ORIGINAL PAPER



Entering the Labor Market: Networks and Networking Behavior in the School-to-Work Transition

Dries De Weerdt¹ · Ayla De Schepper² · Eva Kyndt³ · David Gijbels²

Received: 6 June 2023 / Accepted: 18 January 2024 © The Author(s) 2024

Abstract

This study examines the social networks and networking behavior of students graduating from higher education and transitioning to the labor market. To obtain an in-depth understanding of graduating students' social networks, a mixed method social network study was conducted. Network data from 12 graduating students were collected. The results showed that students seek labor market-oriented contacts with individuals in the personal, education, and work contexts. Students received more practical and job-specific support from weak ties (e.g., colleagues at internships) and more social and emotional support from strong ties (e.g., parents and fellow students). The development of a labor market-oriented network occurred spontaneously through social media channels or when students proactively connected with others at educational institutions or job events. However, not all students felt confident developing a network. In these cases, the lack of awareness of relevant network actors, and interpersonal and intrapersonal characteristics play a critical role.

Keywords Networking behavior \cdot Higher education \cdot Labor market \cdot School-to-work transition \cdot Social network

The transition from higher education (HE) to work is a major life event in most graduates' lives (Draaisma et al., 2018), and preparing for this transition is a key task for students (Parmentier et al., 2022). In doing so, students must be prepared to face

Dries De Weerdt dries.deweerdt@uantwerpen.be

¹ Antwerp School of Education, Faculty of Social Sciences, University of Antwerp, Sint-Jacobstraat 2, Antwerp 2000, Belgium

² Department of Training and Education Sciences, Faculty of Social sciences, University of Antwerp, Antwerp, Belgium

³ Centre for Transformative Innovation and Centre for the New Workforce, Swinburne University of Technology, Melbourne, Australia

obstacles and unexpected situations (Lent & Brown, 2013; Marciniak et al., 2022) and manage their careers, as the modern job market is no longer characterized by a single linear career path (Akkermans & Tims, 2017; Briscoe & Hall, 2006). For this reason, students should not focus solely on acquiring academic credentials but also develop and enact proactive career behavior to optimize their career outcomes (De Vos et al., 2019).

Networking is a central part of proactive career behavior (De Vos et al., 2009). Engaging in networking behavior contributes to the development of a comprehensive labor market-oriented network: the connections between a student and other individuals who can provide them with access to relevant information, resources, and people, help them make the right career choices or find a job that fits their career goals, and make them more satisfied with their careers (Batistic & Tymon, 2017; De Vos & Soens, 2008; Parmentier et al., 2022). However, networking does not come naturally for everyone. Wanberg (2012) found that job seekers often experience discomfort when networking, which raises concerns about the quality of their networks and the potential support they can draw from them. For students, this may lead to uncertainty and caution in making career decisions (Jin et al., 2009; Pordelan & Hosseinian, 2021).

Despite their significant influence on a successful school-to-work transition (e.g., Batistic & Tymon, 2017; Buhl et al., 2018; De Vos et al., 2009), little is known about the structure of graduating HE students' social networks and how they exhibit networking behavior as they prepare for this transition. In-depth research is needed on the various network actors and the behaviors driving the creation, management, and development of labor market-oriented networks (Bridgstock et al., 2019; Buhl et al., 2018; Kokkonen & Almonkari, 2015). Furthermore, most studies limited their view on network actors within a specific context (e.g., Buhl et al., 2018), which implies they ignore the complexity and variation in resources available in students' social environments. Additional in-depth work that crosses the boundaries between contexts may provide a more comprehensive view on who students find relevant, how they access resources from different people, and what pitfalls they face in building a labor market-oriented network (Bridgstock et al., 2019). Such knowledge could help to engage HE students in their school-to-work transitions by providing them with access to relevant networks and professional networking opportunities (Bridgstock et al., 2019). Also, higher education institutions may learn from these insights to accommodate networking opportunities for students by creating environments that help students understand the importance of networking, develop strategic networking skills through career guidance activities, and workplace learning and internships (Batistic & Tymon, 2017; Bridgstock et al., 2019).

Our study fills this gap by focusing on the labor market-oriented networks and networking behavior of HE students preparing to transition to the workforce based on a social network perspective. This perspective does not treat students as independent entities but takes into account the social context and, thus, the interconnectedness between students and others. The social context can offer opportunities or constraints for students' action and behavior in the transition to the labor market (Batistic & Tymon, 2017). By mapping and analyzing students' social networks, this study unravels the structure of labor market-oriented networks and the relevance of

different actors. Furthermore, it explores the networking behavior of students during the school-to-work transition to gain insight into the flow of resources between students and their social environment and the pitfalls and limitations students face when building a network. Five research questions (RQ) are addressed:

- RQ1: What is the structure of the labor market-oriented networks of graduating HE students?
- RQ2: Which network actors are perceived as the most relevant to facilitating the transition to the labor market?
- RQ3: What types of support do graduating HE students receive from their networks as they transition to the labor market?
- RQ4: What actions do graduating HE students take to develop and maintain their labor market-oriented networks?
- RQ5: What pitfalls and limitations do graduating HE students experience when developing and maintaining their labor market-oriented networks?

Theoretical Background

School-to-Work Transition

The transition from HE to the labor market is an important and meaningful period in the lives of young adults. This period is characterized by a high degree of uncertainty because individuals are moving from the known education context to the stillunknown labor market context (Grosemans & Kyndt, 2017). The transition process starts with a preparation phase, the focus of this study, in which students are mainly concerned with becoming ready for the future by defining their expectations and motives (Nicholson & West, 1988). Furthermore, during this phase, students have to make various choices regarding their careers (e.g., kind of occupation, type of organization, type of employment, form of employment, continuity of employment) for the first time (De Vos et al., 2019).

To deal with the uncertainties associated with preparing for the transition to work, proactive career behavior helps students make decisions. Proactive career behavior includes actions that individuals undertake intentionally by anticipating, planning, and striving for a successful school-to-work transition, which can impact their early career outcomes (De Vos et al., 2009; Grant & Ashford, 2008). Career outcomes include accomplishments. A distinction is often made between objective outcomes (e.g., salary, promotions) and subjective outcomes (e.g., job satisfaction; Heslin, 2005; Seibert et al., 2001).

