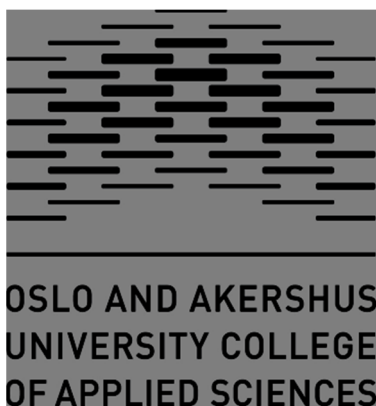


Gender in physiotherapy education

A study of gender performance among physiotherapy students and changes in the significance of gender

Tone Dahl-Michelsen



PhD thesis
Centre for the Study of Professions
Oslo and Akershus University College of Applied Sciences

Spring 2015

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Avhandling 2015 nr 4

ISSN 1893-0476

ISBN 978-82-93208-86-0

<http://www.oda.hio.no>

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Opplag trykkes etter behov, aldri utsolgt

Trykket hos Allkopi

Trykket på Multilaser 80 g hvit

Acknowledgements

My PhD period is now coming to an end, and many people deserve thanks for having contributed to making this part of my life so wonderful. Although it has been a fantastic time, this PhD project involved more work than I imagined when I was starting out. Undertaking this PhD has also involved more meaningful interactions, both professionally and socially, than I initially anticipated. Thankfully, hard work, meaningful professional and social interactions melted and became a "lifestyle" that provided many opportunities to travel. There is no doubt that the time I have devoted to this project has been thoroughly worthwhile.

My supervisors, Anne Birgitte Leseth and Kari Nyheim Solbrække, have done a great job throughout this period. You have supported and challenged me, read my many drafts repeatedly and contributed critical comments, guided, advised and helped me improve my analytical capacity and theoretical understanding. Thank you for never doubting my ability to do this PhD and for not taking over but instead pushing and encouraging me to develop and fulfil my own ideas. In doing that, you allowed this project to be mine. Thanks to Anne, for being the co-author of our book chapter, which was the first step in publishing analysis from this project. I also want to thank Anne for supporting the idea of having a writing period in South Africa. Thanks to Kari for being co-author on our article, another publication on the analysis from this project, which resulted in article three for this thesis. In addition, thank you for giving me the opportunity to be your deputy in teaching the courses on Qualitative Methods and Gender Perspectives on Health and Illness (UIO), when you were on sabbatical in York. I enjoyed the experiences and visiting you in York was great.

A great thank you goes to the students who participated in this project and shared time, experiences and thoughts with me. Without their contributions, this thesis would not have been possible. Likewise, I want to thank the teachers who participated and who welcomed me to their classes. In addition, I want to thank my colleagues at the Institute of Physiotherapy (HIOA), who showed interest in my project and welcomed me back to the Institute.

The Centre of the Study of Professions (CSP) gave me the opportunity to do this PhD project, for which I am grateful. Moreover, I am indebted for the great working environment provided. I have lifelong memories from everyday life in CSP and from visits to Koster, Tjøme and Croatia. Thanks to *all* academic and administrative staff, including the boss, for being so helpful and interested in my project. I am highly appreciative to have had colleagues put so much time into my work. In particular, I want to thank PKK (my research group) led by Jens-Christian Smeby and Finn Daniel Raaen—without the insightful guidance from *all* of you in the group, this PhD project would have been below its final standard.

The office co-habitant period was shared with Mette. Thanks for supporting me, and when needed, encouraging me to believe that the project would eventually end. Thanks for reading through abstracts to conferences, pointing out inconsistencies and teaching me to "sell my argument"—in short to take the offensive! Also for convincing me that tables often are a good idea also in qualitative research and for making them look more professional. I have in particular appreciated your humour and interest in analysing ongoing criminal cases.

Another important person is Tatanya who read and commented on many early drafts and final versions of this PhD thesis. Your support and clear ideas to make changes have been invaluable. I appreciated my visit to your cottage, our stay in Edinburgh and the conference in Sterling. I also enjoyed your interest and competence in food, and I have cherished your kindness in bringing exotic fruits, drinks and goodies to my family. I have enjoyed being in your excellent company during different ballet performances.

Thanks to all of you who gave valuable comments on my final reading seminar, especially final reader Kristin Heggen, whose comments were both inspiring and critical. Thanks for reminding me of the innovativeness of my project. I also want to mention Jan. As the historical and cultural context of physiotherapy education is such an important part of this project, I am glad that you as a historian read and gave valuable comments on my work.

One very special person during my work on this thesis is Sølvi. Primary, our collaboration has involved changing drafts of articles, book chapters, abstracts and conference manuscripts, reading the texts and discussing them in a coffee shop nearby. I am truly indebted for your engagement in my project. Your countless reading and to the point commenting on my texts throughout the PhD has helped raise the quality of this thesis. You are talented, both academically and pedagogically, I have learned a lot and been inspired by you. I also appreciated your proactivity in finding relevant conferences and PhD courses, which involved visits to Essex, Cambridge, London, Birmingham, Edinburgh and Sterling. The month-long stay in Cape Town writing on our extended abstracts was wonderful. Spending time with you involves a whole lot of productive and meaningful professional and social interacting!

Finally, I want to give a big hug to my friends and family for giving me support and love throughout this demanding period. I especially want to thank my parents, Berit and Jan Erling, who, during the years, in different ways, have supported my many educational projects. I also want to thank my sister and my brothers and their families. I am really looking forward to the holidays with you all this year. A special thank you goes to my husband Brage. Your involvement in our children's sports projects provided me with opportunity to spend a lot of time on the PhD thesis. Thanks for supporting me by giving me space to do my own things. My sons, Henrik and Heine, you are the sunshine and the diamonds of my life. My family, I love you.

Oslo, 27st April 2015

Tone Dahl-Michelsen

Sammendrag

I denne avhandlingen studerer jeg hvordan kjønn får betydning i fysioterapeututdanning. Mer konkret utforsker jeg hvordan fysioterapeutstudenter gjør kjønn og hvilke forandringer som finner sted når det gjelder betydningen av kjønn i dagens fysioterapeututdanning. Historiske og kulturelle utforminger av fysioterapi som profesjon og utdanning utgjør en viktig kontekst for analysene i avhandlingen. Det er generelt lite kunnskap om betydningen av kjønn i fysioterapi utdanning både internasjonalt og nasjonalt og tidligere studier har benyttet spørreundersøkelser og digital historiefortelling som datainnsamlingsmetode. Det empiriske materialet i denne avhandlingen er basert på feltarbeid i ferdighetstrening i første året i en norsk fysioterapeututdanning og intervju med studenter som deltok i ferdighetstreningsskissene. Teoretisk bygger avhandlingen på kjønn som performativet. Artiklene i avhandlingen benytter ulike kjønnsteoretiske bidrag og samlet sett muliggjør det oppbyggingen av en kompleks analyse for utforskning av hvordan kjønn får betydning i moderne fysioterapeututdanning.

I *den første artikkelen* utforsker jeg den kjønnede betydningen av sportslighet i form av hvordan studentene vurderer seg selv og hverandre som egnede fysioterapeutstudenter. Funnene viser hvordan studentene deler sportslighet som en felles verdi som forener dem som fysioterapeutstudenter. Samspillet mellom den profesjonelle normen av sportslighet og kjønnsnormer resulterer likevel i en ulik posisjonering av studentene innen et hierarki av sportslighet. Hyper-sportslighet og ordinær sportslighet er identifisert som to hovedtypologier av sportslighet. Mannlige studenter som besitter hyper-sportslighet er anerkjent som særlig egnede fysioterapeutstudenter og inntar en hegemonisk posisjon i studentmiljøet. Kvinnelige studenter som tilpasser seg hyper-sportslighet har muligheten til å innta en hegemonisk posisjon, men tenderer til å ikke gjøre det. Kvinnelige studenter med et mer ordinært nivå av sportslighet har ingen problemer med å bli anerkjent som egnede fysioterapeutstudenter. Mannlige studenter møter derimot problemer her.

I *den andre artikkelen* undersøker jeg betydningen av kurative-kompetanser og omsorgskompetanser i den profesjonelle treningen av fysioterapeutstudenter. Selv om den historiske vektleggingen av tradisjonell kurativ behandling (cure) ser ut til å bestå, så oppfatter studentene klart omsorg (care) som en viktig del av sin profesjonskompetanse. Funnene peker på et sterkere engasjement for omsorgskompetanser både blant kvinnelige og mannlige fysioterapeutstudenter enn tidligere antatt. Videre er kurative-kompetanser og omsorgskompetanser i ferdighetstreningen sammenvevd så vel som binære/motsatte, noe som særlig illustrerer kompleksiteten av kjønnskodede kompetanser i fysioterapeututdanningen. Studentenes muligheter for å overskride tradisjonelle kjønnsnormer gjennom å gjøre både kurative- kompetanser og omsorgskompetanser vurderes til å være relativt store.

I *den tredje artikkelen* undersøker jeg hvordan kroppslige fremvisninger former kjønn i ferdighetstreningen til fysioterapeutstudenter. De kroppslige fremvisningene i fysioterapiutdanningen representerer lokale felleskap av femininiteter og maskuliniteter. Det lokale felleskapet av maskuliniteter er kjennetegnet ved at de mannlige studentenes atferd ser ut til å være inspirert av trender som den meteroseksuelle mannen og det som kalles sporno hvor hyper-seksualitet er fremtredende. I motsetning til de mannlige studentene, er de kvinnelige studentenes kjennetegnet av en nedtonet seksuell fremvisning, noe som knytter an til en historisk sett dominerende form for femininitet i fysioterapiprofesjonen. Et viktig funn er

at i ferdighetstreningen har kvinnelige og mannlige studenter tilgang på det samme repertoaret av handlinger når de praktiserer rollen som fysioterapeut, mens i rollen som pasient kommer det fram en betydningsfull forskjell mellom kvinnelige og mannlige studenter knyttet til måten kropp og seksualitet gjør seg gjeldende. Artikkelen konkluderer med at når det kommer til den fremtredende betydningen som den materielle kroppen har i fysioterapi, så er særlig kvinnelige studenter, men også mannlige studenter muligheter for å overskride kjønnsnormer begrenset, og de kroppslige fremvisningene reproducerer i stor grad heteronormativitet.

Empirisk viser funnene i avhandlingen hvordan fysioterapeutstudenter gjør kjønn gjennom *sportslighet*, gjennom *kurative- kompetanser* og *omsorgskompetanser* og gjennom *kroppslige fremvisninger*. Samlet sett bidrar det til å få frem kompleksitet i betydningen av kjønn innen fysioterapeututdanning. I avhandlingen finner jeg at sportslighet og tradisjonelle kurative-kompetanser representerer maskuliniteter som står sterkt i fysioterapi, men i dagens fysioterapeututdanning synes denne posisjonen likevel å være utfordret og til dels forskjøvet. Eksempelvis praktiseres en fysioterapispesifikk omsorgskompetanse som ser ut til å utfordre det tradisjonelle idealet av kurativ- kompetanse. I forlengelsen av dette argumenteres det for at det kurative og det omsorgsrelaterte er en mer sammenflettet kompetanseform i dagens fysioterapeututdanning enn det som tidligere har vært antatt i litteraturen og videre, at dette er noe som kvinnelige og mannlige fysioterapeutstudenter knytter an til på relativt like måter. Disse funnene indikerer en endring av den tradisjonelle betydningen av kjønn i fysioterapi og innebærer at feminitet har fått en mer positivt konnotert betydning. Særlig finner jeg at mannlige studenter gjøres av kjønn trolig representerer et skifte i gjeldene kjønnsnormer, noe som medfører at hva som er gyldige feminiteter og maskuliniteter i fysioterapi er mer flytende enn hva det var tidligere. De komplekse betydningene av kjønn og de mulige sosiale konsekvensene som synliggjøres i avhandlingen gir et viktig kunnskapsbidrag til forståelsen av hva som spesifikt kjennetegner dagens fysioterapeututdanning og hvem som velger seg dit.

Avhandlingen gir også et bidrag til den teoretiske debatten om forholdet mellom biologisk og sosialt kjønn i studier av kjønn og utdanning. Samlet sett viser nemlig de tre artiklene hvordan ulike aspekt ved kjønn kan være viktig å se etter i et empirisk felt som helhet. Ved å anvende feltarbeid viser jeg med avhandlingen hvordan det er mulig å få fram mere tause og tatt for gitte dimensjoner når det gjelder hvordan kjønn gjøres og får betydning i et felt. Gjennom det skapes et relevant og viktig kunnskapsbidrag til forskning om kjønn og utdanning. Det argumenteres i avhandlingen for at en performativ forståelse av kjønn i kombinasjon med deltagende observasjon og intervju er en fruktbar tilnærming som kan bidra til en mer finmasket forståelse av når og hvordan kjønn får betydning - kunnskap som ofte har en tendens til å forbli taus og tatt for gitt innen studier av profesjoner og profesjonell praksis.

Summary

This thesis addresses the significance of gender in physiotherapy education. More specifically, I explore how physiotherapy students perform gender in their education and the changes in significance of gender in contemporary physiotherapy education. The historical and cultural constructions of the physiotherapy profession and the teaching of physiotherapy constitute an important context for this analysis. There is, in general, limited knowledge of the significance of gender within physiotherapy education both internationally and nationally and existing studies have made use of surveys and digital storytelling. The empirical material in this PhD project is based on fieldwork in skills training classes for first year physiotherapy students in Norway. Theoretically, this thesis is grounded in gender as performativity. The three articles in the thesis draw on different gender theories; taken together, these enable a complex analysis of the ways in which gender becomes significant in contemporary physiotherapy education.

In *the first article*, I explore the gendered importance of sportiness in terms of students' judgment of themselves and their classmates as suitable physiotherapy students. The findings demonstrate how students share sportiness as a common value that unites them as physiotherapy students. However, the intersection of the professional norm of sportiness and gender norms results in the positioning of physiotherapy students within a hierarchy of sportiness. Hyper-sportiness and ordinary sportiness are identified as its two main typologies. Male students possessing hyper-sportiness are acknowledged as being the most suitable physiotherapy students. They assume a predominant and hegemonic position in the student milieu. Female students who adapt hyper-sportiness have the potential to assume such a position, but tend not to do so. Although female students with an ordinary level of sportiness have no particular problems being recognised as suitable physiotherapy students, male students with ordinary sporting skills do encounter such problems.

In *the second article*, I investigate the significance of curing and caring competences in the professional training of physiotherapy students. Although a historical emphasis on curing persists, physiotherapy students clearly perceive caring as an important professional competence. The findings point to a stronger commitment to caring competences among both female and male physiotherapy students than previously assumed. Furthermore, in the skills training classes, curing and caring are both intertwined and binary competences. This clearly demonstrates the complexity of gender-coded competences in physiotherapy education. The potential for students to transcend gender norms by doing curing and caring competences turns out to be significant in this context.

In *the third article*, I examine how the bodily performance informs gender issues in the skills training of physiotherapy students. Bodily performance in physiotherapy education represents local communities of femininities and masculinities. The local community of masculinities is distinguished by the way that male student behaviour is seemingly inspired by trends such as the metrosexual man and what is called sporno, where hyper-sexuality is prominent. Female students, in contrast to male students, are distinguished by the way they tone down their sexual appearance, which relates to the historically dominant form of femininity in the physiotherapy profession. I find that female and male students in skills training classes largely have access to the same repertoire of behaviours when practicing the role of physiotherapist. However, there

are significant differences with regard to body and sexuality behaviour when they practice the role of patient. The article concludes that when it comes to the significance of the material body in physiotherapy, the possibilities to transcend gender norms are limited, particularly for female students: student bodily behaviour conforms to heteronormativity.

Empirically, the findings demonstrate how physiotherapy students do gender through *sportiness*, through *curing and caring competences* and through *bodily performance*. Taken together, these highlight the complexity of gender issues in physiotherapy education. In this thesis, I find sportiness and curing competences to represent masculinities that have a strong position within physiotherapy; however, in contemporary physiotherapy education, this position is also challenged and displaced. For example, students perform a kind of bodily sociality, which demonstrates a physiotherapy-specific caring competence that apparently contests the traditional idea of curing competence. As an extension of this, curing and caring competences are argued to be more intertwined than has previously been assumed. In addition, female and male students focus on these competences in a similar manner. These findings indicate a change in the traditional significance of gender in physiotherapy, suggesting that femininity has accrued connotations that are more positive. In particular, I find that the gender performance of male students in contemporary physiotherapy education represents a shift in current gender norms, which implies a more fluid, and shifting meaning with regard to acceptable femininities and masculinities in physiotherapy than previously found. The complex significance of gender and the possible social consequences highlighted in this thesis, make an important contribution to knowledge and the understanding of what specifically characterises today's physiotherapy education and those who choose it.

This PhD project also makes a contribution to the theoretical debate concerning the sex/gender relationship in studies on gender and education. The three articles in the thesis highlight how different aspects of the relationship between sex and gender are important in the empirical field as a whole. By applying a fieldwork approach, I demonstrate how it is possible to bring to light dimensions that are taken for granted when analysing the significance of gender issues in a particular field. This creates a relevant and important knowledge contribution to research on gender in education. This thesis argues in favour of a performative understanding of gender in combination with participant observation and interviews. This is seen as a fruitful approach, which can contribute a more finely-meshed understanding of how and when gender becomes significant – knowledge that often remains tacit and taken for granted in studies of professions and professional practices.

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The three articles

Article 1

Dahl-Michelsen, T (2014). Sportiness and masculinities among female and male physiotherapy students. *Physiotherapy Theory and Practice*, 30(5): 329–337. DOI: 10.3109/09593985.2013.876692

Article 2

Dahl-Michelsen, T (2015). Curing and caring competences in the skills training of physiotherapy students. *Physiotherapy Theory and Practice*, 2015; 31(1): 8–16. DOI: 10.3109/09593985.2014.949946

Article 3

Dahl-Michelsen, T and Solbrække, KN (2014). When bodies matter: Significance of the body in gender constructions in physiotherapy education. *Gender and Education*, 26 (6): 672–687
DOI: 10.1080/09540253.2014.946475

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1. INTRODUCTION

This thesis addresses the way in which gender becomes significant in physiotherapy education by exploring how physiotherapy students perform gender as embedded in the historical and cultural context of the physiotherapy profession and the teaching of physiotherapy. A central focus of the thesis concerns the changes that are taking place in the significance of gender in contemporary physiotherapy education. There is, in general, limited knowledge of the role played by gender in physiotherapy (Dahle, 1990; Hammond, 2013; Öhman, 2001). Existing studies addressing gender in physiotherapy education have demonstrated a similar distinction between genders in both physiotherapy education and in the physiotherapy workforce. These studies have also highlighted a tendency of female students to cross over into domains that were previously associated mainly with male physiotherapists. However, no similar cross over by male students to areas previously dominated by female physiotherapists has been demonstrated (Öhman, 2001). In existing research, the gender identities of physiotherapy students are found to represent discourses of femininities and masculinities that respectively imply gender as the difference between female and male students (Hammond, 2013). These previous studies are based on surveys and digital storytelling. Existing research has not yet addressed how gender is performed within the classroom in physiotherapy education. As a result, current knowledge is limited with regard to the tacit and implicit aspects of gender within physiotherapy education at the micro level of the classroom. This study explores how gender becomes significant within physiotherapy education in Norway, a topic which has not been investigated previously. The micro level studies in this thesis provide insight into tacit and taken for granted gender socialisation in physiotherapy as acted out in classrooms in Norwegian physiotherapy education. Studies at such a micro level can enhance knowledge on changes in the significance of gender that may be represented in contemporary physiotherapy education.

On several occasions during this PhD project, I have asked different audiences to imagine a physiotherapist. Most of those asked think of the physiotherapist as a man, which agrees with previous research results demonstrating that the public image of the physiotherapist is male. (Hammond, 2013; Sudmann, 2009). However, although people associate the physiotherapist with being a man, women numerically dominate the physiotherapy profession today. Seventy percent of the workforce are women in countries across the world including the UK, the US, Australia, Sweden and Norway (Enger, 2001; Hammond, 2009; MacLean & Rozier, 2009; Sudmann, 2009; Öhman, 2001). The numbers undertaking professional education and training as physiotherapists reflect the gender distribution in the workforce (Öhman, 2001). Physiotherapy is therefore a profession numerically dominated by women. The question as to why it is so strongly associated with men and masculinities has led me to pursue the significance of gender within the physiotherapy profession, in general, and within physiotherapy education, in particular. It should be noted that the association of physiotherapy as being a male profession is not universal; physiotherapy is also referred to as a female profession and sometimes a feminine profession (Dahle, 1990; Davies, 1990; Hammond, 2009, 2013, MacLean & Rozier, 2009; Rozier, Thompson, Shill, & Vollmar, 2001; Sudmann, 1997, 2009; Öhman, 2001). This latter point further boosted my curiosity about the significance of gender in physiotherapy.

According to Ottosson (2008), physiotherapists seem to be little aware of their historical roots in contrast to physicians, nurses, chiropractors, and osteopaths, for example, who use their historical roots to strengthen their professional identity. For example, many physiotherapists and physiotherapy students do not know that physiotherapy was initially a profession for men only (Ottosson, 2005, 2007, 2008). This claim by Ottosson also increased my motivation to examine the matter of gender within physiotherapy education. The association between the physiotherapy profession and masculinities relates to its association with sport and with the idea of physiotherapy as primarily a curing profession (see e.g. Bergman & Marklund, 1989; Dahl-Michelsen & Leseth, 2011; Hammond, 2009, 2013; MacLean & Rozier, 2009; Rozier, Thompson, Shill, & Vollmar, 2001; Sudmann, 2009; Öhman, 2001). In addition, as pointed out by Hammond (2013), not only is the image of the physiotherapist that of a man; he is also white, middle class, fit, sporty and heterosexual. The way in which physiotherapy is referred to both as a female/feminine profession and as a male/masculine profession indicates the significant tensions involving gender; these tensions are explored in the thesis.

1.1 Gender

So then, what is gender? Gender is 'something else than gender', implying that gender reveals itself through the symbolic. Symbols are characterised by the way in which they point to something more than the concrete (Solheim, 2007). In addition, gender is implicitly interwoven into the constructions of professions, influencing professional thinking, the view of what constitutes knowledge and professional ways of behaving (Dahle, 2008). The situation in today's professional practice may usefully be understood by exploring the historical roots of the profession through a gender perspective (Dahle, 2008). In addition, as suggested above, historical gender constructions within the physiotherapy profession can contribute to an understanding of the meaning of gender in physiotherapy both in the past and the present.

The gender perspective applied in this thesis implies that individual female and male students are doing gender as performative actions (Butler, 1990, 1993, 2004, 2006, 2011; Fenstermaker & West, 2013; West & Fenstermaker, 1995, West & Zimmerman, 1987, 2009). Thus, gender is not simply given by culture. A performative understanding of gender resists a static interpretation of gender as something determined and final. Fixed connections between women and femininities and men and masculinities are avoided. However, using a performative gender perspective does not mean that individual women and men can perform gender exactly as they wish. To be seen as appropriate, gender performance must be seen as acceptable behaviour for women and men in the actual field (Nordberg, 2005; Paechter, 2003a, 2003b, 2003c, 2007; Solbrække & Aarseth, 2006). The gender performances or gender scripts that are available to individual women and men are established in social interactions where sex and gender are seen as an inseparable and seamless whole. This suggests that the sex category is an explicit facet of doing gender. Furthermore, the sex category and gender behaviour are performed through the body (Messerschmidt, 2009). Consequently, this perspective places a particular focus on performances that are based on the assumption that what is seen as normal behaviour for women and men in a particular field is often tacit and interwoven with practices that are taken for granted.

