongruent work, sought to customize the change within their personal set of professional identifications. In addition, that study showed that employees' customization strategies can encompass zero, partial and more comprehensive changes, and that the selection of a strategy seems to be a deliberate personal choice to pursue personal aims and goals. Furthermore, the importance of professional-identity fit as a trigger in eliciting change in organisational identification was shown in the study on change in the current workforce, and leadership support was found to explain changes in occupational and organisational identification. In summary, the application of the theoretical framework presented enables us to span the investigation of educational reform and professional development at the macro, meso and micro level, because it provides a framework to synthesize the research and provides a coherent conceptual base for the investigation of the basic phenomena that are involved in change.

Specific practical implications

The first implication for practice concerns the strategy of how to deal with the professional diversity within the workforce. It is recommended here that some consensus is achieved within the organisation about the desirable and permissible degrees of freedom regarding professional diversity in order to explicate the conditions under which this diversity can be made profitable in the realisation of organisational goals, and be beneficial to students and teachers themselves. From the perspective of the identity-matching principle, it can be expected that teachers will put more effort in tasks that are closest to their professional identity. Thus, reflection of HR practioners and supervisors on the differences in foci of identification will surely add to a better understanding of differences in teachers' professional behavior.

Secondly, learning to think in terms of foci of identification can enhance our abilities to support effective innovation and professional development within institutions of Higher Education. From this point of view, it is recommended that educational reform be understood as a process of re-orienting employees to new stakeholders and new occupational roles. The development of HR tactics from such a perspective should explicitly address the ways in which newcomers and experienced teachers cope with new identity incongruent work, e.g. in the selection interview, in task allotment, in discussions about the professional development plan and in performance-appraisal talks. One way to do this is to promote the development of a structured open dialogue in which the individuals' personal goals, the new organisational demands, and the preferred customization strategies are acknowledged and discussed in the light of specific educational reforms at hand. Such an approach from HRM and HRD departments, adds to other perspectives that have been used to understand and promote the processes of professional development for educational reform at the individual level, such

as employees personality and characteristics (Hensel, 2010), individuals' learning behavior in terms of informal and formal professional development (Runhaar et al., 2010; Bednall et al., 2014; van Rijn, 2014) processes of collective learning in teams (Lodders, 2013) and goals of the performance-appraisal system (Bednall et al., 2014). HR practitioners and researchers should take an encompassing and perhaps eclectic approach in the development of HR tactics for professional development and educational reform that builds upon reflection on the commonalities of these approaches and seeks to integrate the proposed guidelines for practice.

Third, when looking at the process of educational reform through the lens of identity incongruent work, it can be expected that teachers will show different customization strategies related to the extent to which the new client group or occupational role is incongruent with their current set of professional identifications. As a consequence, the impact of the introduction of new foci will differ. Differentiation of the planned change process, for example by developing a broad-spectrum communication and implementation strategy, while fine tuning on teachers with higher and lower organisational and career identification, can add to the successful implementation of the reform. Due to the professional diversity in the workforce, the differences in sensitivity to HR practices that spring from initial identifications and the deliberate choices that employees make in their customization strategy, make it important to narrowcast the HR tactics and managerial activities to individuals. In order to get the message through, initial identifications of employees should be taken into account. Thus, it is recommended here to adopt narrowcasting to the employee characteristics as a HRM strategy. This is especially relevant for professional development in the workforce because innovations call upon teachers' own readiness to adopt new foci and admit changes in a set of identifications.

Finally, the observed professional diversity calls for a specific focus on management development within educational leadership that enhances the chances that students, teachers and the organisation value and benefit from this diversity. The provision of guidelines to supervisors for the use of horizontal task-differentiation to guard the fit between the professional identity and task assignment would be an example of maintaining or respecting this diversity.

Taken together, the overall practical consequence of the evidence presented here, is the challenge to rethink HR tactics in the context of Higher Education. The universities' adaptiveness and innovativeness could be increased through heightened awareness of this professional diversity in the workforce. Given that teachers differ in their professional identifications, respond differently to organisational controls and select their own customization strategies, these outcomes should explicitly be used as a design requirement for the development of HR practices, such as selection procedures,

introduction programs and performance-appraisal systems. With regards to promoting professional development, for instance, different sub strategies could be applied in the performance-appraisal system that get the message across and that are aligned with a teacher's existing professional identity.

In summary, this thesis contributes to our existing knowledge in several key ways. First, the results of the studies show considerable professional diversity and identification with subgroups in the teaching profession when it comes to teachers' professional self-understanding and the strength of identification with foci. Secondly, the advocated conceptualization of professional identity and its empirical examination as a higher-order social identity which is grounded within the Social-Identity perspective, provides a theoretically explicit and coherent framework to explore the commonalities and differences in teachers' self-definitions and their relationship with professional development, leadership and HR. Thirdly, these studies highlight factors, circumstances and strategies that are involved in the process of change, not only amongst newcomers but also within the existing workforce. Taken together, these findings can support employees, supervisors and HR departments in developing and managing changes in professional identification and help them in promoting professional development in the context of ongoing educational reform.

References

- Aangenendt, M. T. A., Kuipers, M. A. C. T., & Sanders, K. (2013). Professional identity of teachers in Higher Education, foci, patterning and determinants, *paper presented at the 8th biannual International Conference of the Dutch HRM Network in Leuven*, 15-11-13.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA, USA: Sage Publications.
- Akkerman, S. F., & Meijer, P. C. (2011). A dialogical approach to conceptualizing teacher identity. *Teaching and Teacher Education*, 27(2): 308-319.
- Alfes, K., Truss, C., Soane, E. C., Rees, C. & Gatenby, M. (2013). The relationship between line manager behavior, perceived HRM practices, and individual performance: examining the mediating role of engagement. *Human Resource Management*, special issue: Human Resource Management and the Line, 52(6): 839-859.
- Alvesson, M. (2000). Social identities and the problem of loyalty in knowledge intensive companies. *Journal of Management Studies*, 3: 1101-1123.
- Alvesson, M., & Willmott, H. (2002). Identity regulation as organizational control: producing the appropriate individual. *Journal of Management Studies*, 39: 619-644.
- Alvesson, M., & Karreman, D. (2007). Unravelling HRM: identity, ceremony, and control in a management consulting firm. *Organization Science*. 18(4): 711-723.
- Ardts, J., Jansen, P., & van der Velde, M. (2001). The breaking in of new employees: effectiveness of socialization tactics and personnel instruments. *Journal of Management Development*, 20(2): 159-167.
- Armstrong, D., Gosling, A., Weinman, J., & Marteau, T. (1997). The place of inter-rater reliability in qualitative research: an empirical study. *Sociology*, 31: 597-606.
- Arthur, M. B., & Rousseau, D. M. (1996). The boundaryless career as a new employment principle (Eds.), *The boundaryless career: 3-20*, NY, USA: Oxford University Press.
- Arthur, M. B., Inkson, K., & Pringle, J. K. (1999). *The new careers: Individual action and economic change*. London, UK: Sage Publications.
- Ashforth, B. E., & Mael, F. (1989). Social Identity theory and the organization. *The Academy of Management Review*, 14: 20-39.
- Ashforth, B. E., Harrison, S. H., & Corley, K. G. (2008). Identification in organizations: An examination of four fundamental questions. *Journal of Management*, 34: 325-374.
- Ashforth, B. E., Joshi, M., Anand, V., & O'Leary-Kelly, A. M. (2013). Extending the expanded model of organizational identification to occupations. *Journal of Applied Social Psychology*, 43(12): 2426-2448.
- Ashforth, B. E. & Johnson, S. A. (2001). Which hat to wear? The relative salience of multiple identities in organizational contexts. In Hogg, M. A. T., & Terry, D. J. (Eds) *Social identity processes in organizational contexts*, 31-48. Philadelphia, USA: Psychology Press.
- Ashforth, B. E., & Saks, A. M. (1996). Socialization tactics: longitudinal effects on newcomer adjustment. *Academy Management Journal*, 39(1): 149-178.