Networking as a Resource Builder

Whether students experience a successful school-to-work transition depends, in part, on the extent to which they can access and mobilize certain resources (Lehmann, 2019; Seibert et al., 2001). Therefore, students need to be proactive in making career

decisions and motivated to develop resources that can facilitate the transition from education to work (De Vos et al., 2009; Halbesleben et al., 2014). When they become part of a social network, individuals are provided with a variety of resources, also referred to as social capital. Bourdieu (1986) defined social capital as "the aggregate of the actual or potential resources which are linked to the possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition" (p. 248). Building on the work of Bourdieu, Lin (1999a) developed the network theory of social capital, which argues that students can access instrumental (i.e., information and influence) and expressive (i.e., emotional support) resources through their social relationships. Given the many resources embedded in social networks, networking behavior is a key competency for graduates (Forret, 2014). This entails developing and maintaining relationships with individuals who can provide social and emotional support, information, career advice, and advocacy (De Vos et al., 2009; Forret & Dougherty, 2004; Lehmann, 2019). Previous research has found a significant association between networking and both objective and subjective career success among students who transition to the workplace (De Vos et al., 2009).

Social Network Perspective

A social network perspective in research distinguishes itself from more traditional research by focusing on social relationships as the binding medium between individual actors (Borgatti & Cross, 2003). In this way, social networks are considered the primary building blocks of the interpersonal world. Studying these relationship patterns can offer insights into how, and to what extent, individuals interact with each other. Furthermore, this social structure provides opportunities and/or constraints for individual behaviors (Seibert et al., 2001). As it considers the dominant role of the social structure, a social network perspective enriches the traditional approaches to conceptualizing and measuring the school-to-work transition; it can explain how networks and networking behavior facilitate students' school-to-work transitions.

Previous research has shown the pivotal role of different types of actors in students' labor market-oriented networks. For example, Kuijpers and Meijers (2012) highlighted the importance of teachers as facilitators, as they deliver information about job-specific competencies and students' strengths and weaknesses. Furthermore, Farace et al. (2014) pointed out the influence of parents, who provide students with relevant information and job search strategies during the school-to-work transition. Buhl et al. (2018) stated that romantic partners and peers are at least as influential as parents. Potential future employers are also important actors; if they prefer specific key competencies in their industry/sector, this might guide students in a certain direction (Biesma-Blanco et al., 2007).

To better understand the mechanisms involved in the networking process, it is necessary to have an understanding of the structure and composition of a social network (Mishra, 2020). This paper identifies three key characteristics of social networks.

Network Size

The first key characteristic of a social network is its size, which simply refers to the number of actors (Seibert et al., 2001). Brass et al. (2004) argued that individuals who have more labor market-oriented relations relative to others receive more opportunities to share knowledge and receive more social support. Van Hoye et al. (2009) found that the larger an individual's network, the more they spend on networking behavior. This implies that those who are more committed to networking develop larger social networks and have more access to information. According to Forret (2014), access to information can enhance the transition to the labor market, both in terms of finding a job and successfully integrating into an organization.

Relationship Strength

The second key characteristic of a social network is the strength of the individual relationships or ties within it. Specifically, tie strength concerns the degree of proximity between two individuals (Granovetter, 1973) and can be measured by the length, duration, and frequency of their contact (Marsden & Campbell, 2012). Here, a distinction can be made between so-called strong ties (e.g., family, friends) and weak ties (e.g., acquaintances). Strong ties are more easily available than weak ties, resulting in a higher frequency of contact and information exchange (Reingen & Kernan, 1986).

However, weak ties provide significant advantages in a competitive environment. Granovetter (1973) and Seibert et al. (2001) have argued that weak ties are more likely than strong ties to provide unique information, such as new job opportunities, because they often act as bridges between different social circles and contexts. Although previous studies have shown the importance of weak ties in a complex labor market (e.g., Rajkumar et al., 2022), people remain more likely to seek information from strong ties, who provide emotional support and can help with work exploration and decision-making (Van Hoye et al., 2009).

Network Diversity

The third key characteristic of a social network is the diversity among network actors. Having a diverse composed network is linked to an increased diversity of network resources (Van Hoye et al., 2009). However, according to the principle of homophily, individuals are more likely to build relationships with people who are similar to themselves (McPherson et al., 2001), which leads to less diverse networks. The diversity (or equity) of a network can be measured by analyzing various characteristics of network actors, such as age, gender, and qualifications. Further, Adler and Kwon (2002) have argued that the personal characteristics of network actors reflect the quality of resources they can offer. For example, individuals with higher educational, occupational, or socio-economic status tend to provide more valuable information about the labor market (Aguilera, 2002). In this regard, the effectiveness of HE students' networking behavior depends on the characteristics of the network actors they are attracted to (Lin, 1999b).

Method

Context and Participants

In total, 12 graduating HE students in Flanders, Belgium, who were about to make the transition to the labor market, participated in this study. Students who were to continue full-time education were not eligible to participate. To select eligible participants, snowball sampling was used: the researchers first approached graduating students through their own networks. Subsequently, these respondents acted as informants and helped establish connections with other eligible students. To prevent the initial contacts from having an excessive influence over the later contacts, sampling was conducted in three waves (see Fig. 1; Noy, 2008).

Table 1 provides an overview of the background characteristics of the students. The sample consisted of ten male and two female students, who were, on average, 23 years old. Seven participants were studying to obtain a professional bachelor's degree and five were pursuing a master's degree. Most of the students (n=10) already completed an internship period.

The data collection of this study took place in the year of 2021, during the students' final semester. This meant that students were able to reflect on their labor market-oriented networks and networking behavior up to approximately three months before graduation.

Procedure

To answer the research questions, a mixed method social network analysis (MMSNA) approach was used. The MMSNA approach allows a researcher to map the structure and composition of social networks (i.e., network size, tie strength, diversity) quantitatively. Furthermore, in-depth information can be gathered about the meaning of interactions and the development of relationships through qualitative methods (Froehlich et al., 2020). To collect network data, the concentric circles (CC) method

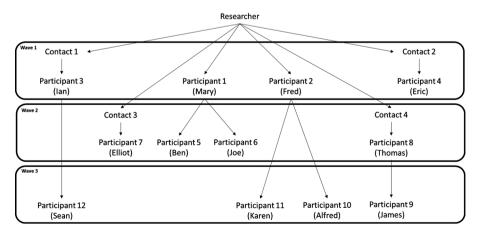


Fig. 1 Sampling Strategy

Table 1 Participant background characteristics Image: Characteristic state	Participant	Gender	Age	Degree	Study discipline	Intern- ship
	Mary	Female	23	Master	Cultural anthropol- ogy	Yes
	Fred	Male	23	Bachelor	Accoun- tancy	Yes
	Ian	Male	21	Bachelor	Physical education	Yes
	Eric	Male	22	Bachelor	Computer sciences	No
	Ben	Male	23	Bachelor	Digital media manage- ment	Yes
	Joe	Male	24	Bachelor	Business manage- ment	Yes
	Elliot	Male	24	Master	Commu- nication sciences	Yes
	Thomas	Male	23	Master	Office Manage- ment	Yes
	James	Male	23	Bachelor	Business manage- ment	Yes
	Alfred	Male	23	Master	Physical education	Yes
	Karen	Female	25	Master	Sociology	No
	Sean	Male	24	Bachelor	Physical education	Yes