In this study the participating students grew up in Norway, which has a particular focus on equality. Norway is seen as a pioneer in gender equality because of its successful inclusion of women in the labour market and in influential positions in the public sector, politics and industrial management (Holst, 2009). However, despite being a pioneer of equality, Norway has one of the world's most segregated labour markets, a fact which is referred to as the Norwegian equality paradox. Gender segregation relates to the way women and men tend to take different career paths. As stated earlier, approximately 70 percent of the workforce in the physiotherapy profession is female. Within each profession, the differences between women and men's career paths are often highlighted in terms of how women and men choose different specialisations. In the physiotherapy profession in Norway, men dominate manual therapy, whereas women dominate psychomotor physiotherapy (Dahle, 1990; Enger, 2001). Women also dominate in physiotherapy for children, whereas men dominate in sports physiotherapy (Dahl-Michelsen & Leseth, 2011). In addition to specialisations, the working areas in physiotherapy are gendered in terms of how men work more often in the private sector, whereas women work more often in the public sector (Dahle, 1990; Dahl-Michelsen & Leseth, 2011; Enger, 2001).

Karlsen (2012) points to how the choice of education and occupation in Norway is seen as a basic human right as long as the individual has the right qualifications. At the same time, there is political concern that the sum of individual choices has resulted in a gender-segregated labour market. The extensive focus on equality in the Norwegian welfare state is based on the fact that education is free and there are also good scholarships available. By ensuring a good framework for education, the state encourages individuals to undertake education and career choices without emphasising traditional gender roles. In the 1970s and the 1980s, the focus was on encouraging girls and women to ignore traditional gender-based choices (Karlsen, 2012). However, the physiotherapy students participating in this study have grown up in a period when the emphasis has shifted to men's choices. That is, there has been a shift in focus to stimulate and encourage men to make career choices independent of traditional gender roles.

1.2 Physiotherapy education

The titles physiotherapist and physical therapist (used in the US), are protected and preserved for people whose qualifications are approved by a national professional association, which is also a member of the World Confederation of Physical Therapy (WCPT), an international organisation representing over 360 000 physiotherapists throughout the world. WCPT aims to make physiotherapy education and the professional practices of physiotherapy as similar as possible throughout the world or at least as similar as necessary to enable the physiotherapy profession to be recognised in a worldwide context. Thus, the member organisations of WCPT have agreed guidelines for entry-level education. WCPT recommends that entry-level programmes are based on university studies over a minimum of four years. This results in the preparation of graduates to become autonomous practitioners. Entry-level physiotherapy education programmes are typically conducted in colleges and universities and the programme structures vary widely. Although the WCPT guidelines state that entry-level programmes should be the equivalent of four years full time-time study at university level (WCPT, 2007),

the educational frameworks for preparing physiotherapy graduates are diverse. This corresponds to the considerable diversity existing in the regional, social, economic, political, cultural and professional environments in which physiotherapy education is conducted across the world (Webb et al., 2009).

In Norway, there are four bachelor degree programmes in physiotherapy. The programmes are offered by educational institutions located in Bergen, Oslo, Trondheim and Tromsø. An overall national plan (UFD, 2004) regulates the content of bachelor programmes and ensures that there are sufficient similarities among the four programmes. Each programme requires three year's full-time study, equivalent to 180 points in the European Credit Transfer and Accumulations System (known as ECTS). This is followed by a one-year internship, split between six months in municipality health services and six months in a hospital. The Norwegian Agency for Quality Assurance in Education (NOKUT) is the controlling authority for educational activity in all Norwegian universities. NOKUT controls the quality in the physiotherapy programmes in line with the recommendations from the WCTP, which shows how physiotherapy education is controlled at national level. As is the situation across the world (Webb et al, 2009), Norway has far more applicants than available places; entry is thus usually highly competitive. Physiotherapy is a popular study implying that students enrolled in this area are seen as high achievers. Applicants are selected based on marks and interviews, depending on institutional philosophies (Bithell, 2007; McMeeken, 2007; Redenbach & Bainbridge 2007, Threlkeld & Paschal, 2007). The increasing numbers of physiotherapy programmes in Australia have resulted in the student population there becoming increasingly diverse with respect to age, ethnicity and prior qualifications (McMeeken, 2007). However, a study from the UK reveals that recruitment of ethnic minority students is low (five percent) (Greenwood & Bithell, 2005). The recruitment of ethnic minority students is even lower in Norway (between 1 and 1.5 percent) (Dahl-Michelsen & Leseth, 2011). A recent study from the UK shows that the use of recruitment interviews has succeeded in increasing diversity, resulting in a higher rate of minority students. However, this study also highlights how increased diversity has made it more difficult to fulfil the demands on output, that is, the achievement of sufficient ECTS. The numbers of students that graduate successfully seems to decrease as diversity increases (Hammond, 2013).

In Norway, students are enrolled in the programme based solely on marks from upper secondary school. Thus, the educational institutions have limited influence on who is enrolled. Apart from how they advertise themselves in programme brochures and websites, they do not have direct influence on who becomes a student. This means that the educational institutions cannot choose students based on whom they find to be suitable for becoming physiotherapists and neither can they select students in order to enhance diversity.

1.3 Aims and research questions

The aim of this thesis is to explore the significance of gender in physiotherapy education.

The overall research question for this PhD project is:

How does gender become significant in physiotherapy education?

The following sub-questions are addressed across the three articles:

- 1) *How do physiotherapy students perform gender in their education?*
- 2) *What are the changes in the significance of gender in contemporary physiotherapy education?*

Table 1 presents the research questions and the main findings from the articles in this thesis.

Table 1. Overview of the research questions and the main findings of the three articles

Title	Research questions	Main findings
Sportiness and masculinities among female and male physiotherapy students	<p>How do female students and male students perform sportiness as they qualify to become physiotherapists?</p> <p>How does sportiness intersect with gender in the positioning of female students and male students as suitable physiotherapy students?</p>	<p>Sportiness is found to be a shared common value among physiotherapy students. However, the intersection of the professional norm of sportiness and gender norms also results in the positioning of the physiotherapy students within a hierarchy of sportiness. Hyper-sporty male students take the top position, followed by hyper-sporty female students, ordinary sporty female students and finally ordinary sporty male students. The article demonstrates a historical line of communication between past and present physiotherapy history with respect to how sportiness is embedded in gender within the physiotherapy profession.</p>
Curing and caring competences in the skills training of physiotherapy students	<p>How do physiotherapy students perform curing and caring competences in skills training?</p> <p>How are curing and caring competences displayed as contextual frames in skills training?</p> <p>How do students performing curing and caring competences intersect with curing and caring as contextual frames in the professional training of physiotherapy students?</p>	<p>The findings illuminate the complexity of curing and caring as gender-coded competences in the skills training of physiotherapy students. The findings demonstrate curing and caring as both binary and intertwined competences. Whereas the binary element mostly concerns contextual frames, the intertwined competences mostly concern performative aspects. Female and male students focus on curing and caring competences in similar ways. As a result, the potential to transcend traditional gender norms turns out to be significant in this context. The findings suggest that although curing somehow remains superior to caring, future generations of physiotherapists will be able to use their skills for care and not only to cure.</p>
When bodies matter: significance of the body in gender constructions in physiotherapy education	<p>Which bodily performances indicate the significance of gender in the skills training of physiotherapy students?</p>	<p>Bodily gender performances are found to represent local communities of femininities and masculinities within skills training for students. A continuity of historically-constructed femininities and masculinities is found in the local communities within today's education; however, modern trends are also present. The article demonstrates that when it comes to the significance of gender with regard to the material body in physiotherapy education, the opportunities to transcend gender norms are limited, particularly for female students.</p>

1.4 Outline of the thesis

Based on the three articles, this extended abstract aims to contextualise and discuss the overall research question of the study, which is how gender becomes significant in physiotherapy education. The extended abstract consists of seven chapters. This chapter, Chapter 1, has introduced the study. Chapter 2 gives an overview of gender research within physiotherapy. Chapter 3 presents and discusses the theoretical framework of the PhD project. Chapter 4 outlines the methodological approach and presents the analysis. Chapter 5 presents the findings from the articles. In Chapter 6, the findings are discussed in more detail. Chapter 7 offers conclusions and addresses implications, possible limitations and suggestions for future studies.

2. LITERATURE REVIEW

This study explores how gender becomes significant in physiotherapy education. The purpose of a literature review is to scope, map and focus the topic of the study (Thomson, 2012). Gender research within the field of physiotherapy has been limited (Hammond, 2013; Öhman, 2001). Nevertheless, the following literature review maps out the historical and cultural context in which physiotherapy is embedded and describes the background for the study. The review is divided into four sections. The first section presents important aspects of gender in the literature on the historical and cultural development of the physiotherapy profession, whereas the second section gives an overview of the research on gender segregation in physiotherapy. The third section presents studies of gender and sexuality within physiotherapy and the fourth section outlines previous studies of gender in physiotherapy education. The chapter ends with a summary of the existing literature on gender in physiotherapy education and identifies the so-called knowledge gap, that is what is lacking, to which this study seeks to make a significant contribution.

2.1 Gender in the history of the physiotherapy profession

How gender came to matter in the development of the physiotherapy profession is the focus of this section of the literature review. I have divided this section into three sub-sections, which outline, respectively, the development of the physiotherapy profession in Sweden, England and Norway. As this study takes place in the context of Norwegian physiotherapy education, the presentation of the Norwegian context is expected. Sweden was chosen as the country played an important role in the development of physiotherapy worldwide (Abrandt, 1997; Bergman, 1989; Haugen, 1997; Johansson 1999, Nicholls & Cheek, 2006; Ottosson, 2007, Öhman 2001, Richardson, 1999a, Richardson 1999b). Sweden was also selected because in this country physiotherapy was first a profession for men only, which makes it especially relevant in an enquiry as to how norms of gender came to be so strongly embedded in the profession from its start. To contrast how physiotherapy originated as a male profession in Sweden, I show how physiotherapy arose as a profession for women in England. Compared with the situation in Sweden, physiotherapy in England was more closely associated with women and femininity; and physiotherapy was seen as a female profession. As argued in the Introduction, the construction of a profession is often tacitly embedded in gender (Dahle, 2008). Following on from this argument, these three national contexts are selected to demonstrate how aspects of gender are significant in the development of the profession but in rather different ways.

2.1.1 The case of Sweden

The beginning of the physiotherapy profession in Sweden goes back to 1813 when Pehr Henrik Ling established an education which was named Gymnastica Centralinstitutet or GIH, (today, the Swedish School of Sport and Health Sciences). As Sweden was the centre of physiotherapy at that time, students from other countries were trained in Sweden (Haugen 1997; Nicholls &

Cheek 2006; Ottosson 2007). From 1813 to 1864, training was for men only. Most students were army officers with aristocratic and middle class backgrounds (Haugen 1997; Ottosson, 2007).

In the period between 1813 and 1934, the most prominent characteristics of the profession were its scientific knowledge base and the strong sense of autonomy shown by physiotherapists (Ottosson, 2007). Ling's movement system formed the basis of its scientific knowledge base. This system consisted of four elements: pedagogical gymnastics (gymnastics for the healthy), military gymnastics (mostly fencing), medical gymnastics (gymnastics/physiotherapy for the unhealthy) and the aesthetic gymnastics (Ottosson, 2007). The gymnastic movement system was based on theory; theoretical teaching was an important component of the training. Interestingly, the fourth aspect, aesthetic gymnastics, never played a prominent role at GIH (Ottosson, 2007). According to Ottosson (2007), the strongly autonomous position of the profession at that time implied that physiotherapists were seen as equal to physicians (orthopaedists). The reason for this is that the physicians (orthopaedists) focused on disease as a chemical imbalance, whereas physiotherapists saw disease as a mechanical imbalance. The chemical and mechanical aspects of the imbalance were considered to be of equal importance in order to rebalance or cure the afflicted individual. A key argument made by Ottosson (2007) is that in this period (1813–1934), the physiotherapist was a man who was associated with a particular type of culturally-coded masculinity. There was a strong focus on both physical strength and psychological power. In addition, Ottosson claims that the professionals we know today as orthopaedists were originally physiotherapists. In other words, both professions originated from GIH (Ottosson, 2007).

Ottosson (2007) points that harmony between the physiotherapists and the physicians (orthopaedists) did not last long. There was a long and hard battle for hegemony in the field of health. According to Ottosson (2007), this conflict was rooted in the similarity of their male characteristics. He outlines this similarity as a particularly strong, culturally-coded masculinity based on a claim for power and domination. It should be noted that there was no dispute between the physiotherapists and orthopaedists about the considered excellence of physiotherapy (basically the movement system of Ling). However, only one discipline could claim the top position, controlling the way Ling's system developed. After nearly 80 years of what Ottosson (2007) presents as a 'struggle between men', the Swedish parliament introduced separate programmes for physiotherapists and physical training instructors in 1934. According to Ottosson (2007), the separation of training into two programmes represented a strategic success for the physicians who did not want (competitive) men to be physiotherapists (Ottosson, 2007). In 1929, a national report overseen by physicians suggested that physiotherapy education should be barred to men. This never became reality in the form of law; however, unlike a woman, a man had to become an instructor in physical education before he could be enrolled into the physiotherapy programme. As a result, it became more complicated for men to become physiotherapists. Bergman and Marklund (1989) suggest that the separation into two educational programmes in 1934 led to physiotherapy becoming a predominantly female profession (Bergman & Marklund, 1989). After the separation of the training programme in 1934, admission requirements for the physiotherapy programme were lowered, the length of training was shortened and the title of director was removed. Consequently, as the male

physicians seem to have intended, male physiotherapists gradually disappeared from physiotherapy education (Ottoosson, 2007, p. 33).

Notably, those women who enrolled in the education programme from 1864 achieved quite similar competences to the men. Although they did not take the courses in fencing, their education still included competences that had cultural connotations with masculinity and autonomy. From 1934, the situation of the physiotherapist changed as they became subordinate to the physicians. Physiotherapy education became a female-dominated profession after 1934, both in terms of numbers and in the subordinate role afforded to physiotherapists from that time. However, I argue that because their knowledge base still had masculine connotations, the female physiotherapist was not completely subordinate to the physicians. This point corresponds with Witz (2013), who argues that professions tend to be associated with masculinity or femininity even though the practitioners of the profession might change from being numerically dominated by one or other of the sexes. How much the physiotherapy profession actually changed as physiotherapy became numerically dominated by women and exactly which characteristics changed are interesting questions.

2.1.2 The case of England

The way in which physiotherapy developed as a female profession in England in the 1880s is in contrast to the situation in Sweden. Whereas physiotherapy in Sweden was originally a profession for men, in England, it was a profession for women from the start. The competences of the physiotherapist in England were different from those in Sweden (see e.g., Nicholls & Cheek, 2006). In this period (Victorian England), the practitioners we today know as physiotherapists were labelled masseuses. In short, massage was the core competence, which gave rise to some specific challenges. Not only was massage less valued, compared to Ling's scientifically-acknowledged movement system, massage was also a poorly-defined practice. A particular problem was that prostitutes masqueraded as masseuses in order to avoid prosecution. It was therefore very important for the physiotherapy profession to avoid any possible associations with the work of prostitutes. As a result, the physiotherapist masseuses established certain strategies including the adoption of a disciplinarian approach to the body and to sexuality in physiotherapy (Nicholls & Cheek, 2006; Nicholls & Gibson, 2010; Nicholls & Holmes, 2012). For example, no men were allowed to train as masseuses, as contact between men and women was believed to involve ungovernable sensuality and sexuality. It was therefore simpler to prevent men from being educated as physiotherapists.

Interestingly, at this time, female physiotherapists (masseuses) in England seemed to represent a similar role to that of male physicians in Sweden, in terms of excluding men from becoming physiotherapists although their motives were not the same. In this period, men were never patients unless there were strong medical reasons and, in such cases, the treatment was only carried out in the presence of a physician (who at that time was a man) (Nicholls & Holmes, 2012). At this time, physiotherapists in England did not have their own scientific knowledge base. Male physicians were therefore able to subordinate female physiotherapist in this period. However, the extent of their subordination to male physicians and the medical profession can be questioned. Physiotherapists obviously profited by positioning themselves close to the

medical profession. For example, they apparently used the curative knowledge base to ensure that their massage services were acknowledged as medical massage. In this way, these female physiotherapists succeeded in making massage a professional practice, which later developed into physiotherapy. They succeeded in making massage an acknowledged professional competence compared with other types of massage. Massage in the context of physiotherapy still has higher status than massage for well-being or alternative massage (e.g. as offered in spa treatments). The strategy for the success of these female physiotherapists in England implied a view of the body as a machine. In medical terms, for example, the inner thigh was seen as representing the 'origins and insertions' of muscles with no sensual connotation (Nicholls & Holmes, 2012). Compared with women being trained in Sweden from 1864, however, these female physiotherapists in England, had a weaker position in relation to physicians not at least because they did not have their own scientific knowledge base. I argue therefore that a comparison between female physiotherapists from 1864 in Sweden to that of female physiotherapists in England from 1880s indicates that it was not necessarily the sex category of the physiotherapist that affected their ability to achieve status and legitimacy. It was, rather, the lack of their own scientific knowledge base.

In the next section, I show how the situation in Norway represented a third variation on how aspects of gender became significant in the development of the physiotherapy profession.

2.1.3 The case of Norway

Norwegian physiotherapy has three roots: orthopaedic, gymnastic and massage-based (Haugen, 1997; Langaas, 2013). I have already showed how gymnastic physiotherapy was rooted in Sweden, whereas massage-based physiotherapy was rooted in England. Orthopaedic and gymnastic physiotherapy were closely linked (Ottosson, 2007). Although there were orthopaedic institutes in Europe from the eighteenth century, the first orthopaedic institute in Norway was not established until 1838 when Dr. Kjølstad opened an institute in Lillehammer (Haugen, 1997; Langaas, 2013). Kjølstad's methods for curing scoliosis became well-known internationally and consisted of exercises and mechanical stretching treatment where the patient was strapped to a bed or treatment bench. Kjølstad worked closely with Dr. Tidemand, another well-known Norwegian orthopaedist. Both received funding from the Norwegian state, enabling their methods to be continued after their deaths. Tidemand's assistant (Caroline Gundersen) and Tidemand's daughter (Henriette Tidemand) continued the work of the Tidemand Institute, which moved from Lillehammer to Christiania. It was in this institute that physiotherapy was first taught in 1897 (Haugen, 1997).

Swedish physiotherapy education was closely related to that in Norway as they are neighbouring countries. In addition, in the period from 1814 to 1905, Norway was in political union with Sweden. Thus, many Norwegians were educated in Sweden. In the period between 1813 and 1897, no physiotherapy education was carried out in Norway (Haugen, 1997). Thus, the knowledge base established in Swedish education was also adopted by Norway. The first two Norwegian women to be trained at GIH in Sweden in 1877 were Elisabeth Lampe and Agathe Faije. Elisabeth Lampe ran her own institute in Christiania and worked as a teacher in gymnastics (Haugen, 1997; Langaas, 2013). She was instrumental in establishing the first

Physiotherapist Association, which was constituted in 1895. She was a member of the board and later became the leader of the Physiotherapy Association. In 1897, three physicians, Dr. Giertsen, Dr. Bülow-Hansen and Dr. Natvig, established the Orthopaedic and Mechanical Institute in Christiania, which is known as the first Norwegian physiotherapy institute. Although women were proactive in physiotherapy, it was male physicians who led the way in physiotherapy education in Norway.

According to Dahle (1990) and Haugen (1997), the physicians had great influence on the development of physiotherapy education in Norway. This was not only due to their strong medical knowledge. It was also because physiotherapy education was financed by private money to which physicians had better access than physiotherapists (Dahle, 1990; Haugen 1997). In fact, physiotherapy education in Norway was private for 70 years (1897–1967) (Haugen, 1997). The second physiotherapy institute in Norway, the Mensedieck Institute, was established in 1927 in Oslo. However, this was not formally recognised as a physiotherapy institute until 1974. Training was based on the movement system of Bess Mensedieck (1861–1957). She was inspired by Ling, among others. Mensedieck herself said that she wanted to develop Ling's system for women (Mensedieck, 1906). Other physiotherapy institutes in Norway were established in 1976 (Bergen), 1989 (Tromsø) and 1992 (Trondheim). The 'Oslo programme' and the 'Mensedieck programme' are today organised as one institute, with most subjects taught in common.

Before the establishment of the first physiotherapy institute in Norway, a public committee was constituted to examine the question of education for physiotherapists. The subjects discussed were anatomy, physiology and pathology. Although teaching of massage was planned, the main emphasis was on gymnastics. The plan was to establish the physiotherapy institute at the Norwegian Gymnastic Central School (today the Norwegian School of Sport Sciences) (Dahle, 1990; Haugen, 1997). According to Haugen (1997), one of the deepest conflicts in the history of Norwegian physiotherapy education concerned whether physiotherapy ought to be mainly rooted in gymnastics (sport) or in medical science (Haugen, 1997).

Norwegian physiotherapy education was initially open to both women and men. However, in the period between 1911 and 1946 it was closed to men (Thornquist, 2014). According to Ottosson (2008), it seems reasonable that the exclusion of men from physiotherapy education in Norway in this period has links to the situation in Sweden. He suggests that Norwegian physicians might have wanted to avoid the situation of their colleagues in Sweden and therefore did not want men to become physiotherapists. This is based on the assumption that male physiotherapists would not accept being subordinate to male physicians, whereas female physiotherapists would. Comparing the case of Sweden with the case of Norway, Ottosson (2008) highlights how physicians in Norway did not combine physiotherapy with sports education, which may also have been a strategic decision on the part of physicians (Ottosson, 2008).

In the beginning, the medical profession did not support the establishment of the physiotherapy profession. In fact, the legitimisation of physiotherapy as a profession in Norway occurred as a direct response to a police demonstration in 1936. The police argued that they needed a law that made it possible to distinguish between massage as medical treatment and massage as a cover

for prostitution (Haugen, 1997). Dahle (1990) describes how the relatively small market for physiotherapy led to a conflict between working class masseuses and middle class physiotherapists (called masseuses at that time). Whereas the working class masseuse used only massage, the physiotherapist used a combination of medical exercises and massage. Dahle (1990) emphasises the competition between them. However, use of the term massage as a cover for prostitution was more problematic for physiotherapists. As physiotherapists established themselves in institutes that advertised massage services, this became an increasing problem (Dahle, 1990). There are stories from this time about fathers refusing to allow their daughters to become physiotherapists because of the risk of being associated with prostitution (Dahle, 1990, p. 86). Later on, massage became a problem because it lacked the scientific basis available for exercises. In addition, activity was promoted but massage, as a passive treatment, was devalued (Dahle, 1990; Haugen, 1997; Sudmann, 2009).

To sum up, in this section I have outlined the historical development of the physiotherapy profession presented as the three cases of Sweden, England and Norway. I have described how different legitimising strategies were used with different debates on which competences physiotherapy should be based on from country to country. In Sweden, physiotherapy was first established as a profession for men and it was strongly linked to sport and exercise with a scientific knowledge base. This helped physiotherapy become an autonomous profession. In England, physiotherapy was seen as a female profession. Massage was the main competence of the physiotherapist in this period and (female) physiotherapists seemingly were subordinated to male physicians. However, their competence was legitimised by their medical knowledge base. Norway has been presented as a case standing between Sweden and England in terms of how the profession was established with its roots in Sweden, but with similarities to England. In the next section, I will outline some aspects of gender segregation within physiotherapy.

2.2 Gender segregation in the physiotherapy profession

Gender segregation relates how women and men tend to have different career paths, as can be seen in previous studies on gender in physiotherapy. In the following section, previous studies on gender segregation within physiotherapy are presented in two sub-sections. The first sub-section shows how segregation patterns take place in today's physiotherapy profession in terms of a gendered division of labour. The second sub-section outlines how gender segregation in physiotherapy is embedded in different therapeutic roles and ideologies.

