Academic career: on institutions, social capital and gender

Petra Angervall, Jan Gustafsson and Eva Silfver

ABSTRACT
During decades of change in the Western higher education sector, new ways of understanding academic work have reinforced notions of the impact of social capital. The present study investigates researchers’ experiences of their own career making within two areas of Education Sciences in Swedish higher education: Childhood Studies (CS) and Science Education (SE). The structure at the CS departments is collaborative and integrated; teaching and research are seen as an entity. This structure creates a coherent career path where members of the collective group jointly produce and accumulate social capital; it also appears to be related to discourses of femininity. In the SE departments, the career structure is strategic and differentiated; the two career paths work in parallel through a differentiation between teaching and research. This appears to be related to discourses of masculinity. In conclusion, our analysis shows how social capital and gender mutually create different ways of doing an academic career.

Introduction
In research studies on career and work, questions of advancement are often raised with regard to the impact of social capital (Selbert, Kraimer, & Liden, 2001; Walker & Yoon, 2017). In light of recent decades of change within higher education in Europe and elsewhere (Åkerlind, 2005; McKay & Monk, 2017), new ways of understanding academic work also influence how social capital is thought to be involved and can be perceived (Maritz & Prinsloo, 2015). The academic career path has been refashioned, as have the meaning and effect of social capital, which may more than ever play a crucial role in how career success is shaped (Berger, Benschop, & van den Brink, 2015). Broadbridge (2010) and Lipton (2017) also point out the importance of gender in better understanding access to an accumulation of social capital within academia. Our intention, in the present study, is to investigate how social capital is interrelated with gender in different academic departments and how it affects young researchers and their career paths.

We investigate how academic career and gender interact and are manifested at departments within two distinct subject areas in Education Sciences: Childhood Studies (CS) and...
Science Education (SE). In line with Adcroft and Taylor’s (2013) research in the UK, we focus on Sweden and investigate these issues in the area of Education Sciences. Education Sciences (hereafter ES – Swedish: Utbildningsvetenskap) is well suited to studying the vagaries of a contemporary academic career path. ES was established in 2001 as an inter-disciplinary research field that includes teacher profession studies, teacher education as well as the academic discipline education (Swedish: pedagogik). Hence, referring to Beach (2013), ES is a modern and re-contextualized academic field that frames several disciplines and inter-disciplinary interests, which has created tension and ambivalence in relation to its, for example, definition and goals.

In ES in Sweden today, the number of women far exceeds the number of men, although men are active in the more prestigious academic positions than women are (Angervall, Beach, & Gustafsson, 2015). Studying ES illustrates the growing pressures created by a performative culture (Beach, 2013) as well as some of the general tensions and conflicts found in Western universities in our contemporary culture – tensions and conflicts related to the relationships between the discipline itself and praxis, between science as a subject and teacher education (i.e., professional training) (Trowler, Saunders, & Bamber, 2012).

Accordingly, the aim of the present article is to investigate how young researchers accumulate social capital in their making of an academic career, and how gender is embedded in these processes. The study is based on interviews with 27 ‘young’ academic researchers and their experiences of career making in different institutional settings.

Social capital in networks

Academics are continuously struggling to acquire career resources (funding, influence, merits, time). Social capital is thus a key factor and can be described as having access to resources, but it also refers to how people acquire resources jointly through their relationships. Social capital is, thus, a resource that researchers at universities gain access to through their participation in social networks or other social structures. Accumulation of social capital is therefore considered an essential resource for the creation of academic career and success (Broadbridge, 2010; Maritz & Prinsloo, 2015).

Putnam (2001) points out that the idea underlying social capital is that social networks and relationships have a value that affects the performance of individuals or organizations. In the present study, we use Nahapet and Ghoshal’s (1998) definition of social capital, which views: … social capital as the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit (1998, p. 243). For example, in order to accumulate and ‘own’ social capital, a researcher must have relationships with colleagues and other researchers who are the source of his or her advantage. This potential benefit, according to Portes (1998), is founded on mutual trust, common social responsibility and commitment, an experience of shared identities and a feeling of sympathy, which is the very essence of social capital.