Entering the Labor Market: Networks and Networking Behavior in the...

developed by Van Waes and Van den Bossche (2020) was used. This method maps egocentric networks, each of which includes the personal network of a central actor (ego) and his/her connections (ties) with other network actors (alters). Within this study, graduating students' personal networks (ego) were examined with regard to people (alters) they considered relevant when transitioning to the labor market. Egocentric networks allow respondents to define their own network boundaries (Cross & Cummings, 2004). In this way, it is possible to obtain a broad picture of all the contacts who students view as relevant in their transition to the labor market without being limited to a specific context—for example, only including contacts within the educational institution (Van Waes & Van den Bossche, 2020). The CC method was applied in two phases, as described in the following sections.

Phase 1: Mapping Labor Market-Oriented Networks

In the first phase, the focus was on measuring network size and identifying the relevance of the network actors identified. Each participant was asked to independently create a network map (see Fig. 2). In creating the network map, respondents had to follow several steps supported by an instructional guide. First, the principle of name-

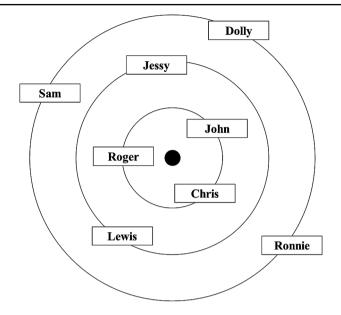


Fig. 2 Example of an Anonymized Network Map

generating was applied (Van Waes & Van den Bossche, 2020). Each respondent (ego) named and wrote down all of the network actors relevant to their transition to the labor market on a Post-it Note. They were not required to distinguish between face-to-face conversations, phone calls, messages, e-mails, or other means of interaction.

Second, respondents stuck each Post-it Note to a large sheet of paper (A3 or A4), which included three concentric circles drawn around a black dot. The central black dot represented the respondent (ego) and the concentric circles indicated the level of relevance to the student's transition to the labor market. In other words, individuals in the smallest circle had the highest level of relevance; each larger circle indicated a correspondingly lower degree of relevance. Respondents were given five days to draft their labor market-oriented network. Once respondents created their networks, they photographed them and sent them to the researcher one day before the second phase began.

Based on the network maps, a dataset could be developed with information about the respondents' social network (n=12) and the network actors who were part of this network (n=97). More specifically, variables regarding to network size (i.e., the total number of network actors) and the relevance of network actors (i.e., positioning on the network map) were created.

Phase 2: Semi-Structured Interviews

In the second phase, semi-structured video interviews with all of the respondents were conducted. They followed an interview guide. The first part of the interview aimed to advance knowledge of (the relationship with) identified network actors using the principle of name-interpreting (Van Waes & Van den Bossche, 2020). For

this purpose, network actors (alters) were treated separately: questions were asked regarding their background characteristics, the strength of the relationship, and the specific content and meaning of interactions. In the second part of the interviews, respondents were asked questions about the level of support they experienced and the development of labor market-oriented networks (i.e., actions taken to develop and maintain a network; pitfalls and limitations).

On average, the interviews lasted 37 min. The shortest was approximately 28 min, and the longest was approximately 51 min. All interviews were recorded and transcribed verbatim. Before the start of the interview, active informed consent was obtained from all participating students. In the transcripts and on the network maps, the names of respondents and network actors (alters) were replaced with codenames to ensure anonymity.

Both quantitative and qualitative data were extracted from the interviews. Quantitative data covered relationship strength and diversity. To provide insight into relationship strength, respondents answered several rating scales for each of the underlying variables (i.e., length, frequency, and duration). Length of contact referred to when the student began having labor market-oriented conversations with a certain network actor. It included four response options, ranging from "since graduating from secondary education" to "since graduating from HE." A special note was made in cases where there was no labor market-oriented contact yet ("no contact yet"). Frequency of interaction indicated how often students interacted with the individuals in their network about the school-to-work transition. Eight response options were provided, ranging from "daily" to "less than three times per semester." Duration referred to the average time a labor market-oriented conversation lasted; it was defined in terms of minutes. Regarding network diversity, participants had to provide information about the gender (i.e., male, female, X) and qualifications (i.e., no degree, secondary education, professional bachelor, master) of each network actor.

Qualitative data concerned information about the perceived level of support students receive from their networks, the actions they undertook to develop a network, and the possible pitfalls or limitations they experienced.

Analysis

Descriptive Quantitative Analyses

Descriptive quantitative data was extracted from the network maps regarding network size (i.e., the total number of network actors mentioned) and relevance of network actors (i.e., the position of actors in a particular circle). To answer the first research question (RQ1) regarding the structure of the labor market-oriented networks, we focused on three network characteristics.

First, *network size* was determined by counting the number of network actors in each network. Subsequently, different types of network actors were distinguished based on their relationship to the respondent. R software was used to perform descriptive analyses (i.e., mean, median, standard deviation, interquartile range (IQR), frequency). Second, to gain insight into *relationship strength*, the different responses for length and frequency were summarized based on absolute and relative frequencies.

Absolute frequencies described the number of times a particular response category was observed, while relative frequency compared this value to the total number of responses for that variable. To summarize responses related to duration, the mean score was used. Third, for *network diversity*, the underlying variables gender and qualifications were summarized using relative frequencies (i.e., the number of times a particular response was observed to occur in relation to the total number of responses for that variable). The age of network actors was summarized using the mean and standard deviation.

To answer RQ2, regarding the relevance of network actors, absolute and relative frequencies were used to show how often a particular cluster of network actors was placed in a particular circle on a network map, and thus the number of times a specific type of actor was found to be more or less relevant.

Qualitative Analyses

To answer RQ3, RQ4, and RQ5, inductive coding was conducted on the qualitative interview data. First, the transcribed interviews (conducted in Phase 2) were imported into NVivo 12 software. Second, based on content analysis, underlying categories related to (1) perceived support, (2) actions taken to develop and maintain a labor market-oriented network, and (3) pitfalls and limitations were determined. A matrix query provided an overview and compared data fragments to those of other respondents.