2.2.1 Gendered division of labour

To reiterate, in Norway and internationally, only 30 percent of the workforce in physiotherapy is male. In Norway, gender segregation is shown in the way men predominate in manual therapy and sports physiotherapy, whereas women predominate in psychomotor physiotherapy and physiotherapy for children. In addition, men work more often in the private sector, whereas women work more often in the public sector (Dahle, 1990; Dahl-Michelsen & Leseth, 2011; Enger, 2001). In Sweden too, male physiotherapists work more often in private practice, primary health care, occupational care and sports medicine clinics, whereas women work in

inpatient wards and hospitals, geriatric clinics and long-term rehabilitation clinics (Bergman, 1989; Johansson, 1999; Öhman, 2001; Öhman & Hägg, 1998; Öhman, Stenlund & Dahlgren, 2001).

In the US, men are over-represented in clinical electromyography, sports and orthopaedics (88 percent of all male physiotherapists specialise in these three areas), whereas women predominate in cardiopulmonary, geriatric, neurologic and paediatric physiotherapy (MacLean & Rozier, 2007). In the UK, the National Health Service (NHS) is a large working area for physiotherapists, though physiotherapists are also agency workers and work in the independent sector (Park et al., 2003). Physiotherapy education in the UK has a long tradition of hospital-based training (Hammond, 2009, 2013). Sim (1985) points to how the UK may have certain weaknesses in professional status compared with Canada, Australia and the US. This is because physiotherapy education in the UK has not been university or degree-based (Sim, 1985). In 1988, only five percent of registered physiotherapists were men and most of these were in leading positions (Davies, 1990). In a survey, which included female and male students in UK, the most common reasons given by both groups for men not becoming physiotherapists were the profession's female image and poor pay. The number of male physiotherapists in the UK has risen to 18 percent (Bithell, 2007). In 2007/2008, the number of male physiotherapy students was 28 percent (Hammond, 2013). I have found no studies investigating gender distribution in work areas or specialisation in the UK. However, studies from the UK refer to studies from Sweden and US on these issues (see e.g., Davies, 1990; Hammond, 2013) and do not comment on the situation in the UK as being different. I therefore argue that the gender pattern in the UK is probably quite similar. In addition, gender division in physiotherapy also applies to the field of academia, which is dominated by female physiotherapists. Women predominantly carry out teaching and research in physiotherapy; only seven percent of teachers in physiotherapy education are men, which indicates that male physiotherapists do not favour teaching as a career (Öhman, Hägg & Dahlgren, 1999).

Dahle (1990) highlights the tendency of female physiotherapists in Norway to specialise in manual therapy, an area currently dominated by men, whereas there is no similar pattern of men looking to specialise in psychomotor physiotherapy, currently dominated by women. The pattern of women seeking work in areas traditionally dominated by men, but not the other way around, is well known within the gender segregation of work today. It is also claimed that this reveals women as the flexible gender (Solheim & Teigen, 2006). Gender segregation in previous studies in physiotherapy has not only been viewed in relation to where women and men work, but also in terms of how therapeutic roles and ideologies are gendered by being associated with femininity and/or masculinity. The next sub-section looks at literature in this area.

2.2.2 Gendered therapeutic roles and ideologies

Gender in physiotherapy is often assumed to be related to the fact that different therapeutic roles and ideologies are associated with cultural norms of femininity versus masculinity (to women or men). Dahle (1990) points to the therapeutic model of caring, based on empathy, sensitivity and feelings, being culturally and historically associated with femininity. A

therapeutic role based on goals, Dahle further claims, is thus in line with cultural understandings of masculinity, where values such as effectivity, management and control are emphasised and acknowledged. By applying these roles and ideologies, individuals not only confirm their professional identity but also their gender identity (Dahle, 1990). It is quite interesting, therefore, to find that female physiotherapists had rather different views about what the professional role of physiotherapists ought to be (Dahle, 1990). In her study, many so-called professionally-conscious women argue for a professionalism and a therapeutic ideology that can be characterised as scientific in traditional (masculine) ways. In other words, some women want to keep the caring values separate from what they see as important in the physiotherapy profession. Many have the same view about profit as male physiotherapists. Other women, however, insisted on a wider definition of 'what physiotherapy is' and emphasised an alternative therapeutic ideology that integrates caring values (Dahle, 1990:277). In contrast, the therapeutic role described by men in Dahle's study was far less varied. According to Dahle (1990), her study indicates that the male therapeutic role and ideology point to the masculinisation of the physiotherapy profession (Dahle, 1990). Similarly, Bergman and Marklund (1989) argue that the physiotherapy profession in Sweden has become masculinised. Their claim rests on a belief that values that are historically and culturally associated with masculinities are increasingly emphasised in contemporary physiotherapy.

In a study of the professional role of novice physiotherapists in Sweden (Öhman & Hägg, 1998), the design of therapeutic roles was found to be related to different job orientations for female and male physiotherapists. Female physiotherapists were found to be patient-oriented and to have great job satisfaction in their close relationship with patients. Male physiotherapists worked in rehabilitation teams and focused on training, had interests in starting a private practice, and focused on equipment and a business outlook. Male physiotherapists are found to be team-oriented (as compared to patient-oriented) and unsatisfied with team leaders, salaries and organisational issues (Öhman & Hägg, 1998).

2.3 Gender and sexuality in the physiotherapy encounter

In today's physiotherapy, both women and men are physiotherapists and both women and men are patients. Thus there are both same-sex and opposite-sex treatment relationships between physiotherapists and patients. As mentioned earlier, studies from Nicholls & Cheek (2006) and Nicholls & Holmes (2012) show how the handling of sexuality and gender has historically been important in constructing the professional physiotherapy encounter. In the professional conduct of physiotherapists worldwide, a disciplined approach towards the body is still recognised (Nicholls & Holmes, 2012). In the following two sub-sections, I present research on gender and sexuality in the physiotherapy encounter. In the first sub-section, I outline how gender and sexuality are experienced and reported from the point of view of physiotherapy students and physiotherapists. In the second sub-section, I examine research on patient stories about experiences of gender and sexuality in the physiotherapy encounter.

2.3.1 Reports on gender and sexuality by physiotherapy students and physiotherapists

Studies have reported that physiotherapy students and physiotherapists in today's clinical practice experience sexual harassment and inappropriate patient sexual behaviour (IPSB). For example, surveys from North America, New Zealand and Australia, report increases of 40 to 80 percent in IPSB (Cooper & Jenkins, 2008; Cullen 1997; de Mayo 2000; O'Sullivan & Weerakoon, 1999; McComas et al., 1993). In a study with students from a West Australian university, 78 percent of the students reported that they had experienced IPSB. Forty-eight of the 67 respondents were women. In addition, according to the authors, the study exposed that the students, in line with published data from physiotherapists, are inconsistent in their attitudes towards professional sexual boundaries. According to Ang, Cooper and Jenkins (2010), these findings highlight the need for training to focus on IPSB and professional sexual boundaries in the undergraduate curriculum (Ang, Cooper & Jenkins, 2010).

Hammond (2013) finds that the discourse of masculinity in physiotherapy education implies that male students are at risk of being identified as unprofessional by being viewed as a sexual threat (Hammond, 2013). In the classroom where students practice manual skills, undressed to shorts and sports bra (for women), male students are found to be challenged in terms of balancing the need to conform to the heterosexual ideal of masculinity, while at the same time balancing the risk of being unprofessional (Hammond, 2013). In these situations, male students must learn the spoken and often unspoken rules of therapeutic touch in physiotherapy practice. Thus, male students internalise discursive strategies to regulate themselves as asexual/safe/professional male physiotherapy students in relation to such rules (Hammond, 2013). In contrast to male students (Hollway et al., 2003), women are considered less at risk of being unprofessional than their male classmates (Hammond, 2013). However, the findings in Hammond's study (2013) show that even though female students are less at risk of being accused of inappropriate sexual behaviour, this may still happen. One example from a clinical placement period in a hospital describes how a female student (with an Asian background) was accused of being unprofessional. She had responded to a 15 year old patient with learning disabilities who had asked for a goodbye hug by both hugging her and giving her an ear kiss. The episode resulted in a huge drama where the female student was positioned as implicitly sexualising the treatment and her suitability as a physiotherapist was questioned (Hammond, 2013).

In the Norwegian context, a qualitative study based on interviews with female physiotherapists (Sudmann, 1997) investigates how they handle bodily proximity (intimacy) with male patients in treatment. The study demonstrates how female physiotherapists emphasise a behaviour where gender and sexuality are treated as not being present in the physiotherapy encounter. This takes place by emphasising a biomechanical view of the body. Female physiotherapists emphasise ideas of the good patient and the good physiotherapist as gender-neutral ideas. Sudmann (1997) argues that the most important reason for these ideal types to be gender neutral is to help them handle the presence of sexuality. Thus, physiotherapists, as women, take great responsibility for creating the ideal types through practical arrangements and symbolic work. Sudmann (1997) reasons that the ideal type of the gender-neutral physiotherapist thereby contributes possibilities for increased power and legitimacy for female physiotherapists. Nonetheless, men are found to be more powerful than women, measured by gaze, sexualising,

status and demands for legitimacy. For female physiotherapists, power is achieved through a clinical gaze, objectification and the use of academic terminology. Sudmann's argument (1997) is that, in terms of sexuality and power, gender is part of the treatment session and influences the type of treatment the patient is offered.

The physiotherapists in Sudman's study (1997) said that it was easier for them, i.e., more relaxed, to have female patients than male patients. In addition, it was easier to be in a treatment relationship with older rather than younger men. They found it more comfortable to have patients who were in a relationship rather than those who were single. They preferred the treatment to take place in the training room and for the physiotherapist to wear a coat, which they saw as necessary in close bodily work with patients. Additionally, physiotherapists often used a pillow between themselves and the patient in some of the most intimate positions. Moreover, they made use of academic and professional expressions and did not talk personally in intimate situations but focused on what was going on biomechanically, and so on. The good patient is expected not to misinterpret bodily closeness. For example, patients should not show or express pleasure. In addition, physiotherapists want the patient to be active and to participate in intellectualising the treatment. This implies that the patients are expected to show interest in and agree on the objectification of their bodies by describing their bodies in biomechanical terms. In addition, the patient should be well groomed, clean-smelling, and should not be depressed or gloomy. Patients are not supposed to ask too much about the therapist's private life. They are expected to be able to create a good mood and use humour in the treatment, but they should not flirt. Any use of a direct sexual expression is seen as insulting for the therapist (Sudmann, 1997).

This section looks at how surveys show that physiotherapy students and physiotherapists report sexual harassment from their patients. The qualitative study of Hammond (2013) demonstrates how issues of sexuality are present in physiotherapy education in the UK. The qualitative study of Sudmann (1997) shows how female physiotherapists in physiotherapy encounters experience sexuality and gender. How gender and bodies are strongly involved in the physiotherapy encounter is also demonstrated. This suggests that although sexuality is emphasised as being absent from the physiotherapy encounter, it still matters. In the next sub-section, I present a study that focuses on patient experiences of the significance of gender, intimacy and sexuality in the physiotherapy encounter.

2.3.2 Patient reports on gender and sexuality

In another qualitative study, based on focus group interviews, Sudmann (2009) asks patients in Norway about their experiences of being in physiotherapy treatment (Sudmann, 2009). In this study, the patients talk about detailed planning of their self-presentation. The patients are particular about hygiene, choice of underwear, casual dressing in the therapy sessions, perfume, jewellery and so on. The female participants explained that being seen as neat and clean is important. The dress code for the physiotherapy encounter is sports bra and female boxer shorts or regular shorts. Lacy briefs or thongs are not seen as appropriate attire for the physiotherapy session. Some of the older female patients explain that they do not wear sport bras, but emphasise wearing bras with no sexual connotations. The younger female patients negotiate

between choosing an inappropriate type of bra and being seen as dowdy. The younger participants feel that covering the breast too much is dowdy unless it is a sports bra. Being old-fashioned was not felt directly as age; it was more a matter of being seen as an unappreciated, non-feminine being. The experiences of the female participants demonstrate how delicate the physiotherapy encounter is in terms of embarrassment potential when social expectations such as dress code are not met. Some female participants felt that male physiotherapists wanted them to cover up more, whereas others had experience of the reverse. Some female patients had experienced unwanted sexual attention from male physiotherapists. They appear to have been exposed to behaviour from one therapist (now dead) which went far beyond acceptable professional codes of conduct in physiotherapy (Sudmann, 2009).

Male participants also focused on being neat and clean in the physiotherapy encounter. They see it as a necessity in order to show respect for the therapist, based on an implicit understanding that no one wants to be in close bodily contact with a body that is sweaty, dirty, and so on. Their underwear is in good condition. Some men see being neat and clean as being respectful to the physiotherapist; others feel that putting too much emphasis on appearance is an indirect sexualisation of the treatment session. On the whole, male patients paid the same attention to their underwear and appearance regardless of whether they were seeing a male or a female physiotherapist. Some, however, said that they paid more attention to their appearance if they were seeing a female physiotherapist, and especially a younger female physiotherapist (Sudmann, 2009).

As demonstrated in this section, patients carry out detailed plans for their appearance in the physiotherapy encounter and gender has a strong influence on the norms of appearance, with women being more concerned with their appearance than men. In the next section, I look at studies on gender within physiotherapy education.

2.4 Gender in the physiotherapy education

As mentioned earlier, research on gender in the physiotherapy profession is rare. In particular, there is a lack of knowledge on gender within physiotherapy education. Some existing studies have however focused on gender in relation to work values and work preferences and constructions of professional identity found in physiotherapy. This literature is described below.

2.4.1 Work values, work preferences and gender

Öhman (2001) finds that student values and work preferences follow the pattern of the gender-segregated work division in physiotherapy. Female physiotherapy students are similar to female physiotherapists with work preferences that are more widespread, whereas male physiotherapy students are similar to male physiotherapists with preferences that focus on a few areas (Öhman, 2001). In a study of career choice and professional preferences among Swedish physiotherapy students, differences between men and women's preferences and values were identified (Öhman, Stenlund & Dahlgren, 2001). Men are found to be more likely to have chosen physiotherapy because of their interest in sports and physical activity (Öhman, Stenlund &

Dahlgren, 2001). The finding that sport is of greater significance to the educational choice of physiotherapy for men compared with women was also found in a study from the UK. The respondents in this study are students in upper secondary school. Male students, to a larger extent than female students, believe that one needs to be sporty to become a physiotherapist (Greenwood & Bithell, 2005). Additionally, in the study of Öhman, Stenlund and Dahlgren (2001), men prefer to see themselves as the owner of a private clinic in comparison with women and wish to work with alternative approaches to health care, such as fitness training in sports medicine clinics. Male students are also more decided about future professional activities, whereas female students are more open to different areas of practice (Öhman, Stenlund & Dahlgren, 2001).

In the latter study, the opportunity to work with people is the most frequently-reported reason for the career choice for both men and women. However, the main reason for students' career choices is to work with bodies that are healthy and athletic, in other words to work with bodies similar to their own (Öhman, Stenlund & Dahlgren, 2001). The two most preferred healthcare facilities after graduation are sports medicine clinics and fitness centres. Also, future work in private practice and health promotion are highly valued, whereas care of the elderly and hospital work are not favoured. Interestingly, very few students want to work in research, which demonstrates that research is not a motive for students' choice of a career in physiotherapy. Notably, students' initial preferences change only marginally during the educational programme. Nevertheless, very few believe they will be able to get a job in a sports medicine clinic or in a fitness centre after their graduation. Students become more positive about working in the public health arena during their education. The authors interpret these findings as 'an adaptation to reality' (Öhman, Stenlund & Dahlgren, 2001).

A similar study of career choice and professional preferences in a group of Canadian physiotherapy students demonstrates that students in Canada mostly share the same work preferences and values as their colleagues in Sweden (Öhman, Solomon & Finch, 2002). The findings reveal that job accessibility and economic advantages are the most frequently indicated reason for the choice of physiotherapy as a career. The desire to work in private practice and with adults is ranked highly, and few students regard home care and community healthcare facilities as ideal choices after graduation. Clinical educators are found to be role models and research, managerial work or occupational health is not preferred. The findings suggest that the students appear to be choosing their career for its clinical focus. In student preferences for private or public sector employment, (statistically) significant gender differences appear. In fact, gender is the only background factor that shows significant associations with student preferences for future work. Female students prefer employment in public health care, whereas male students would prefer to become the owner of a private clinic (Öhman, Solomon & Finch, 2002). Similarly to the students in the Swedish study, these students were asked to indicate their most likely type of employment. The answers indicate that the public sector and general hospital are viewed as the most likely employment sector after graduation. The authors interpret this in relation to pragmatically rational decision-making as an important dimension of career decisions and professional socialisation (Hodkinson & Sparkes, 1997). Students in Canada had a background in kinesiology or physical education because of a different enrolment system

which indicates that they might be better informed about the job market (Öhman, Solomon & Finch, 2002).

The studies presented above do not pay attention to symbolic aspects of values and work preferences. However, some studies that centre on the educator's view of student work values and work preferences, disclose how educators associate female and male students with different symbolic values. For example, gendered perceptions of the need for recruiting men and women to the physiotherapy profession are found among female educators in Sweden (Öhman, Hägg & Dahlgren, 1999). Female educators want more men in the physiotherapy profession as they believe it will improve status and salaries. Female educators consider the male student to represent a business mentality. This is found to be somehow problematic to female educators in terms of challenging their social values and empathy for weak groups such as the disabled and elderly people, with whom they believe female students, not male students, will work. However, male students are regarded as important and as a valuable resource in terms of a perceived need for their business mentality in the physiotherapy profession. Female students are seen as important to the profession in terms of bringing in empathy and care (Öhman, Hägg & Dahlgren, 1999). In another quantitative study, male students are found to achieve lower mean marks than female students on clinical placements. In addition, 13 percent of male students, compared to only two percent of female students, had failed a placement (Hammond, 2009). In this study, female educators found an attitude problem with male students. It was suggested that there might be a mismatch between male student preferences for working in the private sector and the clinical education in physiotherapy, being based on the NHS and being female dominated. Based on this, Hammond (2009) argues that there are what he terms gender issues in assessment within physiotherapy education. Also, he argues that there is a need to follow up on why clinical educators, academic tutors and students have different interpretations of the clinical assessment process and how these criteria might be gendered (Hammond, 2009).

Taken together, the studies in this section show how the gendered division of labour in physiotherapy seems to be grounded in the educational context to a large degree. There is also a tendency for neither female nor male students to be positive about the work areas that women are traditionally associated with, such as work in the public and in more caring areas such as care of the elderly and hospital work (Öhman, 2001). The findings presented in this section also point to sport as being of greater importance for male students compared with female students. Having said that, the studies presented so far do not appear to have paid systematic attention to *how* gender becomes significant in the physiotherapy profession and in physiotherapy education. In the next sub-section, I present a study of gender and identity construction within today's physiotherapy education in the UK.

2.4.2 Gender and identity constructions in the physiotherapy education

The study referred to is an enquiry into students' identity constructions in an undergraduate physiotherapy programme in the UK (Hammond, 2013). More specifically, the study examines what types of gender discourses are articulated in students' experiences of becoming physiotherapists. In this study (Hammond, 2013), male students are found to position themselves as being particularly suitable for being physiotherapists. This positioning takes

place through a view of themselves as sporty and as having a common-sense view of handling tasks in physiotherapy treatment, both practically and intellectually. The findings demonstrate that male students experience themselves as more powerful and with higher status than female students, female clinical educators and female academics. Hammond (2013) argues that men's bodies are constructed as fit and strong, and therefore they are seen to be more capable, and more appropriate for physiotherapy work. In other words, Hammond reasons that masculine identities are constructed within a discourse that normalises physiotherapy as a natural prolongation of sport. The masculine body is considered as being more appropriate for performing physiotherapy. Moreover, Hammond argues that heterosexual male bodies are constructed as appropriate for physiotherapy work, possibly implying that women do not have the physical capabilities to succeed in physiotherapy or by implication that gay men may be perceived as effeminate. This provides a platform for men to construct an identity as physically capable and socially acceptable in physiotherapy (Hammond, 2013). Hammond finds this situation to be different for women in terms of how they must meet a professional norm of being big and strong, while at the same time conforming to norms of femininity. Thus, he argues that the female students meet conflicting norms. One example is a female student who explains that her father was sceptical of the idea of her becoming a physiotherapist since she was not considered physically big and strong. The father questioned her suitability in terms of having physical capabilities for physiotherapy. The same student refers to how she remembers that the promotional video for the physiotherapy programme, which she had seen before applying for the physiotherapy education, focused heavily on men and masculinities.

In short, female students generally do not refer to the masculine discourses, however they are positioned in relation to them (Hammond, 2013). Moreover, the stories of the female students illustrate how they are conscious of other discourses that position them as women. One example is that female students have social expectations of having a family when deciding to pursue an education in physiotherapy. The findings disclose that desirable motivations for female students pursuing an education in physiotherapy are 'to make a difference to people's lives', to 'work towards the beneficence of people' and 'social responsibility', implying that these aspects are opposed to personal material gain. According to Hammond (2013), altruistic professional attributes make female students desirable and suitable candidates for physiotherapy. In his study he finds that female students feel they are forced to be unfeminine in terms of wearing the uniform that implies the removal of feminine attributes such as jewellery. In sum, female students demonstrate a professional identity as being altruistic and as working for the greater good of society. As such, they embed and respond to the social edict that women ought to help and care for people (Hammond, 2013).

Concluding this section, Hammond (2013), finds that through their narratives students position themselves within discourses of femininity and masculinity rather than against them. This implies that they work in line with gendered expectations and thus students do not transcend traditional gender norms. Hammonds (2013) claim is that students thereby normalise physiotherapy as a career choice in line with traditional gender norms. Consequently, he argues, students' gender performing reinforces heteronormativity and ideas about how the body influences perceptions on who is appropriate to be a physiotherapist (Hammond, 2013).

2.5 Summing up the literature review

This literature review gives an overview of existing knowledge concerning gender in the physiotherapy profession including physiotherapy education. The review demonstrates that gender research within physiotherapy is limited. Moreover, knowledge on *how* gender becomes significant within physiotherapy in general is very rare. Studies within an educational context is in this sense only found in the UK. Taken together, the presentation of the different studies in the literature review demonstrates gender in the physiotherapy profession as historically and culturally embedded. This knowledge forms an important contextual framework for the empirical studies in this thesis. In the educational context, the previous studies from Sweden (Öhman, Stenlund & Dahlgren, 2001) and from Canada (Öhman, Solomon & Finch, 2002) have identified that gender differences between female and male physiotherapy students conform to the existing picture of gender segregation within the physiotherapy profession. Additionally, the study from Sweden has pointed to a new trend indicating that female students will chose to work in areas that are not traditional for women in physiotherapy (Öhman, 2001).

The study from the UK, which is a recent contribution to gender research within physiotherapy education, gives a picture of female and male students as positioned within discourses of femininities and masculinities respectively. In short, Hammond's study (2013) demonstrates how female and male students within physiotherapy education in UK have limited possibilities for transcending traditional gender norms. In other words, they conform to traditional gender norms, which construct the male student in a hegemonic position as the natural physiotherapist, whereas the female student is constructed as the other.

Notably, several of the studies presented in the literature review are quantitative and based on surveys. In addition, the qualitative studies (e.g. Dahle, 1990; Ottosson, 2007; Sudmann, 1997) were more occupied with structural and power perspectives and have not emphasised gender performance. Consequently, I argue that these studies have demonstrated *that* gender matters in the physiotherapy profession and in physiotherapy education. However, to a limited extent they have provided knowledge about *how* gender becomes significant. In short, the literature review discloses that there are no previous studies on gender within the Norwegian physiotherapy education. Using this background, the thesis mainly investigates how gender becomes significant in physiotherapy education in a Norwegian context. Departing from a gender performance perspective, this thesis provides an opportunity to explore the possibilities for transcending traditional gender norms within today's physiotherapy education in Norway. This is particularly interesting in the light of how Hammond's (2013) recent study has demonstrated that students have limited possibilities to transcend traditional gender norms within physiotherapy education in the UK.

