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# **The elite endurance athlete as a mother**

**-A case study of four elite endurance sporting women**

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### ***Abstract***

The purpose of this research was to get an insight in womens life as elite sporting mothers. In four interviews, elite endurance athletes shared their experiences of being pregnant and becoming mothers during their sporting careers. Interviewees were held with four Swedish longdistance-athletes from the sport of running, triathlon, biathlon and cross country skiing. Data was analysed employing a Bourdieuan perspective. The results of this study point to three key findings: a)The four elite endurance sports mothers have a strong sporting habitus, but they also separate parts of their identities from sports. Sport is no longer their only high capital; b) The love and relation to the mothers' children is an important capital and contributes in a positive way to their field of sports. It seems to result in these athletes getting more relaxed and finding stronger motivation for joy of their sport; c) The support from partner and family is important for the women to manage to firmly keep a foot in the two fields: sport and family.

***Keywords: motherhood, elite sport mothers, motherhood, career, experiences, endurance-sport, Bourdieu***

# Foreword

The idea for this study comes from my own interest in this topic. I'm an endurance athlete, not in the same level as these women, but sport is a huge part of my life and has been since childhood. Actually very important, everything in my daily life has been controlled by sport; until the day I became a mother.

I'm an athlete, a mother, someone's wife, a fulltime student and I also work. I struggle with combine all these things. It's not only temporal conflict, but also an identity conflict. But honestly, I wouldn't like to change a thing! I'm far from being the only woman who combines motherhood with a career. Today the gender norms are a lot more relaxed then they were for our parents and grandparent's. Even that is today is mostly accepted to combine career with motherhood, it often become a conflict between these to spheres.

I ran until the day my son was born. I think people questioned if I was risking the babies' health. I did long distance sessions when he was very little. I felt guilty when I was away, even though I knew he was happy with his father.

We don't know much about pregnancy and high performance sport. Many athletes who fall pregnant feel unsure how much they dare to workout. There is not much science in this topic, mostly for ethic reasons I think. I want to study training for pregnant high performance athletes, and write a book directed to women in high performance sport about training during pregnancy. A first step is to study some of our national top level athletes in endurance sport and share their experiences of being a mother and a high performance athlete.

I want to thank all four women for sharing their experiences and participating in this study. I also want to thank my supervisor Natalie Barker-Ruchti for her support and consulting in my first science essay.

Thanks

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# Introduction

There is a picture of me from one of my first competitions as a mother. There were a few minutes to start; all the other competitors did their warm up in the water, I sat on the bridge and breastfed my child.  
(Kristin)

Being a mother does not mean having to give up your sporting career. The results presented in this thesis stem from an interview study about combining motherhood and elite endurance sport. Four top athletes who have continued their sporting career beyond pregnancy share their experiences. Their journey from being pregnant, exercising during pregnancy and returning to their careers as high perform athletes after birth are explained. Many women in history have combined motherhood with being very successful in their sports: Paula Radcliffe, the World record holder in marathon gave birth to two children during her long career. Orienteering athlete Simone Niggli-Luder, who has a record of 20 World Championship gold medals, many World Cup victories as well as successes from other championships and numerous sport awards, is another example. She gave birth to a daughter and a set of twins during her athletic career. Swedish long-distance runner Isabella Anderson, who gave birth to a daughter in 2009, won the Swedish championship race in half-marathon when 16 weeks pregnant and achieved great success the season after having become a mother. Although these athletes prove that it is possible to return to competing at elite level after giving birth, and to do so with great results, they represent a minority. Most athletes choose not to return to elite sporting after giving birth. Further it is difficult to say how the changes and the peak in performance related to mental or physiological aspects.

Considering the present media coverage on women who combine their sporting careers with motherhood, the elite-sporting mothers is a hot topic.

