The mediating role of social informal learning in the relationship between learning climate and employability

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Abstract

Purpose – This study examines whether learning climate relates to employability competences through social informal learning (i.e. feedback, help and information seeking).

Design/methodology/approach – Multiple regression analyses and structural equation modeling were used to test direct and indirect effects in a sample of 372 employees working in two Dutch governmental institutes.

Findings – The analyses confirmed that learning climate has an indirect effect on employability competences through feedback, help and information seeking. More specifically, the findings suggest that learning climate is important for employees' engagement in proactive social informal learning activities. Engaging in these learning activities, in turn, relates to a higher level of employability.

Originality/value – This study employs an integrative approach to understanding employability by including the organization's learning climate and employees' social informal learning behavior. It contributes to the extant literature on professional development by unraveling how proactive social informal learning relates to employability competences. It also provides new insights on learning climate as a determinant for social informal learning and employability.

Keywords Employability, Competences, Workplace learning, Social informal learning, Learning climate

Paper type Research paper

Introduction

In present times, many organizations face the challenge to answer to changing market demands due to innovations in their field, increased competition and internalization, technological advancements, aging workforces and new ways of working (Nauta *et al.*, 2010; Mc Kee and Eraut, 2012; Scully-Russ and Torraco, 2020; Valverde *et al.*, 2000; Van der Heijden *et al.*, 2016, 2018). Consequently, organizations recognize the need to be flexible and able to adapt to these challenges to remain competitive (Collet *et al.*, 2015). A firm's performance and competitiveness highly depend on the capabilities and transformative potential of its

workforce. Employees who possess up-to-date knowledge, skills and abilities are valuable assets for organizations and a source of competitive advantage (Crooke *et al.*, 2011; Delery and Roumpi, 2017; Mahsud *et al.*, 2011). Therefore, organizations want their employees to continuously update their knowledge and develop skills needed to thrive and adapt to changes in their work. These skills and knowledge are also referred to as employability competences and are crucial for an organization's performance and adaptability.

As such the notion of lifelong employability has replaced the traditional view on lifelong employment (Froehlich *et al.*, 2018). Job functions within organizations have changed and careers have become boundaryless and cross-organizational (Brown *et al.*, 2003). Traditional hierarchical career paths no longer meet the demands of the contemporary dynamic labor market and are being replaced by a degree of flexibility in functions (DeFillipi and Arthur, 1996). As a result, employees should possess sufficient domain-specific knowledge. Yet, building and expanding expertise is insufficient. Being able to move flexibly within complex, nontraditional career paths and organizations requires employees to develop complementary skills (Van der Heijden *et al.*, 2009).

These social and adaptive skills enable employees to anticipate work-related changes and developments, to balance their employer's needs as well as their own, and move flexibly within their function. In this respect, Van der Heijde and Van der Heijden (2006) use the concept of employability, defined as "the continuous fulfilling, acquiring or creating of work through the optimal use of competences" (p. 435). In addition to possessing occupational expertise, generic competences such as anticipation and optimization, personal flexibility, corporate sense and balance are relevant to one's employability. These competences enable employees to identify, create and act upon career opportunities (Froehlich *et al.*, 2014a, b; Fugate *et al.*, 2004; Thijssen *et al.*, 2008; Van der Heijde and Van der Heijden, 2006). Employability can be attained and enhanced by employees through learning activities at work (Froehlich *et al.*, 2014a, b; Fryczynska and Ciecierski, 2020; Gerken *et al.*, 2016; Van der Klink *et al.*, 2014; Van der Heijden *et al.*, 2009). It not only broadens one's expertise, it also enables competence development. Informal learning, as a type of workplace learning, is deemed particularly relevant as it not only accounts for the majority of learning at work (Bear *et al.*, 2008; Conlon, 2004; Eraut, 2004; Manuti *et al.*, 2015) but also positively relates to the development of employees' employability (Froehlich *et al.*, 2014a, b; Froehlich *et al.*, 2014a, b; Gerken *et al.*, 2016; Van der Heijden *et al.*, 2009).

If the workplace is essential for learning, it is important to develop an understanding of how employees learn, how they acquire knowledge and how the work setting fosters workplace learning. Eraut (2000) emphasized that social interactions at work contribute to employees' learning. Work-related encounters, relationships and opportunities for receiving feedback are important factors for workplace learning (Eraut, 2007). In other words, learning is embedded in work. Building on this view, social informal learning is characterized by interaction with peers, colleagues and superiors (Boud and Middleton, 2003; Mulder, 2013; Noe *et al.*, 2013; Kyndt *et al.*, 2009). In particular, the way employees seek feedback on the job, search for help and inquire for relevant information has been shown to contribute to outcomes such as employees' employability, innovative work behavior and performance (Bamberger, 2009; Cersaoli *et al.*, 2018; Froehlich *et al.*, 2014a, b; Gerken *et al.*, 2016; Van der Heijden *et al.*, 2009). All of these activities display the social nature of learning. In this respect, the organizational context in which social informal learning takes place can influence whether employees actually engage in learning.