- Ashforth, B. E., Sluss, D. M., & Harrison, S. H. (2007). Socialization in organizational contexts, *International Review of Industrial and Organizational Psychology*, 22: 1-26.
- Asparouhov, T., & Muthen, B. (2009). Exploratory structural equation modelling. *Structural Equation Modelling*, 16(3): 397-438.
- Avalos, B. (2011). Teacher professional development in Teacher and Teacher Education over ten years. *Teaching and Teacher Education*, 27(1): 10-20.
- Bainbridge, H. T. J., & Lee, I. (2014). Mixed methods in HRM research. In: Sanders, K., Cogan, J. A. and Bainbridge, H. T. J. (Eds). *Research methods for Human Resource Development*: 15-33. NY, USA: Routledge.
- Baldwin, R. G., Lunceford, C. J., & Van der Linden, K. E. (2005). Faculty in the middle years: illuminating an overlooked phase of academic life. *Review of Higher Education*, 29: 97-118.
- Banai, M., & Reisel, W. D. (2007). The influence of supportive leadership and job characteristics on work alienation: A six-country investigation. *Journal of World Business*, 42(4): 463-476.
- Barnhart, S. A. (1987). Developing a Performance Appraisal System. *R&D Management*, 2: 99-102.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51: 1173-1182.
- Bartels, J., Douwes, R., de Jong, M., & Pruyn, A. (2006). Organizational identification during a merger: Determinants of employees' expected identification with the new organization. *British Journal of Management*, 17: 49-67.
- Bartels, J., Pruyn, A., de Jong, M., & Joustra, I. (2007). Multiple organizational identification levels and the impact of perceived external prestige and communication climate. *Journal of Organizational Behaviour*, 28: 173-190.
- Baruch, Y. (2006). Career development in organizations and beyond: balancing traditional and contemporary viewpoints. *Human Resource Management Review*, 16: 125-138.
- Bauer, T. N., Bodner, T., Erdogan, B., Truxillo, D. M., & Tucker, J. S. (2007). Newcomer adjustment during organizational socialization: A meta-analytic review of antecedents, outcomes, and methods. *Journal of Applied Psychology*, 92 (3): 707-721.
- Bednall T. C., Sanders, K., & Runhaar, P. (2014). Stimulating informal learning activities through perceptions of performance appraisal quality and HRM system strength: a two-wave study. *Academy of Management Learning and Education*, 13(1): 45-61.
- Bednall, T. C. (2014). Longitudinal research. In: Sanders, K., Cogan, J.A., & Bainbridge, H.T.J. (Eds). *Research methods for Human Resource Development*. NY, USA: Routledge.
- Beijaard, D., Meijer, P. C., & Verloop, N. (2004). Reconsidering research on teacher's professional identity, *Teaching and Teacher Education*, 20: 107-128.
- Bleiklie, I., & Michelsen, S. (2013). Comparing HE policies in Europe: structures and reform outputs in eight countries. *Higher Education*, 65: 113-133.
- Bliese, P. D. (2000). Within-group agreement, non-independence, and reliability: Implications for data aggregation and analysis. In: Klein, K. & Kozlowski, S. W. (Eds.), *Multilevel theory, research and methods in organizations*, 349-381. San Francisco, USA: Jossey-Bass.
- Bodenhausen, G. V. (2010). Diversity in the person, diversity in the group: Challenges of identity complexity for social perception and social interaction. *European Journal of Social Psychology*, 40: 1-16.
- Boomsma, A., & Hoogland, J. J. (2001). The robustness of maximum likelihood estimation in structural equation modelling. In: Cudeck, R., DuToit, & S. Sorbom, D (Eds.), *Structural Equation modelling: Present and future*, Lincolnwood, IL: Scientific Software International.
- Boon, C., Den Hartog, D. N., Boselie, P., & Paauwe, J. (2011). The relationship between perceptions of HR practices and employee outcomes: examining the role of person-organisation and person-job fit. *International Journal of Human Resource Management*, 22(1): 138-162.
- Bos-Nehles, A. C., van Riemsdijk, M. J., & Looise, J. K. (2013). Employee perceptions of line management performance: applying the AMO theory to explain the effectiveness of line managers' HRM implementation. *Human Resource Management*, special issue: Human Resource Management and the Line, 52(6): 861-877.
- Boselie, P., Dietz, G., & Boon, C. (2005). Commonalities and contradictions in HRM and performance research. *Human Resource Management Journal*, 15: 67-94.
- Boswell, W. R., & Boudreau, J. W. (2001). Employee satisfaction with performance appraisals and appraisers: the role of perceived appraisal use. *Human Resource Development Quarterly*, 3: 283-299.
- Bowen, D. E. & Ostroff, C. (2004). Understanding HRM-firm performance linkages: the role of the 'strenght' of the HRM system. *Academy of Management Review*, 29(2): 203-221.
- Boxall, P. (2013). Mutuality in the management of human resources: assessing the quality of alignment in employee relationships. *Human Resource Management Journal*, 23(1): 3-17.
- Boyd, W. & King, E. J. (1977). *The History of Western Education*, 11th edition, London, UK: AC Black publications.
- Brennan, R. L., & Dale J. P. (1981). Coefficient Kappa, some uses, misuses and alternatives. *Educational and Psychological Measurement*, 41: 687-699.
- Brewer, M. B. (2010). Social identity complexity and acceptance of diversity. In: Crisp. R.J. (Eds.) *The psychology of social and cultural diversity*, chapter two. Oxford, UK: Blackwell Publishing ltd.
- Bron, J., & Thijs, A. (2011). Leaving it to the schools, citizenhip, diversity and human rights education in the Netherlands. *Educational Research*, 53(2): 123-136.
- Brown, A. D. (2001). Organization studies and identity, towards a research agenda. *Human Relations*, 54: 113-121.
- Brown, M. G. (1989). Improving performance appraisal. *Performance + Instruction*, 28(10): 26-29.
- Bullis, C., & Bach, B. W. (1989). Socialization turning points: an examination of change in organizational identification. *Western Journal of Speech Communication*, 53(3): 273-293.
- Byrne, B. M. (2012). *Structural Equation modelling with Mplus: basic concepts, applications and programming*. NY, USA: Routledge.
- Cable, D. M., & DeRue, D. S. (2002). The convergent and discriminant validity of subjective fit perceptions. *Journal of Applied Psychology*, 87(5): 875-884.

- Canrinus, E. T., Helms-Lorenz, M., Beijard, D., Buitink, J., & Hofman, H. (2012). Self-efficacy, job satisfaction, motivation and commitment: exploring the relationships between indicators of teachers' professional identity. *European Journal of Psychology Education*, 27:115–132.
- Cassel, C., & Symon G. (2004). *Qualitative methods in organizational research*. London, UK: Sage publications.
- Cawley, B. D., Keeping, L. M., & Levy, P. E. (1998). Participation in the performance appraisal process and employee reactions: a meta-analytical review of field investigations. *Journal of Applied Psychology*, 83(4): 615-633.
- Chen, Y. C., Chi, S. C., & Friedman, R. (2013). Do more hats bring more benefits? Exploring the impact of dual organizational identification on work-related attitudes and performance. *Journal of Occupational and Organizational Psychology*, 86(3):417-434.
- Christ, O., & Dick van, R. (2003). When teachers go the extra mile: Foci of organisational identification as determinants of different forms of organisational citizenship behaviour among schoolteachers. *British Journal of Educational Psychology*, 73: 329-341.
- Clarke, M., Hyde, A., & Drennan, J. (2013). Professional identity in higher education. The academic profession in Europe: new tasks and new challenges. *The Changing Academy – the changing academic profession in international comparative perspective*, 5: 7-21.
- Collinson, J. A. (2004). Occupational identity on the edge, social science contract researchers in Higher Education. *Sociology*, 38(2): 313-329.
- Combs, J., Liu, Y., Hall, A., & Ketchen, D. (2006). How much do high-performance work practices matter? a meta-analysis of their effects on organizational performance. *Personnel Psychology*, 59(3): 501–528.
- Cooman de, R., De Gieter, S., Pepermans, R., Hermans, S., du Bois, C., Cares R., & Jegers, M. (2009). Person-organization fit: testing socialisation and attraction-selection-attrition hypotheses. *Journal of Vocational Behavior*, 74:102-107.
- Cooper, D. & Thatcher, S. M. B. (2010). Identification in organizations: the role of self-concept orientations and identification motives. *Academy of Management Review*, 35 (4): 516-538.
- Cooper-Thomas, H. D., & Anderson, N. (2006). Organizational socialization: a new theoretical model and recommendations for future research and HRM practices in organizations. *Journal of Managerial Psychology*, 21(5): 492-516.
- Cooper-Thomas, H. D., Paterson N. L., Stadler, M. J., & Saks, A. M. (2014). The relative importance of proactive behaviors and outcomes for predicting newcomer learning, well-being and work engagement. *Journal of Vocational Behavior*, 84(3): 318-331.
- Cornelissen, J. P., Haslam S. A., & Balmer, J. M. T. (2007). Social identity, organizational identity and corporate identity: towards an integrated understanding of processes patternings and products. *British Journal of Management*, 18: 1-16.
- Cremer, de D., Dijke, van M., & Bos, A. E. R. (2006). Leader's procedural justice affecting identification and trust. *Leadership & Organization Development Journal*, 27(7): 554-565.
- Crook, T. R., Todd, S. Y., Combs, J. G., Woehr, D. J., Ketchen, D. J. (2011). Does human capital matter? A meta-analysis of the relationship between human capital and firm performance. *Journal of Applied Psychology*, 96(3): 443-456.
- Cross, S. E., & Madsen, L. (1997). Models of the self: Self-construals and gender. *Psychological Bulletin*, 122(1): 5-37.
- Cummings, W. K., & Shin, J. C. (2014). The changing academic profession in international comparative perspective. In: Shin, J.C., Arimoto, A., Cummings, W.K., & Teichler, U. (Eds.). *Teaching and Research in Contemporary Higher Education, systems activities and rewards*, 9: 1-12.
- Dalen, van P., Henkens, K., & Schippers, J. (2009). Dealing with older workers in Europe: a comparative survey of employers' attitudes and actions. *Journal of European Social Policy*: 19-47.
- Dawson, J. F. (2014). Moderation in management research: what, why, when and how. *Journal of Business and Psychology*, 2:1-19.
- Delveaux, E., Vanhoof, J., Tuytens, M., Vekeman, E., Devos, G., & van Petegem, P. (2013). How may teacher evaluation may have impact on professional development ? A multilevel analysis. *Teaching and Teacher Education*, 36:1-11.
- Den Hartog, D. N., Boon, C., Verburg, R. M., & Croon, M. A. (2013). HRM, communication, satisfaction and perceived performance. *Journal of Management*, 39(6): 1637-1665.
- DeNisi, A. S., & Pritchard, R. D. (2006). Performance appraisal, performance management and improving individual performance: a motivational framework. *Management and Organization Review*, 2: 253-277.
- DeNisi, A., & Smith, C. E. (2014). Performance appraisal, performance management and firm-level performance: a review, a proposed model, and new directions for future research. *The Academy of Management Annals*, 8(1): 127-179.
- Dick, van R., & Wagner, U. (2002). Social Identification among schoolteachers: dimensions, foci and correlates. *European Journal of Work and Organizational Psychology*, 11: 129-149.
- Dick, van R., Christ, O., Stellmacher, J., Wagner, U., Ahlswede, O., Grubba, C., Hauptmeier, M., Höhfeld, C., Moltzen, K. and Tissington, P. A. (2004). Should I stay or should I go? Explaining turnover intentions with organizational identification and job satisfaction. *British Journal of Management*, 15: 351-360.
- Dick, van R., Wagner, U., Stellmacher, J., & Christ, O. (2004). The utility of a broader conceptualization of organizational identification: Which aspects really matter ?. *Journal of Occupational and Organizational Psychology*, 77:171-191.
- Dick, van R. (2004). Identification in organizational contexts: linking theory and research from social and organizational psychology. *International Journal of management reviews*, 3: 265-283.
- Dick, van R., Wagner, U., Stellmacher, J., & Christ, O. (2005). Category salience and organizational identification. *Journal of Occupational and Organizational Psychology*, 78: 273-285.
- Dick, van R., Grojean, M. W., Christ, O., & Wieseke, J. (2006a). Identity and the extra mile: Relationships between organizational identification and organizational citizenship behaviour. *British Journal of Management*, 17: 283-301.
- Dick, van R., & Becker, T. E., & Meyer, J. P. (2006b). Commitment and identification: forms, foci, and future. *Journal of Organizational Behaviour*, 27: 545-548.