What do we know about this topic and the experiences of women as top-level athletes? Not much actually. Only a few studies raise this topic, which leave many questions unanswered. How do women make it? How do they manage to combine training and motherhood? What causes the huge advance and improved performance that many elite sporting mothers experience after giving birth? Do the advantages relate to hormonal changes during the pregnancy that has made them stronger or is it mental changes that might come with motherhood? Moth-

erhood means new priorities and often less time for one's own interests (Johnston, 2006, Palmer, 2009). Endurance sport such as distance running, orienteering, triathlon, cross-country skiing, cycling and biathlon are sports that require many hours of training to be able to stay at the top. It usually brings with it numerous long workouts and hours away from the child. The broad purpose of this study is to explore and examine how women combine sport and motherhood.

## Purpose and objectives

In aiming to study how it is possible for high-performance endurance athletes to combine their career with motherhood, the following two research questions will be answered:

1. How do elite endurance sport mothers believe that motherhood affects their athletic selves and endeavours?
2. What experiences do women describe the possibility of continuing training in elite endurance sport during pregnancy?

Based on these two questions, and in the line with my theoretical lens, I have focused in three life phases: a) Pre-pregnancy: How women's backgrounds and experiences in sport have shaped them and their way of living; b) During pregnancy: How they managed to exercise endurance sport during pregnancy, and after birth; and c) Post-pregnancy: How their experiences of the reactions by family, friends and significant others influenced them when continuing their sporting career as mothers.

The research presented in this thesis is significant as it offer knowledge about the different experiences of thigh-performance elite athletes as mothers. It is my believe that by giving them more space in the social science, more female athletes may continue their sporting careers after having become mothers. Hopefully this research will allow elite endurance sporting women to feel more comfortable and less uncertain when they exercise during and after pregnancy. And last but not least, this research increases knowledge around elite sporting mothers as a social phenomenon, both general and specific in the world of sport. By learning from the stories the research participants offered, the gap between the representations constructed by the media and their actual experiences will be filled.

# Thesis overview

In the first part of this thesis, the scientific field relating to elite sporting mothers is presented. A literature review of previous studies is included. In the second part the Bourdieuan framework is presented. The third part contains the method section. Design and implementation of the study, as well as ethical considerations are discussed. In the fourth part, the results from the interviewee's are presented and discussed in the fifth part. In the last part, the conclusion offers a summary of the findings, referring to their relevance and future directions in terms of research.

# Background

In order to study existing research about elite sporting mothers, but also about women in sport, gender and career women I primary used the scientific database PubMed and Sport Discus. The searches I conducted showed me that elite sporting mothers do not take up much-space in the scientific literature. I found it therefore necessary to include popular science books; biographies and magazine articles. The media is actually where these women mostly have featured. The media tends to present them as an interesting group consisting of exceptional individual cases (Pedersen, 2001). Media's approach to those women makes the announcement that it is possible to continue training while pregnant and also come back to elite level in sport after birth. The conclusion journalists make in their narrative of these women is that we have seen that many of them also perform better after pregnancy and birth (Aagård, 2013, februari).

## Literature review

There is a lot of research done on motherhood, mothers and women's professional careers and also on physical training and pregnancy. Most of this research emerged from a medical perspective (Hale & Milne, 1996, Kardel, 2005, Pedersen, 2001, Öberg, 2012). There are also some researchers who have interviewed elite sport mothers in New Zealand and Denmark, but the interviewees were not exclusively endurance athletes (Palmer, 2009, Pedersen, 2001). Results from these studies show that it is possible to continue an athletic career after pregnancy and combine it with motherhood. Pedersen (2001) focuses on how an athletic career is possible for athletes who are mothers, and how to maintain the excellence in sport. Palmer (2009) focuses on the multiple identities of combining elite sporting with motherhood. Many women make a professional career while being mothers (Dixon & Bruening, 2005, Johnston & Swanson, 2006, Mitchell, 2004). An elite sport career differs from a career in work in a sense that it is a lifestyle that characterizes the way of living. Some female athletes also have a job or studies aside from their sport (Pedersen, 2001, Palmer, 2009).



## History of endurance sporting women

For better understanding of the phenomenon of elite endurance sport mothers, women's history in endurance sport, motherhood and sport career offers useful insight.