Finally, as mentioned earlier, the previous studies from Sweden (Öhman, Stenlund & Dahlgren, 2001) and Canada (Öhman, Solomon & Finch, 2002) are quantitative studies using surveys, whereas the study from the UK is qualitative, using digital storytelling and interviews. Thus, these studies did not have the methodological advantages of fieldwork. In this PhD project, I conduct participant observation in combination with interviews, which enables the exploration

of more tacit aspects of how gender becomes significant in physiotherapy education. The methodological advantages of this approach will be outlined in more detail in Chapter 4. Chapter 3 presents the theoretical framework of this thesis.

3. THEORETICAL PERSPECTIVE

In this thesis, I address the significance of gender in physiotherapy education. The chapter is developed to enable a discussion on how physiotherapy students perform gender in their education and the possible changes in the significance of gender in today's physiotherapy education. The three articles in this thesis draw on different theoretical contributions; however, all are grounded in the same epistemology, which views gender as performative. In order to explain how the performative perspective provides a fruitful basis for studies of gender in physiotherapy education, I outline how the perspective is applied in this thesis. The presentation also includes criticisms and debates within gender studies on how to understand and apply this perspective. In the context of the thesis, the questions these debates raise cannot be resolved but they remain relevant to my central argument.

The chapter is divided into two sections. In the first section, I outline the importance of performativity in gender theories and present the concepts of doing and undoing gender. In addition, the section includes a discussion on conceptual definitions and the relationship between sex and gender in gender theories. In the second section, I present the different theories from each of the articles to provide an overview of how they contribute to the project as a whole.

3.1 Performativity in gender theories

In order to understand the importance of performative gender theories in studies on gender in physiotherapy education, it will be useful to look at why performativity became a core concept in gender theories. In the 1960s, role theories became increasingly important in Nordic gender research. The adaption of role theories was strongly inspired by Parsons (1951) and his concept of structure-functionalism. A central point of departure in role theories concerns the fact that individuals always have to deal with interactions with other individuals. When these encounters are repeated into the form of expectations, a role is constructed. For Parsons, such roles ensure that different functions in society are taken care of and thus social integration is fulfilled. According to Parsons, this implies that the different roles women and men are assigned to in modern society, such as family carer and breadwinner, are not only socially learned through childhood and family life, their complementarity is also necessary to constitute a well-functioned society. However, during the 1960s, Nordic gender researchers developed role theory in a more critical direction than Parsons originally intended. Inspired by the radical turn in the social sciences the structure of roles in which women and men were assigned to, was increasingly seen as a part of a larger system of power in which women were regarded as the most subordinated part (Holter, 1970). Another theoretical issue was that, although role theories could explain women and men's social behaviour as a social construct and as such not pre-defined by sex: the concept could not fully explain why some individuals did not socialise into these roles or contested these norms of behaviour. In short, role theory could not capture change or protest and was viewed as too static and deterministic (Solbrække & Aarseth, 2006). These critics gave momentum to the development of doing gender and gender performance perspectives. The advantage of these perspectives lies in their ability to expose potential for

transcending traditional gender boundaries, for example, by the fact that both women and men can enact feminine and masculine roles. This made it possible to identify boundaries that limit women to perform femininities and men to perform masculinities. While bearing in mind that individual actions are embedded in norms of gender and therefore represent gendered structures of power, the performative approach to gender more eagerly seeks to grasp change and possible variations in the way that individuals respond to gender norms in different contexts. The concepts of doing and undoing gender are important in gender performativity approaches and are outlined in more detail below.

3.1.1 Doing and undoing gender

This section begins with the doing gender concept of West and Zimmerman (1987), followed by a look at the early work of Butler (1990). The section then examines Deutsch's (2007) concept of undoing gender and a later contribution on gender by Butler (2004).

According to West and Zimmerman (1987), gender is as an ongoing activity (doing) taking place in everyday interaction. They see the relationship between sex and gender as being embedded in interaction. In their theory, the concepts of sex, sex categories and gender are needed to understand gender as doing rather than having a static relationship to social norms as in role theory. Sex is based on biological criteria for the classification of people as women or men. In everyday life, categorisation is recognised by the social identification of membership in one or other category. Gender, on the other hand, is the activity of managing to be read as appropriate for the sex category in the light of normative conceptions (West & Zimmerman, 1987, p. 127). If gender is done appropriately, the normative conceptions of gender are confirmed; if doing gender fails, it is the individuals and not the norms that are called into account (West & Zimmerman, 1987, p. 146).

The idea of gender as a social construct is based on the case study of the transsexual Agnes (Garfinkel, 1967). Agnes grew up as a boy, but adapted a female identity when she was 17 years old. She later underwent a surgical sex change. West and Zimmerman's argument for gender as doing is based on reflections on how Agnes, according to Garfinkel's analysis, had to learn how to 'do woman'. This implies that she had to learn to produce configurations of behaviour that would be seen by others as normative gender behaviour (West and Zimmerman, 1987, p. 134). Gender as a communicative interaction implies that actions are viewed not only by the individual who performs gender, but also by those who read it. In other words, it is not enough to see oneself as a woman or a man, gender is performed in interactions and is read and judged by others than the doer.

Butler's work has provided several noteworthy contributions to gender theory. In particular, her book *Gender Trouble* (1990) is crucial to the shift towards a focus on gender performance. Most importantly, in this context, as in the theory of West and Zimmerman, there is no pre-defined gender. This implies that gender does not exist before it is done; accordingly, gender is produced *in* communicative praxis: '...gender is always done, though not a doing by a subject who might be said to pre-exist the deed' (Butler 1990, p. 25).

In *Gender Trouble* (1990) there tends to be no pre-defined sex either. Thus, in contrast to West and Zimmerman (1987), Butler's (1990, 1997, 2004) premise is that there is no ontologically-based distinction between sex and gender in terms of how either category is socially constructed. Her concept of doing gender implies that in order to make socio-cultural communication intelligible, the repeated stylisations of gender appear as if it was an effect of essential inner nature. Thus, although there is no doer behind the deed (Butler 1990, p. 25), gender and gender identity appear to be natural (Lykke, 2010, p. 91).

Butler's main contribution to gender studies is her focus on gender performance:

Gender is the repeated stylization of the body, a set of repeated acts within a highly rigid regulatory frame that congeal over time to produce the appearance of substance, of a natural sort of being (Butler, 1990, p. 33).

In Butler's theory, the doing of gender and sex is embedded in a false duality. That is, binary gender discourses inscribe bodies according to a false duality (Francis 2008, p. 213). Butler's argument (1990) relates to this latter point as she challenges this false duality by pointing out how it is the norms and not the individuals that need to be confronted. According to Butler (1990), this is why sex and gender should be separated from each other.

This thesis is inspired by both West and Zimmerman's theory (1987) and Butler's theory of gender (1990). In gender studies, doing gender (West & Zimmerman, 1987) and gender performance (Butler, 1990) are interchangeable concepts although grounded in different approaches. Gender performance is said to be a post-structuralist term, whereas doing gender is claimed to be an ethno-methodological term (Sabbe & Aelterman, 2007). However, in this project, I have followed the argument of McDonald (2013), who argues that although there are differences between the ethno-methodological approach of doing gender (West & Zimmerman, 1987) and the post-structuralist approach of gender performing (Butler, 1990), the perspectives complement each other in important ways (McDonald, 2013). The main potential embedded in both the concept of doing gender (West & Zimmermann, 1987) and gender performing (Butler, 1990) is the possibility of destabilising binary and essentialist gender thinking and the potential for capturing shifting and transgressive gender actions. With its focus on the possible changes in the significance of gender in physiotherapy education, this thesis draws on both sets of thinking without seeing any need to separate them.

As mentioned earlier, the idea behind doing gender is to explore the ways in which both women and men are able to perform both femininities and masculinities. This suggests a loosening of the coupling between women and femininities and men and masculinities. However, according to Deutsch (2007) and McDonald (2013), this is not always the case in studies using these concepts (Deutsch, 2007; McDonald, 2013). One criticism concerns a tendency within gender research to focus mainly on traditional gender performance. As non-traditional female behaviour tends not to be seen as doing masculinity, and non-traditional male behaviour tends not to be seen as doing femininity, it is the traditional gender behaviour of men and women that is mostly identified and analysed. This risks an over-representation of gender as representing binary differences and failure to explore possibilities for deconstructing it. In other words, this risks supporting rather than questioning popular gender discourses based on natural differences

(Francis, 2000, 2002, 2006, 2008, 2010). A similar criticism is raised by Risman (2009) who questions the tendency to label new behaviours identified within groups of boys and girls as alternative or new masculinities and femininities simply because the group is composed of biological females and males (Risman 2009, p. 82). If anything a man does is interpreted a type of masculinity and everything a woman does is interpreted a type of femininity, stereotypes of women and men are reinforced instead of emphasising their similarities (McDonald, 2013; Risman, 2009). Rather paradoxically and not at all as intended by West and Zimmerman (1987) and Butler (1990), the tendency to see what men do as masculinities and what women do as femininities has seemingly become a common practice in gender studies (Deutsch, 2007; McDonald, 2013).

The concept of undoing gender has developed from this background. The central point here is that when men are doing femininities they are undoing gender, whereas women are undoing gender when they are performing masculinities. As doing gender and performing gender imply two gender approaches, the concept of undoing gender also represents two approaches (Kelan, 2010; McDonald, 2013). One approach, associated primarily with Deutsch (2007), is rooted in ethno-methodology based on West and Zimmerman's (1987) approach to doing gender. Deutsch's (2007) argument is that undoing gender creates opportunities to focus on gender as sameness and not only as difference. Consequently, she claims that the aim of undoing gender is to inspire researchers to look for ways in which women and men accomplish sameness (Deutsch, 2007). In this way, undoing gender shows how gender can become less relevant as difference (McDonald, 2013). Also she reasons that whereas doing gender evokes conformity, undoing gender evokes resistance (Deutsch 2007, p. 122). There has been some debate on the concept of undoing gender within the field. This mainly concerns the response of West and Zimmerman (2009) to Deutsch's (2007) and Risman's (2009) argument about how the gender binary can be subverted in interaction. West and Zimmerman (2009) claim that undoing gender is not possible in terms of how one is always accountable to gender. They argue that, although the accountability structure that maintains gender may shift to accommodate less oppressive ways of doing gender, this can never be entirely eradicated. They suggest a concept of redoing rather than undoing gender (Connell, 2010, p. 32). Although this interesting debate is relevant to the field of gender studies, with reference to the position of Butler in this thesis, I have chosen to apply the concepts of doing and undoing gender.

The second approach to undoing gender is based on the post-structural/discursive approach, which is heavily rooted in the works of Butler (1990, 1993, 2004). Butler's concept of undoing gender (2004) is intended to subvert the norms by which normatively-gendered subjects are produced. The difference between the ethno-methodological and the post-structuralist approach is that, in the former, doing and undoing gender are carried out by pre-defined subjects in concrete social interactions and in the light of dominant gender norms to which women and men are held accountable, whereas, in the latter, undoing gender examines the discursive production of subjects in ways that subvert dominant gender norms (McDonald 2013, p. 565). Based on this, I argue that the former approach is mostly concerned with the interactions between individuals and the latter with the discourses being produced. Butler (2004) focuses on subverting gender norms; according to McDonald (2013), this often results in commonalities between women and men, which makes gender differences more silent in given interactions.

These ideas are also central to Deutsch (2007). Accordingly, in this project, I see the approaches to undoing gender of Deutsch (2007) and Butler (2004) as being primarily parallel. The central theoretical point is that, despite their differences, the ethno-methodological and post-structuralist approaches complement each other and can be used together as they are basically concerned with the same issues (McDonald, 2013). The next section explores the relationship of sex and gender. This exploration enhances the way in which the gender performance approach is applied to the field of physiotherapy education in this thesis.

3.1.2 Sex and gender

I have already touched on how the separation of sex from gender became a premise for critical thinking about gender. It is also a key point in the debates concerning how easily gender can be transcended in modern societies. According to Lykke (2010), the relationship between sex and gender is important for an understanding of the consequences of the performative gender perspective. In her presentation, three different perspectives in the field of gender studies represent the relationship between sex and gender, as outlined in Table 2 below.

Table 2. The relationship between sex and gender in gender theories

Perspective	Relationship	Implications
First perspective	Sex → gender	Sex determines gender
Second perspective	Gender ≠ sex	Gender is separate from sex
Third perspective	Gender/sex	Gender and sex are interwoven

The first perspective, illustrates the relationship in terms of how sex determines gender. In short, the effect is that men and women’s agency is limited by their sex category. The second perspective splits gender and sex, implying that gender is different from sex, which makes it possible to study women and men’s ability to transcend what is presumed to be given by sex. However, this position suggests that gender and sex are totally separate. The third perspective views gender as inseparable from sex, which implies that bodily and social norms are inextricably woven together (Lykke, 2010). Please note that the table is not to be viewed as representing a strict chronological development of these perspectives. The table illustrates streams and trends of the relationship between sex and gender within gender studies. The point is to underscore that performative approaches in gender theory have been developed as a response to the problems that follow the assumption that sex defines gender, as in the first perspective in the table. The assumption that sex defines gender has been criticised for being deterministic and is central to what is known as biological determinism and cultural essentialism (Lykke, 2010). Biological determinism is ‘a thought figure that constructs biology as a determining factor as far as social, cultural and psychological character and position are concerned’ (Lykke, 2010, p. 23). Although the second perspective enables us to deconstruct gender, which resolves the problem of determinism and essentialism, another problem remains. Sex and gender become separate entities. Consequently, it becomes difficult to capture

situations and social fields in which biological sex and social gender are intertwined. The third perspective is developed against this background. Here, gender and sex are seen as inextricably interwoven, which according to Lykke (2008, 2010) enables an understanding of how the body material and the cultural dimension appear at the same time.

3.2 Conceptualisation of gender in the articles

The articles in this thesis approach different aspects of gender in physiotherapy education implying that they deal differently with the concepts of femininities and masculinities, as is outlined in the following paragraphs. First, I present the concepts of multiple masculinities within Connell's theory (Article 1). Gender is presented as binary and intertwined performances of femininities and masculinities (Article 2). Finally, I present the concept of communities of femininities and masculinities within Paechter's theory (Article 3).

3.2.1 Multiple masculinities

In her work, Connell (1995, 2005) has developed the concept of masculinity into masculinities to underscore how masculinity includes the plural. Within gender studies, it has become common to conceptualise masculinity and femininity in the plural. I have therefore applied this plural concept throughout my exploration of femininities and masculinities.

In Article 1, I apply Connell's theory of masculinities in order to analyse how students position themselves and each other within a hierarchy of sportiness in the student milieu. Connell's (1995, 2005) theory of different types of masculinities provides a conceptual model that demonstrates relations between masculinities. In her theory, hegemonic, subordinated, complicit, and marginalised masculinities represent the construction of various masculinities. Hegemonic masculinity implies domination and is the top position within the hierarchy of masculinities (Connell, 1995, 2005). The position of hegemony is central because it structures practice in such a way that what dominates becomes hegemonic and what is hegemonic dominates within the actual field (Karlsen, 2011; Lagestad, 2011; Lorentzen, 2006; Lykke, 2008). The relationship between the masculinities suggests that subordinated masculinity is dominated by hegemonic masculinity, whereas complicit masculinity supports hegemonic masculinity. For example, complicit masculinity is a position occupied by those who do not fully achieve the hegemonic position but still benefit from it. Marginalised masculinity is subordinated and, as indicated by the label, at the bottom of the hierarchy of masculinities. The hierarchy of masculinities thus provides the following direction of positions: hegemonic, complicit, subordinated and marginalised (Connell, 1995, 2005).

Through hegemonic masculinity Connell (1995, 2005) attempts to explain why some men are able to dominate and subordinate women and other men. The theory has widespread acceptance but is not without criticism. One criticism is that the masculinities performed by women fall outside the theory. Omitting the masculinity of women tends to emphasise a natural connection between the male body and hegemonic masculinity. Connell & Messerschmidt (2005) have responded to this criticism and agree that research on hegemonic masculinity needs to pay

closer attention to the practices of women and that hegemonic masculinity is related to context (Connell, 2005; Connell & Messerschmidt, 2005; Messerschmidt, 2012). Originally, the concept of hegemonic masculinity was formulated in tandem with hegemonic femininity, which soon became renamed as emphasised femininity to acknowledge the asymmetrical position of masculinities and femininities in a patriarchal gender order (Connell & Messerschmidt, 2005, p. 848). The relationship between hegemonic masculinity and emphasised femininity has been largely ignored, which also Connell & Messerschmidt (2005) see as regrettable. They claim that gender is always relational, and patterns of masculinity are socially defined in contradistinction from some node (whether real or imaginary) of femininity (Connell & Messerschmidt, 2012, p. 848).

In Article 1, therefore, I include what can be considered as female masculinities (Halberstam, 1998). That is, instead of using the concept of emphasised femininity, I include performances of masculinities enacted by the female students (female masculinity). This demonstrates how there are no given connections between men and women and the standards/norms they strive toward. This suggests that students do not necessarily belong to or represent a single category within the hierarchy, and that female students are not necessarily subordinate to male students. In Article 1, this framework is used analytically to explore how both female and male students are able to perform masculinities. Thus, it enables a more finely-meshed understanding of the possibility for female and male students to find different positions within the student milieu.

Nevertheless, the concept of female masculinity is also contested. For example, Paechter (2006a) criticises Halberstam's concept of female masculinity (1998) for romanticising as well as reifying masculinity without telling what it is (Paechter, 2006a). According to Francis (2008), the expression of the masculine and feminine is problematic, however integral in Halberstam's (1998) work (Francis, 2008). However, she claims Halberstam's work to be pioneering in its application of Butler's ideas and its radical decentring of the corporeal in gender performances (Francis 2008, p. 214). Halberstam herself claims that her concept is based on the appearance rather than the content of masculinity. As pointed out by Francis (2008), this response seems to ignore the way that appearance (muscle contours, posture gait and so on) is based on notions or characteristics of gender (Francis, 2008, p. 221).

Within educational gender studies there also is a debate concerning the concepts of femininities and masculinities. In short, this debate challenges the conceptualisation of femininities and masculinities and how sex and gender are seen as related (see e.g. Francis, 2010; Haywood, & Mac and Ghail, 2012, Paechter 2006a, 2006b, 2007, 2009; Rasmussen 2009). As already mentioned, the concepts of femininities and masculinities and the relationship between sex and gender are central in gender theory and related debates. As highlighted in Article 1, I conceptualise sportiness (a core topic in Article 1) as different types of masculinities and inquire empirically as to the extent to which female and male students perform it. In other words, I do not conceptualise masculinities performed by the female students as a new kind of femininity or a different kind of masculinity. Instead, I conceptualise sportiness as a professional norm representing masculinities, and explore how this norm of sportiness intersects with gender norms as performed by the students in physiotherapy education.

3.2.2 Binary and intertwined femininities and masculinities

In order to explore how female and male students attend to curing and caring competences in physiotherapy education, I define them as gender-coded competences. That is, curing and caring are seen as historical and cultural constructions of masculinities and femininities within the physiotherapy profession, as well as being performative actions. In the second article, I do this through a theoretical approach of filling content into curing and caring as, respectively, masculinities and femininities in physiotherapy education. Thus, I analytically apply curing and caring as sensitising concepts guiding what to look for in order to develop knowledge on what the phenomenon implies in the concrete context (Blumer, 1969). This represents a bottom-up approach in terms of focusing on students performative actions, and the intersection between these actions and the contextual frames of physiotherapy education as a way to develop a more theoretical understanding of curing and caring in the context of physiotherapy education. This approach corresponds to how gender can be seen as tacitly embedded in the structuring of competences (Acker, 1990; Solbrække, 2005; Solheim, 2002). This suggests that masculinities and femininities (curing and caring competences) reveal themselves as contextual aspects of tasks and processes. Additionally, gendered competences are not conceptualised as given by culture, but as existing codes representing how things are normally done by women and men and thus being reproduced when performed by individuals (Butler, 1990, 1993, 2004, 2006, 2011; Fenstermaker & West, 2013; West & Fenstermaker, 1995; West & Zimmerman, 1987, 2009). This latter dimension, emphasising agency over structure, implies a performative or doing perspective on gender.

As previously mentioned, the values and behaviours that are seen to define masculinities, femininities, and their interaction remain contested. For example, in recent gender studies, masculinities and femininities are often viewed as culturally-constructed binaries (Alvesson & Billing, 2009; Kimmel, 2004; Lupton, 2000; MacDonald, 2013; Williams, 1991, 1995). This might imply that the difference between femininities and masculinities becomes dichotomous and there can be an exaggerated focus on stereotypical gender constructions. Based on the second article, I argue that a focus on binary differences between femininities and masculinities is not suited to grasp how curing and caring might be intertwined in today's skills training for professional practice. Thus, viewing gender as an intertwined construction of femininities and masculinities enables us to transcend a view of them as dichotomies. In Article 2, I also address how femininities and masculinities are constructed historically as caring and curing competences within the physiotherapy profession. The article explores the social interplay of these competences by investigating empirically how students perform gender as curing and caring competences in skills training.

3.2.3 Communities of femininities and masculinities

In order to investigate the way in which female and male students construct gender as difference based on their bodily performances of the sexed body in skills training classes, Paechter's theory on communities of femininities and masculinities (2003a, 2003b, 2003c) was useful (Article 3). Her theory focuses on how gender is learned as performances of femininities and masculinities constructed within groups of girls/women and within groups of boys/men.

Paechter's theory (2003a, 2003b, 2003c) is developed from Lave and Wenger's (1991) and Wenger's (1998) theory on communities of practice. However, Paechter points to how their theory on communities of practice is largely gender-blind. Nevertheless, she found it a fruitful point from which to develop her theory (Paechter, 2003b). In addition, Wenger (1998) underscores how the informal sharing of repertoire happens over time – as communities of practices – rather than focusing solely on the individual or the social system, which is in line with the perspective I use in this thesis.

Paechter (2003a, 2003b, 2003c, 2007) strongly emphasises gender as performative, referring to Butler (1990, 1993). However, Paechter pays particular attention to how performative actions take place within a context where social conventions and bodily forms are significant to the way in which gender is performed. This matches the context of physiotherapy students' skills training as outlined in Article 3. In her theory, Paechter (2003a, 2003b, 2003c, 2007) focuses on how children learn what it means to be a girl or a boy. However, she involves adolescent women and men in her theory. Of course, the physiotherapy students in the study have already learned what it means for them to be a woman or man. Nevertheless, in the educational context of physiotherapy, they will not only learn what it means to be a physiotherapist, but also what it means to be a female or a male physiotherapist.

Concerning performativity, Paechter (2003b) emphasises how both sex and gender are performative and how both relate to context. By outlining how the sex category is fundamental to societal living, she demonstrates how it is mostly taken for granted, as well as being strongly interwoven into the context. As an example, she points to how the first question when a baby is born is if everything is ok and whether it is a girl or a boy (in most western societies, these questions are now asked at ultrasound sessions before birth). Immediately after the baby is categorised as a boy or a girl, a set of expectations is created concerning how the baby is going to develop and become a girl or boy. How this is basic, is demonstrated in Paechter's (2003b) presentation on what happens when a baby is born as intersex. In short, society categorises the baby as either girl or boy as soon as possible, independently of the individual's own perception of being a girl or boy. If possible, the baby is constructed as a boy and, if not, the baby is constructed as a girl. In addition, Paechter (2003b) demonstrates how an individual's gender is based on perceptions of the genitals on which the person has based their performance. The sex category is defined by inspecting genitals, which we do not normally have access to in daily life; however, we assume what sex category a person has based on how the person looks and acts.