- DiSanza, J. R., & Bullis, C. (1999). Everybody identifies with Smokey the Bear: Employee responses to newsletter identification inducements at the US Forest Service. *Management Communication Quarterly*, 12: 347-399.
- Dulebohn, J. H., Bommer, W.H., Liden, R. C., Brouer, R. L., & Ferris, G. R. (2012). A meta analysis of antecedents and consequences of Leader-Member Exchange, integrating the past with an eye to the future. *Journal of Management*, 38(6): 1715-1759.
- Dusen, van G. C. (2014). The virtual campus, technology and reform in Higher Education, ASHE-ERIC Higher Education Report, 25(5).
- Edwards, M. R., & Peccei, R. (2010). Perceived organizational support, organizational identification, and employee outcomes: Testing a simultaneous multifoci model. *Journal of Personnel Psychology*, 9(1): 17-26.
- Edwards, J. R., & Lambert, L. S. (2007). Methods for integrating moderation and mediation: a general analytical framework using moderated path analysis, *Psychological Methods*, 12(1): 1-22.
- Edwards, J. R. & Cable, D. M. (2009). The value of value congruence. *Journal of Applied Psychology*, 94(3): 654-677.
- Eggins, R. A., Reynolds, K. J., & Haslam, S. A. (2003). Working with identities: The ASPIRe model of organizational planning, negotiation and development. In S.A. Haslam, D van Knippenberg, D., Platow, M., & Ellemers, N. (Eds.), *Social Identity at work: developing theory for organizational practice*: 241-257. NY, USA: Psychology Press.
- Ehrnrooth, M. & Bjorkman, I. (2012). An integrative HRM process theorization: beyond signaling effects and mutual gains. *Journal of Management Studies*, 49: 1109-1135.
- Ellemers, N., Haslam, S. A., Platow, M. J. & Knippenberg van D. (2003). Social identity at work: Developments, debates, directions, In: Haslam, A., Knippenberg, van D., Platow & Ellemers, N. (Eds.) *Social identity at work: Developing theory for organizational practice*: 3-28.
- Fang, R., Duffy, M. K., & Shaw, J. D. (2010). The organizational socialization process: review and development of a social capital model. *Journal of Management*, 37(1): 127-152.
- Field, A. (2009). *Discovering statistics using SPSS*. (3rd ed.). Thousand Oaks, CA, USA.
- Fitzsimons, D., James, K. T., & Denyer, D. (2011). Alternative approaches for studying shared and distributed leadership. *International Journal of Management Reviews*, 13(3): 313-328.
- Fletcher, C. (2001). Performance appraisal and management: The developing research agenda. *Journal of Occupational and Organizational Psychology*, 4: 473-487.
- Flora, D. B., & Curran, P. J. (2004). An empirical evaluation of alternative methods of estimation for confirmatory factor analysis with ordinal data. *Psychological Methods*, 9: 466-491.
- Foreman, P., & Whetten, D. A. (2002). Members' identification with multiple-identity organizations. *Organization Science*, 13(6): 618-635.
- Frank, A.W. (2012). Practicing dialogical narrative analysis. In: J. A. Holstein, & J. F. Gubrium (Eds.), *Varieties of narrative analysis*: 33-52. Thousand Oaks, CA, USA: Sage publications.
- Fraser, B. J., Walberg, H. J., Welch, W., & Hattie, J. A. (1987). Syntheses of educational productivity research. *International Journal of Educational Research*, 11: 147-252.
- Fuchs, S. & Edwards, M. R. (2012). Predicting pro-change behaviour: the role of perceived organisational justice and organisational identification. *Human Resource Management Journal*, 22: 39-59.
- Gardner, P. (1995). Teacher training and changing professional identity in early twentieth century England. *Journal of Education for Training*, 21(2): 191-217.
- Geijsel, F., & Meijers, F. (2005). Identity learning: the core process of educational change *Educational Studies*, 31(4):419-430.
- George, A. L., & Bennett, A. (2005). *Case studies and theory development in the social sciences*. Cambridge, UK: MIT Press.
- Gibson, D. M., & Dollardhide, C. T. (2010). Professional identity development: A grounded theory of transformational tasks of new counselors. *Counselor Education and Supervision*, 60(1): 21-38.
- Gioia, D. A., & Chittipeddi, K. (1991). Sensemaking and sensegiving in strategic change initiation. *Strategic Management Journal*, 12: 433-448.
- Glaser, B. G., & Strauss, A. L. (1967 and 2012). *The discovery of grounded theory: strategies for qualitative research*, Chicago, USA: Aldine publishing.
- Gottfredson, G. D. (1977). Career stability and redirection in adulthood. *Journal of Applied Psychology*, 62: 436-445.
- Greenhaus, J. H., Peng, A. C., & Allen, T. D. (2012). Relations of work identity, family identity, situational demands, and sex with employee work hours. *Journal of Vocational Behaviour*, 80: 27-37.
- Griffioen, D. M. E., & de Jong, U. (2014). Implementing research in professional higher education, factors that influence lecturers' perceptions. *Educational Management Administration Leadership*
- Guest, D. E. (2011). Human resource management and performance: still searching for some answers. *Human Resource Management Journal*, 21(4): 3-13.
- Guest, G., Bunce, A., & Johnson, L (2006). How many interviews are enough?: An experiment with data saturation and variability. *Field Methods*, 18: 59-82.
- Hall, D. T., Schneider, B., & Nygren, H. T. (1970). Personal factors in organizational identification. *Administrative Science Quarterly*, 15(2): 176-190.
- Hall, D. T. (2004). The protean career: A quarter-century journey. *Journal of Vocational Behavior*, 65(1): 1-13.
- Hallier, J., & Summers, J. (2011). Dilemmas and outcomes of professional identity construction among students of human resource management. *Human Resource Management Journal*, 21(2): 204-219.
- Hallinger, P., & Bryant, D.A. (2013). Synthesis of findings from 15 years of educational reform in Thailand: lessons on leading educational change in East Asia. *International Journal of Leadership in Education: Theory and Practice*, 16(4): 339-418.
- Harrison, S. H., Sluss, D. M., & Ashforth, B. E. (2011). Curiosity adapted the cat: the role of trait curiosity in newcomer adaptation. *Journal of Applied Psychology*, 96(1): 211-220.

- Haslam, S. A. (2004). *Psychology in organizations, the social identity approach*. London, UK: Sage publications.
- Haslam, S. A., van Knippenberg, D., Platow, M. J. & Ellemers, N. (2003). Social identity at work: developments, debates, directions. In: Haslam, S. A., van Knippenberg, D., Platow, M. J., & Ellemers, N. (Eds.) (2003). *Social identity at work: developing theory for organizational practice*. UK: Psychology Press.
- Haslam, S. A. (2004). *Psychology in organizations, The social identity approach*. London, UK: Sage publications.
- Haslam, S. A., & Ellemers, N. (2005). Social identity in industrial and organizational psychology : concepts, controversies and contributions. *International review of Industrial and Organizational Psychology*, 20: 39-118.
- Hattie, J. A., Biggs, J., & Purdey, N. (1996). Effects of learning skills intervention on student learning: A meta-analysis. *Review of Research in Education*, 66: 99-136.
- Hattie, J. A. (2003). *Teachers make a difference: What is the research evidence?* Australian Council for Educational Research, Annual Conference on Building Teacher Quality, University of Auckland.
- He, H., & Brown, A.D. (2013). Organizational Identity and Organizational Identification, a review of literature and suggestions for future research. *Group Organization Management*, 38(1): 3-35.
- Heavey, A. L., Holwerda, J. A., & Hausknecht, J. P. (2013). Causes and consequences of collective turnover: a meta-analytic review. *Journal of Applied Psychology*, 98(3): 412-453.
- Henderson, J. H., Liden, R. C., Glibkowski, B., Chaudhry, A. (2009). LMX differentiation: A multi-level review and examination of its antecedents. *The Leadership Quarterly*, 20: 517-534.
- Hensel, R. (2010). *The sixth sense in professional development, a study on the role of personality, attitudes and feedback concerning professional development*. Doctoral dissertation, University of Twente, Enschede, the Netherlands.
- Hoffman, B. J., & Woehr, D. J. (2006). A quantitative review of the relationship between person-organization fit and behavioral outcomes. *Journal of Vocational Behavior*, 68 (3): 389-399.
- Hsiung, H. H., & Tsai, W. C. (2009). Job definition discrepancy between supervisors and subordinates; the antecedent role of LMX and outcomes. *Journal of Occupational Psychology*, 82: 89-112.
- Hutcheson, G., & Sofroniou, N. (1999). *The multivariate social scientist*. London, UK: Sage publications.
- Ibarra, H. (1999). Provisional selves: Experimenting with image and identity in professional adaptation. *Administrative Science Quarterly*, 44: 764-791.
- Jahrami, H., Marnoch, G., & Grey, A. M. (2009). Use of card sort methodology in the testing of a clinical leadership competencies model. *Health Services Management Research*, 22: 176-183.
- Janssen, O. (2005). The joint impact of perceived influence and supervisor supportiveness on employee innovative behaviour. *Journal of Occupational and Organizational psychology*, 78: 573-579.
- Jepsen, D. A., Hutcheson, G., & Choudhuri, E. (2001). Stability and change in 25-year occupational career patterns. *The Career Development Quarterly*, 50: 3-19.
- Jiang, K., Lepak, D. P., Hu, J., & Baer, J. C., (2012). How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. *Academy of Management Journal*, 55(6): 1264-1294.
- Jin, J., & Rounds, J. (2012). Stability and change in work values: a meta-analysis of longitudinal studies. *Journal of Vocational Behavior*, 80(2): 326-339.
- Johnson, M. D., Morgeson, F. P., Ilgen, D. I., Meyer, C. J., & Lloyd, J.W. (2006). Multiple professional identities: examining differences in identification across work-related targets. *Journal of Applied Psychology*, 91(2): 498-506.
- Jokisaari, M. (2013). The role of leader-member and social network relations in newcomers' role performance. *Journal of Vocational Behavior*, 82(2): 96-104.
- Jones, S., Lefoe, G., Harvey, M., Ryland, K., (2012). Distributed leadership: a collaborative framework for academics, executives and professionals in higher education. *Journal of Higher Education Policy and Management*, 34(1): 67-78.
- Kammeyer-Mueller, J. D., & Wanberg, C. R. (2003). Unwrapping the organizational entry process: disentangling multiple antecedents and their pathways to adjustment. *Journal of Applied Psychology*, 88(5): 779-794.
- Kammeyer-Mueller, J., Wanberg, C., Rubenstein, A., & Song, Z. (2013). Support, undermining, and newcomer socialization: Fitting in during the first 90 days. *Academy of Management Journal*, 56(4): 1104-1124.
- Kanter, R. M. (1989). Careers and the wealth of nations: A macro-perspective on the structure and implications of career forms. In: Arthur, M. B., Hall, D. T., & Lawrence, B. S. (Eds.), *Handbook of career theory*, 506-521. NY, USA: Cambridge University Press.
- Karreman, D., & Alvesson, M. (2004). Cages in tandem: management control, social identity, and identification in a knowledge-intensive firm. *Organization*, 11(1): 149-175.
- Kelchtermans, G., & Ballet, K. (2002). The micropolitics of teacher induction: A narrative biographical study on teacher socialization. *Teaching and Teacher Education*, 18(1): 105-120.
- Kelley, H. H. (1973). The process of causal attribution. *American Psychologist*, 28: 107-128.
- Kessels, J. W. M., & Ehlen, C. G. J. M. (2006). Flexibiliseren in het hoger onderwijs [flexibility in higher education]. In: van Hout, H, ten Dam, G., Mirande, M., Terlouw, C., & Willems, J. (Eds.), *Vernieuwing in het hoger onderwijs: Onderwijskundig handboek* [Innovation in higher vocational education : Educational handbook]: 36-47. Assen, The Netherlands: Van Gorcum.
- Kirk, R. E. (1996). Practical significance: A concept whose time has come. *Educational and Psychological Measurement*, 56(5): 746-759.
- King, N. (2004). Using Interviews in organizational research. In: Cassel, C., & Symon G. (Eds.) *Qualitative Methods in Organizational research*, 11-22. London, UK: Sage publications.
- King, N. (2012). Doing template analysis. In: Symon, G. & Cassel, C. (Eds.). *Qualitative organizational research, core methods and current challenges*: 256-269. London, UK: Sage publications.