Previous research has shown, further, how people’s professional careers are greatly affected by their access to social capital and networks (Broadbridge, 2010; Maritz & Prinsloo, 2015; Walker & Yoon, 2017). Networks are defined as a set of nodes (and actors) and
a set of links (or relations) between these nodes. These nodes and links are believed to affect people’s academic career (Benschop, 2009). Moreover, Lin (2001) sees networks as relationships between people that can be both formal and informal, where the latter are created through personal contacts and arrangements. However, both kinds of networks can create social capital. Most studies of social networks have looked at the relationship between social structures and actors, typically focusing on formal relationships within the network. Instead, the present study focuses on actors within social networks, and according to Benschop (2009), studies such as this are relatively few in number.

Maritz and Prinsloo (2015) and Walker and Yoon (2017) have argued that there is a clear link between social capital and academic career outcomes. In their studies, they have noted that network structures and social resources generate certain network benefits, such as access to more information, access to resources and career sponsorship, which in turn lead to increased individual career success in the form of, for example, number of publications, research grants, promotions and career satisfaction.

Research has also shown that the impact of social capital on gender structures and academic identity has become more apparent than ever (Coate & Howson, 2016). As Guarino and Borden (2017) and Walker and Yoon (2017) have argued, variations in the acquisition of social capital are highly dependent on power and gender; gender as a social relation affects the structures, attributes and values at work (see also Angervall & Beach, 2017).

Moren Cross and Lin (2008) offer some explanations for how inequalities in access to social capital emerge. First, the availability of social capital is a historical and institutional construction in which men, in general, always benefit relative to women. Second, individuals within the same social categories (such as gender or ethnicity) tend to share limited networks. When these two factors come together – women’s disadvantage and lack of resource-dense relations – inequalities in access to social capital are created (see Berger et al., 2015). Women also tend to develop so-called horizontal networks, which affect their career paths negatively, while men exhibit more vertical networking behaviours, which tend to be more favourable to their future careers (Walby, 2011).

According to Durbin (2011) and Lipton (2017), women tend to be left outside the more prestigious networks (sometimes referred to as the ‘old boys’ network’), and therefore also left with fewer resources and fewer strategic contacts in academia. Prestigious networks are also often tacit, informal, and contain knowledge and trading practices; women tend not to get involved in or obtain positions in such networks. Despite changes in the higher education sector and the partly new structures and ways of understanding academic work, research has shown that such gender conditions persist (Broadbridge, 2010; Lipton, 2017).

**Bonding and linking social capital**

According to Putnam (2001), the process of acquiring social capital can be described by distinguishing how we bond and link resources in making a career. Social capital created by bonding is organized horizontally and is the basis for strong, mutual solidarity. This form of social capital creates strong social ties and contributes to great loyalty within the group. Social capital created by linking is instead vertically organized and creates links to new networks and social relationships. Linking, however, often creates weak ties and indispensable relationships as well, in this way generating competitiveness.
A similar picture is drawn by Maritz and Prinsloo (2017), who show how links between people within certain networks are created to build relationships. It is also possible to ‘borrow’ social capital from someone in a higher position within the network, thus gaining access to groups or individuals that would otherwise be difficult to connect with (see Storberg-Walker, 2007). The ‘bonding’ of social capital creates, according to Burt (1998), a flat network (‘often associated with notions of femininity’), while ‘borrowing’ social capital creates a more hierarchical network (‘often associated with notions of masculinity’). One example of borrowing social capital is when a researcher is ‘invited’ to a specific research group by an influential and ‘sponsoring’ professor. This invitation includes sharing funds, rewards and access to network and contacts. However, it also comes with expectations to repay the borrowed capital by, for example, including the sponsoring professor on a project application. This can also be related to Guarino and Borden’s (2017) results demonstrating how women in academia tend to work more horizontally, thus, in collaborative rather than competitive structures and with tasks that serve, nurture and promote others. However, as Burt (1998) argues, all types of social networks always contain structural ‘holes’, and these holes create possible links to new networking contacts as well as opportunities to acquire ‘new’ social capital.

The study

The study’s empirical data are based on 27 interviews with ‘young’ researchers in Educational Sciences. The researchers have recently completed their doctoral studies and are at an early stage in their careers, trying to establish themselves in the academic field of Educational Sciences. The study was conducted at two universities in Sweden. Using purposive sampling, we selected two departments in the field of CS and two in Education Sciences. The reason for using this selection method was to capture the variations that exist between institutional settings, but also between subjects and gender structures in Educational Sciences.