Practice is defined to be essential to the community, that is, shared practices make a community of practice (Paechter 2003a, p. 71). Practice is not fixed but fluid and is constantly being shifted, renegotiated and reinvented (Paechter, 2003a, p. 71). Moreover, to be a full member of a community of practice, core meanings must be shared. Shared repertoire is the most important in the case of local masculinities and femininities (Paechter, 2003a). Furthermore, reification is the glue in the construction and perpetuation of the communities. That is, reification is a marker of belonging to a community of practice. Reification can refer to both a process (by which something becomes reified) and a product (the reified object, practice or process), but to be meaningful it must be incorporated into a local practice (Paechter, 2003a, p. 76). Typically,

reification includes items such as membership cards, certain kinds of clothes, walking styles, hairstyles, and so on, which function as a marker for belonging. That the salience of bodies and bodily forms are reified markers of masculinities and femininities implies that certain clothes and styles of walking and dressing perform as distinguishing markers for belonging to certain communities of practice. In addition, media, popular culture, and other local and broader ways to present masculinities and femininities, influence local practices (Paechter 2007). The theory of communities of femininities and masculinities emphasises how and why particular forms of gender are performed at particular times and places. This suggests that in the educational context of physiotherapy, the larger society may have a significant influence on, for example, what students bring to their education. Furthermore, it is important to consider the historical background in order to understand how femininities and masculinities are influenced historically in the actual field (Paechter 2003a, 2003b, 2003c, 2007). This approach to understanding gender constructions corresponds to gender being situated in time, space and context (Butler, 1990), and is applied in this thesis.

The strongest contribution from Paechter's theory (2003a, 2003b, 2003c, 2007) is the 'bringing back of the body' to gender theories. That is, the theory incorporates the significance of the material and the sexed body in gender performing and emphasises how the body matters and consequently has an impact on the gender performances that are available to individuals in particular places and times, such as in contemporary physiotherapy education. In other words, gender performing cannot be separated from the body, which both limits and gives access to different communities of practice and to different positions within the communities of practice. Thus, Paechter's theory demonstrates Haraway's point that the body should not be reduced to 'a blank page for social inscriptions' (Haraway, 2013), a point which is made in this thesis.

Performances of femininities and masculinities are specific to context. Although one has some choice of what and how to perform, choices are constrained by the communities of femininity and masculinity of which we are part. Paechter (2001) is concerned with how one cannot freely choose the discourse one wants to operate in and that some discourses are more powerful than others. The extent to which one is able to resist varies. According to Paechter (2005), for many, the benefits of conformity outweigh those of resistance (Paechter, 2005, p. 15). As a result, the possibilities to resist in many cases involve joining with others to form alternative communities. One shortcoming of Paechter's theory might be that as it operates with femininities and masculinities as binaries, femininities and masculinities tend to become fixed.

In order to understand the gender performing of male students in Article 3, the concepts of inclusive masculinity (Anderson, 2005) and personalised masculinity (Swain, 2006) are applied. In short, the concept of inclusive masculinity is used to demonstrate how men are able to perform masculinity without undervaluing women and gay men (Anderson, 2005). That is, men are able to constitute new groups, or communities of masculinities to utilise Paechter's concept (2003a, 2003b, 2003c, 2007). This implies that they are able to perform masculinity in opposition to orthodox masculinity. The concept of inclusive masculinity corresponds to the shift in broader cultural perceptions of homosexuality. Inclusive masculinity argues that men within this group have their own values that constitute hegemony in opposition to orthodox masculinity. This implies an opposition to the devaluing of women and gay men within the

orthodoxy masculinity (Anderson, 2005). In this study, inclusive masculinity, is found to operate within the whole group and is not established in opposition to a group that is already performing orthodox masculinity. The concept of personalised masculinity (Swain, 2006), in a similar manner to the concept of inclusive masculinity (Anderson, 2005), indicates how hegemonic masculinity does not necessarily need to produce subordination in order to maintain itself. That is, personalised masculinity captures constructions of masculinities that do not necessarily depend on a patriarchal dividend. This suggests that so-called subordinate boys and men do not necessarily see themselves as subordinate but as different (Swain, 2006). In this thesis, these concepts are used to understand male students' gender performing within a community of masculinities (Paechter 2003a, 2003b, 2003c, 2007).

3.3 Summing up

In this chapter, I have outlined the theoretical framework for the present study. In addition, I have outlined how the three articles that form the thesis have combined gender theories grounded in the same epistemology. They have also enabled me to emphasise different aspects of gender construction based on students' gender performing in physiotherapy education. For example, in Article 1, I demonstrated Connell's theory of multiple masculinities. However, in the same article, and based on my empirical data, I showed that female students also perform masculinities. In this way, I drew some inspiration also from the concept of female masculinity (Halberstam, 1998). In addition, femininities and masculinities were explored as binary and intertwined concepts in Article 2. I used Paechter's theory of communities of femininities and masculinities in Article 3 as well as the concepts of inclusive and personalised masculinity. Based on Lykke (2010), I analytically deconstruct gender; however, from an ontological perspective, I view gender and sex as inseparable. The methodologically aspects of the thesis is outlined in the next chapter.

4. METHODOLOGY AND EMPIRICAL DATA

This PhD study is placed within a social interactional framework implying that meaning is a relational phenomenon constructed in the interaction between individuals or between individuals and things (Gubrium & Holstein, 1997; Järvinen & Mik-Meyer, 2005; Kvale & Brinkman, 2009). How gender becomes significant in physiotherapy education is the main research question in this thesis. The sub-questions posed in this thesis are: How do physiotherapy students perform gender in their education? What are the changes in the significance of gender in contemporary physiotherapy education? These research questions are investigated through participant observation and interviews in skills training in a physiotherapy education context in Norway. This chapter describes the methods, the field, the data collection process, the process of analysis and finally reflexivity.

4.1 Fieldwork

In this work, I use the concept of *fieldwork* as synonymous with the term *participant observation*, which can be defined as follows:

Participant observation implies that the researcher personally collects the data by watching and listening to the participants as they are in action or interaction, express meanings or are involved in events. Enabling this, forces the researcher to be present where the participants are... . The best way of being present is often by participating in the activities of the participants. The researcher then becomes both a participant and an observer... . The area where the participation takes place, is framed as the field and the carrying-out of the observation is named as fieldwork (Grønmo 2004, pp. 141–143, my translation).

Fieldwork can include a range of techniques for gathering information, such as more or less structured interviews and just being present or hanging around. The method takes into account both implicit meanings, tacit knowledge and practices that are taken for granted as well as verbal utterances (Hammersley & Atkinson, 2007). In particular, this method enables the study of what is unspoken and implicit. In other words, fieldwork opens up knowledge through first-hand experiences, which allows for a broad base of interpretations (Fangen, 2010; Hammersley & Atkinson, 2007; Järvinen & Mik-Meyer, 2005). In this case, participant observation has enabled me to be more sensitive to the less obvious and more implicit sides of how gender becomes significant in physiotherapy education. This type of sensitivity is easier to achieve by observation rather than through interviews (Fangen, 2010). Before turning to the data collection process, I state the reasons why this field was chosen for the study.

4.1.1 Selection of the field

I chose to carry out participant observation among first year students in one of the four physiotherapy institutes in Norway. More precisely, I have chosen skills training as the field of

study. Skills training is defined as practice within the *Overall plan for physiotherapy education in Norway* (Utdannings og forskningsdepartementet, UDF; [Ministry of education and Research] 2004) and constitutes 30 of the 180 ECTs in the bachelor degree programme of physiotherapy. The overall plan describes skills training as follows:

Skills training provides the foundation for personal and practical knowledge, which the individual develops through testing and personal experience. The skills require practice and guidance and cannot be conveyed in a theoretical manner alone. Skills training forms a central part of student education, enabling students to apply manual and communicative methods and techniques in physiotherapy situations. Communicative skills in therapy professions are employed both physically and verbally in the way students examine, treat, teach, and tutor. Students are to experience both the therapist role and the patient role through close collaboration with other students. This must include notifications of activities and experiences. Students are to use their own bodily presence and confidence to promote these qualities in patients/clients. Students will gain experiences in gathering, evaluation and the use of information related to individuals and their environment (National Curriculum for Physiotherapy Education, 2004, p. 11, my translation).

Compared with clinical placements, skills training has been overlooked within the research field of physiotherapy education, and the opportunity to contribute more knowledge on skills training as an important part of the curriculum of physiotherapy education is an additional reason for choosing this field of study. However, the main reason for the choice is that skills training is a suitable arena for studying *how gender becomes significant in physiotherapy education*, based on gender as *doing* performed by individuals in interaction(s) with other individuals within the educational context of physiotherapy education. After reading the curricula of the physiotherapy education programmes in Norway, I found the *Functional assessment and manual skills (FAMS)* course suitable for the purpose of this study. The course explicitly describes a focus on manual skills and relational competence. From a gender perspective, the course can be associated with both masculinities and femininities, based on cultural and historical constructions that view manual skills as masculine and relational skills as feminine.

I wanted to explore female and male students gender performing and therefore included both male and female students in this study. As the physiotherapy institute recruits both female and male students and as they all follow the same courses, this would not have been a problem whichever course I had decided access. However, I also wanted to observe a course taught by both female and male teachers. As female educators predominate in physiotherapy education, (Öhman, 2001) this has been a larger challenge. Very few courses include more than one male teacher. However, the FAMS course met all these criteria: The course includes what can be seen as feminine and masculine competences, both female and male students attend the course, and both female and male teachers teach the course. Based on this, I decided to try to get access to this course.

4.1.2 Access to the field

This project is approved by the NSD (Data Protection Office for Research), and all students and teachers involved have signed informed consent. The Norwegian Regional Committee for Medical and Health Research Ethics did not consider the project to require approval, as patients are not involved in the study.

As the field is familiar to me, a point I will return to, establishing contacts and informal access was straightforward. To get admission to the course(s), I contacted the head of studies of the physiotherapy institute that I wanted to get access to, and described my PhD project. She was immediately very positive and enthusiastic about the project and emphasised the importance of research in physiotherapy in general and in physiotherapy education in particular. I explained that I wanted to attend the FAMS course and would also consider attending the *Massage and palpation* (MP) course at a later point. She gave me the names and emails of the teachers that were academically responsible for these courses. We agreed that she would inform the staff about the project at one of her meetings, and that the staff would be informed that I would contact those responsible for the two courses selected.

A few weeks later, I sent an email to the teacher who was academically responsible for the FAMS course and asked if he knew about the project and if I could visit the team and talk about the project. We agreed on a meeting with the team a few days later. The teachers in the team were positive about the project and welcomed me to their classes. Although, they told me that I could just turn up at their classes, I insisted on formality. Therefore, I told them that I first would send them an email with formal information about the project and I additionally emailed a document asking for their informed consent. A few days later, I sent emails to the teachers and, as they responded positively, I made appointments for the classes I planned to follow.

4.1.3 The field

The participant observation took place in May 2010 as the students neared the end of their first academic year in the institute. The course was attended by 55 students, and was divided into two groups. Nearly all students were present on all nine days on which I observed this course. The students were aged between 18 and 45 (information given by teachers) and the three teachers I followed were all in their early forties. The three teachers were ethnic Norwegians as were most of the students, which is in line with the recruitment of ethnic minority students in Norway (between 1 and 1.5 percent) (Dahl-Michelsen & Leseth, 2011). The total number of hours observed in this course was 68. The following table gives an overview of the characteristics of the observations on classes in the FAMS course.

Table 3. Summary of observations on the Functional assessment and manual skills (FAMS) course with details of course, date, time, group and gender distribution of students and teachers

Course	Date	Time	Group	Female/male students (n= 55)	Female/male teachers (n=3)
FAMS	03.05.2010	08.30-11.30	I + II	42/13	1/1
FAMS	04.05.2010	08.30-11.45	I	21/7	0/1
		12.30-15.45	II	21/6	0/1
FAMS	06.05.2010	08.30-11.45	II	20/5	0/1
		12.30-15.45	I	21/7	0/1
FAMS	07.05.2010	08.30-11.45	I	25/8	1/1
		12.30-15.45	II	15/4	1/1
FAMS	11.05.2010	08.30-11.45	II	21/6	0/1
		12.30-15.45	I	21/7	0/1
FAMS	19.05.2010	08.30-11.45	I	21/7	0/2
		12.30-15.45	II	21/6	0/2
FAMS	20.05.2010	08.30-11.45	II	21/6	1/0
		12.30-15.45	I	21/7	1/0
FAMS	21.05.2010	08.30-11.45	II	19/9	0/1
		12.30-15.45	I	20/2	0/1
FAMS	31.05.2010	08.30-11.45	I	21/7	1/0
		12.30-15.45	II	21/6	1/0

In October and November 2010, I carried out participant observation in another group of first-year students. They were then in the first semester of their first year at the physiotherapy institute. I contacted the teacher who was academically responsible for the *Massage and Palpation* (MP) course. She was positive about the project and we agreed on a meeting, which took place on 15 October 2010. I had an additional meeting with the teaching staff on 18 October 2010. All were positive about the project, and after this meeting, I sent them an email with formal information for the course, and we agreed on dates for the observation. The group consists of 110 students divided into four groups. The total number of female students was 76, and the total number of male students was 34. The students and the male teacher were about the same age as those observed in the other cohort, whereas the female teachers were older (between 50 and 62 years old). The justification for making further observations beyond those I had made in the FAMS course was that I wanted to observe more students and teachers to have a broader basis for comparing what I observed in the two different courses. Although the study does not have a design and purpose in terms of statistical generalisation, having observed so many students (165) including the MP course strengthened the study. The total number of hours observed in this course was 15. Table 4 gives details about observations of the MP course.

Table 4. Summary of observations on the Massage and palpation (MP) course with details of course, date, time, group and gender distribution of students and teachers

Course	Date	Time	Group	Female/male students (n=110)	Female/male teachers (n=5)
MP	25.10.2010.	08.30-11.15	A1	17/7	2/0
MP	25.10.2010	12.30-15.15	B1	19/9	1/1
MP	01.11.2010.	12.30-15.15	BII	18/7	2/0
MP	04.11.2010	12.30-15.15	AII	19/9	2/0
MP	09.11.2010	12.30-15.15	AI	19/8	2/0
MP	11.11.2010.	12.30-15.15	BII	19/8	1/1

Based on what I observed, and the informal conversations I had with students and teachers in the MP course, these students did not differ significantly from the students I observed in the FAMS course. Students appeared to be similar in terms of their preoccupation with exercise and sport, bodily practices in classes, and so on. Any differences I observed between the two courses related to differences between teachers (such as gender and age) and teaching strategies and pedagogies (e.g. organisation of teaching situations), which is not the focus of this study, rather than differences between the students themselves who are the focus of the study. For this reason, I did not find it necessary to include students from the MP course in the interview portion of the study.

4.1.4 Field notes

Field notes are detailed written notes of events, situations, people, places, and rooms, and are the most common way of registering participant observation. Field notes are invaluable as data material; writing them up is a way to distance one's own participation (Emerzon, Fretz & Shaw, 2011; Sanjek, 1990).

In this project, I had good opportunities to write field notes during classes. Most students carry a notebook in which they write notes from classes and thus my note taking resembled theirs. Taking notes in classes thus became a natural part of being a participant in the field. In breaks and informal meetings with teachers I did not take notes until afterwards, as I saw that it would appear unnatural in those situations. I have written two field books (A4 note books) with notes (145 pages in total). The notebooks are organised so that each page is divided into two by a vertical line. On the left side, I wrote notes about what I observed. Some of the notes are about the environment, i.e. what the classroom looked like and I made small sketches which demonstrate how treatment benches are placed, what equipment is in the room, and so on. The notes also contain descriptions of how students and teachers appeared, such as what clothes they wore, their hairstyles, makeup and so on. On the right side of the vertical line in the notebooks, I wrote down immediate and spontaneous interpretations of what happened. Examples include, 'Is Emma subjected to an extreme body pressure here?' and 'Tom looks

comfortable wandering around in his boxer shorts, is this typical of male students? Physiotherapy-specific masculinity?’ and so on. The notes contain codes to myself, like exclamation points, smileys and so on, which reflected my own spontaneous interpretations. These helped me remember what I was thinking in the situation when I wrote up the notes (usually the same day or the day after, but sometimes several days later). Gradually, I included more information if there were changes compared with what I had observed before, regarding, for example, how the students were dressed, and in this way the patterns in the material became clearer.

When I wrote up field notes, I transcribed them into different documents that I created on my PC. During the life of the project, the notes have become stories about what I have observed. Later these were brought together with the material from the interviews, and the data analysed together in the different articles that make up the thesis. During the observation, I had the opportunity for some informal conversations with the students before and after class, as well as in some of the breaks, but these informal conversations gave limited insight into how students think about and experience what had been happening in the classroom. As a result, I chose to include interviews with students.

4.2 Interviews

The interview is seen as a particularly suitable method to obtain people's experiences and feelings about the topic that is the subject of investigation (Kvale & Brinkmann, 2009; Järvinen, 2005). Interviews provide an opportunity to move forward on issues that have come to the surface in the observations and provide a space for reflection where the students and I could together construct understandings of the issues that were highlighted during the observations. In addition to how the questions reflected on what had been happening in classes, the interviews gave me the opportunity to explore aspects that were not available during the observations in teaching situations. Such aspects included why students chose to pursue a degree in physiotherapy, how they prepared for class and what expectations they had of their fellow students, themselves and their teachers. Students also talked about what they had done before they started physiotherapy education and a little about their lives outside the training context. They shared experiences they had with other teaching situations and courses other than the one I was observing and they told me about other teachers. Thus, I gained more background information about the students, which enhanced my insight into their views on and experience with physiotherapy training.

4.2.1 Selection criteria

At the end of May and in the beginning of June 2010, I interviewed sixteen students (eight female and eight male students), who had been participating in the FAMS course. Students who were selected for interview represented a strategic choice in the sense that they were not chosen randomly. Kvale & Brinkmann (2009) point out how informants are selected on the basis that they have something interesting to offer in relation to the study topic. In this sense, all students were candidates for interview; however, I had to make a selection. The sample I made was

based primarily on four criteria: gender, age, level of sportiness and degree of social participation in class. The first two I decided before the observations, while the last two were determined during observations. I included equal numbers of students of both sexes; another option would have been to select participants based on the percentage distribution of female/male students in the physiotherapy institute. This was not relevant for my research design. The number of male students is the same as the number of female students in order to give corresponding weight to male and female students, although the male students are numerically in a minority.

I wanted interviewed students to include a representative age span so that, for instance, not only the youngest physiotherapy students were included in the interview portion of the study. Consequently, the students are included based on my observations about the age range of the group. Regarding the last two inclusion criteria (degree of sportiness and degree of social participation), I noted how some students were more animated, sporty and/or sociable in the classroom and how this varied. I was also aware of how being active, prominent and dominating in this environment is perceived as positive and seen as essential to gaining superiority in the field. In other words, I wanted to interview both the students I perceived as the most outspoken and those who were quieter. The observations made it possible to see how much attention students invested in their interest in sports and exercise, for example, in their conversations in the classroom. I wanted to include both sporty students and those who seemed somewhat less engaged in sports and fitness. I decided that I would not let the students categorise themselves in terms of their interest in sport and fitness. It might have been an option, but I wanted no such explicit inclusion criteria. I think such an option would control too much of what the interviewees thought the interviews were concerned with, which might give a bias in relation to the topics I wanted to discuss with them and lock the design too much in certain directions. Students were therefore not informed exactly why they had been chosen, beyond the criteria that I thought they had something interesting to contribute to this study (Kvale & Brinkmann, 2009).

The search for students who were not particularly interested in exercise and sport proved to be difficult. This is interesting because it demonstrates how the different parts of the qualitative process are interrelated and can be difficult to identify in isolation. Selection processes can themselves become findings. I constantly tried to find students who were not interested in sports and exercise. Several times in advance of the interviews, I thought that a particular student did not appear to be very interested in training and sports, only to find in the interview that these areas were central to the student. In this way, my selection criteria became an important finding; it is difficult to find physiotherapy students without a strong interest in training and sport (Article 1). More specifically, this is an important prerequisite for success as a physiotherapy student, which shows how sport has an impact on the education of physiotherapy students, although it is not a formal requirement. Thus, the observations gave the basis for the selection criteria for recruiting students for interviews. Table 5 gives information about the interviews.

Table 5. Information concerning the interviews including date, time, duration, gender, name and age

Date	Time	Duration, hours	Sex	Name	Age, years
18.05.2010	09.00-11.00	2	Female	Maria	19
18.05.2010	11.30-13.00	1.5	Female	Bettina	21
18.05.2010	16.00-18.00	2	Female	Thea	21
25.05.2010	12.00-13.30	1.5	Male	Oscar	24
25.05.2010	13.30-15.00	1.5	Male	Henry	22
01.06.2010	09.00-11.00	2	Male	Andreas	22
01.06.2010	12.30-14.00	1.5	Male	Vidar	25
02.06.2010	09.00-10.30	1.5	Female	Linda	26
02.06.2010	10.30-12.00	1.5	Male	Marcus	21
02.06.2010	12.30-14.00	1.5	Female	Anna	35
02.06.2010	14.00-15.30	1.5	Female	Celine	30
03.06.2010	09.00-10.30	1.5	Male	Harald	21
03.06.2010	10.30-12.00	1.5	Male	George	20
08.06.2010	11.30-13.30	2	Female	Silje	27
09.06.2010	09.00-10.30	1.5	Female	Elisabeth	26
10.06.2010	13.30-15.00	1.5	Male	Martin	25

4.2.2 Interview approach

All sixteen students who were asked to participate in an interview agreed to participate. With one exception, the interviews took place in a popular café on campus, with some sheltered seating areas. I chose to conduct interviews in a café to break up the educational context and found that the atmosphere made the setting less formal. One interview took place in a meeting room attached to the rooms for skills training. The interviews lasted between 50 and 70 minutes. There was some additional time before and after the actual interview, including a more informal chat as a transition to the interview situation.

In scientific work, the selection of interview format must be consistent with the purpose of the study. Because this study is exploratory, the choice was between the so-called semi-structured and unstructured format. The interviews I conducted lie somewhere between these two designs. I have emphasised the open design, which follows that of unstructured interviews because this shape provides the best opportunity to follow up the unexpected and encourage new aspects of the phenomenon to appear, and thus there is the possibility of exploring new knowledge. I used a semi-structured interview guide (Kvale & Brinkmann, 2009). This means that the subject/theme of the interviews was pre-planned and possible questions were set up for each

theme. The interview guide was used as checklist in the sense that I made sure that all the interviews touched upon the topics that were set up, but the order and magnitude of the topics varied between interviews (Fog, 1994). The open shape of the interviews meant that it was possible to explore on the themes. The semi-structured shape also made it easier to systematise the data afterwards.

Thus, the interview approach I established can be described as emphasising adequate openness with sufficient structure to enable systematisation. The questions in the interview guide were formulated in an inviting style that appealed to a storytelling style in the students' answers. Examples include: Please, tell me a little about why you want to become a physiotherapist. Please tell me a little bit about why you chose physiotherapy. Please tell me a little about what it is like to be undressed in class, and so on (see appendix 4). Students generally gave detailed answers and it was easy to keep the conversation going. The questions in the interview guide, especially potential follow-up questions, came up by themselves without the need to introduce them. In line with an open design, I tried to not to be too quick to bring the conversation back on track when I occasionally felt that we were talking on the side or too much on a topic and needed to move forward to cover the planned themes. I found that this way of interviewing gave new understandings or contexts of which I was not necessarily aware. One example of how such contextual understandings became visible through talking about a theme is that the first students I interviewed were not asked if they thought it was possible to be a physiotherapy student without being into training (being sporty). Gradually, it became clear to me that this was a relevant follow-up question because being a physiotherapy student without any interest in training seemed an unlikely option without being explicitly expressed. By asking directly about this theme, it was more clearly discussed and both the students and I became more aware of how sportiness and training were important to them as physiotherapy students.