While the organization provides opportunities to learn, it depends on the individual whether he or she chooses to use these opportunities (Billett, 2004). In other words, learning is determined by an interaction between the individual and the context (Tynjälä, 2008). Learning climate is an organizational factor that impacts employees' learning behavior (Marsick and Watkins, 2003; Nikolova *et al.*, 2014) and is defined by Nikolova *et al.* (2014, p. 259)

as "employees' perceptions of organizational policies, and practices aimed at facilitating, rewarding and supporting employee learning behavior". Building on this view, the current study also explores the role of contextual factors that support learning.

The present study addresses employability from both an organizational and individual perspective, thereby answering the call by Guilbert *et al.* (2016) for a more integrative approach to understanding employability. From an organizational perspective, organizations are required to adapt to changing market demands. From an individual perspective, employees contribute to their firms' performance as well as their own employability by continuously broadening their skills set, knowledge and abilities. As such, we focus on ways through which organizations can increase their adaptability by facilitating their employees in being employable (i.e. learning climate) and individuals can increase their employability (through social informal learning). Scholars do refer to a potential relation between contextual factors, workplace learning and employability or competence development (Gerken *et al.*, 2016; Nauta *et al.*, 2010; Scully-Ross and Torraco, 2020; Van der Heijden *et al.*, 2009; Williams *et al.*, 2016), yet empirical research is largely missing. Prior researchers have investigated the importance of informal learning for employability. However, only few have focused on the relationship between social informal learning and employability (e.g., Froehlich *et al.*, 2014a, b; Gerken *et al.*, 2016; Van der Heijden *et al.*, 2016). This research provides a promising direction for further exploration of how employability can be attained and enhanced. In addition, since learning climate is a contextual factor that facilitates forms of workplace learning (Cerasoli *et al.*, 2018; Eldor and Harpaz, 2019; Tharenou, 1997), we include it in our research to form an integrative understanding.

In conclusion, the present research aims to contribute to the extant literature by using an integrative approach to employability. We propose a mediation model with social informal learning (individual level) as a mediator between learning climate (organizational level) and employability. To our knowledge, this research is one of the few that empirically investigates the proposed mediating relationship. We explore this relationship by using a quantitative cross-sectional survey study.

Theoretical framework
Employability
The concept of employability has evolved over the last decades corresponding with organizational developments caused by the transition from an industrial to a postindustrial society (Thijssen and Van der Heijden, 2003). For workers, being employable shifted from the notion of merely being employed to also having the responsibility to develop and maintain work-related skills (Hall, 2004). In this respect, definitions of employability emphasized the need for domain-specific knowledge and skills. This is congruent to the current competence-based approach to employability (Fugate *et al.*, 2004; Guilbert *et al.*, 2016; Römgens *et al.*, 2020; Valverde *et al.*, 2000; Van der Heijden *et al.*, 2018). Currently, employability implies continuously broadening one's expertise, flexibility and proactivity (Van der Heijden *et al.*, 2018). This adaptability on part of the employee is needed to perform in a diversity of workplace settings. As such, there is a shift in perspectives on employability from an exclusive focus on skills toward the ability to move flexibly in a diverse range of work contexts (Collet *et al.*, 2015). Competences that are deemed important for this flexibility are social and adaptive by nature (Batistic and Tymon, 2017; Fryczynska and Ciecierski, 2020; Haynie *et al.*, 2020; Rodriquez *et al.*, 2002; Van der Heijden *et al.*, 2009).

Following the current competence-based approach to employability, Van der Heijde and Van der Heijden (2006) conceptualized employability as having domain-specific knowledge and four generic competences. First, *occupational expertise* refers to the required knowledge and skills to perform current job tasks. *Anticipation and optimization* entails taking an active

role in reflecting on current developments and preparing for future work changes in order to strive for positive career outcomes. *Personal flexibility* refers to an employee's capacity to passively adapt to work-related changes. *Corporate sense* refers to the identification with corporate goals and acceptation of collective responsibilities. The final generic competence is *balance*, referring to the compromise between different elements of employability that are sometimes unequal, such as balancing employees' needs versus the employer's interests, and one's private life versus their career trajectory. Anticipation and optimization, and personal flexibility are flexibility competences emphasizing the current shift in our understanding of employability.

As has become clear, multiple interpretations of employability exist. As several scholars posit, employability can be interpreted from various perspectives ranging from an economic–social perspective, to an individual perspective and ultimately to an organizational perspective (Guilbert *et al.*, 2016; Nauta *et al.*, 2010). The economic–social perspective refers to the more traditional meaning of employability (being employable or unemployable). The individual perspective stresses the shift in employees' competences needed to be able to continuously meet the changing work environment. Finally, the organizational perspective concerns the organizations' ability to continuously adapt to the changing labor market demands. One way to do so is by building an organizational culture that cultivates employability. As Guilbert *et al.* (2016) posit, there is a need for an integrative understanding of employability. In this regard, the present study addresses employability both from an organizational and individual perspective.