The two CS departments were organized around teaching assignments in teacher education programmes. Most staff at these two departments were, accordingly, working in teaching, sharing tasks and assignments collectively. The work tasks and assignments appear to be shared, and almost 80 [40 + 40] staff members (about 12% of them male) were involved in the teaching and research work at these two departments. Within each department there was one professor with a high designation; the research work was almost only performed by senior researchers, and often not related to projects. Instead, small amounts of faculty funds were used to support various research activities. Unlike the CS departments, the two SE departments were organized as a clearer mix of or division between teaching and research, and each department had three professors. On the one hand, the research work at these departments often seemed to concern strong disciplinary areas of didactics studies and teacher education professional studies components, although some researchers specialized in different subjects (languages, history, maths, chemistry, etc.).

On the other hand, the two SE departments were also highly involved in teacher education, and many of the researchers worked as schoolteachers before entering research education. Men and women were equally represented at these departments, although most doctoral students were women. In total, about 50 [25 + 25] staff members are
active on a regular basis in research and teaching. Table 1 provides an overview of the type of departments, numbers of interviewed researchers and gender patterns.

Selection of participants was accomplished using snowball sampling through personal communication with members of the four departments. To ensure the researchers’ anonymity and confidentiality, the names and descriptions of participants, departments and universities have been removed from the article.

All participants were active in Education Sciences and had completed their PhDs one to four years prior to the interviews, which were conducted between autumn 2009 and spring 2011. The interviews were semi-structured and carried out by the authors themselves. This enabled us to get a picture and a sense of the institutional environments they described for us in the interviews. During the interviews, we were interested in how these young researchers described their experiences from the academy, what relationships and social contacts they had with their colleagues within academia, what conferences and networks they participated in, what work tasks they had [teaching or research] and their thoughts about and strategies for their future academic career.

The analysis is based on the interviews, which we summarized using a meaning condensation method after they were concluded. The interviews were conducted and summarized in Swedish and then translated into English within the analysis. This means that the keywords and themes were written in English though derived from a Swedish transcript. The analysis was conducted thematically in order to discover keywords and concepts embedded in the entire corpus of interview data (Braun & Clarke, 2006). The analysis was carried out through a close reading of our interviews and by searching through all of the interviews to find repeated patterns of meaning, which were then developed into themes. Through this analytical work, we identified several themes within the departments; the themes emerging from our data are related to our areas of interest, namely academic careers, social capital and gender.

The themes that appear (as part of our empirical findings) at the CS and SE departments are all related to the departmental structure and its social capital, but also to how the work performed interrelates with gender. We elaborate on how gender is related to subject discipline (not least historically) and to work in research and teaching as well as on how social capital is defined with regard to performance, care, trust and collegiality between groups and individuals. These themes are identified through our analysis of the interviews and describe the patterns found, thus revealing how social capital, gender and institution interact in the formation of career outcomes.

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**Table 1.** Overview of participants grouped by department type, number of interviewed researcher and gender patterns.

| Department type                        | Female early researcher (n) | Male early researcher (n) | Gender patterns                                                                 |
|----------------------------------------|----------------------------|---------------------------|---------------------------------------------------------------------------------|
| CS: teaching dominated department      | 9                          | 5                         | Preponderance of female doctoral students, junior researchers, teachers and professors |
| SE: mix of teaching and research       | 9                          | 7                         | Men and women are equally represented at these departments. Some preponderance of female doctoral students and junior researchers |
| Sum                                    | 18                         | 12                        |                                                                                  |
The CS departments

The two CS departments are characterized by two patterns: teaching and research are organized and seen as integrated units, and researchers are primarily employed to work in teaching at their respective departments. The work is often described as collaborative, and researchers appear to work closely, pursuing joint strategies and shared objectives that bond them together. At these two departments, the teacher education programme is placed at the very centre, and most employees are expected to be fully involved in the programme, as it is part of the common direction of the departments. A few also discuss the fact that, in order to get time for research, they must serve in teacher education and do ‘one’s share’. Hence, performances in teaching and the horizontal networks at the department are used as a ‘ticket’ to getting invited to join vertical and international research networks. This pattern was found among both the female and the male researchers at the two CS departments.