Prior observation of the interviewees provided opportunities that probably would have been difficult to achieve in the interviews otherwise. The fact that I used less time to establish talking about the themes was also a result of how I felt more comfortable to challenge students and monitor their responses in ways that I would not have felt comfortable with if we had met for the first time in the interview. From the student point of view, it seemed that this also made it easier for them as they did not see me as a stranger. For example, in interviews they often said: 'as you've seen' 'you know' or 'you've probably also have noticed'.

Directly after each interview, I jotted down my spontaneous impression of the interview. I used these notes to write a little story about each of the students, based on the impressions of the interview. I read these stories repeatedly when I started working with the transcribed interview material and they helped me remember more of the spontaneous interpretations I had made.

4.2.3 Transcription

I recorded the interviews digitally and transcribed the interviews personally. The transcription made me familiar with the material in a way that I experienced as significant for the analytical work later on. I think this has been particularly important in relation to an interactional perspective emphasising how this combines form and content. I found that through the

transcription process, I relived much of the context of the interview and became familiar with the material through this work. Thus, it has been easier for me to recall the interviews beyond the written text later in the working process. The interviews were transcribed as verbatim as possible; breaks were highlighted in the transcribed text either by repeating dots (...) or because I wrote down the words in parentheses, such as (student thought a long time before that answer came). Extracts from the interviews as they are presented in the three articles have been edited; pauses to take breath, cough and so on are not emphasised. But the fact that this was noted in the transcripts was significant for the analysis. In line with the interactionist perspective in this study, where the focus on the context (i.e. how) and not just the content (what was said) is important, these details helped me remember the context and not just the content. This analytical approach gradually led to a sense that the material was part of my body. By that, I mean that after countless times reading through the material, marking down comments and making written version, I could easily remember the context of what was said. This illustrates perhaps how parts of the themes in the interviews referred to implicit knowledge. Unlike Kvale & Brinkmann (2009), who describe analysis as already taking place in in the interview, I experienced rather the ability to track down important discoveries, and what they could mean, during later analysis.

4.3 Analysis

The combination of participant observation and interviews has provided the opportunity to build up a complex analysis of how gender becomes significant in physiotherapy education (Atkinson & Coffey, 2003). The empirical material in this thesis consists of 145 pages of field notes and 235 pages of transcriptions from the interviews (121 pages from the interviews with female students and 114 pages from the interviews with the male students).

In the first round of analysis, I developed the field notes into thick descriptions aiming to bring details in the empirical material to the surface by including rich descriptions of contexts and possible connections for interpretation of the empirical data (Geertz, 1973). For example, notes about the boxer shorts worn by male students (see article 3) are built into thick descriptions by writing about their labels, colour, design, and so on. The body movements and characteristic behaviours that students perform when wearing their boxer shorts was described including snapping the elastic waistband, performing sexualized although humorous movements, and so on. In addition, descriptions include how their use of humour appears in other situations where boxer shorts are not necessarily the main focus and how their boxer shorts are present but not focused on in situations that do not involve humour, in situations where students are demonstration models, for example. This way of working gives access to varieties of meaning and interconnections in the field notes.

In further efforts to develop field notes and interview transcripts into research texts, the interaction between the specific excerpts and the commentary that is my more specific interpretation is central. I built up the specific field notes and interview transcripts by writing comments on the various excerpts. The analytical points often became clearer through the interaction between the original notes and comments on them. I often remembered other relevant episodes while I was writing about something else. These spontaneous memories

represent important analytical movements and understanding of the material. In addition, the process of writing excerpts and comments into a research text helped reconstruct the original episodes (Emerson, Fretz & Shaw, 2011).

In the next stage, some excerpts had to be shortened. The excerpts often included several points and highlighted a number of aspects of a theme. This means that I used some field notes or interview transcripts several times, dividing them up for use in different contexts. Editing extracts and cutting out some material to improve the text has to be constantly weighed against the need to remain true to the nuances and complexity of the original material (Emerson, Fretz & Shaw, 2011). To provide better insight into what guided the process of developing the field notes and transcripts from interviews to research text, I have developed some guidelines that provide insight into the analytical process. Given that this study is exploratory and aims to open an unexplored field in physiotherapy education, the analysis has not followed a particular method but has been driven by analytical principles (Nerland, 2004) which I have called analytical guidelines. Below, I describe two guidelines that govern the analytical work in this thesis.

4.3.1 Exploring what is implicit

This thesis focuses on taken for granted aspects of how gender becomes significant in the physiotherapy education. The exploration of the implicit and what is taken for granted is therefore a central analytical guideline. To gain access to the more implicit aspects of gender, it is important to focus on the field with a stranger's look, which is a particular challenge when studying a field where one is familiar with the cultural codes. In the section on research in one's own field, I elaborate on this point.

To address the implicit, I have used a strategy termed naive observation (Wadel, 1991). Specifically, this suggests describing what one sees, based on the idea of not having been at the place before and thus never having seen what is going on before. In this strategy, the researcher tries to put aside advance or previous knowledge. Even though this is not possible, I have used the strategy to establish an outsider's eye. For example, I noticed students' preoccupation with sports and exercise during the observations. The naive observation helped me to focus on this theme as I was unfamiliar with it. As I worked on the field notes, the importance of being involved in sport and physical training in this field became clear. This way of working also made me aware how gender becomes significant and how sport represents gender (Article 1). In addition, although I had planned to cover the issue of students' relationship with training in the interview guide, the students themselves introduced this theme at the beginning of the interviews (with the exception of two students). That is, the topic of sport and physical training and activity came up as a response to the question on why they wanted to become physiotherapists. This made me aware how fitness and sports skills (conceptualised as sportiness) are particularly important for the students' perception of who is suitable to study physiotherapy and how sportiness is crucial in their recognition of themselves and each other as physiotherapy students and future physiotherapists. That this knowledge was implicit was reinforced by the discovery that any question about becoming a physiotherapist when not particularly interested in fitness and sports was alien to the students.

The way in which actions and statements are related to context is an important analytical focus. Curricula and programmes are examples of contexts that broaden the focus of analysis of the individual's actions. In the same way, a historical focus on physiotherapy and physiotherapy education provides a wider context for the analysis of student actions. How students live today is another example of context for any analysis. An example of this is how *new* trends of masculinity, such as the metrosexual man and sporno, play themselves out in the educational context (Article 3). The relationships between individuals are central to the analysis. A focus on relationships can be described as what Wadel (1991) calls a focus on the rules. This suggests that the focus of the analysis is not the individual but the social relationships that individuals form part of (1991, p. 71). The questions to ask include what are the rules of the game, what games takes place and what is required to participate in the game, who does what, and what is the purpose of the game (Wadel 1991, p. 78). This type of question is important as a part of the analytical guideline as to focus on what is implicit. To focus on the implicit and what is taken for granted also ensures that a focus on gender as embodied is central to the analysis.

4.3.2 Exploring differences versus similarities

In all phases of the analysis, exploring differences versus similarities has been a driving focus in terms of how gender becomes significant. This suggests that I have employed a continuous focus on comparing differences and similarities in order to see the varied meanings of gender (Nordberg, 2005). Specifically, I have focused on the similarities and differences between female and male students, as well as the similarities and differences within the female and the male student groups. Such analytical focus enables an exploration of variations and demonstrates the breadth of gender constructions. Specifically, the exploration of gender as similarities and differences uses the analysis of patterns. This took concrete form through questions about empirical material such as: Are there actions and statements that are repeated throughout the material? Are these actions and statements typical of students in general, for male students or for female students? How does this vary? What about actions (and phrases) that appear to be atypical and voiced by a minority of students? What impact will these actions have?

4.3.3 Analysis steps

To give a clearer picture of the analysis steps, this is set up in tabular form. While the two analytical guidelines highlight what has shaped the analysis in this thesis, the following table illustrates an analytical process for the synthesis of the articles as a whole in which research questions and analysis steps are shown.

Table 6. Analytical strategies and empirical research questions across the three articles with analysis steps, strategy and empirical research questions

Analysis step	Strategy	Empirical research questions
1	Empirically-inspired analysis	What gender performances are significant in the skills training and how do students perform them?
2	Theoretically-inspired analysis	How do students negotiate the gender performances that identify them as physiotherapy students? How do physiotherapy students confirm and contest gender norms?
3	Critically-inspired analysis	How and to what extent do female and male physiotherapy students perform gender in similar and different ways?

Although the analysis as presented in the table may give the impression of a gradual process that goes straight ahead or through separate rounds of analysis (as described above), in practice the analysis was more affected by the eternal dance with movements back and forth between different levels (Wadel, 1991; Fangen, 2010). In other words, the table meets the need for a systematic overview of the research as a schematic. Although the empirical analysis is most evident in the first step, whereas the second step is more theoretically driven and the third step more critically inspired, they are not clearly separate in practice. In particular, the second and third steps are closely interwoven. This relates to how analysis also includes balancing between top-down and bottom-up approaches, a balance which is also present in discussions on the relationship between first-order and second-order concepts (van Maanen, 1979) or in emic versus etic concepts (Headland & McEhanon, 2004). In short, this debate informs whether and to what extent an analysis is more theoretical or empirical. Empirical material necessarily needs to be introduced to scientific concepts (Mausethagen, 2013). However, there is a tendency for second-order, theoretical concepts of to take over from first-order concepts. In an attempt to reduce this risk, I focused strongly on what I have labelled first-order strategies also in the more theoretical phases of the analysis that used second-order strategies. The table also allows transparency, which is a criteria in assessing the reliability of the data collection process.

4.4 Reflexivity

In the final section of this chapter, I address reflexivity including the topic of doing research in one's own field, ethical reflections and considerations. The chapter ends by addressing validity and generalisation issues.

4.4.1 Doing research in one's own field

My background as physiotherapist includes seven years in clinical work and seven years in a teacher position before I started this thesis. Thus, my example, along with those researchers cited in the literature review, confirms how research on professions is often undertaken by

researchers who themselves belong to the profession being studied, which can be both a resource and a problem. The strength is that the proximity allows for a natural access to the profession on its own premises. However, the risk of only reproducing the profession's own self-understanding is seen as a challenge due to a possible lack of sufficient critical distance (Molander & Smeby, 2013). In other words, the relationship between proximity and distance is central in qualitative research, but can be considered a specific challenge when studying one's own field.

Below, I give some examples of how I have experienced this researching my own profession. In the first field notes, there are notes that relate to the challenges of the proximity to the field. For example, I have described how I felt a spontaneous tingling in my body related to that I wanted to be a teacher in the class. For the first two days, it was challenging to just be there and observe the students working. I noticed the teacher in me as a reflex and wanted to guide the students and answer their physiotherapy-related questions. I also recognised some of the pressures in being one teacher guiding 25 students in manual skills, which sometimes requires one to one guidance. It was understandable that it could be hectic in the teaching situation and it was somehow hard not to help.

In these situations, I was grateful for my notebook, which I carried openly with me all the time. As a result, I could avoid being directly and continuously confronted with the situations described above. The naive observation, described in the guidelines for studying what is implicit, helped in establishing a distance from the field by giving a concrete description of the classroom, and so on. An understanding was established relatively quickly for all involved that I was a researcher in this setting and therefore not a teacher that should be asked professional questions in class. At the same time, I experienced that these situations demanded a judicious use of social skills. I wanted to get in contact with the students and thus I could not take on the role of a total outsider when I am actually not. These situations arose particularly when students were waiting for the teacher to guide them when they were working in pairs. They typically discussed among themselves how they had perceived what had been demonstrated. For example, after the teacher had demonstrated particular skills to a student, students would then practice those skills. In such situations, they often asked me whether they had understood it correctly. I answered then typically with something like, 'yes, I think so, but you will have to check with the teacher' or 'hm, was it like this? Maybe you can ask some other classmates or look in the book'. I signalled through my body language whether or not they were on track or not, but without going into the teacher's role. This way of helping I saw as a necessity and I felt that it facilitated their including me and that they respected and understood that in the role of a researcher I could not go into teaching, and that they viewed me as a reasonable person. As already stated, it was taking notes that gave me the opportunity to make this contact appear natural. In fact, when I began the observations I found that doing research in my own field was in fact somewhat less challenging than I had previously thought. Perhaps this was because I had been forced to reflect on it beforehand. Next, I will present some of the ethical reflections and considerations I made as a researcher in this field.

4.4.2 Ethical reflections and considerations

Beyond the formal ethical requirements, ethics and ethical issues are interwoven throughout the research process, being associated with the different choices that are made during the study. The following example demonstrates how the easy access to the field implied ethical reflection on the opportunities for students and teachers to not participate in the study. The head of studies at the institute I chose for fieldwork was very positive about the project. She told me privately, but also in meetings, where I was present together with the teaching staff, where she emphasised the importance for physiotherapy education to be focused on research. It was certainly helpful for me to meet such enthusiasm and support in relation to the project, but this also caused some ethical challenges. I pondered on what opportunities teachers had in real terms to say that they would not participate in the project, given that their head expressed the importance of the study to the physiotherapy institute. I was therefore keen to emphasise that participation in the project was voluntary in my contact with teachers. I was probably extra-sensitive to whether they sent out signals that they did not want to participate. I did not see any such signs and the teachers gave the impression that they also thought it was important for research to be conducted on physiotherapy education. This may show how strongly the field is inscribed in research discourse in higher education. As mentioned earlier, I contacted teachers by email, attached the information letter (see appendix 2), and asked them to contact me if they would like to participate, which they did. Regarding the students, they were informed about the project on their website (which is a closed network system), and I informed them again at the beginning of the observations when the students gave written informed consent for the observation. No student objected to participation in the study. Most signed without asking questions, while a minority of the students came forward in the break and asked me a few questions about the project before they signed. The students who participated in the interviews were asked orally in class, before I sent them a formal request by email where I attached a new informed consent document for the interview (appendix 3). This was then signed in connection with the interview. That the students were generally keen to participate in the project can be interpreted as that they too are part of the research discourse in higher education, where a positive attitude to research has high symbolic value.

Being part of skills training classes meant that I was present in situations where students undressed to their underwear and where their bodies were closely examined. Thus, ethical challenges of intimacy were present. Notably, there was no gradual introduction to this – neither for the students nor myself – as I was present in these situations from day one. I believe my familiarity with the field, studying my own profession, was of significance here. As a physiotherapist, I am trained to handle close bodily work with patients that are scantily clad. As I have been a physiotherapy student myself, I have my own experiences with skills training classes and as I have also been a teacher, including skills training, I am familiar with these issues from a teacher's point of view. Again, it is through naive observation (Wadel, 1991) that I was able to see this as a physiotherapy-specific competence. I became aware that I had been trained to both watch and regulate the way I looked at other bodies, focusing on their bodies as biomechanics, and in general being sensitive to reading contexts. I felt that the physiotherapy students were comfortable with me being present in intimate situations not at least because I was a physiotherapist and not only a researcher.

That these students participated in this research project may have meant that they reflected more about their professional training than they would have done otherwise. The students who participated in the interviews were given a special opportunity to reflect on topics that were experienced in the observations. The interviews provided a space for reflection where students and I constructed together a space for thinking about and understanding the issues that were highlighted during the observations. This space for reflection seems to be important for those who are interviewed (Nerland, 2004). The students said that they felt the participation in the interviews was positive because they got insight into their own thoughts and views through what we reflected on together with regard to the various themes in the interviews. Thus, the interviews also added an ethical dimension to the study.

In Norway, there are four physiotherapy institutes, which suggests that those who know the physiotherapy institutes well will be able to recognise the particular institute in this project. This has caused some ethical reflections concerning anonymity. With regard to the students participating in the study, anonymity was not the issue it would have been if the actual educational institution had been identified. In terms of teachers, this is a little different since they are far fewer. As the thesis primarily deals with students and less with teachers, the question of anonymity became less challenging. It is also important to note that higher education is part of the public domain and, in this sense, teachers should agree that insight into their teaching as part of physiotherapy education should be public. The study is not an evaluation study and therefore I had no need to identify any problematic aspects of the teaching practices of individual teachers (Nerland, 2004). I had an open dialogue with teachers during the study about the challenges of complete anonymity. They are aware that the milieu is small and that, even if they are not identified, they could be recognised by those who know the area well. That they have not expressed any specific concern about anonymity can also be understood in light of the fact that they are used to dealing with a critical look at education. In the interviews, the students explicitly mentioned their high expectations of teachers: 'when you teach in the physiotherapy education you have to be one of the best'. Given that this is communicated to teachers, for example, in the mandatory evaluations related to teaching, the teachers are used to dealing with the students' critical eye on their teaching. In addition, the project developed so that the main focus was on the students.

I have chosen not to identify which of the educational institutions of physiotherapy I studied, because I believe the results may be valid across different physiotherapy programmes. It was my ambition for the results to be shared in the field of physiotherapy education, which Gullestad (1991) and Kvale & Brinkmann (2009) describe as an ethical research ambition. This is also one of the main reasons why I primarily wanted to publish the results in physiotherapy journals.

4.4.3 Validity and generalisation

Validation permeates all stages of a research project and is not limited to any separate stage. This implies that validity is not something that is restricted to part of a chapter, such as here. In addition, validity is to be seen as a quality of craftsmanship. Choices are made throughout the research process to make the study consistent, transparent and valid (Kvale & Brinkmann, 2009). Validity concerns how a study puts forwards credible and trustworthy knowledge and is

not about whether or not the findings are true (Østerud, 1998). Validity implies choices of theoretical perspective, the selection of a field, which in this case was the choice of the courses for participant observations and the selection of students for interviews, and the presentation of findings.

According to Kvale and Brinkman (2009) ‘analytical generalization involves a reasoned judgment about the extent to which the findings of one study can be used to guide what might occur in another situation. It is based on an analysis of the similarities and differences of the two situations’ (Kvale & Brinkman, 2009, p. 262). In Norway the physiotherapy education to a great extent is similar in terms of being regulated by the same Overall plan (UDF, 2004). The students who participated in this study are probably not particularly different from those studying at the other physiotherapy institutes in Norway. This means that physiotherapy students in Norway, probably are not worth mentioning different from each other in terms of characteristics presented for the students participating in this study, i.e. gender and age. Based on this, I argue this study is analytically generalisable. Furthermore, in this project (both in the articles and the extended abstract), I have emphasised transparency. The table demonstrating the process of analysis as a stepwise process is one example of practical steps towards transparency. In a similar way, communicative validity has been emphasised (Article 1, 2 and 3) in the analysis process. For example, I discussed my interpretations with other researchers in several research groups in which I have participated throughout the project. Thus, my interpretations of the empirical material as well as the design, findings, discussion and conclusions have been challenged and discussed, and alternative interpretations have been considered. The research groups, the review processes of the three articles, and presentations at national and international conferences have given the opportunity for comments from researchers from different fields, both nationally and internationally. I see this as strengthening the validity of the findings. In addition, the ethical considerations described above are part of the process of validation throughout the project.

5. FINDINGS IN THE ARTICLES

In this chapter, I present the main findings of the three articles in this thesis.

5.1 Article 1

Dahl-Michelsen, T (2014). Sportiness and masculinities among female and male physiotherapy students. (2014). *Physiotherapy Theory and Practice*, 30(5): 329–337. DOI: 10.3109/09593985.2013.876692

In the first article, I explore the gendered importance of sportiness in terms of students' judgment of themselves and their classmates as suitable physiotherapy students. Sportiness works as both a fellowship and a dividend among the physiotherapy students. As fellowship sportiness points to what brings them together as physiotherapy students. Sportiness works as the glue in the student fellowship and acts as a symbol and hallmark in their recognition of themselves and each other as physiotherapy students. From this perspective, all students are included in a fellowship of physiotherapy students. The findings also highlight that being sporty is a fundamental aspect of what makes students recognise themselves as physiotherapy students and is taken for granted.

I also find that the intersection of the professional norm of sportiness and gender norms results in the positioning of physiotherapy students within a hierarchy of sportiness. Two main typologies of hyper-sportiness and ordinary sportiness are identified and within each of them both female and male students are represented. In short, male students judged as possessing hyper-sportiness are acknowledged as particularly suitable physiotherapy students and assume a hegemonic position in the student milieu. However, female students who adapt hyper-sportiness also have the potential to assume such a position, although they tend not to do so. According to the framework of Connell (1995, 2005), they therefore occupy a position of complicit masculinity. Although female students with an ordinary level of sportiness occupy a position of subordinated masculinity, they have no particular problems in being identified as suitable physiotherapy students. Male students, who perform ordinary sportiness, on the other hand, occupy a position of marginalised masculinity. Notably, they encounter problems being accepted as physiotherapy students.

In this article, I further explore why physiotherapy students apparently perceive sportiness as a prerequisite to becoming a physiotherapist and as a core value in physiotherapy. I do this by an examination of the historical roots in the physiotherapy profession. I find that the strong position of sportiness relates to the historically strong association between physiotherapy and sport in general and between male physiotherapist and sportiness in particular. I therefore argue that a historical trend shows up in today's education by its seeming natural that male students should occupy the hegemonic position by performing hyper-sportiness. I also find that there seem to be similarities between the situation of female physiotherapists in the educational programme in Sweden in the period between 1864 and 1934 and the situation of female students

who today perform hyper-sportiness. Both can be seen as competent physiotherapists, but do not achieve the hegemonic position in the field. The position of female students who perform ordinary sportiness seems to have more in common with the situation of physiotherapy students after the roles of physiotherapists and physical training instructors were separated in 1934. At this point, physiotherapy began to develop from being primarily a male profession with its own scientific knowledge base, incorporating the internationally-renowned system of Ling gymnastics to becoming a female profession, where physiotherapists were dominated by male physicians (Ottosson, 2008). Here I point to how the development of physiotherapy into a subordinated and female profession appears to have resulted in less need for female students to perform sportiness in order to be acceptable as physiotherapy students. In addition, the increased demand for ordinary sporty male students to perform sportiness in order to be acceptable as physiotherapy students compared with ordinary sporty female students in today's education corresponds to the strong link between men and sport within the field of physiotherapy. The findings in Article 1 suggest that student emphasis on sportiness may limit opportunities for diversity in terms of student motivation for becoming a physiotherapist. For male students in particular, this reduces opportunities for diverse motivation and the potential for being accepted without performing hyper-sportiness. In conclusion, this article demonstrates how both female and male students perform sportiness as masculinities in physiotherapy education. However, it has different consequences to their perceived suitability as physiotherapy students.

5.2 Article 2

Dahl-Michelsen, T (2015). Curing and caring competences in the skills training of physiotherapy students. *Physiotherapy Theory and Practice*, 31(1): 8–16. DOI: 10.3109/09593985.2014.949946

In the second article, I explore the significance of the curing and caring competences in physiotherapy education. The article looks at how curing and caring competences intersect within the professional training of physiotherapy students. Based on the findings, I demonstrate the complexity of curing and caring competences in the professional training of physiotherapy students. In the first place, there is evidence that curing still retains at least some of its historically hegemonic status in contemporary education. Mostly this is apparent in the contextual framing of classrooms and learning situations where a focus on the anatomical and biomechanical aspects of physiotherapy is taken for granted. For example, the benches, which stand in ordered lines and rows, connote curing by virtue of their mechanical and medical design. On the walls in the classroom, there are anatomical images of the body (posters) and models of skeletons, and so on. In addition, physiotherapy students today seem to conform to this outlook by perpetuating these strategies, which historically constructed physiotherapy as primarily a curing profession. For example, students' stories about their choice of physiotherapy education tend to relate to the curing aspects of the profession.