- Kline, R. B. (2011). *Principles and practice of structural equation modelling*, New York, USA: Guildford Press.
- Kluger, A. N., & DeNisi, A. (1996). The effects of feedback interventions on performance: a historical review, a meta-analysis, and a preliminary feedback intervention theory. *Psychological Bulletin*, 19(2): 254-284.
- Knipsend, C. A., & Juvonen, J. (2013). The role of social identity complexity in inter-group attitudes among young adolescents. *Social Development*, 22: 623-640.
- Knippenberg, D. van, & Schie van, E. C. M. (2000). Foci and correlates of organizational identification. *Journal of Occupational and Organizational Psychology*, 73: 137-147.
- Koelewijn, W. T. (2014). *Doctors in business, A study into what drives physicians' entrepreneurship*. Doctoral dissertation, University of Twente, Enschede, The Netherlands.
- Kooij, D., & Van De Voorde, K. (2011). How changes in subjective general health predict future time perspective, and development and generativity motives over the lifespan *Journal of Occupational and Organizational Psychology*, 84: 228-247.
- Kovalenko, M. & Mortelmans, D. (2014). Does career type matter? Outcomes in traditional and transitional career patterns. *Journal of Vocational Behavior*, 85(2): 238-249.
- Kreiner, G. E., & Ashforth, B. E. (2004). Evidence toward an expanded model of organizational identification. *Journal of Organizational Behavior*, 25(1): 1-27.
- Krippendorff, K. (1981). *Content analysis, an introduction to its methodology*. CA, USA: Sage publications.
- Kristoff, A. L. (1996). Person-organization fit: an integrative review of its conceptualizations, measurement and implications. *Personnel Psychology*, 49: 1-49.
- Kristoff-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individual's fit at work: a meta-analysis of person-job, person- organization, person- group, and person-supervisor fit. *Personnel Psychology*, 58: 281-342.
- Kruis, K., Rense, N., & Zijlstra, W. (2010). *Het KOMPAS, medewerker monitor 2009, hoofdrapportage*. The Hague University of Applied Sciences, the Netherlands.
- Kuijpers, M., & Scheerens, J. (2006a). Career competencies for the modern career. *Journal of Career Development*, 32: 303-319.
- Kuijpers, M., Schyns, B., & Scheerens, J. (2006b). Career competencies for career success. *The Career Development Quarterly*, 55: 168-178.
- Kuijpers, M. (2012). *Architectuur van leren voor de loopbaan: richting en ruimte*. Oratie 30-11-2012. Open Universiteit, Heerlen, The Netherlands.
- Kuijpers, M., & Meijers, F. (2012). Learning for now or later? Career competencies among students in higher vocational education in the Netherlands. *Studies in Higher Education*, 37(4): 449-467.
- Kuijpers, M. (2012). *Architectuur van leren voor de loopbaan: richting en ruimte* (oratie). Heerlen: Open Universiteit. The Netherlands.
- Kuijpers, M., Evers, A., Kreijns, K., Klaijnsen, A., & Kessels, J. (2014a). Leren (en) innoveren. Onderzoek naar professionaliseringsruimte van docenten in PO, VO en MBO. In Meijers, F., Kuijpers, M., Mittendorff, K. & Wijers, G. red. *Het onzekere voor het zekere: kwetsbaarheid als kracht in loopbaandialogen*. Antwerpen / Amsterdam: Garant: 205-214.
- Kuijpers, M., Evers, A., Kreijns, K., Klaijnsen, A., & Kessels, J. (2014b). Transformative leadership versus autocratic leadership in school professionalization culture and innovative behavior of teachers (paper Eapril 2014).
- Kuvaas, B. (2011). The interactive role of performance appraisal reactions and regular feedback. *Journal of Managerial Psychology*, 26(2): 123-137.
- Kyndt, E., & Baert, H. (2013). Antecedents of employees' involvement in work related learning, a systematic review. *Review of Educational research*, 83(2): 273-313.
- Lapointe, É., Vandenberghe, C., & Boudrias, J. (2014). Organizational socialization tactics and newcomer adjustment: The mediating role of role clarity and affect-based trust relationships. *Journal Of Occupational & Organizational Psychology*, 7(3): 599-624.
- Lee, I. S. G., Felps, W., & Baruch, Y. (2014). Toward a taxonomy of career studies trough bibliometric visualization. *Journal of Vocational Behavior*, 85(3): 339-351.
- Leung, A. & Chaturvedi, S. (2011). Linking the fits, fitting the links: Connecting different types of PO fit to attitudinal outcomes. *Journal of Vocational Behavior*, 79(2): 391-402.
- Liddell, D., Wilson, W. E., Pasquesi, K., Hirschy, A. S., Boyle, K. M. (2014). Development of professional identity through socialization in graduate school. *Journal of Student Affairs Research and Practice*, 51(1): 69-84.
- Lin, C., & Sanders, K. (2014). HRM research methods: Where we are and where we need to go. In: Sanders, K., Cogan, J. A., & Bainbridge, H. T. J. (Eds.). *Research methods for Human Resource Development*. NY, USA: Routledge.
- Lindell, M. K., & Whitney, D. J. (2001). Accounting for common method variance in cross-sectional research designs. *Journal of Applied Psychology*, 86(1): 114-121.
- Locke, W. (2013). Teaching and research in English higher education: The fragmentation, diversification and reorganization of academic work, 1992-2007. In: Shin, J. C., Arimoto, A., Cummings, W. K., & Teichler, U.(Eds). *Teaching and Research in Contemporary Higher Education, systems activities and rewards*, 9: 319-334.
- Lodders, N. (2013). *Teachers learning and innovating together, Exploring collective learning and its relationship to individual learning, transformational leadership and team performance in higher vocational education*. Doctoral dissertation, University of Twente, Enschede, The Netherlands.
- Loi, R. Chan, K. W., & Lamb, L. W. (2013). Leader-member exchange, organizational identification, and job satisfaction: A social identity perspective. *Journal of Occupational and Organizational Psychology*, 87(1): 42-61.
- Lynn, S. A., Cao, L. T., & Horn, B. C. (1996). The influence of career stage on the work attitudes of male and female accounting professionals. *Journal of Organizational Behavior*, 17: 135-149.
- Marginson, S. (2006). Dynamics of national and global competition in Higher Education, *Higher Education*, 52: 1-39.