The career structure at the CS departments can be described as collaborative and integrated. Several researchers remark on the difficulty of moving further in their career and of advancing by linking to or borrowing some kind of social capital. Research projects are usually financed by faculty funds at the departments, very rarely by external funding, and coordinated by a senior professor. A professor position is hence connected to research funds, but also to a research position.

Horizontal work structures and gender

During the interviews, the researchers at the CS departments all talk about lacking specific resources that would allow them to make advanced academic careers. Most of them were primarily involved in teacher education. Several also mentioned the rather small number of professors at their department and described how that influenced their work. Hence, the professors were seen as those with possible links to social capital that could be used in making a career. In our view, these descriptions at least partially illustrate how the departments were organized: rather flat, and greatly tied to teacher education, collaborative work, and a historical discourse related to praxis and the teaching profession. The descriptions also illustrate how this area is linked to historical discourses on gender and to specific forms of teaching, care or fostering (Guarino & Borden, 2017), which could explain why women outnumber men in this area. The work structures at these departments were also organized as inclusive and ‘caring’. Catarina, for example, who was on parental leave at the time of her interview, described how care is part of and expressed in her work:

My professor and my supervisor have a great understanding of family life. And that is a relief. I understand that’s not the case everywhere. I feel I’m fully supported … they actually visited me at home one evening just to discuss some issues.

As we see in the excerpt, it seems as if parental leave is ‘fully supported’ by Catarina’s professor. Others also mention the accepting atmosphere regarding, for example, childcare or sick leave (e.g., Vendela and Cajsa), and in our view, these descriptions exemplify how researchers here used and shared social capital.
Several of the researchers in CS also mention that the structure and work of these departments have been at least partially spared the changes required by recent years of policy changes. For example, Vendela says:

I believe that this place has been quite spared from 'elite reps', demanding high performance – actually the whole teacher education faculty.

Vendela uses the metaphor ‘elite representatives’ to describe what is often identified as research that has a higher reputational value (and merit) than other areas of academic endeavour. She emphasizes that her own work is indispensable and, therefore, she attends numerous teaching and departmental meetings, always saying ‘yes’ to more teaching, although she knows that this is not strategically beneficial to her research career:

I attend every meeting because I’m part of it and I want people to remember me.

Vendela has endeavoured to build strong ties with the department’s undergraduate education programme. However, her horizontal strategy means she accumulates more social capital in teaching than in research, and she also reports having problems in finding time to complete her research publications. Her work is obviously more related to the collaborative efforts required to run the department than to competition between researchers and their linking to research contacts and merits; that is, her activities resemble work more often associated with notions of femininity than masculinity (Guarino & Borden, 2017).

**Linking to social capital at integrated departments**

The declared ambition of the leadership at these two departments is to support and stimulate more research funding; most of the staff are in fact only engaged in teaching. Cajsa talks about her loyalty to teaching:

The leadership encourages research and they want you to apply for money but that also competes with some kind of loyalty towards the teaching team, because everybody struggles and has to work overtime … and that’s what messes it up for the leadership … if you get research money. Everyone is aware of that. So I believe that everyone thinks: ‘Yeah, yeah, I continue to work until it’s settled.’ You know, I believe that it’s also: ‘I’ll have to give it another semester.’ So … it’s like; twofold, that’s what it is. … in practice is it better to just go for teaching? It is easier if you stick to teaching, absolutely.

Cajsa’s talk illustrates the complexity of striving to increase one’s research activities and at the same time maintain the department’s teaching profile. Others as well discuss being expected to be loyal to teaching, but also being expected to link and build up their social capital through research advancements. This is undoubtedly difficult: teaching dominates the work and this often decreases opportunities to do research and participate in vertical networks (although some researchers can use their horizontal influence to link and accumulate social capital). The opportunities that do emerge are similar to what Britta describes:

We have formed a research group that deals with childhood perspectives. Being an old preschool teacher, and with a great interest in pre-schools and children, it was good to join in. A
colleague and I are also trying to write an application for funds, and we also participate in conferences, due to our mutual interest in childhood perspectives.