Elite endurance sport has long been a male territory (Hargreaves, 1994, Krawczyk, 1973, Palmer, 2009, Pedersen, 2001). In 1928, the Fédération Sportive Féminine Internationale managed to persuade the International Olympic Committee to include five track and field disciplines in the Olympics in Amsterdam 1928 (Lovette, 1997). One of them was the 800 meters event. Since doing sport was not common among women during this time, many of the women collapsed because of lack of fitness. It was assumed that women's physique was not strong enough for running longer than 200 meters (Kuscik, 1977, Lovette, 1997). A century ago, the question discussed was whether women should participate or take place in the world of sport. Women were obliged to exercise in easy and appropriate forms, separately from men (Pedersen, 2001). Much of this ended up in the belief that intense physical exercising could endanger women's reproductive capacity. Most medical doctors in the first decades of the 20<sup>th</sup> Century believed that sports, and in particular endurance events, were not intended for women (Hargreaves, 1994, Pedersen, 2001). But things change over time. While women were not allowed to race longer distances than 800 meters in the Olympic Games until 1960, long-distance running, such as marathon, was excluded for much longer. In the late sixties when one woman broke the rule that marathon was only for men, and ran the Boston Marathon. After this incident, they were hailed as a gender struggle. (Kuscik, 1977) From then onwards, women were allowed to run the marathon in Boston. When the Norwegian Grete Waitz run the incredible world record time 2:32 in 1978 in New York the women's running debate boosted. The New York Times published an article, in which the journalist questioned Olympic marathons for women and the sport magazine Track and Field News wrote that Grete Waitz results now probably would change the whole perception of long-distance-running for women. The American College of Sports Medicine stated at the same time that there is no medical or scientific evidence that long-distance running is dangerous for healthy trained female athletes (Kuscik, 1977, Lovette, 1997).

## Motherhood and sport career

During the 19<sup>th</sup> century, it was not common for women to have a career in elite endurance sport. Even less common was to combine a sporting career with motherhood. Some athletes considered it impossible for them to do that. Grete Waitz, the Norwegian running legend, said in her biography:

I do not feel competent enough to being a mother right now. My life, with all traveling, is not appropriate for a mother. And I don't feel any maternal instinct. Some people say that I will change opinion when I get a baby, but I will not experiment with my own feeling. If I decide to get pregnant it will be a carefully thought out decision. Live consists of compromises. I think it is impossible to work, pursue a sport career and be a mother at the same time. I only manage do to one of these thing. If it was enough training one session per day to be a top athlete I possible would be able to do at least two of these three things, but to be top of the world two training-sessions per day is necessary and then it is hard to do something else

(Waitz & Averbuch, 1985, p. 178-179, translation: mine).

Grete Waitz died on 19 April 2011. She did not have any children, but she was one of the greatest legends in female long-distance running. Some people had another opinion about this. Ingrid Kristiansen, the Norwegian marathon runner with great success in the 1980's with amongst other things the world record in the marathon distance, is an example of a woman who started to improve her performance after the birth of her first child. She trained hard during pregnancy and she even raced and achieved great results. In the last trimester she replaced one of the daily runs with cycling. After she gave birth, she performed stronger than ever and during the following two years she broke the world record in 5000m, 10.000m and marathon! Ingrid believes that the motherhood made her to a greater runner, not because of the physical changes but because of the emotional. When she became a mother she felt that the pressure and the external demands decreased. She now had something, which was more important, her son (Waitz&Averbuch, 1985).

Now we are in the 21th century and women practicing endurance sport at elite level is not startling any more. Being a mother and doing a career is a bit less common. Research has shown that women whose are mothers have less leisure time than men, and are also faced with more constraints (Shawn, 1994, Miller and Brown, 2005, Palmer, 2009) Women are seen as the primary carer of the family. Becoming a mother is considered as one of the most signif-

icant identity transformations in life (Golden, 2001, Palmer, 2009). To be a mother and at the same time be an elite athlete means multiple identities. Earlier studies have explored how women manage these multiple identities and negotiate constraints such as guilt and lack of time (Palmer, 2009, Spowart 2010).