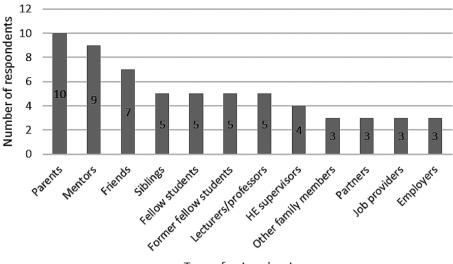
Results

The Labor Market-Oriented Networks

Network Size

The mean number of network actors (alters) in a labor market-oriented network of graduating HE students was approximately 8, with a range of 4 to 13 (IQR=7–10 actors). In general, 13 types of actors were distinguished (see Fig. 3). Participants' parents were the most frequently mentioned (83%), followed by mentors at internships (75%) and close friends (58%). Other actors were mentioned by less than half of the respondents.

Considering the origin of the relationship between the HE student and the network actor, three contexts emerged. First, network actors were found within the *personal context*. Within this context, graduating students discussed their transition to the labor market with their (1) parents, (2) partners, (3) siblings, (4) other family members such as grandparents, uncles/aunts, and cousins, and (5) friends who were not fellow students. Second, network actors were found within the *education context*. Herein, labor market-oriented interactions took place between graduating students and (6) fellow students, (7) former students, (8) internship supervisors associated with the educational institution, and (9) lecturers/professors. Finally, network actors within the *work context* were distinguished. This context included (10) job providers,



Type of network actors

Fig. 3 Types of Network Actors

Table 2Length of labor market- oriented contacts with identified alters $(n=97)$	Length of contact	n	%
	After graduating from SE	14	14
	Since Early years in HE	21	22
	Since final-year in HE	49	51
	No contact yet	13	13

Note SE=Secondary Education, HE=Higher Education

such as recruiters or contacts from social platforms (e.g., LinkedIn), (11) students' mentors at an internship (i.e., employees at the workplace who guided the student in completing daily tasks), (12) employers, and (13) colleagues at internships or jobs.

Relationship Strength

Regarding the *length of labor market-oriented contacts*, graduating students indicated that most labor market-oriented contacts began during their final year of HE, just before the school-to-work transition (see Table 2). One noticeable exception was labor market-oriented conversations with parents, which often started after they graduated from secondary education. However, respondents indicated that these interactions included specific choices they had to make during their HE studies, which were indirectly related to labor market-oriented decisions. It is also striking that some respondents placed actors on their network maps although they had not had any labor market-oriented conversations with them. Usually, this concerned their internship mentors, with whom they usually discussed the internship itself at the time of data collection. However, respondents expected these interactions to move in a more labor market-oriented direction at the end of the internship (which was sometimes outside of the data collection period). Regarding the *frequency of labor market-oriented interactions*, students interacted most frequently with network actors in the personal context and with (former) fellow students (ranging from "weekly" to "monthly"). They had few conversations with their internship supervisors, lecturers/professors, or network actors from the work context. Respondents mostly labeled their labor market-oriented interactions with these network actors as "on hold," indicating that they had not had any at the time of data collection. However, students viewed these actors as relevant to their transition to the labor market and tried to stay connected with them for possible future opportunities.

Finally, regarding the *duration of labor market-oriented conversations*, the longest conversations were with network actors in the education context (M=33 min). Conversations with internship supervisors lasted the longest (M=45 min). Respondents indicated that these conversations were often part of an end-of-internship reflection meeting. Next, conversations with actors in the personal context (M=25 min) lasted longer on average than those with actors in the work context (M=17 min).

Network Diversity

Table 3 shows that both male and female respondents predominantly placed network actors of the same gender within their networks.

Regarding the ages of the network actors, a wide range can be noted. The youngest network actor listed was 21 years old and the oldest was 85 years old (a sister and a grandfather, respectively). None of the reported network actors were younger than the respondents themselves. The average age across actors (n=97) and contexts was 36 years (SD=13.15). When the contexts are considered separately, it is notable that the mean age is highest within the work context (M=38.37, SD=10.31) and lowest within the education context (M=31.69, SD=11.20). The mean age within the personal context was 36 years (SD=15.02). Regarding qualifications, highly qualified actors were placed in network maps the most often (84%, n=81, N=97). In exceptional cases, network actors did not have a degree or were studying to obtain one (9%, n=9, N=97). They were mostly from a personal context. For a limited number of network actors, respondents did not know whether they had obtained a degree (7%, n=7, N=97).

Despite the variation in the age of network actors and the large proportion of highly qualified network actors of the same gender, respondents did not explicitly indicate that these characteristics caused variation in labor market-oriented interactions. Rather, they referred to the context in which different types of network actors were located to explain the differences in interaction (see "Perceived Support").

Table 3 Gender Differences Be-	Respondent	Network actor=Man	Network actor=Woman
tween Respondents' Networks	Man (n=10)	68.30%	31.70%
	Woman $(n=2)$	21.00%	79.00%

Relevance of Network Actors

Respondents indicated two main factors they used to determine the relevance of a certain network actor and, thus, their placement on the network map. First, respondents valued their personal relationships with the network actors and their approachability. One of the respondents, Ian, stated, "*The more personal the relationship, the easier it is to contact them and ask some questions about the transition to the labor market.*" Second, graduating students saw merit in network actors' working in the sector/industry in which they wanted to work. Another respondent, Ben, stated, "*These people can deliver me the most accurate advice about the business community where I want to end up.*"

Table 4 shows the frequency with which certain actors were placed in particular circles on the network maps. The individuals who were placed most often in the inner circle, and thus considered the most relevant, were the respondents' parents. In addition, respondents' romantic partners were considered very relevant. Only a limited number of respondents (n=3) referred to their partner, but they all placed them in the inner circle. Furthermore, respondents' friends were mentioned the most frequently (n=20), but rarely identified as very relevant. Within the education context, respondents mainly named former fellow students and lecturers/professors as very relevant. In the work context, this role was filled by employers and colleagues.