- Mathison, K. (2014). Effects of the performance management context on Australian academics 'engagement with the scholarship of teaching and learning: a pilot study, *Australian Academic Researcher*.
- McDermott, A. M., Conway, E., Rousseau, D. M., & Flood, P. C. (2013). Promoting effective psychological contracts through leadership: the missing link between HR strategy and performance. *Human Resource Management*, 52 (2): 289-310.
- Meijers, F., & Lengelle, R. (2012). Narratives at work: the development of career identity. *British Journal of Guidance and Counselling*, 40(2): 157-176.
- Meijers, F. (1998). The development of a career identity. *International Journal for the Advancement of Counselling*, 20(3): 191-207.
- Meijers, F., & Kuijpers, M. (2014). Career learning and career learning environment in Dutch higher education. *Journal of Applied Research in Higher Education*, 6(2): 295-313.
- Meyer, J. P., Becker, T. E., & Dick, van R., (2006). Social identities and commitments at work: toward an integrative model. *Journal of Organizational Behavior*, 27: 665-683.
- Miles M. B., & Huberman, A. M. (1994). *Qualitative data analysis: an expanded sourcebook* (2nd ed.). Thousand Oaks, USA: Sage publications.
- Miles, J. N. V., & Shevlin, M. (2001). *Applying regression and correlation: a guide for students and researchers*. London, UK.
- Millward, L. J., & Haslam, S. A. (2013). Who are we made to think we are? Contextual variation in organizational, workgroup and career foci of identification. *Journal of Occupational and Organizational Psychology*, 86(1): 50-66.
- Ministry of Education, Culture and Science (2011). *Kwaliteit in verscheidenheid, strategische agenda hoger onderwijs en wetenschap*, [Strategic agenda for higher education and science], Dutch Ministry of Education Culture and Science, The Hague, the Netherlands.
- Mittendorff, K., den Brok, P., & Beijard, D. (2011). Students' perceptions of career conversations with their teachers. *Teaching and Teacher Education*, 27: 515-523.
- Moerkamp, T. & Hermanussen, J. (2011). Professionele identiteit van docenten. In: MESO focus, Personeelsbeleid in het middelbaar beroepsonderwijs, bouwstenen voor bezinning en beleid.
- Moss, J. M., Gibson, D. M., & Dollarhide, C. T. (2014). Professional identity development: A grounded theory of transformational tasks of counselors. *Journal of Counseling and Development*, 92: 3-12.
- Mount, M. K. (1984). Satisfaction with a performance appraisal system and appraisal discussion. *Journal of Organizational Behavior*, 105(4): 271-279.
- Nehles, A. C., van Riemsdijk, M., Kok I., & Looise, L. K. (2006). Implementing human resource management successfully: a first-line management challenge. *Management Review*, 17: 256-273.
- Ng, T. W. H., & Feldman, D. C. (2008). Long work hours: A social identity perspective on meta-analysis data. *Journal of Organizational Behavior*, 29: 853-880.
- Ng, T. H. W., & Feldman, D. C. (2013). A meta-analysis of the relationships of age and tenure with innovation-related behaviour. *Journal of Occupational and Organizational Psychology*, 86(4): 585-616.
- Ng, T. W. H., & Feldman, D. C. (2014). Subjective career success: a meta-analytic review, *Journal of Vocational Behavior*, 85(2): 169-179.
- Nixon, J. (1996). Professional identity and the restructuring of higher education. *Studies in Higher Education*, 21: 5-16.
- Nussbaum, M. C. (1997). *Cultivating humanity, a classical defense of reform in liberal education*. Massachusetts, USA: Harvard University Press.
- OECD (2005). *Teachers matter: attracting, developing and retaining effective teachers* Organization for Economic Cooperation and Development, Paris, France.
- OECD (2008). *OECD Reviews of tertiary education: the Netherlands*, Organization for Economic Cooperation and Development, Paris, France.
- OECD (2010). *Learning our lesson, review of quality of teaching in higher education*, Paris, France: Organization for Economic Cooperation and Development.
- Paaauwe, J. (2008). HRM and performance: achievements, methodological issues and prospects. *Journal of Management Studies*, 46: 127-140.
- Paterson, D. G. (1923). Methods of rating human qualities. *Annals of the American Academy of Political and Social Science*, 110: 81-93.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA, USA: Sage publications.
- Patton, W., & Mc Mahon, M. (2006). *Career development and systems theory; connecting theory and practice*. Rotterdam, the Netherlands: Sense publications.
- Paustian-Underdahl, S., Shanock, L. R., Rogelberg, S. C., Scott, C. W., Justice, L., & Altman, D. G. (2013). Antecedents to supportive supervision: an examination of biographical data. *Journal of Occupational and Organizational Psychology*, 86(3): 288-309.
- Perreault, W. D., & Leigh, L. E. (1989). Reliability of nominal data based on qualitative judgments. *Journal of Marketing Research*, 26: 135-148.
- Peters, K., Haslam, A. S., Ryan, M. K., & Fonseca, M. (2013). Working with subgroup identities to build organizational identification and support for organizational strategy; a test of the ASPIRe Model. *Group Organization Management*, 38(1): 128-144.
- Pichler, S. (2012). The social context of performance appraisal and appraisal reactions: a meta-analysis. *Human Resource Management*, 51(5): 709-732.
- Pillen, M., Beijard, D., & den Brok, P. (2013). Tensions in beginning teachers' professional identity development, accompanying feelings and coping strategies. *European Journal of Teacher Education*, 36(3): 240-260.
- Podsakoff, P. M., & Organ, D. (1986). Self reports in organizational research: problems and prospects. *Journal of Management*, 12: 531-544.
- Podsakoff, P. M., MacKenzie, S. B., & Lee, J. Y. (2003). Common method biases in behavioural research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5): 879-903.

- Pratt, M. G. (2000). The good, the bad and the ambivalent: Managing identification among Amway distributors. *Administrative Science Quarterly*, 45: 464-493.
- Pratt, M. G., Rockmann, K. W., & Kaufmann, J. B. (2006). Constructing professional identity: the role of work and identity learning cycles in the customization of identity among medical residents. *Academy of Management Journal*, 49: 235-262.
- Price, S. J. (2009). Becoming a nurse: a meta-study of early professional socialization and career choice in nursing. *Journal of Advanced Nursing*, 65(1): 11-19.
- Punj, G., & Stewart, D. W. (1983). Cluster analysis in marketing research: review and suggestions for applications. *Journal of Marketing research*, 20: 143-148.
- Purcell, J., & Hutchinson, S. (2007). Front-line managers as agents in the HRM-performance causal chain: Theory, analysis and evidence. *Human Resource Management Journal*, 17: 3-20.
- Rafferty, A. E., & Griffin, M. A. (2004). Dimensions of transformational leadership: conceptual and empirical extensions. *The Leadership Quarterly*, 15: 329-354.
- Rafferty, A. E., & Griffin, M. A. (2006). Refining individualized consideration: distinguishing developmental leadership and supportive leadership. *Journal of Occupational and Organizational Psychology*, 79: 37-61.
- Rees, A., & Nicholson, N. (2004). The Twenty Statements Test. In: Cassel, C., & Symon G. (2004). *Qualitative Methods in Organizational research*, 86-97. London, UK: Sage publications.
- Rhodes, C. (2006). The impact of leadership and management on the construction of professional identity in school learning mentors. *Educational Studies*, 32(2):157-169.
- Richter, D., Kunter, M., Klusmann, U., Lüdtke, O., & Baumert, J. (2011). Professional development across the teaching career: Teachers' uptake of formal and informal learning opportunities. *Teaching and Teacher Education*, 27: 116-126.
- Rickards, T., den Brok, P., & Fisher, D. (2005). The Australian science teacher: a typology of teacher-student interpersonal behaviour in Australian science classes. *Learning Environments Research*, 8: 267-287.
- Rienties, B., Brouwer, N., Lygo-Baker, S. (2013). The effects of online professional development on teachers' beliefs and intentions towards learning facilitation and technology. *Teaching and Teacher Education*, 29: 122-131.
- Rijdt, De C., Stes, A., van der Vleuten, C., Dochy, F. (2013). Influencing variables and moderators of transfer of learning to the workplace within the area of staff development in higher education: research review. *Educational Research Review*, 8: 48-74.
- Rijn, van, M. B., Yang, H., & Sanders, K. (2013). Understanding employees informal workplace learning: The joint influence of career motivation and self-construal. *Career Development International*, 18: 610-628.
- Rijn, van, M. B. (2014). *Understanding employees professional development: the joint influence of individual and situational factors*, Doctoral dissertation, University of Twente, Enschede, the Netherlands.
- Rijswijk van, M. M., Akkerman, S. F., & Koster, B. (2013). Student teachers' internally persuasive borderland discourse and teacher identity. *International Journal for Dialogical Science*, 7(1):43-60.
- Riketta, M. (2005). Organizational identification: A meta-analysis. *Journal of Vocational Behavior*, 16: 358-384.
- Riketta, M. (2008). The causal relation between job attitudes and performance: a meta analysis of panel studies. *Journal of Applied Psychology*, 93(2): 472-481.
- Riketta, M., & Dick, van R. (2005). Foci of attachment in organizations: A meta-analytic comparison of the strength and correlates of workgroup versus organizational identification and commitment. *Journal of Vocational Behaviour*, 67: 570-610.
- Roccas, S., & Brewer, M. B. (2002). Social identity complexity. *Personality and Social Psychology Review*, 6: 88-106.
- Romano, J. L., Hoising, R., O' Donovan, K., & Weinsheimer, J. (2004). Faculty at mid career: a program to enhance teaching and learning. *Innovative Higher Education*, 29 (1): 21-48.
- Romesburg, H. C. (2004). *Cluster analysis for researchers*. North Carolina, USA.
- Rousseau, D. M. (1998). Why workers still identify with organizations. *Journal of Organizational Behaviour*, 19: 217-233.
- Runhaar, P., Sanders, K., & Yang, H. (2010). Stimulating teachers' reflection and feedback asking: An interplay of self-efficacy, learning goal orientation, and transformational leadership. *Teaching and Teacher Education*, 26: 1154-1161.
- Runhaar, P., & Sanders, K. (2013). Implementing human resources management (HRM) within Dutch VET institutions: examining the fostering and hindering factors. *Journal of Vocational Education & Training*, 65(2): 236-255.
- Sachs, J. (2001). Teacher professional identity: competing discourses, competing outcomes. *Journal of Educational Policy*, 16(2): 149-161.
- Saks, A. M., Uggerslev, K. L., & Fassina, N. E. (2006). Socialization tactics and newcomer adjustment: a meta-analytic review and test of a model. *Journal of Vocational Behavior*, 70(3): 413-446.
- Saks, A. M., & Gruman, J. A. (2011). Getting newcomers engaged: The role of socialization tactics. *Journal of Managerial Psychology*, 26(5): 383-402.
- Sanders, K., Cogin, J. A., & Bainbridge, H. T. J. (2014). The growing role of advanced human resource management research methods. In: Sanders, K., Cogin, J. A., & Bainbridge, H. T. J. (Eds.) *Research methods for Human Resource Development*: 1-15. NY, USA: Routledge.
- Sanders, K., Moorkamp, M., Torka, N., Groeneveld S., & Groeneveld, C. (2010). How to support innovative behaviour, the role of LMX and satisfaction with HR practices, *Technology and Investment*, 1: 59-68.
- Santos, G. J. (2006). Card Sort Technique as a qualitative substitute for quantitative exploratory analysis. *International Journal of Corporate Communications*, 11: 288-302.
- 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., & Van Rhenen, W. (2009). How change in job demands and resources predict burnout, work engagement and sickness absenteeism. *Journal of Organisational Behaviour*, 30: 893-917.