Research has shown that some women do everything they can to continue with sport or career after being mothers. In her research, Spowart studied the experiences and lives of snowboarding and surfing mothers. This scholar found that these women act against the stereotypical role of a mother and that of being a snowboarder or surfer, which is traditionally a male affair (Spowart, 2008, Spowart, 2010). Like this research, most of the studies around this topic have focused on identifying how career women negotiate the constraints associated with motherhood (Spowart 2008, Dixon & Bruening 2005, Johnston, 2006, Palmer, 2009, Krawczyk, 1973).

Career mothers are a topic of this time. Australian Karen Mitchell, who runs the company *Kalmor Consulting*, which specializes in issues relating to women, leadership and motherhood, writes about how to successfully manage career through pregnancy, birth and motherhood in her book *Careers and Motherhood, Challenges and Choices* (Mitchell, 2004). Through interviews with many Australian career mothers, she has constructed a guide-book to prepare mothers and give advice in combining career and motherhood. She is a contemporary example of how women can develop a career around helping other women developing careers!

Today there are many sportswomen who keep on training hard during their pregnancy and continue the elite career after birth (Pedersen, 2001, Potteiger, 1993, Palmer, 2009, Öberg, 2012, Henriksson, 1999, Nash, 2010). Some mothers even also combine this with work or studies. Researchers have concluded that reason why that is possible today is the changed current social condition. For understanding elitesport mothers and their reality and challenges it is necessary to also understand the social and historical conditions for the individual accomplishment of the practical activities related to athletic career. Pedersen (2001) concluded that the question how an athletic career is possible today for athlete-mothers raises the question: *What are the necessary social and historical conditions for the individual accomplishment of*

*the practical activities related to an athletic career?* Historical changes become a turning point in the potential careers of elite sport women, but it is not only the historical changes in society themselves which have provided insight to the manner elite athletes try to cope with several life spheres. Each elite athlete appears to function as a unique expert, a so-called self-made expert (Pedersen, 2001).

Other studies have researched what impact motherhood has on the athletic identity. Palmer (2009) studied nine female athletes in New Zealand with the purpose to explore their experiences of how motherhood impacted on their identities as elite athletes. Palmer's work became an interesting inspiration for the background of this study because that study is the only one I found with a topic and purpose that is in line with mine. Palmer (2009) concluded that all participants in the study described sport as core to their athlete identity. For some of the women, becoming a mother made them realize how important sport was for their sense of self. Negotiating their multiple identities and roles as passionate high achieving women in sport, and as mothers, although challenging, was generally perceived as reciprocally changing and elite sport was considered a personal right by the majority of participants. A strategy for them to overcome daily challenges in their life with the multiple identities as mothers and athletes was to surrounding themselves with personal support networks and having access to varying levels of organisational support. Despite this, a major challenge for the women was their feelings of guilt. In a similar vein Douglas and Carless (2009) found that professional golfers indicated when withdrawing from sport that a personal identity crisis and mental illness followed, especially in cases where the retirement was not optional. For these women, golf was so important that the whole life crashed when they of certain reasons could not continue sport. One of them became a mother and her feelings the first time were that she didn't want her baby (Douglas & Carless, 2009).

Mothers who choose to practice sport in their leisure have been found to developed a range of strategies to enable them to continue in their chosen sport (Spowart, 2008). Spowart's studies on snowboarding mums also indicate that what sport people are able to exercise in their leisure is a question of class. Spowart developed five emergent themes from her researches: claiming a right to free time, negotiating constraints, support from partner and others, feelings

of guilt and use of childcare. These are aspects which snowboarding mothers are confronted with in their daily life. These themes are also relevant for any sporting mother.