Perceived Support

The type of support that graduating students experienced regarding their transition to the labor market depended on the type of network actor. First, conversations with

Context/Cluster	Very relevant (inner circle)		Relevant (middle circle)		Less relevant (outer circle)	
	n	%	n	%	n	%
Personal						
Parents	7	70	2	20	1	10
Siblings			5	100		
Partner	3	100				
Other family			3	38	5	63
Friends	3	15	9	45	8	40
Education						
Fellow student	1	17	4	67	1	17
Former fellow student	4	50	4	50		
Supervisor internship			2	50	2	50
Lecturer/professor	3	43	2	29	2	29
Work						
Job provider	2	29	1	14	4	57
Employer	2	67	1	33		
Colleague	3	75	1	25		
Mentor internship	4	33	5	42	3	25

 Table 4 Relevance of Network Actors

Note Blank spaces mean there is no information available

actors in the personal context were mostly focused on the respondents' interests and how they envisioned their future. In addition, parents and other family members encouraged respondents to be proactive and take action to facilitate a successful transition. Also, respondents appreciated the honesty of their parents when they were critical of their future plans by providing a realistic image of the transition to the labor market based on their own experiences. Respondents tended to tolerate their parents' advice and generally labeled them the most trustworthy network actors. Other forms of support that respondents received from network actors in the personal context included advice on work-life balance, discussions about future ambitions, and avenues for finding jobs.

Second, in the education context, lecturers/professors and internship supervisors provided support related to work opportunities and network expansion. In addition, both played a pivotal role in encouraging self-reflection. The graduating students indicated that they engaged in discussions with their lecturers/professors and internship supervisors about their strengths, weaknesses, and opportunities for growth during reflections at the end of their internships. Other actors within the education context included former fellow students. Respondents indicated that they mainly listened to the experiences and practical tips these actors provided about the transition to the labor market, in addition to receiving advice about work-life balance. Because these former students were already working, some respondents indicated that they viewed them as role models. Furthermore, they provided sector/industry-specific information, such as the latest trends and developments, and shared job opportunities.

Third, in the work context, internship mentors served as role models. In addition, they considered their internships as "stepping stones" to employment and cited two reasons for this. First, some of the graduating students hoped to receive a job offer after finishing their internship. Second, respondents believed that their mentors' networks would be valuable for them when they were looking for a job. They also believed their current employers could help them with future job opportunities. They indicated that they would mention their mentors and employers as references on their resumes. Further, job providers were network actors in the work context, who often complemented the proactive behavior of graduating students by initiating labor market-oriented conversations. These conversations tended to focus exclusively on work opportunities. One of the respondents, Fred, explained how he experienced support from a job provider:

They contacted me via LinkedIn and asked for my phone number. Then we talked about my experience and about my qualifications. They immediately explained what they had to offer and [asked] if I was interested.

Actions Taken to Develop and Maintain a Network

The results showed that respondents developed and maintained their networks in three ways. First, the most common answer given by respondents (n=6) was that labor market-oriented networks developed spontaneously as they maintained their existing networks. One of the respondents, Sean, stated, "Maintaining one's own

network will also cause network expansion over time. "In this regard, the graduating students indicated that they did not take any concrete, purposeful actions to connect with other people, but tried to stay connected with the people they already knew. They expected that, over time, they would connect with other individuals and expand their social network.

Second, respondents (n=5) who did indicate taking action to connect with others often mentioned the use of social media channels, such as LinkedIn. Their actions were mainly focused on finding job opportunities by connecting with relevant people in their desired sector/industry. Furthermore, one of the respondents, Elliot, referred to the influence of the COVID pandemic, which caused digital forms of interaction to become more common:

I think now, due to COVID, you really have to look for more digital networking opportunities and I think LinkedIn is a perfect example of how that can be done efficiently. I also know some friends who actually got a job opportunity through online forums.

Third, some respondents (n=4) referred to attending job events as a way to further develop a labor market-oriented network, as well as proactively contacting lecturers/ professors at their educational institution.

Pitfalls and Limitations in Building a Network

One-third of the respondents (4 out of 12) did not experience any pitfalls or limitations in building a network during the school-to-work transition. The remaining eight respondents experienced various difficulties. First, some students (n=3) referred to a lack of awareness about who to contact to facilitate their transition to the labor market. This was mostly due to the lack of a clear vision of their future. Another group of respondents (n=5) exhibited reluctance to contact people. Personal characteristics, such as timidity, played a critical role in this, as explicitly mentioned by Eric: "It is just that I am too shy and don't feel comfortable to approach someone directly. I'm a bit more reserved anyway." In addition to timidity, the respondents also indicated that the strength of their relationships impacted their reluctance. They were more willing to engage in conversations with strong ties than weak ties.

Discussion and Conclusion

Building on the social network perspective, this study aimed to map and analyze the labor market-oriented network and networking behavior of graduating HE students making the transition to work. For this purpose, a mixed method social network analysis approach was used, which encompasses both quantitative and qualitative procedures to gain insight into the structure of social networks and the position of relevant network actors. Furthermore, it uncovers how social networks are created and maintained. More specifically, the concentric circles method was used to (1) map egocentric networks of HE students (n=12) and their connections with other relevant network actors (n=97) in making the school-to-work transition, and (2) provide more in-depth information about the structure and development of the labor market-oriented networks of graduating HE students, as well as the support they provide. Based on the findings, we generated theoretical and practical implications for both the education and labor market (research) context.

Theoretical Implications

First, this study expands the literature on the importance of social networks in the school-to-work transition. By conducting egocentric networks, respondents were able to construct their own network and obtain a broad picture of all the contacts who they consider as relevant in their transition to the labor market without being limited to a specific context (Cross & Cummings, 2004; Van Waes & Van den Bossche, 2020). As a result, we found that students seek labor market-oriented interactions with different types of network actors in the personal, education, and work contexts. Based on previous research, these three contexts provide both instrumental and expressive resources (Biesma-Blanco et al., 2007; Buhl et al., 2018; Farace et al., 2014; Kuijpers & Meijers, 2012). However, most studies have focused on network actors from a specific context (e.g., Buhl et al., 2018), which implies that most career frameworks are monodisciplinary. The exploratory work of this study represents one of the first investigations that explicitly mentions the importance of all these contexts. Considering these findings, students' labor market-oriented networks and networking behavior should be approached and examined in terms of multiple (disciplinary) perspectives (e.g., psychology, educational sciences, management) to enable a thorough understanding of personal, educational, and work contexts.