Social informal learning
Workplace learning is increasingly recognized as a means for employees to develop skills needed for employability competences (OECD, 2010; Bartram and Roe, 2008; Van der Heijden *et al.*, 2016). In this respect, Kyndt and Baert (2013, p. 275) define workplace learning as "the engagement in formal and informal learning activities both on and off the job, whereby employees and groups of employees acquire and/or improve competences that change individuals' present and future professional achievement and organizational performance". Informal learning, as a form of workplace learning, is learner initiated, requires a need or intent to develop, and involves action and reflection (Noe *et al.*, 2013). Informal learning is intertwined with daily work. Employees often learn by engaging in problem-solving and decision-making, by filling a gap in their knowledge or simply by collaborating with others.

Past research on social informal learning identified specific learning activities (Ashford, 1986; Bamberger, 2009; Froehlich *et al.*, 2014a, b; Kyndt *et al.*, 2009). According to review studies by Kyndt *et al.* (2016) and Meirink *et al.* (2007), informal learning from others can take place with and without interaction. Proactive activities such as discussing, asking questions and exchanging information are referred to as learning from others with interaction. Passive social informal learning activities such as listening to presentations and observing colleagues can trigger a change in behavior as well, leading to new working methods, perspectives and practices (Eraut, 2004; Meirink *et al.*, 2007). However, since learning at the workplace is by definition socially oriented, previous research has focused more on informal learning activities involving clear interaction with peers and supervisors.

Kyndt *et al.* (2009) believe that when employees learn proactively from others, they share knowledge and information, seek advice from others and engage in feedback seeking. In a similar vein, Froehlich *et al.* (2014a, b) have operationalized social informal learning as feedback, help and information seeking. Feedback seeking is a proactive process to identify factors influencing effective or ineffective performance (Salas and Rosen, 2010). Its evaluative component distinguishes feedback seeking from other proactive ways of acquiring information. Help seeking, for example, is defined as "an interpersonal process involving

the solicitation of the emotional or instrumental assistance of a work-based colleague" (Bamberger, 2009, p. 51). It is by definition problem-oriented, whereas feedback seeking relates to performance monitoring. Information seeking generally refers to a professional's proactive behavior to obtain general work-related knowledge to compensate for missing information (Morrison, 1993).

Social informal learning and employability
From an individual perspective, employees can increase their employability by engaging in social informal learning. Social informal learning is favored over other types of workplace learning for several reasons. First, social interactions and relationships are inherent to the design of modern job roles. Frequent meetings with clients, colleagues and supervisors as well as open plan offices are examples of how socialization is embedded in daily work practices. Second, social informal learning is considered to be one of the most effective types of workplace learning. Prior research comparing the effects of formal and informal learning on a variety of learning outcomes consistently demonstrate that informal learning positively impacts outcomes such as job performance (Park and Choi, 2016; Wolfson *et al.*, 2018), innovative work behavior (Gerken, 2016) and employability (Froehlich *et al.*, 2014a, b) to a greater extent. Finally, several empirical studies have demonstrated that social aspects of learning led to an increase in competence development and employability (Froehlich *et al.*, 2014a, b). Several studies (e.g., Batistic and Tymon, 2017; Fryczsnka and Ciecierski, 2020; Van der Heijden *et al.*, 2009) demonstrate that networking and network resources reinforce employees' employability. Networking yields not only professional relationships but also access to resources and information useful for one's development. Knowing who one can approach for relevant information, support or guidance increases the likelihood that employees learn from these professional relationships and resources. Similarly, exchanging feedback and information relates to competence development of employees in higher education (Colognesi *et al.*, 2020).

Most research on the relationship between social informal learning and employability focused on feedback seeking. In their review study Ashford *et al.* (2003) showed that feedback seeking is related to obtaining a more accurate view of one's skills and abilities and to improve performance by increasing goal setting and maintaining or enhancing one's image. Employees gain more knowledge and clarity about how to perform work-related tasks (Anseel *et al.*, 2015), thereby increasing one's level of occupational expertise. Furthermore, employees who seek feedback may not only use this information to evaluate their performance but also to anticipate future and latent changes within one's job. These individuals use feedback to adapt to organizational processes and anticipate work-related changes (Ashford *et al.*, 2003). Research by Froehlich *et al.* (2014a, b) in different organizations indicated that feedback seeking from colleagues in particular positively relates to anticipation and optimization. Gerken *et al.* (2016) confirmed this finding in their research among faculty staff in higher education. Additionally, these authors found that feedback seeking also positively relates to occupational expertise and personal flexibility.

The concept of help seeking has received attention from an educational, social psychological and clinical psychological perspective (e.g., Bamberger, 2009; Chan, 2013; Hess and Tracey, 2013; Van der Rijt *et al.*, 2012). It is related to performance as it can reduce uncertainty and clarify one's understanding of his or her work context (Bamberger, 2009; Morrison, 1993). Froehlich *et al.* (2014a, b) showed that help seeking positively relates to occupational expertise, anticipation and optimization, and personal flexibility. Similar findings were found by Gerken *et al.* (2016) and Gerken (2016).