## **Studies in pregnant endurance athletes**

Pregnancy involves several physical changes. Cardiovascular capacity increases and also the oxygen uptake can be improved, in order for the woman to carry the growing foetus. During pregnancy, the need of oxygen is causing an increase in respiratory depth and an increased respiratory rate. Blood volume increases and resting heart rate is increased (Hale & Milne, 1996, Pivarnik, 1996, Melzer, K., Schutz, Y., Soehnchen, N., Othenin-Girard, V., Martinez de Tejada, B., Irion, O., Boulvain, M., & Kayser, B, 2010). The huge hormonal changes caused by pregnancy entail increased flexibility in the joints. The pregnancy-related weight gain leads to the skeleton, muscles, joints and ligaments loaded more heavily. While there is a shift of the body's center of gravity forward, back muscles are strained more, thus creating a higher compression on the posterior part of the lower back. Lumbar region increases and it becomes more difficult to maintain balance (Öberg, 2012).

Many of these effects are in even after the birth; it would be possible to exploit the performance point of view. The effects can persist for weeks or months afterwards, and if you practice then you can get more power out of your workout. The heart has worked more during pregnancy, the muscle has built up and it remains afterward (FYSS, 2011, Melzer et al, 2010, Öberg, 2012). Endurance training is intended to increase or maintain physical performance. Studies have shown that pregnant endurance athletes can continue to train intensively during pregnancy with no apparent adverse effects on maternal and fetal health. It would also suggest that active women could continue exercising throughout gestation to preserve their physical fitness and prevent unnecessary weight gain (Bailey 1998, Öberg, 2012).

Studies also demonstrate that it is impossible to see any significant difference in the birth or birth of the child between elite athletes and a control group. Elite Athletes had significantly lower body mass index (BMI) six weeks postpartum vs. control group (Bo & Backe-Hansen, 2007, Pettinen & Erkkola, 1997). Research also indicates that pregnant athletes maintain a high exercise dose well into the pregnancy. The low-intensity workout is maintained at a high dose throughout pregnancy, while the high-intensity exercise decreases to a low dose at the

end of pregnancy. Exercise may be resumed soon after childbirth. There is no connection between the child's birth, and pregnant women's elite active exercise dose. The incidence of pregnancy-related complaints is small in elite sport women. Studies have shown that pregnant athletes can maintain a high exercise dose well above the general guidelines that are far into the pregnancy without exposing yourself or the baby at risk (Bailey, Davies, Budget, Sander-son & Griffin, 1998, Nash, 2011, Potteiger , 1993, Öberg, 2012).

Other researchers have shown that fetal wellbeing may be compromised during strenuous exercise among pregnant elite athletes. Exercise at intensity above 90% of maximal MHR (maternal heart rate) in pregnant elite athletes may compromise fetal wellbeing (Salvesen et.al, 2011).

## **Recommendations**

Both the national and international recommendations for exercise during pregnancy advocates moderate intensity with a total exercise time of approximately 30 minutes per day (FYSS, 2013, Melzer et. Al, 2010). There are no specific recommendations for elite athletes.

## **Theoretical frame**

In this section, insight into the theoretical base of this study is presented. Bourdieu's modern social theories offered great inspiration for this research. Bourdieu's modern theories offered great inspiration for this research. Bourdieu's work was about aspects of daily life. Things that was interesting for research because they reflect the way society is structured and what factors create conditions for progress.. Bourdieu was a social scientist with a culture sociological approach. His theories are popular in both social and sport science (Thorpe, 2010, Klang and Kumar, 2009). He studied how power and status relationships in society are maintained and reproduced through various social practices, such as art, sports, literature and education (Månson, 2007). Bourdieu argued that humans cannot only be explained by studying a persons behavior, but largely it's also about the norms that are produced and reproduced in culture and passed down for generations (Bourdieu, 1995). The key concepts Bourdieu developed are *habitus*, *capital* and *field*. I will introduce each concept in following.