Britta’s account confirms how her professional background has formed her career priorities, and how she and her colleagues have had to work hard to create social capital. Some of them also explain that, in order to increase their social capital, they have to get permission to borrow from the professor. The researchers at the CS departments often mention their professors as the ‘driving force’ behind career advancement. Cajsa, for example, describes the professor at her department as someone who is ‘supportive’, and in whom others have confidence. She says:

Our professor assumes a lot of responsibility for building up our childhood studies milieu, building our networks and finding funding. She has the role of the networker and we rely on her. This is what she does best and she gets it done, e.g. she finds funding for our graduate school.

According to Cajsa, the professor is a key person at the department where she works, given the professor’s success in acquiring resources that enable others (such as young researchers) to borrow social capital and make influential contacts. This, in turn, provides opportunities for research collaborations in the research field. The professor is often described as a kind of ‘network manager’.

The SE departments

In the SE departments, we see a somewhat different picture than the one sketched above. At these departments, researchers work in a ‘strategic and competitive’ manner and seem to conduct high-level research partly by keeping teacher education and research apart. Sound economic resources as well as influential internal and external networks appear to underpin this culture, as does the way in which several professors, in different areas, compete for status and influence. As discussed above, the professor position entails research funds, or externally funded projects, as well as a research leadership position. Frequent publication rates are perceived, at least by some, as a good indication of the departments’ reputational and competitive status.

Hence, we also see how, at the SE departments, teacher education is positioned as the ‘underdog’, in the periphery of the research field. Indeed, teacher education is so distant that it is, in some respects, considered not to involve ‘real’ scientists at all. Moreover, the research environment appears rather fragmented, with a parallel career structure in which teaching (teacher education) and research are separated. This creates two distinct career paths, where some employees almost only teach, while others largely only conduct research. The work structure can thus be described as a strategic and differentiated career model based on different career resource assets and social capital. This will be described in more detail below.

Differentiated work structures and gender

During the interviews, several researchers express how they have been positioned or position themselves in the departmental structure on the basis of their relationships to either research or teaching. In this group, many women, especially those in teaching, express
their view that they have been overlooked in favour of their male colleagues. Samanta, for example, feels that she has to be at least twice as good as her male peers in order to compete:

We have to be twice as good ... although, we really do some good stuff ... I mean, we work like mad, you know, and have brilliant research questions ... and we share our insights with others. We are actually quite unselfish compared with some men.

Samanta argues that the lack of influence many women experience prevents them from making a career. The kind of social capital they link to enables a horizontal movement, sharing work tasks and insights. This pooling of career resources at least partly on the basis of gender could provide an alternative way of advancing and using networks, especially for those who say that they want to resist the pressure to publish. Linda, for example, describes the lack of vertical movement in her career in a positive way:

I’m not at all tempted by this publication hysteria and stuff like that in the internal research world. Instead, I want to work in the real world ... and what I’ve seen of the research world so far, you know, with all these old men ... That makes me feel so and so about research, actually ... I rather feel like doing some good work and translating research into education and outreach, you know, more readable stuff to ordinary people ... Or doing something completely different.

Linda describes how she has dealt with the performative demands of her department. She, along with several others, experiences the academic culture as extreme and demanding, and therefore tries to resist it. Others, such as Susan, argue that it ought to be more important to work close to practice than to compete for research merits. Moreover, due to the heavy demands, other women have chosen to work in administration, although they know that it will not provide them with good opportunities for advancement. Their loyalty is to the teaching staff rather than to the research culture. Therefore, they make an effort to bond and socialize in the coffee room, to ‘bring a cake now and then’ to promote a good working atmosphere. However, we also see that some women researchers, in doing so, face being positioned as teachers rather than as researchers in this rather meritocratic and gender-divided structure (Angervall & Beach, 2017). That means that women more often work as teachers, and are seen as or become teachers. Men more often work as researchers, but are also expected to act as and become researchers. There are also indications in the interview data that young women researchers accumulate social capital only by moving horizontally through administrative work and teaching. These women are likely strengthening their social capital within the horizontal network, even if their vertical opportunities will probably be negatively affected. Women tend to work more horizontally than men do.