Information seeking is important in learning as it clarifies work activities and promotes understanding of the organizational culture (Bamberger, 2009; Cross *et al.*, 2001; Cross and

Sproull, 2004). In other words, information seeking is a proactive process that may clarify domain-specific tasks and expectations within a work environment. In this respect, Froehlich *et al.* (2014a, b) found a positive relationship between information seeking and anticipation and optimization and personal flexibility. Similarly, Gerken *et al.* (2016) found that information seeking positively relates to anticipation and optimization.

Feedback, help and information seeking are proactive social informal learning activities. Given the emphasis on a proactive role of employees in becoming employable, the current study assumes that these three proactive social informal learning activities will be beneficial for employees' employability. Based on previous research, we formulate the following hypotheses:

H1. Social informal learning activities positively relate to employability competences (i.e. occupational expertise, anticipation and optimization, balance, personal flexibility and corporate sense), with the strongest effect for feedback seeking.

Learning climate
The organizational context in which learning occurs has been referred to as the learning organization, (supportive) learning environment and learning climate (e.g., Marsick and Watkins, 2003; Nikolova *et al.*, 2014; Ortenblad, 2002). Especially, the concept of learning climate is gaining interest in the workplace learning literature and Human Resource Development (HRD) practices. Nikolova *et al.* (2014) define it from the professional's perspective and perceive it as a climate that facilitates and rewards learning. Other scholars also emphasize the need for support and opportunities to learn (Eldor and Harpaz, 2016; Marsick and Watkins, 2003; Ortenblad, 2002), as well as feeling safe to make mistakes and learn (Garvin *et al.*, 2008).

Although these authors demonstrate communalities in their conceptualization of learning climate, they operationalize learning climate slightly differently. Based on their work, we identify four main elements. The first element is individuals' perceptions of feeling enabled to learn. Garvin *et al.* (2008) argue that opposing views, new ideas and reflection should be appreciated. Similarly, Emonds (2018) emphasizes that experimentation and mistakes should be allowed. Second, employees should have opportunities to learn. This can be interpreted as having time to learn or being able to engage in discussions and share different viewpoints (Garvin *et al.*, 2008; Singer *et al.*, 2012). Third, processes and structures that support learning are another key component of learning climate. This entails technology and infrastructure that capture and share learning, such as an online system (Emonds, 2018; Garvin *et al.*, 2008; Marsick and Watkins, 2003; Singer *et al.*, 2012). Finally, leadership that supports and reinforces learning can strengthen the aforementioned factors. Leaders can promote knowledge sharing by actively questioning and listening to different views and new ideas (Garvin *et al.*, 2008), providing space and opportunities to engage in discussions (Garvin *et al.*, 2008; Singer *et al.*, 2012), and acting as strategic leaders who link organizational goals to learning (Marsick and Watkins, 2003). We conclude that a climate that encourages employees to learn and make mistakes, provides ample learning opportunities, offers an appropriate infrastructure and pairs this with encouraging leaders will allow employees to truly learn from their successes and failures.

Learning climate and social informal learning
Learning climate inevitably aims to facilitate and support learning behavior among employees (Cerasoli *et al.*, 2018; Jeong *et al.*, 2018). It does not only provide opportunities to engage in workplace learning but also encourages employees to actively seek solutions to find different ways through which they can expand their knowledge and to take ownership of one's own development (Eldor and Harpaz, 2019). This is particularly relevant for feedback,

help and information seeking as proactive learning activities. Given that seeking feedback, help or information may signal a gap in knowledge and potentially involve risks and costs to lose face, a supportive learning climate is key to engage in such behaviors.

In line with the key characteristics of a positive learning climate mentioned above, previous research found that these factors indeed influence employees' learning behavior (Skule, 2004). A study by Van der Rijt *et al.* (2012) showed that employees' perceptions of a learning climate enable them to engage in proactive behavior, such as help seeking. A learning climate in which employees feel psychologically safe to express their opinions and learn from their errors promotes social informal learning activities. This leads to the following hypothesis:

H2. Learning climate positively relates to employee engagement in all three social informal learning activities (i.e. feedback, help and information seeking).

Learning climate and employability: the mediating role of social informal learning
Some scholars suggest that contextual factors such as a supportive learning environment might indirectly influence employability (Osagie *et al.*, 2018; Van der Klink *et al.*, 2014; Van der Heijden *et al.*, 2009). Others refer to a potential relationship between such organizational factors, workplace learning and employability (Gerken *et al.*, 2016; Nauta *et al.*, 2010; Scully-Ross and Torraco, 2020; Van der Heijden *et al.*, 2018; Williams *et al.*, 2016). While prior research has shown that learning climate plays a significant role for employees' learning behavior, research on the relationship between social informal learning and employability is in its early stages. However, to our knowledge very little empirical research exists on the potential effects of learning climate on social informal learning and, in turn, on employability. Prior research does suggest that such a relationship could exist. Therefore, the present study assumes that learning climate influences the extent to which employees engage in learning activities, which in turn supports employees to become (more) employable. This results in the final hypothesis:

H3. Social informal learning mediates the relationship between learning climate and employability.