### *Habitus*

Habitus is a way of describing the social structure that is embodied in people. Bourdieu de-

scribes habitus like a system of dispositions in which people think, handle and orient themselves in a society. Habitus the most central concept for this research, both when describing the elite sporting mothers way of being and also in the analysis of data. Habitus in this study is kind of a shape of social identity of elite sport mothers. Bourdieu argues that people's varied dispositions are a product of history. People are born into a family and become characterized by it, it's social background, culture, and communication patterns. These dispositions forms habitus, and habitus structure reality and make us to believe that life has a structure (Bourdieu, 1995, Månsson, 2007). Habitus gives us our action frames, which are similar even if we are in different contexts. The action patterns that habitus provides may change for a person in different situations (Bourdieu, 1978, Månsson, 2007). Habitus it's not constant or something invariably but it's takes time to change it. Habitus can explain why and how behaviors and habits can be inherited. Through the concept of habitus, Bourdieu provides an opportunity to a deeper understanding of how habits incorporated early in life exerts influence on the life you live.

Bourdieu described that societies are continuously changing. Habitus is constructed primarily of previous experiences in life, at an early age and shape us into the individuals we are. Theory of habitus may seem simple and based on the idea that an individual's thoughts and actions are controlled by previously accumulated experience. However, that habitus has a deeper meaning and can be understood as the body and mind engrained habits and dispositions which appear dominant on how the individual think, perceive and value their environment, even in situations never experienced before. The habitus is not a temporary or easily replaceable behavior, but a deep-rooted sense of what is right and appropriate in various situations. (Månsson, 2007, Engström, 2010).

### *Capital*

The theory of habitus is based on the concepts of cultural capital, social capital, symbolic capital and field (Bourdieu, 1978). These concepts form the different parts that together shape or form the habitus of an individual or group of individuals, such as a family. The terms describing the cultural, social, economic and symbolic assets we have in the different social contexts, and they explain habitus importance for our actions. Capital refers to the different forms of power held by social agents, identifies various forms of capital (power), including economic, social or cultural values. In this study it is the cultural, or symbolic, capital which is central.

In the field of sport there are a lot of prestige and endeavor for excellence. Results, performance and quantity and quality of training is also capital in the world of sport.

### *Field*

Field refers to a structured system of social positions occupied by either individuals or institutions engaged in the same activity. Fields are structured internally in terms of power relations. Bourdieu used field as a base to understand how people act in a social context. The concept of social field, which might mainly be seen as a theoretical analysis to describe the social world that people live in. Social field can be characterized as a distinct social context in which individuals with similar habitus or institutions are involved in a battle over resources and assets, ie. capital (Månson 2007, Thorpe, 2009, Bourdieu, 1978). Bourdieu describes the world of sport as a social field in which there exist discussions about how to practice sport and which role sport should play in society (Klang and Kumar, 2009).

### **Genderoles in sport**

Bourdieu has also in his work analysed gender in society. He presented a model that explained why the masculine dominance still prevails in society. (Bourdieu, 1978) The division of the sexes is, according to Bourdieu, a social construction that is created in the relation to others during childhood. People unconsciously separate things in the male and female aspects (Kumar and Klang, 2009). In the field of sport there are, and has long been, masculine dominance. Contemporary image of the woman was not consistent with sport at all, and there were not many women athletes. Today it is a different. Previously incompatible roles including women, sport and career can now be combined. Today, even women can appropriate themselves the habitus of an elite athlete and behave naturally in sport contexts. New phenomenon of elite sport mothers has now emerged. Elitesport mothers are a relatively new concept and phenomenon in society. According to Bourdieu's theories that one's habitus is related to childhood and culture the habitus of the elitesport mothers can be seen differ (Bourdieu, 1978).

Holy Thorpe is a researcher who used Bourdieu's theories. Her research in the women snowboard culture is very much influenced by Bourdieu's theory of habitus. Snowboard culture is primarily seen as male territory (Thorpe, 2008, Thorpe 2009).