However, I find that once students have embarked on the programme, an intersection between curing and caring competences seems to emerge; in practice these competences appear to be more interwoven than separate. This has the effect of challenging the hegemonic position of curing, implying that students view the competent physiotherapist as one who combines curing and caring competences. Students emphasise both biomechanical competences (curing) and relational competences (caring) as important for them in becoming physiotherapists. This intersection of curing and caring competences suggests that the hegemony of curing is being contested. In other words, curing and caring now tend to be of equal importance. Notably, female and male students focus on curing and caring in similar ways. This demonstrates how both female and male students perform both feminine and masculine gender norms to qualify as physiotherapists in today's physiotherapy education. Of particular interest is how male students act out caring as femininities in similar ways to female students. Overall, the findings suggest that the hegemonic position of the curing paradigm is now contested. In teachers' demonstrations curing and caring competences are integrated. For example, as teachers encourage students to see the mechanical movements of the body in the demonstration model, students gain explicitly-focused analytical movement competences. At the same time, teachers tacitly demonstrate awareness of care including how they interact with the students taking on the role of the demonstration model. This is shown by how they place caring hands, how they regulate the way they look at the body, and so on. Even though this caring aspect is not explicitly commented on, students grasp it and apparently transfer it into their own practice.

Finally, based on the findings in this article I point to the emergence of what I call renewed competences of caring. The bodily sociality, which is demonstrated, seems to be important for students in order to develop competence in handling intimacy, close bodily contact, sensitivity in reading bodily signs and being attuned to reading different contexts. For example, I find that students demonstrate such competences by suggesting how the experiences of being undressed, examined, and assessed by teachers and classmates are important for their future effectiveness as professional physiotherapists. Students' use of humour to handle embarrassing situations seems to prevent a breakdown in relations by seeing the source of embarrassment as normal and natural. In this light, humour become an essential aspect of caring as an important relational competence in the context of the close relations that physiotherapy necessarily entails. In conclusion, this article demonstrates the great potential for female and male students to perform both femininities and masculinities in this context. The findings suggest that future generations of physiotherapists will be able to use their skills for care and not only cure.

5.3 Article 3

Dahl-Michelsen, T and Solbrække, KN (2014). When bodies matter: Significance of the body in gender constructions in physiotherapy education. *Gender & Education*, 26 (6): 672–687. DOI: 10.1080/09540253.2014.946475

In the third article, we examine which bodily performances indicate the significance of gender in the skills training of physiotherapy students. We find that the bodily practices, which are of

significance to gender constructions, relate to how female students' bodily-based gender performances represent a community of femininities, whereas male students' bodily-based gender performances represent a community of masculinities.

In the local community of masculinities for male students, bodily-based gender performances seem to be inspired by contemporary trends of masculinity such as the metrosexual man and sporno. In these trends, men construct masculinities by being fixated on their own bodies and appearance suggesting that being a visually-erotic object is no longer the position of subordinated masculinity. We find that the success of the metrosexual man and sporno in the professional training of physiotherapy students, might be even better understood in the light of the strong engagement in sports by physiotherapy students. Physiotherapy students in general and male students in particular are strongly associated with sports and sportiness both by themselves and in society. In addition, male students' self-confident style of bodily performance is evident in this community of masculinities. We interpret this confidence on the part of male students as establishing a position of autonomy and hegemony. For example, this is evident in the way male students are able to adopt a flirtatious manner towards female teachers, by bending but not breaking the rules of how students are supposed to behave towards teachers. Interestingly, the position of autonomy of male physiotherapists has historical roots in terms of how men in physiotherapy are linked and associated with autonomy. Thus, we see similarities in the privileged position for men in physiotherapy, between past and present physiotherapy.

In the local community of femininities for female students, we find female students to be distinguished by a moderation of potential sexuality. For example, female students emphasise the need to never show up in sexy underwear (avoiding lace panties, thongs and lace bras). This finding corresponds to how female patients and female physiotherapists, both in the past and the present, seem to be obliged to conform to the silent yet still effective norm of keeping the professional encounter clean by performing a desensualised body. In this article, we emphasise how this does not mean that women in physiotherapy do not have any capacity for agency. It is interesting that we do not see trends of hyper-sexualisation among the female students. It may be possible to interpret the female students' choice of so-called neutral underwear to be an implicit rejection of contemporary trends of sexualisation. The girl power discourses in present culture suggest hyper-sexualisation as part of consumer-inspired trends and do not necessarily give young women more freedom. Young women, caught up in the snares of the fashion and beauty industry, renounce criticisms of patriarchy (McRobbie, 2009). Thus, choosing neutral underwear could be seen as an implicit rejection of this hyper-sexualisation. In summary, the findings indicate that gender norms are strongly interwoven into students' bodily performances both historically and today. In addition, bodily performances conform to heteronormativity.

6. DISCUSSION

How gender becomes significant in physiotherapy education is the main research question in this thesis. The two sub-questions posed in the project are: How do physiotherapy students perform gender in their education? What are the changes in the significance of gender in contemporary physiotherapy education? These questions are addressed in the forthcoming discussion, which is based on the previous chapters in this thesis. To be more concrete, I further develop the key findings from each article. This ties the findings together and draws attention to the specific knowledge contribution made by this PhD project. I have organised the discussion in two sections following the two sub-questions.

6.1 The gender performance of physiotherapy students

How do physiotherapy students perform gender in their education? Each of the three articles in this thesis provides insight into this question. In the articles, I found how students perform gender through *sportiness* (Article 1), through *curing and caring competences* (Article 2) and through *bodily performance* (Article 3). These three findings are discussed below using the concepts of doing and undoing gender. This means that I focus on how and to what extent students confirm and contest gender norms in their doing of sportiness, curing and caring competences, and in their doing of bodily performance.

6.1.1 Gender through sportiness

In this thesis, I apply the concept of sportiness, which includes sport both as performance and as a form for representation (see Article 1). This concept captures both the view of oneself as sporty and being accepted as such by others. The concept is also based strongly on the view of sport as historical and cultural representations of masculinities (Bornholm, 2010; Mosse, 1996). The students' ways of acting sportiness are thus conceptualised as performances of masculinities. In terms of doing and undoing gender, male students can be seen as doing gender by their performance of sportiness as masculinities, whereas female students can be seen as undoing gender by their acting of sportiness as masculinities. In other words, male students conform to traditional gender norms by doing sportiness, whereas female students contest traditional gender norms by doing sportiness. However, the analysis demonstrates that students' ways of performing gendered sportiness in physiotherapy education are more complex. The complexity relates to a hierarchy of sportiness. Within this hierarchy, student positions range from hyper-sporty male students, hyper-sporty female students, ordinary sporty female students and ordinary sporty male students.

This positioning of students and their sportiness can be fruitfully discussed in terms of doing and undoing gender. The hyper-sporty male students see their sportiness and their extensive interest in sport as natural to their choice of physiotherapy education. Based on this, I argue that the performances of the hyper-sporty male students approve traditional gender norms, linking men to sport. Thus, these hyper-sporty male students can be seen as doing gender. Hyper-sporty

female students can be seen to be undoing gender implying that they are contesting traditional gender norms by their doing of hyper-sportiness. However, it is not unusual today for women to do sport. Thus, it is questionable whether hyper-sporty female students actually contest gender norms. In addition, female physiotherapists have been doing sport/gymnastics from the time women were first allowed into physiotherapy (1864 in Sweden). Thus, I suggest that hyper-sporty female students tend to conform to the historical fact that female physiotherapists have always done sports. Having said that, I also find that is not necessary for female students to be seen as particular sporty in order to be acceptable as physiotherapy students. Based on this, I suggest that ordinary sporty female students' do gender by conforming to traditional gender norms. This means that female students doing ordinary sportiness are not questioned in this context, which is in contrast to male students performing ordinary sportiness. In other words, because the ordinary sporty male students do not conform to traditional gender norms as the hyper-sporty male students do, they do not confirm the link of men with sport. The ordinary sporty male students can therefore be seen to be undoing gender. The ordinary sporty male students have some difficulty establishing a legitimate position as physiotherapy students. In short, the need to be sporty lowers the status of male students who do not achieve the hegemonic position of being hyper-sporty. The gender performing of these ordinary sporty male students can be seen as contesting the strong link between men and sport in physiotherapy. Based on Deutsch (2007), this demonstrates how the gender performance of the ordinary sporty male tends to evoke resistance in terms of how their acceptability as physiotherapy students is challenged. I also suggest that these problems with being seen as acceptable physiotherapy student show how it tends to be the people and not the norms that are being questioned when individuals break the norms by undoing gender (Butler, 2004). The findings in this thesis thus demonstrate how the norm of sportiness seemingly cannot be subverted in contemporary physiotherapy education. Furthermore, as masculinities are strongly associated with sportiness, all students are in some ways doing masculinities in this context. However, do physiotherapy students only attend to masculinities? Are there also dimensions of femininities that all students adhere to in their educational training?

6.1.2 Gender through curing and caring competences

In this project, I conceptualise curing as historically- and culturally-constructed masculinities, whereas caring is conceptualised as historically- and culturally-constructed femininities (see article 2). The findings show that physiotherapy students mainly view curing and caring competences to be of equal importance in their training. In addition, female and male students act out these competences in a similar manner. I argue that students by their gender performing of curing and caring competences tend to transcend traditional gender norms. Thus, they are both doing and undoing gender. I outline and elaborate on this argument below.

Applying the concepts of doing and undoing gender, it can be claimed that as caring competences are historically- and culturally-constructed as femininities, female students are confirming traditional gender norms. Consequently, in their focus on curing competences as historically- and culturally constructed-masculinities, they also contest traditional gender norms. However, this latter interpretation can be questioned as female physiotherapists have

focused on curing competences since their entrance to the physiotherapy profession (1864 in Sweden). Seen from this perspective, I argue that they conform to a norm of masculinities, which historically has been strongly associated with both female and male physiotherapists. This is in line with the argument presented above that it is questionable whether female students' performance of sportiness in physiotherapy actually contests gender norms.

Based on the doing and undoing concept, male students confirm traditional gender norms in their ways of acting curing competences and contest traditional gender norms in their ways of acting caring competences. However, although I find that both female and male students, confirm masculinities by doing curing; this thesis also demonstrates how both female students and male students are doing caring. It might not be particularly surprising that female physiotherapy students focus on both curing and caring competences. The suggestion from this thesis is, however, that a similar emphasis on both cure and care is also evident among the male students. Notably, in this context, male students see it as natural to perform caring. They themselves do not see caring as doing woman stuff; caring to them is part of what makes them able to become competent (male) physiotherapists. Thus, I argue that students' gender performing seemingly subverts the traditional gender norms that link men to masculinities and women to femininities (Butler, 2004). This subversion takes place in different ways: first, by (male) students' views on caring as a valuable competence; secondly, by male students' attendance to this caring competence; and thirdly, by female and male students performing these competences in a similar manner. Based on this, I reason that, in the context of the physiotherapy students' education, the doing of cure and care represents a potential for the subversion of traditional gender norms. In the following section, I discuss whether students' bodily performance represents transcendence of gender norms.

6.1.3 Gender through bodily performance

A third aspect of gender highlighted in this thesis is the prominence of bodily performances in communities of femininities and communities of masculinities, respectively (Paechter, 2003a, 2003b, 2003c, 2007). Seen from this angle, I find gender to represent a genuine difference between female and male students. In this section, I pay attention to and discuss students' ways of acting gender within these communities more broadly. One interesting question should be asked. Does the belonging to these communities imply that students adhere totally to traditional gender norms or may they possibly also contest traditional gender norms within these communities of masculinities and femininities?

Within the male students' community of masculinities, their gender performing has apparently taken inspiration from contemporary trends of metrosexual man and sporno. These trends imply that men construct masculinities by being fixated on their own body and appearance (Kinnunen & Wickman, 2006; Langeland, 2009; Solomon-Godeau, 1995). The most well-known example of this style is perhaps the world famous football player David Beckham. These trends seem to have led to a renewal of male students' styles of acting out masculinity in physiotherapy education. Thus, male students contest traditional gender norms within the educational context of physiotherapy, which indicates that male students' might be undoing gender. Notably, however, when it comes to the exhibition of these trends, male students seem to have choices

about how to display these trends. In contrast to the way that sportiness acts as a hierarchy, leading students to position themselves in relation to this hierarchy, the metrosexual man and sporno trends do not result in a similar hierarchal positioning. This means that although these trends influence student behaviour in the classroom, they work as a choice and an opportunity more than an absolute obligation. For example, bodily practices of lubrication with lotions, which give the skin a bronzed and shimmery look, and chest waxing, which are related to the metrosexual man and sporno trends, are not necessary for recognition within the community of masculinities for male physiotherapy students. This implies that those who exhibit these contemporary trends of masculinities are seen as acceptable as well as those who do not, which indicates a variety of choice. In short, the gender performing of male students indicates acceptance of both doing and undoing of gender. Nevertheless, within the group of male students, the border for what counts as normal behaviour in this context and what does not is exemplified by the case of a male student who once wore a briefs and not a boxer shorts (see Article 3). Male students are seemingly forced to wear boxer shorts in order to be accepted in this context. The episode is a striking illustration of how some norms of masculinity could not be subverted. In the words of Butler (2004), what this example illustrates is the tendency to question individuals and not the norms when gender is undone.

The bodily-based gender norms that dominate in the community of femininities demonstrate that potential sexuality is played down and moderated. Female students never come to classes in sexy underwear, avoiding lace panties, thongs and lace bras. They favour sports bras and choose sporty or neutral styles of underwear. Thus, female students seemingly do not have access to the same variety of choice of which style to perform in the context of skills training classes compared with male students. However, this should not be interpreted to say that the female students do not have any agency at all. On the contrary, I suggest that their choice of a so-called neutral style may actually represent an opinion about what kind of femininity is preferred in this context. In other words, whereas male students have access to a kind of hyper-sexuality in the metrosexual man and sporno trends, the equivalent of these trends for female students is hyper-sexuality within the trends of different girl-power discourses. An important difference between these trends is that whereas the metrosexual man and sporno trends are apparently associated with a kind of freedom or increased modernity, the opposite may be the case with the girl-power discourses. The consumer-inspired trends of girl-power may trap girls and women in the double bind of conforming to the regulatory power of the fashion and beauty industry while abandoning any criticism of patriarchy (McRobbie, 2009; Kehily, 2012). From this perspective, I suggest that the bodily performance of the female students demonstrates a choice to play down and moderate sexuality as a rejection of the hyper-sexualisation offered in girl-power discourses. Moreover, their refusal actually gives them more power than the alternative girl-power discourses might do. In terms of doing and undoing gender, the gender performance of the male students contests traditional gender norms through the trends of the metrosexual man and sporno. For the female students, gender performance excludes hyper-sexualisation trends; female students are seemingly doing gender. Thus, their gender performance is the prolongation of a historically- and culturally-constructed femininity in physiotherapy. However, seen in a wider cultural context, the implicit rejection of hyper-sexualisation can be seen as undoing contemporary gender norms.

6.2 The significance of gender in contemporary physiotherapy education

What are the changes in the significance of gender in contemporary physiotherapy education? In the following section, I elaborate and further discuss findings on the changes in significance of gender in today's physiotherapy education by looking closer at what I have labelled shifting femininities and shifting masculinities.

6.2.1 Shifting femininities

In this thesis, I argue that there is an increased focus on femininities in contemporary physiotherapy education. First, I find the bodily sociality, being part of caring competences, to contribute a more openly acknowledged emphasis on femininities in today's physiotherapy education. This bodily sociality of care includes the ability to see and interpret bodily signs, in short to be sensitive towards others. Together with students' use of humour in embarrassing situations, I argue that these abilities are part of a physiotherapy-specific relational competence of caring, seemingly needed to handle the bodily closeness that physiotherapy necessarily entails. Second, as curing has been a historically dominant type of competence, defining the physiotherapy profession in many ways, the finding of both curing and caring competences to be clearly significant in today's physiotherapy education, implies an increased focus on care connoting femininity. Third, I find that female and male students perform the curing and caring competences in a similar manner, which also points to a shift in the significance of femininities within this context. Concrete, students view the competent physiotherapist as one who combines curing (anatomical and biomechanical competence) and caring (social and relational competence). The increased emphasis on caring also relates to how students in the skills training classes focus on curing and caring competences as being intertwined, how caring implies curing, and the other way round. For example, caring hands are part of curing techniques. In addition, by focusing on the body as biomechanical, curing is a skill of care, which is applied to reduce unwanted social attention to the body. Based on this, I argue that there appear to be shifts in the significance of gender in professional competences in contemporary physiotherapy education, including an increased emphasis on femininities.

It goes without saying for the students who participated in this study that both female and male physiotherapists focus on both curing and caring competences. Without this focus, one is not seen as an acceptable competent physiotherapist today. Notably, this shift in traditional gender norms, suggests a change in what counts as normal behaviour within the context of contemporary physiotherapy education. The way that both female and male students apply curing and caring competences indicates similarities rather than differences between them. I argue that this finding, which shows a change to and transcendence of traditional gender norms in the field of study, also implies an implicit requirement to do so. In this context, combining curing and caring competences is not only an option, but is necessary for recognition as a future physiotherapist. Indeed, one of the most sensational points made by this thesis is that male students need to do caring to be seen as competent physiotherapists. That male students need to do caring competences in order to be seen as competent implies a renewal of femininities within physiotherapy, which indicates a shift in the significance of gender in terms of increased femininities with more positive connotations.

This latter finding is in contrast to the findings in the study of Hammond (2013) who finds that physiotherapy students in physiotherapy education in the UK position themselves within discourses of femininity and masculinity, rather than against them. This indicates that, at least at the spoken/oral level, the UK students work in line with gendered expectations and thus do not transcend traditional gender norms. Hammond's (2013) claim is that students thereby normalise physiotherapy as a career in line with traditional gender norms. I argue that the students in Norwegian physiotherapy education (this study), transcend and subvert/undo some important traditional gender norms within physiotherapy education in contrast to the students in the UK study (Hammond, 2013). Consequently, in the context of Norwegian physiotherapy education, the relationship between caring and curing subverts the traditional significance of gender within physiotherapy education.

6.2.2 Shifting masculinities

Nevertheless, in this thesis, I also find how physiotherapy students' gender performance confirms some core aspects of masculinity in physiotherapy. Consequently, stability within gender takes place in physiotherapy education. Students doing of sportiness and curing are prominent confirmations of masculinities in physiotherapy education. This relates to the way that students need to conform to sportiness and curing competences as part of what makes them acceptable as competent future physiotherapists. Importantly, the need to be sporty, that is, to perform sportiness, is not a formal requirement to be accepted into the bachelor degree programme. However, as shown in the thesis, it is an implicit requirement in order to be acceptable when one is a student in the physiotherapy programme. As sportiness, both historically and in the contemporary education context, connotes masculinities and as all students somehow relate themselves to sportiness, all students confirm masculinities to be significant in today's physiotherapy education. However, as already pointed out, for male students it is more difficult to be an acceptable physiotherapy student and future physiotherapist without being seen as hyper-sporty. This finding highlights a particularly strong link or association between men, sportiness and masculinities in physiotherapy.

The tendency to emphasis curing ahead of caring also demonstrates the strength of masculinities in physiotherapy education. In this project, I find that the importance of curing is tacitly embedded in the contextual framework or organisation of professional training for physiotherapy students. For example, the physiotherapy benches, which take up a great deal of space in the classroom and are therefore the most dominate element of decor, demonstrate how curing is significant in the contextual frames of the skills training classes. The benches, which are standing in ordered lines and rows, connote curing by virtue of their mechanical and medical design. Anatomical images on the walls, skeletons and anatomical models of different body parts and body joints are other examples of how curing is emphasised tacitly in the organisation of skills training. In discussing why they want to become physiotherapists, students emphasise the curing aspects of the profession, which I suggest may also demonstrate the importance of masculinities in contemporary physiotherapy education. I also find that the focus on anatomy and biomechanics in the demonstration sequences in the skills training classes and in students practicing of physiotherapy techniques and skills, contributes to confirming masculinities as

being important in the formation of the professional competences students learn during their education. Notably, female and male students focus on the curing competences in a similar manner. In this way, both female and male students confirm the significance of masculinities within the context of their physiotherapy education.

In order to understand the importance of sportiness and curing competences in today's physiotherapy education, a glance at the historical roots of the physiotherapy profession is useful. As previously pointed to, these roots demonstrate how the association of sports and curing has been associated with men, but also with women in physiotherapy. I suggest that the hegemonic position of sportiness and curing in contemporary physiotherapy education might be understood by the way that sportiness and curing are historically and culturally linked to masculinities. Within the physiotherapy profession, as established in Sweden in 1813, the sports and gymnastic system of Ling was seen as having a scientific knowledge base. The fact that Ling's system was associated with science probably boosted the strong position of sports and curing competences in physiotherapy and also increased their link to masculinities. Another commonality in the historical roots of physiotherapy in Sweden, England and Norway (see Chapter 2) is the way that curing has been emphasised as core to the constitution of physiotherapy as a profession. This relates to how professions are legitimised by claiming jurisdiction over a certain area of knowledge (Abbott, 1988; Molander & Terum, 2008). In fact, curing has enabled the successful establishment of physiotherapy as a profession but at the cost of caring (Nicholls & Holmes, 2012). I suggest that this partly explains why curing is so extensively focused on in physiotherapy today. Apparently, the emphasis on curing within today's physiotherapy education is a continuation of the legitimisation of physiotherapy as a profession. In other words, the importance of sports and curing in today's physiotherapy education suggests that masculinities today echo specific historical roots in physiotherapy.

In this thesis, I also find that some of the shifts in masculinities might be considered as renewed forms of masculinities in physiotherapy. These shifts relate to the way that bodily appearance and behaviour in skills training classes for male students are inspired by metrosexual man and sporno trends. These trends are associated with sport, which may also shed light on why they are an inspiration to male students in physiotherapy education. Notably, these trends contest traditional masculinity in physiotherapy, which makes gender more fluid than it used to be. As a result, a renewal of the significance of masculinities may be taking place. The gender performance of male students in this study can also be described by the concepts of inclusive masculinity (Anderson, 2005) and personalised masculinity (Swain, 2006). Inclusive masculinity relates to shifts in the broader cultural perceptions of homosexuality. Inclusive masculinity involves a new form of hegemony in opposition to orthodox masculinity (Anderson, 2005). Personalised masculinity indicates an acceptance of ways of acting that are more inclusive. Based on this, I argue that the gender performance of male students demonstrates a renewal of the significance of masculinities, but also of doing femininities, all of which suggests changes in the significance of gender in the context of physiotherapy education.

A parallel renewing of gender in terms of bodily appearance is not found among the female students in this study. On the contrary, the gender performance of female physiotherapy

students with regard to bodily appearance seems to represent a continuity with historically- and culturally-constructed norms of femininity in which a toning down of sexuality is at the core. Interestingly, from a historical perspective, female physiotherapists have been closely associated with sexuality in the physiotherapy encounter. In fact, to a greater extent than with male patients and male physiotherapists, both female physiotherapists and female patients have been forced to take more responsibility for keeping sexuality at bay. This has resulted in dress codes that play down and moderate sexual appearance (Sudmann, 1997, 2009). The gender performance and behaviour of female students in this study with regard to bodily appearance seem to conform to these traditional body-related norms of femininities in physiotherapy. Notably, I find that in skills training classes, female and male students largely have access to the same repertoire of behaviours when they practice in the role of physiotherapist, which is not the case with the role of patient. Gender makes a significant difference between female and male students when they take on the role of patient in skills training classes. In sum, the findings discussed in this chapter show how physiotherapy students perform gender in their education and demonstrate changes in the significance of gender in contemporary physiotherapy education.

7. CONCLUDING REMARKS

Through an exploration of how physiotherapy students perform gender, the findings in this thesis contribute to an increased understanding of the significance of gender in physiotherapy education, which has been the aim of this project. This chapter offers some concluding remarks and addresses implications, possible limitations and suggestions for future studies.

7.1 Main contributions

First, I outline the scientific contribution made by this thesis. Primarily, the contributions from this thesis are empirical. However, I also briefly mention some theoretical and methodological contributions.