Method
Participants and procedure
We collected the data in two Dutch governmental institutes. Governmental institute 1 was a municipality. Governmental institute 2 served as a Learning and Development (L&D) center for several other governmental departments. The total sample consisted of $N = 372$ employees of which 144 participants worked at institute 1 and 228 participants at institute 2. In total, 155 males (41.7%) and 217 females (58.3%) participated in this study. The average age was 48.69 years (Standard Deviation (SD) = 9.96). The professional work experience ranged from less than 1 year (0.3% of the participants) to 47 years (0.5% of the participants). The majority of participants (61.1%) worked between 1 and 5 years in the current position. The sample derived from governmental institute 1 consisted of 70 males (48.6%) and 74 females (51.4 %). The average age of these participants was 48.56 years (SD = 9.80). Participants' professional work experience varied between 1 year (0.7 %) and 45 years (2.9%). A total of 41.1 % of the participants worked between 1 and 5 years in the current position. The sample from institute 2 was similar to the sample from institute 1.

Measures
Employability. We used a shortened version of the employability questionnaire of (Van der Heijde and Van der Heijden, 2006; Froehlich *et al.*, 2015a, b) consisting of 22 items that

measure *occupational expertise* (five items, e.g. "I consider myself competent to engage in in-depth, specialist discussion in my job domain"), *anticipation and optimization* (four items, e.g. "I take responsibility for maintaining my labor market value"), *personal flexibility* (five items, e.g. "I adapt to developments within my organization"), *corporate sense* (four items, e.g. "I am involved in achieving my organization's mission), and *balance* (four items, e.g. "I suffer from work-related stress"). All items were rated on a six-point Likert scale. The internal consistency of all five scales was satisfactory with a Cronbach's alpha of 0.86 for occupational expertise, 0.86 for anticipation and optimization, 0.82 for balance, 0.85 for personal flexibility and 0.79 for corporate sense.

Social informal learning. We measured social informal learning with a scale developed by Froehlich *et al.* (2017) consisting of 12 items and rated on a five-point Likert scale (1 = completely disagree; 5 = completely agree). This scale measures four activities, namely *feedback seeking from supervisors* (three items, e.g. "feedback from my supervisor makes me reflect"), *feedback seeking from colleagues* (three items, e.g. "feedback from colleagues motivates me to act"), *help seeking* (two items, e.g. "Getting help would be one of the first things I would do if I were having trouble at work"), and *information seeking* (four items, e.g. "I participate in project groups to discuss work-related problems"). The Cronbach's alphas were 0.92 and 0.86 for feedback seeking from supervisors and colleagues, respectively, 0.46 for help seeking and 0.75 for information seeking.

Learning climate. We used the "Supportive Learning Environment" Scale of the Short-Form Learning Organization Survey (LOS-27) by Singer *et al.* (2012). The seven items emphasize the social character of learning climate, which was in line with our focus on the social component of learning, and were measured on a seven-point Likert scale (1 = strongly disagree; 7 = strongly agree). An example item was "If you make a mistake in this unit, it is often held against you". The Cronbach's alpha was 0.75.

Control variables. We selected age, gender, level of education and years of (current) job experience as control variables (Froehlich *et al.*, 2014a, b).

Analyses
First, we applied correlational analyses to explore the relationship between learning climate, social informal learning and employability. Next, we performed multiple regression analyses to investigate the predictive strength of the variables. To test the (indirect) effects of the multiple mediators on the relationship between learning climate and employability, we performed structural equation modeling using AMOS. The path model was simplified by including the significant relationships between variables, as found in the multiple regression analyses. Testing the path model enabled us to investigate to what extent the proposed model including multiple mediators and dependent variables would fit the data. This is in line with Kline's (2010) approach to model fit estimation. The model fit was assessed using the ratio of chi squared to the degrees of freedom (acceptable between 2.00 and 5.00; Marsh and Hocevar, 1985), comparative fit index (CFI, acceptable if $\geq$ 0.90; Hu and Bentler, 1999) and root mean square error of approximation (RMSEA, acceptable if $\leq$ 0.08; Hu and Bentler, 1999). Before running the analyses, we tested for common method bias to check whether the variation in responses was due to differences within respondents as opposed to instrumental characteristics (Podsakoff *et al.*, 2003).

Results
The descriptive statistics and correlations are reported in Table 1. Employees most often engaged in feedback seeking, followed by help and information seeking.