According to Thorpe feminist theorizing in the sociology of sport and physical culture has progressed through ongoing and intense dialogue with an array of critical positions and voices in the social sciences (e.g Judith Butler, R.W. Connell, Michel Foucault (Thorpe, 2009). According to Bourdieu, women are not typically capital-accumulating subjects. Rather, they are “capital bearing objects” whose value accrues to the primary groups to which they belong (Thorpe, 2009). Women are significantly less likely than men to do sport in their leisure. Women who are mothers are less likely active in sport compared with women who are not mothers (Miller & Brown, 2005). Participation in sport opened many door for women to challenge traditional norms of gender roles. The fact that it is today is accepted that women doing sport has allowed them an entrée into male preserve. Research suggests that women who participate in sport feel an increasing sense of power over their bodies and a sense of personal empowerment (Dixon & Bruening, 2005). Despite this, women are still a minority and have fewer commissions in sport, especially as leaders and coaches. Research has shown that women get an sex-award’ in sport, they’re *women*. While men are presented as neutral (Grahm, 2008).

The changes in gender roles in society, such as different forms of family life where both parents are working and thing as kindergarten and nanny’s , are important factors which makes it possible for athletes to continuing sport career when became mothers (Pedersen, 2001). Much of research on coping with work-family conflict in sport has concentrated on childcare assistance. Researchers mean that workers with children have greater conflicts. It’s also argued that women experiences more work-family conflicts than men to because of differences in power relations and social expectations of men and women. Family structure influence the career in sport and for maximise the satisfaction the sport participant should minimise family involvement. The most effective family structure to optimize work is one with no children (Dixon & Bruening, 2005).

# Method

In this section the method approach of the research is presented.

## Research approach

This is a qualitative case study based on data from four interviews with elite sporting women. This study focuses on women's view of themselves and their self-perceived experiences of being an elite sporting mother.

The approach of the study is characterized by interest of describing the basic conditions of the social existence. To get a deeper understanding of these women, and their life as elite athletes and mothers it is necessary to get close and let them share their experiences of pregnancy combined with endurance sport training, and their experiences of motherhood and to continue an athletic career.

## Sampling

In this study it was desirable to find a sampling of elite endurance sport women who have been pregnant, given birth and return to their sport after having recently become mothers. The criteria for sampling included participation in international championships and status as a top-level athlete in their sport. The selection of elite endurance sport women in Scandinavia who fill these criteria is limited. A letter was sent to four Swedish elite endurance sport women, because they filled the criteria. One of the women is a friend of mine and I have followed her success as an elite sporting mum close up. I knew about the other three through media. I used Google to get their contact information, homepages and blogs. All of the women responded and wanted to participate in my study. After they responded by email, I called them all to give more information about the study, and also to give them a chance to look into their training diaries from the time of pregnancy. All participants thought that the topic was relevant and interesting and wanted to share their experiences in an interview. The four women in this study are between 30 and 40 years old and come from four different sports. Kristin,-triathlete, Erica, -runner, Anna,- biathlete and Mary,- cross country skier (pseudonyms). All of the four women had different training backgrounds. The two skiers, Anna and Mary, had trained and

competed in their sport since early childhood. The other two, Erica and Kristin, entered their sports during their early twenties. Common for all of them was that sport activities had been a natural part of life since childhood. Three of the women who participate are still competing in their sport; Anna has quit two years after she gave birth to her son. Erica, who ran middle distance before she got her child, today runs longer distances. They have all taken part in a World, and -or European championship in their sport. All of them live in Scandinavia, have middle-class backgrounds, are married or have a partner and they have one child at the age of 16 months to 5 years.

## Data collection methods

Data were collected by semi-structured interviews (Denscombe, 2009). The interviews were held during a course of 5 weeks. I had prepared an interview schedule, mostly as tool of support, but the interviews became very different and some women talked more about certain topics than others. The schedule included mostly open questions, but these were designed to guide the interview toward revealing the head topics, which I wanted to focus on: Background in sport, training during pregnancy, their own and other peoples expectations on them as to combine motherhood with elitesport and how they experienced the changed daily once child was born. One of the interviews was conducted face to face and three of them by Skype, because of the geographical distance. The interviews lasted for about 40 minutes to 60 minutes and all of them were tape-recorded.