As mentioned, these two SE departments are characterized by both a strong focus on research and specific subject matter and a strong connection to teacher education (and the science teacher profession). Several of the researchers describe how they often experience being positioned at the margins of their institution; sometimes they feel invisible, and or excluded from discussions about the general research strategy and vision of the department. Susan describes her feelings of mistrust and what she calls the ‘separate worlds’ at her department:

We aren’t precisely involved in ... it’s like two separate worlds; a PhD world and a senior research world. And they do their thing ... we haven’t been invited to any research board
for example. That’s when the researchers meet … so it’s like two separate worlds. Where we don’t know so much about what they’re doing.

Susan indicates that the essential problem of working at a department that is divided is lack of trust in the senior researchers (most of whom are professors and men). She also describes a lack of strategic planning and how ‘young’ researchers understand the work organization as ‘just a bunch of different projects’. This ‘keeping apart’ strategy seems to be the organizing principle of the academic work at both SE departments; for example, researchers and teachers are placed and active in different collegial groups, which creates inequalities in both social capital and career opportunities.

**Linking to social capital at differentiated departments**

Our study also illustrates what can be interpreted as common strategies among both men and women researchers at the SE departments, with a clear linking strategy towards a ‘vertical’ career. These researchers describe a rather different strategy to those of the women discussed above: they avoid engaging in institutional work or socializing within the department to instead create international contacts in research networks. Simon, for example, consciously seems to accumulate social capital through contacts in international networks. He discusses how he learnt his strategies during research education:

> The national graduate school has strongly contributed to my [linking] strategies to go to conferences and make international contacts. I’ve made useful contacts with some researchers, and I’ve also published with them, for example, an article from my thesis, and we still keep in touch and work on project ideas together. … Publishing internationally has really opened tremendous possibilities for networking. … I have also been invited to be on the board of an international journal.

For Simon, the graduate school in science has been a resource – a ‘gatekeeper’ for his access to social capital by means of its international networks. Simon is aiming to become a senior lecturer as soon as he can, and therefore his strategy is to link social capital through international networks (other male researchers at these departments also used a similar strategy). Most people in this particular group of researchers are part of several national and international networks, and work to publish articles in international journals.

Several of the young researchers who work in the field of natural sciences also talk about their connections to various international networks, which indicates how important it presumably is to have research contacts. Soleen says:

> I have several international contacts. We have a guest professor from the Netherlands here, who is in xx [natural sciences: our comment], and I also have several contacts within this subject [natural sciences] from Poland. Moreover, we have several contacts from the US, from Iran and South Korea, as well as occasional contacts here and there. For example, I have a good contact in Croatia as well, a woman that I see and talk to once in a while.

Soleen describes a very distinct career strategy related to the culture and customs of her research group: she has found ways to link social capital through simultaneous contacts in many countries. Sven says that he wants to move between different research milieus. He is linked to an externally funded research project and several smaller projects, and is also a main and co-supervisor for doctoral students. Sven describes himself as ‘the odd one out’: ‘I’m not that loyal … because I move between [disciplines and milieus].’
Several other researchers also talked about the different networks and research groups they move between. Margret, for example, can choose between several groups and network contacts:

I have several contacts in Norway. Apart from them, I also have at least two important research networks in Sweden. I have the network in Mathematics [name anonymous]. This network is very active. ... and, apart from that I also have contacts in several research schools that function like networks and within them I participate in several seminars, and get involved in joint mentoring and other collaborations.

Margret and Sven are not alone in working in both national and international networks: several other researchers at these two departments participate in more than one research network. The strategy appears deliberate in the sense that the social capital accumulated is proving to be hugely important in the ‘new’ academic landscape. Sven’s bonding and linking strategy to move between places gives him access to social capital from both horizontal and vertical networks. This enables him to exploit this kind of hierarchical and ‘fragmented’ department in order to secure a better position. On the one hand, young researchers such as Sven and Margret seem advantaged by their strategy of using various networks to accumulate social capital. On the other hand, this ‘strategic’ way of building social capital and resources also partly limits their access, or at least their ability to accumulate vertical resources quickly.

**Discussion**

In the present study, 27 early career researchers were interviewed about their experiences of making an academic career, their relationship and access to networks, strategies as well as about their institutional prerequisites in Educational Sciences. In particular, we have tried to understand how forms of social capital and gender intertwine with career advancements within two distinct subject areas (CS and SE) in Education Sciences. Previous research on social capital and career success within higher education has shown that gender has a strong effect on career outcomes (Berger et al., 2015; Lipton, 2017). Our focus on Educational Sciences, a fairly modern research area in Sweden, adds critical questions and observations to previous research, the goal being to deepen insights and dynamics within the field.