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Sample	1.39	0.49	X																	
2. Gender	1.58	0.49	−0.11*	X																
3. Age	48.69	9.96	−0.01	−0.13*	X															
4. Formal education	4.77	1.36	−0.29**	−0.03	−0.23**	X														
5. Tenure	6.42	7.41	0.37**	−0.04	0.30**	−0.24**	X													
6. Contract type	1.33	0.68	−0.17**	0.06	−0.04	0.08	−0.18**	X												
7. Employers	4.71	4.00	−0.05	−0.02	0.15**	0.01	−0.09	0.04	X											
8. Professional work experience	25.41	10.96	0.07	−0.08	0.89**	−0.32**	0.33**	−0.07	0.64**	X										
9. Help seeking	4.04	0.69	0.01	0.19**	−0.08	−0.06	0.02	0.01	−0.01	−0.07	X									
10. Information seeking	3.64	0.88	−0.28**	0.00	−0.09	0.34**	−0.22**	0.10*	0.08	−0.11*	0.12*	X								
11. Feedback seeking (supervisors)	3.87	0.91	−0.09	0.08	−0.16**	0.12*	−0.19**	0.12*	0.04	−0.13*	0.29**	0.40**	X							
12. Feedback seeking (colleagues)	4.09	0.64	−0.07	0.17**	−0.17**	0.15**	−0.15**	0.07	0.04	−0.14**	0.39**	0.37**	0.59**	X						
13. Learning climate	4.90	1.08	−0.06	−0.05	−0.03	0.04	−0.09	0.01	0.02	0.02	0.20**	0.21**	0.40**	0.30**	X					
14. Occupational expertise	4.87	0.65	0.13**	−0.03	−0.03	−0.01	0.14*	−0.01	0.01	0.02	0.20**	0.06	0.19**	0.17**	0.18**	X				
15. Anticipation and optimization	4.13	0.99	−0.02	−0.03	−0.08	0.22**	−0.17**	0.09	0.07	−0.11*	0.10	0.53**	0.31**	0.29**	0.23**	0.32**	X			
16. Balance	4.21	0.91	0.12*	−0.07	0.08	−0.07	0.13*	−0.04	−0.06	0.11*	0.22**	0.15**	0.18**	0.15**	0.40**	0.38**	0.24**	X		
17. Personal flexibility	4.80	0.61	0.01	−0.04	−0.09	0.05	−0.15**	0.09	0.09	−0.08	0.20**	0.36**	0.32*	0.26**	0.26**	0.43**	0.48**	0.26**	X	
18. Corporate sense	4.11	0.79	0.32**	−0.14**	−0.01	0.10	0.04	−0.03	0.02	−0.01	0.20**	0.32**	0.33**	0.30**	0.24**	0.33**	0.50**	0.29**	0.47**	X

Note(s): $n = 372$. *$p < 0.05$; **$p < 0.01$

Table 1.
Descriptive statistics
and correlations

Hypothesis 1 predicted that all social informal learning activities would positively relate to all employability competences, with the strongest effect for feedback seeking. The results showed that feedback seeking from supervisors significantly positively related to personal flexibility and corporate sense. Help seeking significantly positively related to occupational expertise, balance, personal flexibility and corporate sense. Finally, information seeking significantly positively related to anticipation and optimization, balance, personal flexibility and corporate sense. The results in Table 2 illustrate that indeed all social informal learning activities positively relate to the employability competences. Contrary to our expectations, the effect of feedback seeking is smallest, whereas the effect of information seeking is largest. This provides partial support for Hypothesis 1.

Hypothesis 2 predicted that learning climate would positively affect employees' social informal learning. The results indeed confirm that learning climate positively relates to feedback, help and information seeking (Table 3). This provides full support for Hypothesis 2.

We used structural equations modeling analyses to answer Hypothesis 3. The model included significant relationships from the multiple regression analyses (see Table 4 and Figure 1). The results showed acceptable model fit: CFI = 0.95, RMSEA = 0.09 and X^2/df = 4.25. We found significant indirect results of learning climate on occupational expertise [$B = 0.04$, 95 % CI (0.02, 0.08)], anticipation and optimization [$B = 0.11$, 95 % Confidence Interval (CI) (0.06, 0.17)], balance [$B = 0.06$, 95 % CI (0.03, 0.11)], personal flexibility [$B = 0.13$, 95% CI (0.07, 0.18)], and corporate sense [$B = 0.13$, 95 % CI (0.08, 0.19)]. These results indicate that learning climate has an indirect effect on the employability competences via social informal learning. This provides support for the final hypothesis.

Discussion

The current study aims to create an integrative understanding of employability by focusing on learning climate as an organizational factor and social informal learning as an individual factor. It does so by testing a mediation model, including social informal learning as a mediator in the relationship between learning climate and employability.

Our findings confirmed that learning climate indeed led to engagement in social informal learning and, in turn, higher levels of employability. Proactively learning from others seems a helpful vehicle for employees to build their knowledge, anticipate changes in their work, identify with their organization and find balance between various needs and interests. Furthermore, organizations can create the conditions for proactive social informal learning by adopting a supportive learning environment. The results support the notion that engaging in social informal learning leads to higher levels of employability, thereby confirming and extending previous research on this relationship (Froehlich *et al.*, 2014a, b; Gerken *et al.*, 2016). Proactive information, help and feedback seeking is associated with having domain-specific knowledge, being able to anticipate latent and future work-related changes, finding balance at work and feeling a sense of belonging to the organization. More specifically, employees who engaged in information seeking were better able to anticipate and adapt to work-related developments. These individuals were also able to find a work-life balance and were more engaged to the organization.