Second, the qualitative procedures of the MMSNA approach enabled us to complement the descriptive findings on the network structure and composition with more in-depth insight into the social relations between the students and network actors, and the corresponding flow of resources within a labor market-oriented network. This is vital for the field of research on career competencies, which has provided little understanding of the dynamics and characteristics of social relationships or the associations between relationships and the resources to which individuals have access (e.g., Bridgstock et al., 2019). In general, the resources aligned with Lin's (1999a) categorization, containing instrumental and expressive resources. However, the flow of certain resources depended mainly on one specific network characteristic: the strength of the relationship between the student and the actor. Students received more practical and job-specific support from weak ties, such as lecturers/professors, internship supervisors, and colleagues. This included help with job searches, selfreflection processes, network expansion, or advocacy for work opportunities.

However, they mainly received social and emotional support from their strong ties, such as parents, romantic partners, friends, and fellow students. These actors were important in that they encouraged proactivity and career orientation, provided advice on work-life balance, and shared relevant experiences about the school-to-work transition and career decisions. The association between relationship strength and the flow of resources confirms the findings of previous research (e.g., Van Hoye et al., 2009). Although labor market-oriented contact is more common with strong ties than weak ties (Reingen & Kernan, 1986; Van Hoye et al., 2009), this study con-

tributes to the existing body of knowledge by highlighting the importance of weak ties during the school-to-work transition. These relationships can provide unique information and act as bridges between different social contexts (Granovetter, 1973; Seibert et al., 2001).

Third, previous research has offered little knowledge about the creation, management, and development of labor market-oriented networks (e.g., Buhl et al., 2018). This study has broadened the understanding of students' networking behavior and how they develop and maintain a labor market-oriented network. It distinguished different types of actions. Students indicated that they try to stay connected with existing network actors and protect the social resources to which they already have access. In addition, respondents wanted to acquire new social resources—for example, by using social media channels such as LinkedIn, contacting lecturers/professors, and interacting with job providers at events. These findings imply that students are motivated to preserve the social resources they have and try to acquire new ones; furthermore, they recognize networking as an essential way to accomplish this (Batistic & Tymon, 2017; De Vos et al., 2009). This also implies that students are concerned about the quality of their networks and identifying those who can provide relevant support (Wanberg, 2012).

Fourth, this study enriches the existing knowledge base on networking behavior, as previous research has not provided insight into the pitfalls and limitations graduating students face in building a labor market-oriented network. The findings of our study showed that not everyone feels confident engaging in networking behavior. In general, two main constraints were found. First, the respondents indicated that they do not always know who to contact to support their transition to the labor market, which may be influenced by the extent to which they already have a clear career orientation and goals (Zhang et al., 2022). Second, both intrapersonal and interpersonal characteristics impact whether respondents demonstrate networking behavior. The two aspects cited were relationship strength and timidity. Regarding relationship strength, individuals primarily engaged with their strong ties (Van Hoye et al., 2009). Concerning timidity, previous research by Forret and Dougherty (2001) has stated that extroverts exhibit more networking behavior than introverts. Therefore, both the characteristics of the relationship and the students themselves are important (Jin et al., 2009).

Practical Implications

Previous research has emphasized the importance of access to relevant networks and professional networking opportunities in preparing for the school-to-work transition but has not provided clear guidelines on how to engage in networking behavior or how to create an environment that supports it (Batistic & Tymon, 2017; Bridgstock et al., 2019). This study confirmed that it is imperative for graduating HE students to have opportunities to engage in networking behavior and build a comprehensive labor market-oriented network, as well as know how to do so effectively. Furthermore, based on the findings, all three of the identified contexts (i.e., personal, education, and work) should be aware of their role in students' school-to-work transitions. The interconnectedness of various network actors in the three contexts provides stu-

dents with access to relevant information, resources, and people, which can help them make the right career choices and find an appropriate job (Buhl et al., 2018; De Vos & Soens, 2008; Forret, 2014; Parmentier et al., 2022).

However, networking does not always occur strategically and/or automatically. The results of our study showed that not all of the participating students engage proactively in networking behavior during their school-to-work transition, which may have an impact on the career choices they make and the career outcomes they obtain (De Vos & Soens, 2008; Pordelan & Hosseinian, 2021). To increase the likelihood of a successful school-to-work-transition, students should be stimulated to be proactive in constructing a labor market-oriented network and obtaining resources that can help in making the right career choices and finding a job that fits their career objectives (De Vos et al., 2009; Grant & Ashford, 2008; Halbesleben et al., 2014). In this regard, higher education institutions can play a pivotal role as they can create environments that help students understand the importance of networking, develop strategic networking skills through career guidance activities, and interact with different actors in an approachable way. As indicated by Batistic and Tymon (2017), students can develop labor market-oriented networks and networking skills through activities included in the curriculum or extracurricular activities, such as workshops on career competencies, and hone them through work-based learning and internships. In addition, the results of this study point to the influential role of the internship period to capitalize on the connection between education and work. Internships are often cited as a pivotal moment in the school-to-work transition, so they can contribute powerfully to students' career development and focus.

Limitations and Recommendations for Future Research

Although this study has made an important contribution to the field by providing insight into the labor market-oriented networks and networking behavior of graduating HE students, some limitations must be acknowledged. It set out to explore the networks and networking behavior of graduating students in general and achieved data saturation. However, with only two female students the diversity of the sample was rather limited. Therefore, no conclusions could be drawn about gendered patterns in graduates' social networks and networking behavior, although it can affect social interactions (Friebel et al., 2021). Further, previous research identified differences in the structure of the social networks of different socioeconomic groups (De Schepper et al., 2023). To provide tailored support, there is a need to understand these differences more thoroughly. Therefore, future research could consider purposefully sampling respondents to examine differences in labor market-oriented networks and networking behavior between different types of students (e.g., in terms of their discipline, educational track, socio-economic background, gender).

Another limitation of this study concerns the cross-sectional nature of the data collection. The transition from higher education to the labor market proceeds in several phases. In addition, social networks are dynamic and change over time. Despite the fact that this study provides clear insights into the social networks and networking behavior of graduating students during the preparatory phase of the school-to-work transition (Nicholson & West, 1988), future research could establish a more comprehensive understanding of the dynamics of labor market-oriented networks throughout the entire transition process by collecting longitudinal data. In regard to network change, future research could gain insight into graduates' intention and agency in developing networks. To date, current literature fails to answer to which extent graduates' networks are a result of their social environment or a product of networking behavior.

In conclusion, this study provides in-depth insight into the labor market-oriented networks and networking behavior of graduating HE students who are making a transition from school to work. However, there is still much to explore related to the topic. Social networks are an important aspect of the school-to-work transition, but it is not evident for every student to engage in networking behavior effectively. Therefore, it is necessary to further explore networks and networking behavior to give students the tools necessary to smoothly enter the complex and changing labor market and find sustainable careers.