- Scheerens, J. (2010). *Teacher's professional development – Europe in international comparison*. An analysis of teachers professional development based on the OECD's Teaching and Learning International Survey (TALIS). Luxembourg: Office for official publications of the European Union.
- Schmid, K., Hewstone, M., & Al Ramiah, A. (2012). Neighbourhood diversity and social identity complexity, implications for intergroup relations. *Social Psychological and Personality Science*, 4(2): 135-142.
- Schimank, U., & Winnes, M. (2000). Beyond Humboldt? the relationship between teaching and research in European university systems. *Science and Public Policy*, 27: 397-408.
- Schriesheim, C. A., & Cogliser, C. C. (2009). Construct validation in leadership research: explication and illustration. *The Leadership Quarterly*, 20: 725-736.
- Schwab, D. P. (2005). *Research methods for organizational studies*. 2nd ed, New Jersey, USA.
- Schwab, K. (2011). *The Global Competitiveness Report 2011-2012*. Geneva: World Economic Forum.
- Schyns, B., & Day, D. (2010). Critique and review of leader-member exchange theory: Issues of agreement, consensus and excellence. *European Journal of Work and Organizational Psychology*, 19(1): 1-29.
- Scott, C. R. (1977). Identification with multiple targets in a geographically dispersed organization. *Management Communication Quarterly*, 10: 491-522.
- Scott, C. R., Corman, S. R., & Cheney, G. (1998). Development of a structural model of identification in the organization. *Communication Theory*, 8: 298-336.
- Scott, C. R., Connaughton, S. L., Diaz-Saenz, H. R., Maguire, K., Ramirez, R., Richardson, B., Shaw, S., & Morgan, D. (1999). The impacts of communications and multiple identifications on intent to leave: a multimethodological exploration. *Management Communication Quarterly*, 12: 400-435.
- Scott, S. G., & Lane, V. R. (2000). A stakeholder approach to organizational identity. *The Academy of Management Review*, 25: 43-62.
- Shin, J. C. (2011). Teaching and research nexuses across faculty stage, ability and affiliated discipline in a South Korean research university. *Studies in Higher Education*, 36(4): 485-503.
- Shin, J. C., & Cummings, W. K. (2014). Teaching and research across Higher Education systems: typology and implications. In: Shin, J. C., Arimoto, A., Cummings, W. K., & Teichler, U. (Eds.). *Teaching and Research in Contemporary Higher Education, systems activities and rewards*, 9: 381-394.
- Shin, D., & Konrad, A. M. (2014). Causality between high performance work systems and organizational performance. *Journal of Management*,
- Shrout, P. E. & Bolger N. (2002). Mediation in experimental and non-experimental studies; new procedures and recommendations. *Psychological Methods*, 7: 422-445.
- Sluss, D. M., Ployhart, R. E., Cobb, M. G., & Ashforth, B. E. (2012). Generalizing newcomers relational and organizational identifications: processes and prototypicality. *Academy of Management Journal*, 55(4): 949-975.
- Sluss, D., & Thompson, B. S. (2012). Socializing the newcomer: the mediating role of leader-member exchange. *Organizational Behavior and Human Decision Processes*, 119(1): 114-25.
- Smith, L. G., Amiot, C. E., Callan, V. J., Terry, D. J., & Smith, J. R. (2012). Getting new staff to stay: the mediating role of organizational identification. *British Journal of Management*, 23(1): 45-64.
- Sobel, M. E. (1982). Asymptotic intervals for indirect effects in structural equations models. In: Leinhardt, S. (Eds.) *Sociological methodology*, 290-312. San Francisco, USA: Jossey-Bass.
- Spence, J. R., & Keeping, L. M. (2010). The impact of non-performance information on ratings of job performance: A policy-capturing approach. *Journal of Organizational Behavior*, 4: 587-608.
- Spence, J. R., & Keeping, L.M. (2011). Conscious rating distortion in performance appraisal: A review, commentary, and proposed framework for research. *Human Resource Management Review*, 21(2): 85-95.
- Stemler, S. (2001). An overview of content analysis. *Practical Assessment Research & Evaluation*, 7(17).
- Strauss, A. L., & Corbin, J. (1998, 2008). *Basics of qualitative research: techniques and procedures for developing grounded theory*. CA, USA: Sage publications.
- Sullivan, S. E. (1999). The changing nature of careers: a review and research agenda. *Journal of Management*, 25: 457-484.
- Sullivan, S. E., & Baruch, Y. (2009). Advances in career theory and research: A critical review and agenda for future exploration. *Journal of Management*, 35(6): 1542-1571.
- Tajfel, H. (1978). Social categorization, social identity and social comparison. In: H. Tajfel (Eds.), *Differentiation between social groups: studies in the social psychology of intergroup relations*: 61-76. London, UK: Academic Press.
- Tajfel, H., & Turner, J. C., (1987). The Social Identity of intergroup behaviour. In: Wochel, S., & Austin, W.G. (Eds.) *Psychology of intergroup relations*, 2nd ed., 7-24, Chicago, USA: Nelson Hall.
- Tak, J. (2011). Relationships between various person-environment fit types and employee withdrawal behavior: A longitudinal study. *Journal of Vocational Behavior*, 78: 315-320.
- Taylor, S. E., & Fiske, S. T. (1978). Salience, attention, and attribution: top of the head phenomena. *Advances in Experimental Social Psychology*, 11: 249-288.
- Teichler, U., Arimoto, A., & Cummings, W. K. (2013). *The changing academic profession: major findings of a comparative survey*. Dordrecht, the Netherlands: Springer.
- Teichler, U. (2014). Teaching and research in contemporary higher education, systems activities and rewards, 9: 381-394. In: Shin, J. C., Arimoto, A., Cummings, W. K., & Teichler, U. (Eds.). *Teaching and Research in Contemporary Higher Education, systems activities and rewards*, 9: 381-394.
- Teichler, U., & Hohle, E. A. (2013). The academic profession in 12 European countries – The approach of the comparative study. In: Teichler, U., & Hohle, E. A. (Eds.) *The Changing Academy – The changing academic profession in international comparative perspective*, 8: 1-12. Dordrecht, the Netherlands: Springer.

- Telford, F. (1924). The classification and salary standardization movement in the public service. *Annals of the American Academy of Political and Social Science*, 113: 206-215.
- Terborg, J. R. (1981). Interactional psychology and research on human behavior in organizations. *The Academy of Management Review*, 6: 569-576.
- Toops, H. A. (1923). The measurement of teachers. *Journal of Educational Psychology*, 14(5): 310-311.
- Trede, F., Macklin, R., & Bridges, D. (2012). Professional identity development: a review of the higher education literature. *Studies in Higher Education*, 37(3): 365-384.
- Turner, J. C. (1999). Social identity and self-categorization. In Ellemers, N., Spears, R., & Doosje, B. (Eds.), *Social identity, context, commitment, content*: 6-34. Oxford, UK: Blackwell.
- Ullrich, J., Wieseke, J., Christ, O., Schulze, M., & van Dick, R. (2007). The identity-matching principle: Corporate and organizational identification in a franchising system. *British Journal of Management*, 18: 29-44.
- Van Dusen, G. C. (2014). The virtual campus: technology and reform in Higher Education. ASHE-ERIC Higher Education Report, 25(5).
- Velde, van der, M. E. G., Ards, J. C. A. & Janssen, P. G. W. (2005). The longitudinal effect of information seeking on socialization and development in three organisations: filling the research gaps. *Canadian Journal of Career Development*, 4(2): 32-42.
- Vilkinas, T., & Ladyshevsky, R. K. (2014). Factors impacting job performance and role attractiveness in academic directors and their implications for policy and practice in higher education. *Educational Research for Policy and Practice*, 13:101-114.
- Vogel, M., & Feldman, D. C. (2009). Integrating the levels of person-environment fit: the roles of occupational and group fit. *Journal of Vocational Behavior*, 75: 68-81.
- Volberda, H. W., van der Weerdt, N., Verwaal, E., Stienstra, M., & Verdu, A. J. (2012). Contingency fit, institutional fit, and firm performance: a metafit approach to organization-environment relationships. *Organization Science*, 23(4): 1040-1054.
- Volkman, M. J., & Anderson, M. A. (1998). Creating professional identity: Dilemma's and metaphors of a first-year chemistry teacher, *Science Education*, 82(3): 293-310.
- Wanberg, C. R., & Kammeyer-Mueller, J. D. (2000). Predictors and outcomes of proactivity in the socialization process. *Journal of Applied Psychology*, 85: 373-385.
- Warrens M. J. (2008). On the equivalence of Cohen's Kappa and the Hubert-Arabic adjusted rand index. *Journal of Classification*, 25: 177-183.
- Weert de E., & Boezeroy, P. (2007). Higher education in the Netherlands: country report. International Higher Education Monitor. Center for Higher Education Policy Studies (CHEPS), Enschede, Netherlands.
- Weert de E., & van der Kaap, H. (2014). The changing balance of teaching and research in the Dutch binary higher education system. In: Shin, J. C., Arimoto, A., Cummings, W. K. & Teichler, U. (Eds.) *Teaching and research in contemporary higher education, systems activities and rewards*, 9: 113-133.
- Weert, de E., & Leijnse, F. (2010). Practice-oriented research: The extended function of Dutch universities of Applied Sciences. In: Kyvik, S., & Lepori, B. (Eds.), *The research mission of higher education institutions outside the university sector*, *Higher Education Dynamics*, 31: 199-217.
- WGBh/cz, (2003). Wet Gelijke Behandeling inzake Handicap en Chronische ziekte, [Dutch law regarding equal rights in case of disability and chronic illness], the Netherlands.
- Whaley, L. W., & Longoria, L. A. (2009). Preparing card sort data for multidimensional scaling analysis in social psychological research: a methodological approach. *Journal of Social Psychology*, 149: 105-115.
- Wolff, R., & Pasztor, A. (2010). Equal opportunity in a public system: experiences of ethnic minority students in Dutch Higher Education, In: Lazin, F., Evans, M., & Jayaram, N. (Eds.) *Higher education and equality of opportunity: Cross-national perspectives*, 270-290.
- Yang, L-Q., Levine, E. L., Smith, M. A., Ispas, D., & Rossi, M. E. (2008). Person-environment fit of person plus environment: a meta-analysis of studies using polynomial regression analysis. *Human Resources Management Review*, 18: 311-321.
- Yin, R. K. (1981). The case study crisis: some answers. *Administrative Science Quarterly*, 26 (1): 58-65.
- Yin, R. K. (2014). *Case study research, design and methods*. (5th edition), Sage publications, CA, USA.
- Zacher, H. (2014). Individual difference predictors of change in career adaptability over time. *Journal of Vocational Behavior*, 84(2): 188-198.
- Zhu, C., & Engels, N. (2014). Organizational culture and instructional innovations in higher education: Perceptions and reactions of teachers and students. *Educational Management Administration & Leadership*, 42: 136-158.

Summary in Dutch

(Samenvatting)

Samenvatting

■ INLEIDING

Internationaal vergelijkend onderzoek laat zien dat instituties voor Hoger Onderwijs en hun medewerkers meer dan voorheen worden uitgedaagd om bij te blijven bij de veranderende maatschappelijke eisen en ontwikkelingen (Shin & Cummings, 2014). Voorbeelden hiervan zijn het inspelen op de veranderende kwalificaties in de beroepspraktijk tegen de achtergrond van technologische ontwikkelingen, globalisering en internationalisering, het leveren van concrete bijdragen aan de economische en maatschappelijke ontwikkeling, het waarborgen van brede toegankelijkheid en kwaliteit van het onderwijs en het bijdragen aan wereldburgerschap van studenten (Boyd & King, 1977; Gardner, 1995; Nussbaum, 1997; WGBh/cz, 2003; OECD, 2005; Rienties, Brouwer & Lygo-Baker, 2013; Cummings & Shin, 2014; van Dusen, 2014). Dit veelvormige en nadrukkelijke maatschappelijke appel op het Hoger Onderwijs vormt een uitdaging voor het aanpassings- en innovatievermogen van zowel de onderwijsinstellingen als van haar medewerkers (OECD, 2008, 2010; Teichler, Arimoto & Cummings, 2013; Shin & Cummings, 2014).