Based on prior research, we assumed that feedback seeking would be most important for employees' employability. Given that feedback seeking is characterized by an evaluation of one's behavior, work and performance, we believed that feedback in particular would have a greater effect on employees' learning and development, and thus competence development. Our results, however, showed the opposite. This can possibly be explained by individual differences such as age, motivation and learning preferences. The employees in our sample were fairly experienced, given the relatively high mean scores for work experience, tenure and age. This, combined with the findings that information seeking and help seeking were
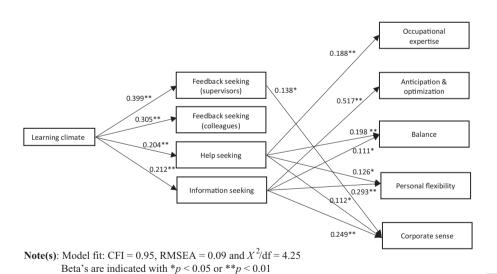
Predictor	Occupational expertise β	Anticipation and optimization β	Balance β	Personal flexibility β	Corporate sense β
Sample	0.11	0.17*	0.13*	0.10	0.45**
Gender	−0.09	−0.02	−0.12*	−0.10	−0.14**
Age	−0.18	0.10	0.10	−0.02	0.11
Formal education	0.04	0.05	−0.06	−0.07	0.12*
Tenure	0.13*	−0.08	0.08	−0.09	−0.03
Contract type	0.03	0.04	−0.02	0.06	−0.01
Employers	0.01	−0.02	−0.07	0.06	−0.01
Professional work experience	0.17	−0.10	−0.02	−0.01	−0.03
Feedback seeking (S)	0.11	0.08	0.10	0.13*	0.17**
Feedback seeking (C)	0.04	0.05	0.04	0.03	0.09
Help seeking	0.15*	−0.01	0.17**	0.12*	0.10*
Information seeking	0.01	0.47**	0.16**	0.29**	0.30**
R^2	0.10	0.31	0.14	0.19	0.36
ΔR^2	0.07	0.29	0.11	0.16	0.34

Note(s): $n = 372$. *$p < 0.05$; **$p < 0.01$

Table 2.
Regression results for the effects of social informal learning on employability

Predictor	Feedback seeking (supervisors) β	Feedback seeking (colleagues) β	Help seeking β	Information seeking β
Sample	0.01	0.05	0.01	−0.19
Gender	0.08	0.16**	0.19**	−0.02**
Age	−0.13	−0.21	0.01	0.07
Formal education	0.06	0.13*	−0.09	0.26**
Tenure	−0.10	0.07	0.07	−0.05
Contract type	0.10*	0.05	0.02	0.05
Employers	0.02	0.04	0.01	0.04
Professional work experience	0.05	0.12	−0.13	−0.07
Learning climate	0.38**	0.30**	0.21**	0.16**
R^2	0.21	0.17	0.09	0.20
ΔR^2	0.18	0.15	0.06	0.18

Note(s): $n = 372$. *$p < 0.05$; **$p < 0.01$

Table 3.
Regression results for the effects of learning climate on social informal learning

associated with higher scores on employability, might indicate that patterns of learning differ for this group of employees. Individual factors such as chronical age, motivation, goal orientation and future time perspective (Froehlich *et al.*, 2014a, b; 2015a, b; 2016) can affect one's learning behavior and, in turn, one's employability. For example, the perceived opportunities for growth and development decrease with age. This consequently affects employees' motivation to learn and perform (Raemdonck *et al.*, 2015). However, Froehlich *et al.* (2015a, b) found that employees with an opportunity focus (i.e. the perception of how many opportunities are to be expected) engaged in learning behaviors that positively affected their employability. Additionally, the feedback literature (e.g., Anseel *et al.*, 2015) demonstrates that engagement in feedback seeking deceased with age. This possibly explains that older or

Estimated path				Confidence interval	
			Standardized	Lower	Upper
From		To	coefficients	bound	bound
Learning climate	→	Feedback seeking (S)	0.399**	0.301	0.487
Learning climate	→	Feedback seeking (C)	0.305**	0.217	0.393
Learning climate	→	Help seeking	0.204**	0.096	0.298
Learning climate	→	Information seeking	0.212**	0.110	0.298
Feedback seeking (S)	→	Personal flexibility	0.097	−0.011	0.217
Feedback seeking (S)	→	Corporate sense	0.138*	0.034	0.242
Help seeking	→	Occupational expertise	0.188**	0.083	0.295
Help seeking	→	Balance	0.198**	0.077	0.301
Help seeking	→	Personal flexibility	0.126*	0.034	0.238
Help seeking	→	Corporate sense	0.112*	0.004	0.211
Information seeking	→	Anticipation and optimization	0.517**	0.434	0.593
Information seeking	→	Balance	0.111*	0.013	0.203
Information seeking	→	Personal flexibility	0.293**	0.183	0.413
Information seeking	→	Corporate sense	0.249**	0.134	0.358

Note(s): $n = 372$. *$p < 0.05$; **$p < 0.01$

Table 4.
Path estimates of the structural equation model

Note(s): Model fit: CFI = 0.95, RMSEA = 0.09 and X^2/df = 4.25
Beta's are indicated with *$p < 0.05$ or **$p < 0.01$

Figure 1.
Final model tested

more experienced employees are more likely to engage in information or help seeking as opposed to feedback seeking, and that this learning behavior still is positively related to employability. Future research could further unravel the role of antecedents on an individual level for employees' learning and competence development.