Funding No funding was received for conducting this study.

Data Availability Supporting data is not available as the participants of this study did not agree for their data to be shared publicly.

Declarations

Conflict of Interest We have no known conflict of interest to disclose.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/ licenses/by/4.0/.

References

- Adler, P. S., & Kwon, S. W. (2002). Social capital: Prospects for a new concept. Academy of Management Review, 27(1), 17–40. https://doi.org/10.5465/amr.2002.5922314.
- Aguilera, M. B. (2002). The impact of social capital on labor force participation: Evidence from the 2000 social capital benchmark survey. *Social Science Quarterly*, 83, 853–874. https://doi. org/10.1111/1540-6237.00118.
- Akkermans, J., & Tims, M. (2017). Crafting your career: How career competencies relate to career success via job crafting. *Applied Psychology*, 66(1), 168–195. https://doi.org/10.1111/apps.12082.
- Batistic, S., & Tymon, A. (2017). Networking behaviour, graduate employability: A social capital perspective. *Education+Training*, 59(4), 374–388. https://doi.org/10.1108/et-06-2016-0100.
- Biesma-Blanco, R., Pavlova, M., Van Merode, F., & Groot, W. (2007). Using conjoint analysis to estimate employers preferences for key competencies of master level Dutch graduates entering the public health field. *Economics of Education Review*, 26, 375–386. https://doi.org/10.1016/j. econedurev.2006.01.004.

- Borgatti, S. P., & Cross, R. (2003). A relational view of information seeking and learning in social networks. *Management Science*, 49(4), 432–445. https://doi.org/10.1287/mnsc.49.4.432.14428.
- Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). Greenwood Press.
- Brass, D. J., Galaskiewicz, J., & Greve, H. R. (2004). Taking stock of networks and organizations: A multilevel perspective. Academy of Management Journal, 47(6), 795–817. https://doi. org/10.2307/20159624.
- Bridgstock, R., Jackson, D., Lloyd, K., & Tofa, M. (2019). Social connectedness and graduate employability: Exploring the professional networks of graduates from business and creative industries. In R. Bridgstock, & N. Tippett (Eds.), *Higher education and the future of Graduate Employability* (p. 296). Edward Elgar Publishing. https://doi.org/10.4337/9781788972611.
- Briscoe, J. P., & Hall, D. T. (2006). The interplay of boundaryless and protean careers: Combinations and implications. *Journal of Vocational Behavior*, 69(1), 4–18. https://doi.org/10.1016/j.jvb.2005.09.002.
- Buhl, H. M., Noack, P., & Kracke, B. (2018). The role of parents and peers in the transition from university to work life. *Journal of Career Development*, 45(6), 523–535. https://doi. org/10.1177/0894845317720728.
- Cross, R., & Cummings, J. N. (2004). Tie and network correlates of individual performance in knowledgeintensive work. Academy of Management Journal, 47(6), 928–937. https://doi.org/10.5465/20159632.
- De Schepper, A., Clycq, N., & Kyndt, E. (2023). Social networks in the transition from higher education to work: A systematic review. *Educational Research Review*, 40, 100551. https://doi.org/10.1016/j. edurev.2023.100551.
- De Vos, A., & Soens, N. (2008). Protean attitude and career success: The mediating role of self-management. Journal of Vocational Behavior, 73(3), 449–456. https://doi.org/10.1016/j.jvb.2008.08.007.
- De Vos, A., Clippeleer, I., & Dewilde, T. (2009). Proactive career behaviours and career success during the early career. *Journal of Occupational and Organizational Psychology*, 82(4), 761–777. https://doi. org/10.1348/096317909x471013.
- De Vos, A., Akkermans, J., & van der Heijden, B. (2019). From occupational choice to career crafting. In H. Gunz, M. Lazarova, & W. Mayrhofer (Eds.), *The Routledge Companion to Career Studies* (pp.128–142). https://doi.org/10.4324/9781315674704-9.
- Draaisma, A., Meijers, F., & Kuijpers, M. (2018). The development of strong career learning environments: The project 'Career Orientation and Guidance' in Dutch vocational education. *Journal of Vocational Education & Training*, 70(1), 27–46. https://doi.org/10.1080/13636820.2017.1392995.
- Farace, S., Mazzotta, F., & Parisi, L. (2014). Characteristics of parents and the unemployment duration of their offspring. Evidence from Italy. In M. A. Malo, & D. Sciulli (Eds.), *Disadvantaged workers* (pp. 149–179). Springer.
- Forret, M. L. (2014). Networking as a job-search behavior and career management strategy. In U. C. Klehe, & van E. Hooft (Eds.), *The Oxford Handbook of Job loss and job search* (pp. 275–292). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199764921.013.022.
- Forret, M. L., & Dougherty, T. W. (2001). Correlates of networking behavior for managerial and professional employees. *Group & Organization Management*, 26(3), 283–311. https://doi. org/10.1177/1059601101263004.
- Forret, M. L., & Dougherty, T. W. (2004). Networking behaviors and career outcomes: Differences for men and women? *Journal of Organizational Behavior*, 25(3), 419–437. https://doi.org/10.1002/job.253.
- Friebel, G., Lalanne, M., Richter, B., Schwardmann, P., & Seabright, P. (2021). Gender differences in social interactions. *Journal of Economic Behavior & Organization*, 186, 33–45.
- Froehlich, D. E., Van Waes, S., & Schäfer, H. (2020). Linking quantitative and qualitative network approaches: A review of mixed methods social network analysis in education research. *Review of Research in Education*, 44(1), 244–268. https://doi.org/10.3102/0091732x20903311.
- Granovetter, M. (1973). The strength of weak ties. American Journal of Sociology, 78, 1360–1380. https:// doi.org/10.2307/2776392.
- Grant, A. M., & Ashford, S. J. (2008). The dynamics of proactivity at work. *Research in Organizational Behavior*, 28, 3–34. https://doi.org/10.1016/j.riob.2008.04.002.
- Grosemans, I., & Kyndt, E. (2017). Transition from higher education to the labour market: State of the art. In E. Kyndt, V. Donche, K. Trigwell, & S. Lindblom-Ylänne (Eds.), *Higher education transitions: Theory and research* (pp. 209–218). Routledge.
- Halbesleben, J. R. B., Neveu, J. P., Paustian-Underdahl, S. C., & Westman, M. (2014). Getting to the COR: Understanding the role of resources in conservation of resources theory. *Journal of Management*, 40(5), 1334–1364. https://doi.org/10.1177/0149206314527130.