7.1.1 Empirical contributions

The articles in this PhD project contribute knowledge on the significance of gender in physiotherapy education, an area to which previous research has paid limited attention both internationally and nationally. No previous studies have investigated the gender performance of physiotherapy students within a Norwegian context. In this thesis, I find gender to be significant through *sportiness*, through *curing and caring competences* and through *bodily performance* in educational training. As social processes, these performances, on the one hand confirm and reproduce traditional types of masculinities. On the other hand, some types of traditional norms of femininities and masculinities are contested. In other words, although this form of doing gender in physiotherapy education involves continuous performances of sportiness and curing, a parallel main finding in this thesis relates to ways of undoing or redoing gender in physiotherapy education. In particular, I find that student acting of a bodily sociality demonstrates a physiotherapy-specific caring that is opposed to the traditional ideal of curing. Also I find curing and caring to be intertwined competences that are focused on in a similar manner by both female and male students in skills training classes. These findings point to a change in the traditional significance of gender in physiotherapy, suggesting that femininity has gained more positive connotations. Furthermore, I find that the gender performance of male students in contemporary physiotherapy education represents a change in current gender norms – a change that implies a more fluid and shifting meaning with regards to accepted femininities and masculinities in physiotherapy than has previously been seen.

7.1.2 Theoretical and methodological contributions

In this thesis, I have attempted to make some theoretical and methodological contributions to studies on gender in physiotherapy education, including suggestions as to how gender may be studied fruitfully within this context. In the discussion chapter, I demonstrated how students' gender performing of sportiness, curing and caring competences, and bodily performance can be understood in terms of doing and undoing gender. This shows how physiotherapy students'

gender performance can also be discussed in more theoretical terms within studies on gender in physiotherapy.

This thesis also concerns a debate in the field of gender and education on how to understand the relationship between sex and gender within educational studies, that is, what seems to be given by biology on the one hand and what is given by purely social norms on the other. Taken together, the articles in this thesis demonstrate how identifying different aspects of the sex/gender relationship within the empirical field as a whole might be a fruitful strategy (which calls for a variety of approaches to the sex/gender issue). In the first article, the gender dimension of sex/gender is demonstrated to be most prominent. Thus, the social dimension seems most important in order to be able to achieve the hegemonic top position of sportiness. In the second article, sex/gender appears as an inseparable whole, where neither the social gender nor the biological sex matter more than the other. In other words, here gender makes no significant difference, suggesting the potential to transcend gender norms. The third article, in contrast to the second article, demonstrates how students cannot transcend gender norms as they wish, because their gender performance is the display of their material sexed bodies, so to speak. In other words, the third article highlights the significance of taking the body into serious consideration in terms of the sex/gender relationship. These different articles show how the use of different aspects of gender can be applied empirically in educational research in order to understand its complexity.

Most research within physiotherapy education is based on surveys or interviews. My PhD work thus offers a methodological alternative, which may inspire others to employ participant observation or participant observation in combination with interviews in order to explore knowledge that often remains tacit and implicit. In other words, a methodological contribution from this work is its demonstration of how fieldwork enabled me to provide new knowledge not necessarily possible with other methods. I argue that this contribution is particularly significant when it comes to the question of how to study gender. I suggest that the approach I have applied in the present work demonstrates a way to study gender, which overcomes both the risk of using gender to explain every difference between women and men and the risk of denying gender as an explanation of the differences between women and men. I suggest that participant observation, in combination with interviews, is a fruitful method, which can contribute a more finely-meshed understanding of how and when gender matters. This often remains tacit and taken for granted in studies on professions and professional practices.

7.2 Implications for physiotherapy education

In the following section, I address the more specific implications that the present PhD work might have for physiotherapy education. The findings in this study demonstrate a number of paradoxes and dilemmas in the education of physiotherapists. These dilemmas concern tensions where both harmonious and hierarchal dimensions are present at the same time in professional training.

Notably, this thesis highlights how sportiness and curing and caring become significant to physiotherapy students in terms of how they are to achieve knowledge about bodies through

their own and their classmates' bodies. At the same time, and as also demonstrated in this study, their bodies come to matter through their performing of sportiness and curing and caring in physiotherapy education. In other words, curing, caring, sportiness and the body are somehow interwoven in the professional training of physiotherapy students. These important hallmarks have been part of the professional training of physiotherapists from its beginnings.

The physiotherapy education programmes in Norway are part of the public higher educational system. I believe that this means that these educational institutions need to be aware of their societal responsibility and how they are accountable for training future generations of physiotherapists and moving the physiotherapy profession forward. It is therefore necessary to move beyond too simplistic and dichotomous understandings of complex relationships, such as the relationship between cure and care. The findings in this thesis demonstrate how there is an increased emphasis on caring and how curing and caring may be far more closely intertwined in the professional practice of physiotherapy than usually considered. Nevertheless, there is a tendency for curing to dominate at the expense of caring, which, in my opinion, shows that the way one defines and practices competences has social consequences. Historically and culturally, curing and caring are constructed as competences that connote masculinities and femininities, respectively. Historically and culturally, masculinities have been more highly valued than femininities (Dahle, 2008). These points are often taken for granted being implicitly interwoven into the constructions of the profession (Dahle, 2008). In order to transcend these understandings and make changes that confirm political norms of gender equality, these social aspects or patterns need to be made more explicit within today's physiotherapy education as part of the system of higher education.

In this study, I discover how students face the challenges and vulnerability that arise from making the body visible and being in close physical contact with their classmates when scantily clad during skills training. Their solution is to make these aspects a necessary part of their professional competences. In the knowledge system of professional training within higher education, such competences, in my opinion tend to be kept at the outside of what count as professional and important competences. Based on the findings in this thesis, I argue that the dimensions of bodily learning, often labelled as tacit and personal knowledge (Polanyi, 1958; Polanyi & Sen, 1983), are highly significant to the education of physiotherapists. As demonstrated in this study and in line with findings from previously research on learning through bodies (Langaas, 2013), these dimensions are present in physiotherapy education. However, they tend to be in the shadow of what is articulated. Thus, I encourage those who teach and organise physiotherapy education, to be more consciously aware of how these tensions work in the educational system. Moreover, I suggest changes to curricula and syllabus, if that is necessary, in order to encourage a stronger position for the caring dimensions of the professional competences in physiotherapy.

Previous research has pointed to the link between sport and physiotherapy students (Hammond, 2013; Öhman, Solomon & Finch, 2002; Öhman, Stenlund & Dahlgren, 2001). The findings in this thesis highlight how sportiness embeds two sides of a harmonically and hierarchal dimension, implying both inclusion and exclusion among physiotherapy students. In order to gain insight into the complexity of the significance of sportiness in the context of physiotherapy

education, I think it important to discuss in more detail what this dilemma may lead to. It can be argued that great dedication is required by hyper-sporty male students to gain top positions as physiotherapists in the Olympia Top Team or national teams of top sports in general, which are presented as dream jobs for students. Very few positions are available in this area. However, from an educational point of view, the strong dedication of these male students can be questioned in terms of how this kind of strong engagement eventually becomes too one-sided, preventing necessary involvement in other dimensions of physiotherapy. However, as this project demonstrates, these students also focus on caring competences, which in my opinion suggests less need to question these male students about becoming too focused on sport and on the curing aspects of physiotherapy more generally. Nevertheless, I suggest it is necessary that both students themselves and their teachers should be aware of the different aspects of hyper-sporty male students' strong interest in sportiness. In other words, although their extreme dedication should not be viewed negatively, it should be critically analysed.

Another dilemma or paradox demonstrated in this study is that that hyper-sporty female students apparently have the opportunity to take on the hegemonic top position of sportiness but they tend not to do so. I find the question of why they do not take on this position to be interesting. Does the finding point to a kind of glass ceiling in physiotherapy education? Are invisible norms preventing hyper-sporty female students from taking on the top position? I suggest female students themselves should explore whether there is a pattern established where their male counterparts position themselves as the best physiotherapy students (see Article 1). In addition, I advise teachers in physiotherapy education to be conscious of how hyper-female students might need to be encouraged and made aware of how they may be leaving the top positions within sports physiotherapy empty for the benefit of their male classmates.

Based on the findings in this thesis, I argue that it is necessary for teachers and administrators in physiotherapy education to pay attention to the situation of the ordinary sporty students, in particular the male students. These students seem to represent different motivations for becoming physiotherapists. Thus, they may contribute to a much-needed diversity within student motivations for becoming physiotherapists. If these students leave physiotherapy education because they fail to find acceptance as suitable physiotherapy students, it could be a loss to diversity in physiotherapy. Thus, I argue that those who teach and organise physiotherapy education, need to pay attention to the motivations for becoming a physiotherapist that are emphasised within the educational programmes and within the recruitment profiles of the programmes.

Gender aspects, including heteronormativity, critical perspectives and more generally knowledge about the history of the physiotherapy profession, seemingly have been and still are quite absent within physiotherapy education. For example, there is a need to debate gender issues within physiotherapy education (Hammond, 2013). In addition, students in physiotherapy represent a very homogenous group, which some probably see as a problem and others not. There are reasons for broader recruitment and for stimulating the heterogeneity that may already exist but which is not visible. In the light of how Norway emphasises equality in general, there may be reasons for physiotherapy institutes to aim for broader recruitment with regard to ethnicity, class, age and gender. In addition, the need for different treatment for

minority groups already present in education may need to be acknowledged. One such example relates to the differences between hyper-sporty and ordinary sporty students presented in this study.

As outlined in the introduction, the students who participated in this study have grown up in a Norwegian society that strongly emphasises equality ideals (Holst, 2009; Slagstad 1998). This led to an emphasis on women undertaking education and career choices during the 1970s and 1980s that were not traditional gender choices for women. Since the 1990s the focus has been on men choosing gender non-traditional (Karlsen, 2012). This thesis cannot answer whether the students in this study will choose gender non-traditional in their specialisation later on. But there is reason to ask whether the way that female and male physiotherapy students perform gender, which includes male students performing femininities, is somehow related to the politics of equality in Norway. The fact that Norway has one of the world's most segregated labour markets despite extensive emphasis on equality politics forms the equality paradox of Norway. The findings in this thesis may demonstrate a shift in professional competences, although segregation of work arenas remains. For example, although male students continue to become sport physiotherapists and manual therapists, they may do this differently from previous generations of men.

7.3 Limitations and future studies

Moving towards the end of this thesis, I address possible shortcomings and look at the need of future studies in the field of physiotherapy. All researchers make choices concerning theory and methods in their studies. Thus, to a certain extent, there will always be limitations in studies as a result of the choices made by the researcher (Mausethagen, 2013).

First, although this study focused on the students, teachers were also included because of their interactions with students. Teachers are of importance to students' professional development and it would have been interesting to focus more exclusively on the interactions between students and teachers than in the present study. In addition, within educational studies in physiotherapy, there is a need to focus more exclusively on teachers. In the FAMS course followed closely in this study, teachers were younger than was previously common within physiotherapy education. In addition, there were more male teachers than was previously the case. To what extent this has an impact on what goes on in the classrooms in physiotherapy education is an interesting question. Other examples of questions to be pursued are: Who are the recognised teachers in physiotherapy education and what are their characteristics? What competences are seen as important in order to teach in contemporary physiotherapy education? What are the similarities and differences between female and male teachers in physiotherapy education? Do we need more male teachers or not? These questions would be interesting to follow up in future studies.

Secondly, issues of similarity and diversity are not only interesting in relation to gender; ethnicity and class are also of significance when it comes to formal and informal aspects of physiotherapy education. These matters would be both interesting and important to pursue in future studies.

Thirdly, in this thesis I have investigated first year students and, as the study is not longitudinal, it cannot answer whether or how the significance of gender in physiotherapy education might vary at different stages in training. Nor can it answer whether there would have been changes in how gender becomes significant throughout these students' professional development during their education. Following students all the way through their training could offer insight into these issues.

A fourth area for valuable research would be to conduct a study that included all the physiotherapy institutes in Norway because this would enable a comparison of the differences between the programmes. However, based on the overall national plan, there ought not to be particularly strong differences between the physiotherapy programmes in Norway. It would also have been interesting to include physiotherapy education from other countries. Sweden would be a fascinating example, as it is the country of birth for the physiotherapy profession. Educational studies in physiotherapy seem to have a longer tradition in Sweden than in many other countries. Previous studies have been conducted on physiotherapy education in the UK and the recent study of Hammond (2013) indicates interesting differences and some similarities that could be important to pursue in future studies. In general, there is a need for comparative studies within educational studies in physiotherapy in an international context, not least as the students of today, being the professionals of tomorrow, are supposed to be educated to work in a broader international context. A comparative study between physiotherapy programmes from different countries could address questions of significance to the future of physiotherapy education in an international context. I suggest designs that could generate knowledge on the cultural aspects of how physiotherapy is shaped in the twenty-first century for application in future studies. In my opinion, this would add much-needed knowledge for physiotherapy education and the physiotherapy profession as part of contemporary society.

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APPENDICES

The following four appendices include the approval letter from the NSD (Data Protection Office for Research), the information letter with consent form for the observation, the information letter with consent form for the interview and the interview guide.

Appendix 1: Approval for research

Norsk samfunnsvitenskapelig datatjeneste AS
NORWEGIAN SOCIAL SCIENCE DATA SERVICES



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Anne Birgitte Leseth
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Høgskolen i Oslo
Postboks 4 St. Olavs plass
0130 OSLO

Vår dato: 18.02.2010

Vår ref: 23597 / 2.1LT

Deres dato:

Deres ref:

KVITTERING PÅ MELDING OM BEHANDLING AV PERSONOPPLYSNINGER

Vi viser til melding om behandling av personopplysninger, mottatt 29.01.2010. Meldingen gjelder prosjektet:

23597	<i>Kjønne kompetanseformer i moderne fysioterapeututdanning</i>
<i>Behandlingsansvarlig</i>	<i>Høgskolen i Oslo, ved institusjonens øverste leder</i>
<i>Daglig ansvarlig</i>	<i>Anne Birgitte Leseth</i>

Personvernombudet har vurdert prosjektet og finner at behandlingen av personopplysninger er meldepliktig i henhold til personopplysningsloven § 31. Behandlingen tilfredsstiller kravene i personopplysningsloven.

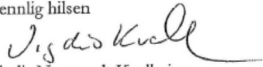
Personvernombudets vurdering forutsetter at prosjektet gjennomføres i tråd med opplysningene gitt i meldeskjemaet, korrespondanse med ombudet, vedlagte prosjektvurdering - kommentarer samt personopplysningsloven/-helseregisterloven med forskrifter. Behandlingen av personopplysninger kan settes i gang.

Det gjøres oppmerksom på at det skal gis ny melding dersom behandlingen endres i forhold til de opplysninger som ligger til grunn for personvernombudets vurdering. Endringsmeldinger gis via et eget skjema, http://www.nsd.uib.no/personvern/forsk_stud/skjema.html. Det skal også gis melding etter tre år dersom prosjektet fortsatt pågår. Meldinger skal skje skriftlig til ombudet.

Personvernombudet har lagt ut opplysninger om prosjektet i en offentlig database, <http://www.nsd.uib.no/personvern/prosjektoversikt.jsp>.

Personvernombudet vil ved prosjektets avslutning, 31.12.2014, rette en henvendelse angående status for behandlingen av personopplysninger.

Vennlig hilsen


Vigdis Namtvedt Kvalheim


Lis Tenold

Kontaktperson: Lis Tenold tlf: 55 58 33 77
Vedlegg: Prosjektvurdering

Appendix 2: Information letter for participant observation

This letter has been translated from Norwegian.

Information letter

Request for consent on participant observation in the research project 'Gendered competence forms in contemporary physiotherapy education'.

As part of my PhD, I am carrying out a project about current competences in the practical part of contemporary physiotherapy education. The aim of the study is to gain insight into what students and teachers in physiotherapy education see as central knowledge for the physiotherapists of tomorrow and also how knowledge and competence is created in the educational context of physiotherapy. Research-based knowledge, experience-based knowledge and client knowledge are knowledge areas included in knowledge-based physiotherapy. How knowledge areas in this model are significant for physiotherapy practice in the educational context – and the impact gender has on the various forms of expertise – will be central to the project.

Consent to participant observation implies that you agree to my presence in class and that I take notes from what I observe. The notes will not contain information that can identify you directly. During the project period, field notes will be stored in a locked cabinet to which only I have access. After the project period, field notes will be destroyed. In addition to participant observation, I will conduct interviews with some students and teachers. If you are selected for interview, you will receive a special request if you want to participate. The results of this study are part of my PhD project, which is expected to be complete by July 2014. The project is recommended by the Private Ombudsman for Research, Norwegian Social Science Data Services A/S and is not considered to require approval by the Regional Committee for Research Ethics (REK). Participation is voluntary and you can withdraw at any time during the study without giving a reason.

If you have any questions regarding participation in the project, please feel free to contact me:

email: tone.dahl-michelsen@hio.no

phone: 22 45 27 82

Consent form:

I have received information about the project 'Gendered competence forms in contemporary physiotherapy education' and consent to participate in the project.

Date:

Signature.....

Appendix 3: Information letter for interview

This letter has been translated from Norwegian.

Information letter

Request for consent for interview in the research project 'Gendered competence forms in contemporary physiotherapy education'.

As part of my PhD, I am carrying out a project about current competences in the practical part of contemporary physiotherapy education. The aim of the study is to gain insight into what students and teachers in physiotherapy education see as central knowledge for the physiotherapists of tomorrow and also how knowledge and competence is created in the educational context of physiotherapy. Research-based knowledge, experience-based knowledge and client knowledge are knowledge areas included in knowledge-based physiotherapy. How knowledge areas in this model are significant for physiotherapy practice in the educational context – and the impact gender has on the various forms of expertise – will be central to the project.

I have carried out participant observation in classes where you have participated. On these occasions, I have noticed that you have skills and perspectives about physiotherapy practice, which it would be interesting to know more about. Therefore, you are requested to attend an interview. It will last approximately 1 ½ hours and take place at a time and place we agree. The interview will be taped and transcribed by me. During the project period, the audio file will be stored on a computer at HIO (Oslo University College) to which only I have access (it will be deleted from the recorder immediately after the audio file is transferred to the computer). The transcribed material will not contain information that can identify you and it will be kept in line with current research ethics guidelines. After the doctoral work is approved, sound files and related material will be shredded.

The results of this study are part of my PhD project, which is expected to be complete by July 2014. The project is recommended by the Private Ombudsman for Research, Norwegian Social Science Data Services A/S and is not considered to require approval by the Regional Committee for Research Ethics (REK). Participation is voluntary and you can withdraw at any time during the study without giving a reason.

If you have any questions regarding participation in the project, please feel free to contact me:

Email: tone.dahl-michelsen@hio.no

phone: 22 45 27 82

Consent form:

I have received information about the project 'Gendered competence forms in contemporary physiotherapy education' and consent to an interview.

Date:

Signature.....

Phone.....

Appendix 4: Interview guide

This guide has been translated from Norwegian.

Interview Guide (Spring 2010)

Background
Please tell me a bit about yourself: How old are you? Where are you from? What did you do before you started in physiotherapy education?
Motivation for the study
Please tell me about why you want to become a physiotherapist. What is important that physiotherapists do? Is there anything you think is less important for a physiotherapist? Are there themes you have been through so far in your training that you think are very relevant for you as a physiotherapist? What area can you imagine working in in physiotherapy? What is the expertise needed for such a job? Do you think you can get such a job? Is there any area you cannot imagine working in in physiotherapy? Please tell me a little about why you cannot imagine working in
Teaching content and methods
What are your thoughts about the syllabus and learning outcomes in the course you are attending now. And what are your thoughts about the syllabus and learning outcomes in other courses so far in the study? You said that ... were important skills for a physiotherapist. Did you learn this in the education (course)? In your experience, what is emphasised in the teaching? In teaching, I have observed that you work a lot in pairs. I have noted that you most often work in the same pairs and that female students work with female students and male students work with male students. What do you think about that? Do you have any thoughts on why it has been like that? Please tell me about a teaching situation that you thought was good. Please tell me about a teaching situation that you think was no good or less good.
Knowledge Forms
In physiotherapy, there is a developed model called 'evidence-based physiotherapy'. It has three areas of knowledge: scientific-based knowledge, experience-based knowledge and client knowledge. Do you know this model? What do you think about these forms of knowledge? How are they presented in the teaching/class?

Teaching, Learning and Gender

How do you think that a teacher should behave?
What is it important that those who teach and guide you do?
How do you think that students should behave?
What do you expect from your fellow students?
What do you expect of yourself as a student?
Do you see yourself as a student or physiotherapist in class – or both?
When do you feel as a student and when do you feel as physiotherapist?
Please tell me how it is to have female teachers in this course.
Please tell me how it is to have male teachers in this course.
Please tell me about your experiences with female fellow students in the classroom.
Please tell me about your experiences with male peers in the classroom.
How do you feel about being so scantily clad in class?
Can you say a little about how it is to be the patient when the teacher demonstrates?
(Requested way: Can you say a little about what it is like to take part in the demo?)
How do you prepare for teaching in terms of being scantily clad (possible keywords for follow-up questions: underwear, hygiene, shaving, etc.)
Can you remember any embarrassing situations in the classroom?
Please tell me what happened.

The future of physiotherapy and own future as a physiotherapist

What do you think physiotherapy is going to be like in the future?
What knowledge is important for the physiotherapists of tomorrow?
Think five to ten years ahead. What area of physiotherapy do you think you will be working in?
Are you going to continue in further education?

Ph.d.-graden i profesjonsstudier

Avhandlingene kan kjøpes gjennom HiOAs nettbokhandel <http://www.hioa.no/Om-HiOA/Skriftserien>.

- Magne Lindholm (2015): *Journalistikkens autoritet. Yrkesideologi og autoritetsmarkering i norsk journalistikk 1954-2014*
- Ida Katrine Riksaasen Hatlevik (2014): *Meningsfulle sammenhenger. En studie av sammenhenger mellom læring på ulike arenaer og utvikling av ulike aspekter ved profesjonell kompetanse hos studenter i sykepleier-, lærer- og sosialarbeiderutdanningene.*
- Mette Løvgren (2014): *Professional Boundaries. The Case of Childcare Workers in Norway*
- Gerd Sylvi Steinnes (2014): *Profesjonalitet under press? Ein studie av førskulelærarar si meistring av rolla i lys av kvalifiseringa til yrket og arbeidsdelinga med assistentane.*
- Sølvi Mausethagen (2013): *Reshaping teacher professionalism. An analysis of how teachers construct and negotiate professionalism under increasing accountability.*
- Marita Nordhaug (2013): *Which Patient's Keeper? Partiality and justice in nursing care*
- Ida Drange (2013): *A study of Labour Market Careers for Professionals of Ethnic Minority Origin*
- Joakim Caspersen (2013): *Professionalism among novice teachers. How they think, act and perceive knowledge.*
- Asgeir Falch-Eriksen (2012): *The Promise of Trust - An inquiry into the legal design of coercive decision-making in Norway.*
- Anita Røysum (2012): *Sosialt arbeid i nye kontekster. Om sosialarbeideres erfaringer med NAV-reformen.*
- Jonas Debasay (2012): *Omsorgens grenser. En studie av hjemmesykepleieres rammebetingelser i pleie av og omsorg for etniske minoritetspasienter.*
- Pål Nygaard (2012): *Profesjonalisering mellom Bildung og Engineering. En studie av de norske ingeniørenes profesjonshistorie 1930-1970.*
- Hilde Karlsen (2012): *Not so unconventional after all: A quantitative study of men in care-oriented study programmes and professional occupations in Norway.*
- Louis Royce Botha (2011): *Incorporating indigenous knowledges into knowledge making: experiences from a South African context.*
- Jorunn Vindegg (2011): *Å forstå en familie: Fortellinger som kunnskapskilde i sosialarbeideres profesjonelle yrkesutøvelse.*
- André Vågan (2009): *Physicians in the making.*
- Bodil Tveit (2008): *Ny ungdom i gammelt yrke - en studie av sykepleierstudenters motivasjon og fagidentitet i møte med en tradisjonstung utdanning.*