Voor het begrijpen van de veranderingen op individueel niveau vormt de 'professionele identiteit' van docenten een boeiend en groeiend onderzoeksdomein (Beijaard, Verloop & Meijer, 2004; Ashforth, Harrison & Corley, 2008; Trede, Macklin & Bridges, 2012; Pillen, Beijaard & den Brok, 2013). Echter, de variëteit en de ambiguïteit in de wijze waarop dit begrip tot nog toe is geconceptualiseerd speelt het gebruik parten (Beijaard et al., 2004). In deze dissertatie wordt de professionele identiteit van een docent benaderd vanuit de zogenoemde 'Social Identity' theorie (Tajfel, 1978; Tajfel & Turner, 1987; Ellemers, Haslam, Platow & van Knippenberg, 2003; Haslam, 2004; Haslam & Ellemers, 2005; Ashforth et al., 2008). In deze theorie staat het inzicht centraal dat de identiteit van een individu niet alleen wordt gevormd door aspecten zoals karaktertrekken, en persoonlijkheid, maar ook door de identificaties met meerdere sociale groepen en rollen die tesamen zijn of haar 'sociale identiteit' vormen. Deze sociale identiteit verwijst naar "dat deel van het zelfbegrip van een individu dat wordt ontleend aan het zich onderdeel weten van een sociale groep (of groepen), tesamen met de waarde en emotionele verbondenheid die onderdeel vormen van dat lidmaatschap" (Tajfel, 1987:63). Zo kunnen individuen zich identificeren met, oftewel een deel van de eigen identiteit ontleenen aan, zeer uiteenlopende categorieën zoals geslacht, leeftijdsgroep, religie, etniciteit, opleiding, beroep, beroepsrol, en de organisatie(-onderdelen) (Alvesson, 2000; Ashforth et al., 2008). Voortbouwend op de Social Identity theory wordt de 'professionele identiteit' van een docent hier omschreven als 'een mix van de relevante identificaties in de context van de loopbaan en het beroep'.

De belangrijkste reden voor de keuze van de Social Identity Theorie ligt in het empirisch breed onderbouwde 'identity matching' principe, dat laat zien dat het organisatiege-

drag van een medewerker sterk verbonden is met juist die categorieën waarmee hij of zij zich het meest mee identificeert, zoals organisatie onderdelen, beroepsrollen en klantengroepen (Scott & Lane, 2000; Haslam, 2004; Riketta, 2005; Riketta & van Dick, 2005; van Dick, Becker & Meyer, 2006b; Ullrich, Wieseke, Christ, Schulze & van Dick, 2007; Ashforth et al., 2008). Hoewel onderzoek naar de voorspellers en de consequenties van afzonderlijke identificaties van medewerkers inmiddels zeer omvangrijk is, laten reviews ook zien dat er nog belangrijke uitdagingen bestaan. Voorbeelden hiervan zijn het vraagstuk van parallelle oftewel meervoudige identificaties (Roccas & Brewer, 2002; Ashforth et al., 2008), het gebrek aan kennis omtrent het proces van veranderingen in identificaties (Haslam, 2004; Ullrich et al., 2007; Ashforth et al., 2008; He & Brown, 2013) en het gebrek aan inzicht in de volledige set van de identificaties van medewerkers in een specifieke werksetting. Zo bleef onderzoek in het secundaire en tertiaire onderwijs tot nog toe beperkt tot slechts enkele categorieën van identificatie (van Dick & Wagner, 2002; Christ & van Dick, 2003; Rhodes, 2006; Collinson, 2004; Jones & Volpe, 2011; Shin, 2011).

Het doel van deze dissertatie is dan ook het vergroten van het inzicht in het proces waarlangs veranderingen in de professionele identiteit van docenten in het Hoger Onderwijs tot stand komen. Daartoe worden de relevante categorieën van identificatie, de combinaties daarvan in professionele identiteiten en de factoren en omstandigheden die van invloed kunnen zijn op mogelijke veranderingen in kaart gebracht. Door te onderzoeken hoe de aangetroffen veranderingen zich verhouden tot de activiteiten vanuit leidinggevenden, vanuit Human Resource Management (HRM) en de activiteiten van docenten zelf, wordt beoogd de arena waarin individuele en organisatie strategieën elkaar ontmoeten beter te begrijpen. Daarmee beoogt deze dissertatie bij te dragen aan het vergroten van de kennisbasis en de mogelijkheden voor het ondersteunen van de noodzakelijke permanente onderwijsontwikkeling in het Hoger Onderwijs (Shin & Cummings, 2014; Bednall, Sanders & Runhaar, 2014). De centrale onderzoeksvraag luidt:

Wat zijn de antecedenten en gevolgen van veranderingen in de identificaties en de combinaties daarvan in professionele identiteiten van docenten in het Hoger Onderwijs?

Studies

Nadat in hoofdstuk 1 een uitgebreide schets van het theoretische kader is gegeven, worden vier studies naar de samenstelling en verandering van professionele identiteit gepresenteerd. Door de longitudinale aard van enkele van de studies zijn de data van de verschillende hoofdstukken deels aan elkaar gerelateerd, daarom bevat hoofdstuk 1 een gedetailleerde data matrix waaruit de samenhang blijkt.

Studie 1

In hoofdstuk 2 worden twee studies beschreven die gericht zijn op het in kaart brengen van de identificaties onder docenten in een instelling voor Hoger Onderwijs. De onderzoeksvragen luiden:

- 1) *Wat zijn de afzonderlijke categorieën van identificatie voor docenten in het Hoger Onderwijs?;*
- 2) *Welke professionele identiteiten kunnen worden onderscheiden, waarin identificaties met verschillende categorieën zijn gecombineerd? en*
- 3) *In welke mate wordt de variatie in identificatie en professionele identiteiten verklaard door loopbaanfase en geslacht?.*

Studie 1 ($N = 12$) is een mixed method studie waarin een methode voor kwalitatieve factoranalyse en diverse codeertechnieken zijn gebruikt om de informatie te analyseren die ontleend is aan diepte-interviews en aan de foto's die het resultaat van diverse kaart sorteer opdrachten weergeven. Studie 1 laat onder meer zien dat docenten zich kunnen identificeren met minimaal tien verschillende afzonderlijke categorieën, zoals (onderdelen) van de organisatie, beroepsrollen, klantengroepen en de eigen loopbaan. Uit de kwalitatieve factoranalyse blijken vier overkoepelende professionele identiteiten te kunnen worden onderscheiden waarin de identificatie met meerdere categorieën wordt gecombineerd. Dit zijn: a) de 'teaching professional' waarin identificatie met het werkveld, de eigen expertise en met studenten worden gecombineerd, b) de 'professional teacher' waarin identificatie met het zijn van een goede didacticus en coach en met de maatschappij samenvallen, c) de combinatie van identificatie met de organisatie en het curriculum in een derde categorie en tot slot d) een categorie waarin de identificatie met collega's en de eigen loopbaan samenvallen.

Studie 2 bevat een vragenlijst studie ($N = 538$) waarin dezelfde identificaties aan de gehele docentenpopulatie van een hogeschool zijn voorgelegd. In lijn met de resultaten van de kwalitatieve studie laat de factoranalyse (Mplus) acceptabele fit maten zien voor een grotendeels dezelfde onderliggende factorstructuur. Meervoudige factoranalyses op subgroep niveau binnen het personeelsbestand laten geen variatie zien in de combinaties van identificaties, bijvoorbeeld samenhangend met de mate van ervaring in het beroep, of met geslacht.

Beide studies geven aanwijzingen voor een sterke professionele diversiteit onder docenten. Dit blijkt uit de omvang van de aangetroffen verschillen in de mate waarin docenten zich met (onderdelen) van de organisatie, beroepsrollen, klantengroepen en de eigen loopbaan kunnen identificeren en ook uit de aangetroffen aanwijzingen voor het bestaan van status verschillen en animositeit tussen verschillende subgroepen van docenten.

Wat betreft de voorspellers van identificatie worden in studie 2 diverse lineaire en kwadratische effecten van geslacht, leeftijd, omvang van de aanstelling en loopbaanfase gerapporteerd. Een voorbeeld hiervan is het negatieve kwadratische effect van leeftijd op de identificatie met de organisatie en het curriculum, waarbij deze identificatie het laagst blijkt te zijn onder relatief jonge en onder relatief oudere docenten (omgekeerde u-vorm).

Studie 2

In deze studie, beschreven in hoofdstuk 3, wordt de relatie bestudeerd tussen het gebruik van een cyclus voor functionerings- en beoordelingsgesprekken en het creëren van voorwaarden voor de professionele ontwikkeling van docenten, namelijk het actief overwegen van de eigen professionele ontwikkeling en het ervaren van professionele mogelijkheden. Daarbij wordt ingezoomd op mogelijke interactie-effecten die voortkomen uit de kwaliteit van de relatie met de leidinggevende (Leader-Member Exchange) en interactie-effecten die samenhangen met de sterkte van de al aanwezige identificaties van de docent. De onderzoeksvragen luiden:

- 1) *Wat is de relatie tussen de toepassing van de cyclus voor functionerings- en beoordelingsgesprekken enerzijds en de ervaren professionele mogelijkheden en actieve overweging van de eigen professionele ontwikkeling anderzijds? en*
- 2) *In welke mate wordt deze relatie beïnvloed door de taakgerichte ondersteuning van de leidinggevende en de al aanwezige identificaties van de docent met de organisatie, het beroep en de loopbaan?*

Om de diverse hypothesen te testen wordt gebruik gemaakt van een vragenlijst studie ($N = 538$ docenten). In lijn met de voorspelling, laten de resultaten zien dat de mate waarin de cyclus voor functionerings- en beoordelingsgesprekken is toegepast, samenhangt met de mate waarin de docent mogelijkheden ziet voor professionele ontwikkeling en het nemen van concrete stappen ook actief overweegt. Ook blijken docenten met een hogere identificatie met de organisatie sterker te reageren op de toepassing van de gesprekscyclus. Ook blijkt identificatie met de organisatie bij te dragen aan het ervaren van mogelijkheden voor professionele ontwikkeling.