- Heslin, P. A. (2005). Conceptualizing and evaluating career success. *Journal of Organizational Behavior*, 26(2), 113–136. https://doi.org/10.1002/job.270.
- Jin, L., Watkins, D., & Yuen, M. (2009). Personality, career decision self-efficacy and commitment to the career choices process among Chinese graduate students. *Journal of Vocational Behavior*, 74(1), 47–52. https://doi.org/10.1016/j.jvb.2008.10.002.
- Kokkonen, L., & Almonkari, M. (2015). Teaching networking: An interpersonal communication competence perspective. In J. Jalkanen, E. Jokinen, & P. Taalas (Eds.). *Voices of Pedagogical Development* (pp. 31–56). Research-publishing.net https://doi.org/10.14705/rpnet.2015.000286.
- 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. https:// doi.org/10.1080/03075079.2010.523144.
- Lehmann, W. (2019). Forms of capital in working-class students' transition from University to employment. Journal of Education and Work, 32(4), 347–359. https://doi.org/10.1080/13639080.2019.161 7841.
- Lent, R. W., & Brown, S. D. (2013). Social cognitive model of career self-management: Toward a unifying view of adaptive career behavior across the life span. *Journal of Counseling Psychology*, 60(4), 557. https://doi.org/10.1037/a0033446.
- Lin, N. (1999a). Building a network theory of social capital. Connections.
- Lin, N. (1999b). Social Networks and Status Attainment. Annual Review of Sociology, 25, 467–487. https://doi.org/10.2307/223513.
- Marciniak, J., Johnston, C. S., Steiner, R. S., & Hirschi, A. (2022). Career preparedness among adolescents: A review of key components and directions for future research. *Journal of Career Development*, 49(1), 18–40. https://doi.org/10.1177/0894845320943951.
- Marsden, P. V., & Campbell, K. E. (2012). Reflections on conceptualizing and measuring tie strength. Social Forces, 91(1), 17–23. https://doi.org/10.1093/sf/sos112.
- McPherson, M., Smith-Lovin, L., & Cook, J. (2001). Birds of a feather: Homophily in social networks. Annual Review of Sociology, 27, 415–444. https://doi.org/10.2307/2678628.
- Mishra, S. (2020). Social networks, social capital, social support and academic success in higher education: A systematic review with a special focus on 'underrepresented' students. *Educational Research Review*, 29, 100307. https://doi.org/10.1016/j.edurev.2019.100307.
- Nicholson, N., & West, M. A. (1988). Managerial job change: Men and women in transition. Cambridge University Press. https://doi.org/10.1017/CBO9780511522116.
- Noy, C. (2008). Sampling knowledge: The hermeneutics of snowball sampling in qualitative research. *International Journal of Social Research Methodology*, 11(4), 327–344. https://doi. org/10.1080/13645570701401305.
- Parmentier, M., Pirsoul, T., & Nils, F. (2022). Career adaptability profiles and their relations with emotional and decision-making correlates among Belgian undergraduate students. *Journal of Career Development*, 49(4), 934–950. https://doi.org/10.1177/08948453211005553.
- Pordelan, N., & Hosseinian, S. (2021). Online career counseling success: The role of hardiness and psychological capital. *International Journal for Educational and Vocational Guidance*, 21(3), 531–549. https://doi.org/10.1007/s10775-020-09452-1.
- Rajkumar, K., Saint-Jacques, G., Bojinov, I., Brynjolfsson, E., & Aral, S. (2022). A causal test of the strength of weak ties. *Science*, 377(6612), 1304–1310. https://doi.org/10.1126/science.abl4476.
- Reingen, P. H., & Kernan, J. B. (1986). Analysis of referral networks in marketing: Methods and illustration. *Journal of Marketing Research*, 23(4), 370. https://doi.org/10.2307/3151813.
- Seibert, S. E., Kraimer, M. L., & Liden, R. C. (2001). A social capital theory of career success. Academy of Management Journal, 44(2), 219–237. https://doi.org/10.5465/3069452.
- Van Hoye, G., van Hooft, E. A. J., & Lievens, F. (2009). Networking as a job search behaviour: A social network perspective. *Journal of Occupational and Organizational Psychology*, 82(3), 661–682. https://doi.org/10.1348/096317908x360675.
- Van Waes, S., & Van den Bossche, P. (2020). Around and around. The concentric circles method as a powerful tool to collect mixed method network data. In D. E. Froehlich, M. Rehm, & B. Rienties (Eds.), *Mixed methods social network analysis: Theories and methodologies in learning and education* (pp. 159–174). Routledge/Taylor & Francis Group.
- Wanberg, C. R. (2012). The individual experience of unemployment. Annual Review of Psychology, 63(1), 369–396. https://doi.org/10.1146/annurev-psych-120710-100500.

Zhang, C., Hirschi, A., Li, M., & You, X. (2022). Profiles of calling and their relation to universityto-work transition outcomes. *Journal of Career Development*, 49(4), 788–801. https://doi. org/10.1177/0894845321992873.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Dries De Weerdt graduated with a master's degree in Training and Education Sciences at the University of Antwerp. He is now a doctoral candidate in Education Sciences at the Antwerp School of Education (University of Antwerp). His main research interests concern the school-to-work transition of higher education students and collaborative teaching practices such as team teaching.

Ayla De Schepper graduated with a master's degree in Training and Education Sciences at the University of Antwerp. She is now a doctoral researcher at the Faculty of Social Sciences at the University of Antwerp. Her current research project focuses on social networks in the transition from higher education to the labour market.

Eva Kyndt is full professor at the Centre for Transformative Innovation and Acting Director of the Centre for the New Workforce (Swinburne University of Technology, Melbourne, Australia). As a research professor she focuses on the intersection between learning and working from a sustainable career perspective, specific topics include the transition from education to work, dual education, career paths, and social networks. She is the former elected coordinator (2017–2021) of the Special Interest Group Professional Learning and Development of the European Research Association for Research on Learning and Development. She has advised a diverse range of organisations on their HRD policy and supported the product development of several evidence-based digital tools in the area of sustainable careers, hybrid work, and well-being at work.

David Gijbels is full professor of learning and instruction and vice-dean in the Faculty of Social Sciences of the University of Antwerp. His research is situated within the research group EDUBRON and he teaches different courses in the master 'Training and Education sciences' (OOW). He is co-founder of the Antwerp Social Lab and co-ordinating the scientific research network on 'learning strategies in informal and social learning contexts'.