Furthermore, differences between sectors might be expected. For example, in the current study conducted within governmental institutes, feedback seeking is related to personal flexibility and corporate sense, whereas in studies by Froehlich *et al.* (2014a, b) and Gerken *et al.* (2016), conducted in an Austrian federal chamber, an Austrian information technology (IT) company and a Dutch educational institution, it was found to relate to anticipation and optimization only. The different findings might be partially attributed to the specific sector and type of organization.

Our findings also demonstrate that social informal learning takes place when employees feel their work environment supports and facilitates learning. Such an environment was most important for feedback seeking, followed by help and information seeking. These findings are in line with previous studies on the role of the organizational environment. A supportive learning environment indeed encourages social exchange of information and knowledge (Garvin *et al.*, 2008; Marsick and Watkins, 2003). Furthermore, it supports the assumption that feedback seeking contains more risks compared to help and information seeking. It entails searching for specific directions on how to improve one's own performance and behavior instead of navigating through the organization's way of working. Feedback, thus, addresses the gap between current understanding of the self, task or performance and desired understanding (Hattie and Timperly, 2007).

Limitations and suggestions for future research

The current research presents several limitations. We offer directions for future research while addressing these limitations. First, we aimed to integrate multiple perspectives in our research by including learning climate and social informal learning. However, we focused primarily on proactive social informal learning, while the extant research has explored many different forms or dimensions of workplace learning (Kyndt and Beausaert, 2017; Messmann *et al.*, 2018) and learning activities (Eraut, 2004, 2007, 2007; Noe *et al.*, 2013). The challenge lies within the wide variety of conceptualizations and measures of informal learning, leading to less consistency and different interpretations across studies (Cerasoli *et al.*, 2018). We encourage future research to take a broader perspective on social informal learning by also taking into account passive and collaborative learning activities next to proactive learning. Additionally, this research confirmed that a learning climate is essential for employees to engage in social informal learning. Learning climate was interpreted as feeling enabled, supported and safe to learn. To further advance our understanding of learning climate, we encourage future research to focus on other elements of learning climate, such as opportunities to learn (Batistic and Tymon, 2017; Fryczynska and Ciecierski, 2020; Garvin *et al.*, 2008), processes, structures and systems (Emonds, 2018; Garvin *et al.*, 2008), and leadership (Emonds, 2018; Jeon *et al.*, 2018).

Second, the current research took place in a governmental setting, which may have led to sector-specific results. Learning climate in particular may differ across departments in the very same organization. Furthermore, depending on participants' work tasks and responsibilities, they may engage in proactive social informal learning in various ways. Knowledge workers, for example, who create and transfer knowledge, work with complex tasks and hold knowledge about which individual to approach for a certain need, might differ from teachers in higher education (Fryczynska and Ciecierski, 2020; Gerken *et al.*, 2016). We therefore suggest that future studies consider different sectors, organizational structures and procedures, and occupations.

Third, the present study is cross-sectional and the findings are self-reported. Given that employability competences and the perception of a learning climate can develop over time, we propose future research to consider temporal changes in competence development as well as objective measures of the variables of interest. We argue for the mediation model as

investigated in the current study, not a reversed relationship as it is unlikely that employability could lead to social informal learning and, in turn, to learning climate. Future research could include a longitudinal research design with multiple measurement moments as well as self-report and supervisor-report measures.

Practical implications

Our findings illustrate that social informal learning can act as a lever for increasing one's employability. From a strategic or managerial perspective, organizations can potentially establish a climate that facilitates learning and increases employability by implementing human resources (HR) policies on employability and highlighting the importance of continuous learning and development. Taking into account the social side of learning as well as socially-oriented work practices that might be already in place, we suggest that these learning activities should be integrated more explicitly in daily work. Organizations can realize this by establishing learning communities or implementing collaborative work activities. By providing the opportunity to collaborate, employees are likely to engage in proactive learning activities such as feedback, help and information seeking. By promoting collaboration, employees are able to expand their knowledge that is applicable in a large variety of tasks (occupational expertise) and learn to anticipate changes in one's job and flexibly move between challenges they face (flexibility competences). Furthermore, the ability to actively participate in learning communities and different work groups may increase the feeling of belonging to the organization and its mission (corporate sense). Organizations and professionals alike hold the potential to enhance employees' employability as well as firms' capacity to adapt.

Conclusion

The current research provides initial evidence on the relationship between learning climate, social informal learning and employability. The more employees experience a positive learning climate, the more likely they engage in social informal learning, and thus, the more employability competences are developed. By establishing a significantly positive relationship between these concepts, our findings contribute to and advance the literature on workplace learning (Eraut, 2000, 2007; Kyndt et al., 2016; Mulder, 2013), learning climate (Marsick and Watkins, 2003; Nikolova et al., 2014) and employability (Van der Heijden et al., 2009, 2018). Furthermore, by integrating an individual and organizational perspective to understanding employability, we disentangled how employability can be enhanced by employees as well as organizations (Guilbert et al., 2016). This enables us to provide directions for future research and HRD policies.

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