Wat betreft de identificatie met de loopbaan zijn geen interactie-effecten gevonden. Hetzelfde geldt voor identificatie met drie verschillende beroepsidentificaties, waar in een explorerende analyse een direct effect is aangetroffen van de identificatie als 'coach' op het actief overwegen van de eigen professionele ontwikkeling. Wat betreft taakgerichte ondersteuning door de leidinggevende is een versterkend effect waar te nemen op de relatie tussen de toepassing van de gesprekscyclus en het actief overwegen van professionele ontwikkeling, zoals voorspeld.

Samengevat laten de resultaten van deze studie onder meer zien dat de genoemde voorwaarden voor professionele ontwikkeling van docenten samenhangen met de mate waarin de cyclus wordt uitgevoerd, de kwaliteit van de relatie met de leidinggevende en aspecten van de bestaande identificaties van de docent.

Studie 3

Het proces van verandering in de professionele identiteit van docenten die als nieuwkomer entree maken in een hogeschool, is onderwerp van de derde studie welke is beschreven in hoofdstuk 4. Het doel van deze studie is te begrijpen hoe het proces van verandering in identificaties plaatsvindt, gezien vanuit de activiteiten die de nieuwkomers zelf ondernemen. Hiertoe worden de activiteiten van de nieuwkomers onderzocht in termen van loopbaancompetenties (Kuijpers & Scheerens, 2006a) en aanpassing strategieën (Pratt, Rockmann & Kaufmann, 2006). De drie onderzoeksvragen luiden:

- 1) *Welke veranderingen in identificatie met de organisatie, het beroep en de loopbaan kunnen worden waargenomen bij nieuwkomers vlak voor tot vier maanden na indiensttreding?,*
- 2) *In welke mate kunnen de waargenomen veranderingen worden verklaard door het gebruik van loopbaancompetenties vlak voor indiensttreding?, en*
- 3) *Hoe kan de verandering worden verklaard en begrepen in termen van de aanpassing strategieën die deze nieuwkomers gebruiken?.*

De studie bestaat uit een kwantitatief deel en een exploratief kwalitatief deel. Deel 1 is gebaseerd op een 'two-wave' design, waarbij twee vragenlijsten worden gebruikt om de verschillen in identificaties te kunnen vaststellen tussen de situatie vlak voor aanvang van de werkzaamheden en de situatie na een periode van vier maanden ($N = 41$). Deel 2 bevat een vergelijkende gevalstudie ($N = 8$) om het onderliggende proces van verandering te onderzoeken, gebruikmakend van de sollicitatiebrief, het curriculum vitae en een loopbaaninterview (9 maanden na start van de werkzaamheden).

Deel 1 laat onder meer zien dat bij de meeste nieuwkomers veranderingen zijn waar te nemen in een of twee van de identificaties. Ook blijken de loopbaancompetenties 'motievenreflectie', 'kwaliteitenreflectie' en 'werkexploratie' wel samen te hangen met de mate van identificatie met de loopbaan en het beroep vlak voor de start van de werkzaamheden, maar geen bijdrage te leveren aan de verklaring van verandering die na enkele maanden te zien is. Geformuleerd in termen van een loopbaantransitie perspectief, suggereren de resultaten dat loopbaancompetenties meer dienen voor docenten om zich te oriënteren en zich voor te bereiden op een nieuwe functie, dan dat ze een rol spelen nadat de overstap is gemaakt en de werkzaamheden zijn gestart.

Deel 2 laat onder meer zien dat er zes verschillende aanpassingsstrategieën te onderscheiden zijn waarmee docenten veranderingen in de eigen professionele identiteit aan kunnen brengen. Dit zijn 'identity conservation', 'identity splinting', 'identity hopping', 'identity patching', 'identity enriching' en 'identity development'. Deze bevinding verdubbelt het aantal eerder empirisch bevestigde aanpassing strategieën (Pratt et al., 2006), die medewerkers kunnen gebruiken in een transitieperiode, wanneer zij worden geconfronteerd met een nieuwe uitdaging die incongruent is met de reeds bestaande eigen professionele identiteit. De vergelijkende gevalstudie levert indicaties op dat de keuze voor een specifieke aanpassingsstrategie een expliciete en weloverwogen keuze van de nieuwkomer is, waarbij zowel de ervaren congruentie met de organisatie-eisen als de ervaren congruentie met het gewenste eigen loopbaanperspectief een rol spelen.

Studie 4

In de laatste studie, welke is beschreven in hoofdstuk 5, staat het proces centraal waarlangs veranderingen in identificatie met de organisatie en het beroep optreden, in dit geval binnen een bestaande populatie van docenten over een tijdsperiode van twee jaar. De onderzoeksvraag van deze studie luidt:

In welke mate worden veranderingen in de identificatie met de organisatie en het beroep verklaard door de congruentie tussen de professionele identiteit en dat wat de organisatie vraagt, door taakgerichte ondersteuning vanuit de leidinggevende en de combinatie daarvan?.

In dit onderzoek worden enkele hypothesen getoetst die zijn afgeleid van het 'Process model of identification' van Ashforth, Harrison and Corley (2008). In dit model worden de veranderingen in identificatie van medewerkers begrepen als het resultaat van twee processen, namelijk 'organisational sense breaking' en 'organisational sense making'. In deze studie worden hiervoor twee indicatoren gebruikt, namelijk de mate van taakgerichte ondersteuning van de direct leidinggevende (voor het proces van sensegiving) en de congruentie tussen de eigen professionele identiteit en dat wat de organisatie van de docent vraagt (voor sensebreaking). De studie is gebaseerd op twee vragenlijsten met een tussenperiode van twee jaar ($N = 263$ docenten).

De resultaten laten onder meer zien dat verandering in identificatie met de organisatie mede wordt verklaard door een lage congruentie op het eerste meetmoment en een hoge congruentie op het tweede meetmoment. Dit resultaat is in lijn met de hypothese dat de aanleiding voor veranderingen in identificatie gevonden kan worden in de ervaren discrepantie tussen de eigen professionele identiteit en dat wat de organisatie vraagt en dat veranderingen dienen om een nieuw evenwicht te bereiken. Ook het voorspelde effect van taakgerichte ondersteuning van de leidinggevende op de vastgestelde verandering in identificatie met de organisatie is bevestigd. Wat betreft identifi-

catie met het beroep is het voorspelde effect van de taakgerichte ondersteuning van de direct leidinggevende bevestigd, echter het voorspelde effect van de mate van congruentie is niet waargenomen. Nadere analyse op de richting van verandering laat zien dat de vastgestelde effecten met name gelden voor docenten met een toegenomen identificatie met de organisatie en het beroep.

Samenvattend bevestigen de resultaten van dit onderzoek het model ten aanzien van veranderingen in identificatie met de organisatie. De resultaten bevatten echter ook indicaties voor verschillen in de dynamiek van het proces van verandering.

■ DISCUSSIE

Het laatste hoofdstuk van deze dissertatie bevat een samenvatting van de vier studies. In aanvulling op de opmerkingen in de discussie waarmee elke afzonderlijke studie wordt afgesloten, bevat dit hoofdstuk een overkoepelende samenvatting van de verkregen resultaten, een kritische reflectie op de verkregen inzichten en enkele suggesties voor verder onderzoek.

Wat betreft de theoretische bijdrage van deze dissertatie worden de bevindingen geplaatst tegen de achtergrond van recente theorievorming binnen de Social Identity theorie, de LMX theorie, de professionele ontwikkeling van docenten en de ontwikkeling van evidence-based HRM. Wat betreft de praktische consequenties, worden de bevindingen geplaatst in het licht van onderwijsinnovatie en het bevorderen van professionele ontwikkeling van docenten. Daarbij wordt een oproep gedaan om bij onderzoek naar onderwijsinnovatie en professionele ontwikkeling in het Hoger Onderwijs nadrukkelijk aandacht te besteden aan de professionele diversiteit in de identificaties van docenten en de dynamiek van verandering.

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Max, 16-2-15

About the Author

Max Aangenendt was born in the Netherlands (Arnhem, 1960). After completing secondary school in The Hague, he studied Pedagogical and Andragogical Sciences at the University of Leiden, where he specialised in methods for social policy research and organisational sociology. He wrote his thesis on evaluation focussed research within the context of judicial child care and graduated cum laude in 1984. In 1989 he completed a postdoctoral program for HRD-professionals provided by the department of Educational Science and Technology at the University of Twente and in 2003 did an interim-management program provided by the Rotterdam School of Management. After his studies in 1984, he started working as a contract researcher at the University of Leiden on a effect study concerning interventions in family systems and worked as a teacher, (freelance) staff trainer, curriculum consultant, policy advisor and project manager for various bachelor and master programs in social work, facility and business management and at the police academy. In the summer of 2008 he began his PhD studies in Organisational Psychology and HRD at the University of Twente. As part of this process he has taken courses in Advanced Studies in HRM (2011) and Mplus (2013).

At present he is head of the unit 'student affairs' for the department of academic and student affairs of The Hague University of Applied Sciences. This unit supports the students and staff of the 50 bachelors', masters' and post-graduate degree programs in the creation of a challenging study climate for talent development by providing academic, career and psychological counselling services, cultural and sports activities (through ACKU and the sports office), funding programs and facilities for study- and student organisations.

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Max Aangenendt studied Pedagogical and Andragogical Sciences at the University of Leiden, after which he worked as researcher, teacher, consultant and (project) manager in the field of HE. This research was conducted at the University of Twente (Organisational Psychology and HRD) in cooperation with the research group 'Pedagogics of vocational development' of The Hague University of Applied Sciences.

The central aim of this dissertation is to increase our understanding of changes in identifications and in the professional identity of employees, by investigating the prominent foci of identification, their mix in higher-order social identities and the personal and organisational factors (HRM and supervisory behaviour) that are involved in the change of these professional self definitions.

Building upon the assumption that institutions for Higher Education and their workforce are being continually challenged to keep up and adapt to changing societal demands and that it is the quality and flexibility of the workforce which is the key factor to address this turmoil, this dissertation specifically focuses on the understanding of changes in teachers' professional identity in higher vocational education.

For this purpose four related empirical studies have been conducted. Together these studies illustrate the considerable professional diversity in the workforce and shed light on the relationships between foci of identification and professional identities, performance appraisal, leadership, career competencies, customization strategies, professional development and changes in teachers' identifications over time.