Our results show how social capital, gender and institutional settings interact and structure the career outcomes within this field. More specifically, we see how career and gender become the medium and effect of the relationship between the individual researcher and the institution as well as how different forms of social capital (bonding and linking) accumulate within these different institutional settings. The career structure that emerges within the CS departments shows a collaborative and integrated structure in which teaching and research are seen as an entirety. This structure creates a coherent career path where individuals and institutions together produce and accumulate social capital (Maritz & Prinsloo, 2015). In the SE departments, a partly different career structure emerges that can be described as strategic and differentiated. Here, two career paths work in parallel through a differentiation of teaching and research. We see how the researchers at the CS departments assume responsibility for teaching, but also how they can gain access to so-called structural holes if given the opportunity in particular relationships.
(Burt, 1998). These relationships can be used as a point of entrance to more vertical networks. However, among some of these researchers, the teaching work approach is also expressed as a form of resistance and as an attempt to find alternative routes to producing academic work. The more differentiated structure at the SE departments creates a situation where both work assignments and gender are divided.

Depending on the differentiation made between teaching and research, men more often than women have access to vertical social capital (see Berger et al., 2015). We mean that this (re-)production of structural gendered relations is especially apparent within Educational Sciences and creates inequality of access to social capital. This structural differentiation can be explained by how two historically different subjects – natural science and education – have been re-contextualized. This re-contextualization has created two partly different knowledge discourses that are kept apart in an attempt to create different career paths. In practice, these two institutional structures almost appear to create different academic worlds, where gender and work are valued differently. These institutional structures interact with academic disciplines and workplace cultures and help to shape how men and women in these settings are expected to conform.

The researchers in the CS departments are able to borrow social capital if they can free themselves from teaching. The horizontal work actually creates opportunities, although on a very small scale. And as Burt (1998) argues, borrowing social capital is foremost a strategy used by men and thereby understood as masculine, even though we illustrate how it can be understood differently: as based on solidarity and trustful relationships at integrated departments. Moreover, we note that this network structure appears to be informally created and established for researchers, often women, to borrow social capital and make contact with vertical research networks. In this institutional environment, social capital is a powerful resource in the formation of academic careers, which is in line with Lin (2001) and Walker and Yoon (2017), who have shown a clear link between social capital and academic career.

Similar institutional structures do not exist within SE departments. Such departments are instead characterized by a differentiation of teaching and research, which we see creates a low degree of trust among the interviewed researchers. Instead, they compete for resources and recognition. This differentiation of teaching and research appears to be formally created. Additionally, the professors are said to be active only in the vertical research networks, which probably affects how the researchers in teaching are able to borrow social capital and participate in vertical research networks. This is in line with international findings presented by Burt (1998), but also more recent research by Maritz and Prinsloo (2015) and Walby (2011) has shown similar results. Moreover, Guarino and Borden’s (2017) research illustrates how women tend to produce horizontal networks, while men primarily are organized vertically.

These kinds of results can explain how SE, as a particular kind of institution, is organized and can consist of two forms of social capital: one more horizontal with a specific form of social capital and one more vertical. These forms of social capital largely construct a gender hierarchy and a differentiated career structure, and as Broadbridge (2010) and Lipton (2017) have pointed out, they create a gendered hierarchy that adversely affects the careers of women researchers in particular.
Conclusion

The field of Education Sciences in Sweden is a re-contextualized academic field within a new academic landscape: between various disciplines and inter-disciplinary interests and tensions. The present results provide insight into how social capital and gender interact in this field and within institutional settings as well as into how they create different career structures. Our results illustrate how researchers are able to accumulate different forms of social capital in making an academic career. In conclusion, we argue that these conditions produce and distribute inequalities of social capital, which cause women researchers to be less valued than men researchers.

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ORCID

Petra Angervall http://orcid.org/0000-0003-2425-2088
Jan Gustafsson http://orcid.org/0000-0003-1770-7830
Eva Silfver http://orcid.org/0000-0001-6413-6538

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