## Data analysis methods

All the interviews were transcribed verbatim, and sent back to the participants for member-checking. The analytic process continued with coding the transcripts and group the codes in thematic-areas. I choose to first structure data after the three periods before pregnancy, during pregnancy and after pregnancy and look at their experiences and their relations and attitudes to sport during those different periods. Before I did the interviews I thought about having a couple of head topics as I could structure the transcripts along then. It was training background, physical training, struggles in being a mother and athlete and others opinion about their way of living. And also their own opinions about meaning of pregnancy and motherhood for performance in sport, because that was what actually was in line with the purpose of the study. I started to code the transcripts after that principle. In the group of codes, I came up

with subsets of codes and at least I had a thirty. For example when they talked about attitudes to exercise while pregnant I ended up with different codes for their own attitudes, attitudes from family and friends, attitudes from midwife and doctor and common attitude. (for example 'Attitude O' and 'Attitude F' ) It was also positive and negative attitudes. The section 'physical training' consisted of subsets like 'intensity', 'duration' and 'competition'. By doing that I felt that I could structure the interview material. For practical and environmental reasons I used the computer when coding the transcripts. I developed a 'cut and paste' system where I cut quotes from data and pasted them under specific headlines.

When I had coded all data from interview's and structured it in a result section I started to analyze it from Bourdieu's theories of habitus, capital and field. The analysis is built on my own interpretations and experiences from the interview meeting with those elite sporting mothers.

## Ethics

The collection of data was done according to ethical principles and the rights and dignity of the participants were fully respected. I have respected the information requirement, the requirement of consent, confidentiality obligations and utilization requirement (Denscombe, 2009). All of the interviewed women were informed about the aim of the study and gave consent to participate. They were also told about the types of questions that would be asked during the interview. The questions were of a nature that they did not pose any psychological risk or personal damage. The data from the interviews were treated confidentially and anonymously and the participants were given pseudonyms to prevent identification. The interview transcripts were sent back to all participants so they have a possibility to check if they did not agree with some information or if there were any misunderstandings. All quotes are the women's own words. The interviews were held in Swedish and the corrections made in sentence structure are because of linguistic reasons.

## Result and Analysis

In this section the data from the interviews is presented. I highlight quotes and arguments based on the head topics and based on Bourdieu's theoretical foundations. I start by presenting the interviewees' backgrounds in sport, what sport meant to them and with what feelings they get into their pregnancies. Then I describe how and why they exercised during pregnancy. That leads to my main topics which is about their own experiences of how pregnancy influenced their relationship to sport and their possibilities to exercise, as well as how others influenced their choice to remain in high-performance sport.

### The importance of sport

For all of the four women in this study, sport had been a natural part of their lives since early childhood. All of them did sport as children. Two of them started to compete in their sport in early school age, and the other two did other sports as children. They talked about sport as something enjoyable and pleasurable. Since sport activities have influenced their lives since childhood, it became a part of their identities. Seen from the perspectives of Bourdieu, those women's habitus are strongly characterized by sport.

Women described their relationship to sport with words like "A part of live, lifestyle, passion, daily chore, part of identity", as did Mary:

It is (sport) a huge part of life, it's been quite a long time .. and it's like...my profession ...but also my passion and great interest... Yes, that is a big part of me and my identity.

Anna talked about that loved to train and race. She talked about her relationship to sport like:

Yes, then of course it has meant a lot. Finally it became a big part of my life. As ruled everything in life. That was how it was the last years, before I quit. Everything was controlled and adapted around training.

Sport was something that these women formed their identities around and characterized their personality. In the world of sport they were safe and happy. Erica talks about sport as something that shaped her lifestyle:

Running permeates pretty much everything you do in life. Like from the time you are going to eat lunch: oh no, how many hours is it to the next workout?!

They all talked about the prioritization they have to make because of their sporting careers, but they talked about that in a way that suggests a deep love with what they do. Their priorities before they became mothers were mostly about opting out of things in life that did not go hand in hand with their sporting career. Some women choose not to have children because of career (Johnstone & Swanson 2006, Dixon & Bruening 2005). Those mothers did not, in contrast, their pregnancies were planned.

None of them planned to stop doing sport when starting a family, even though they did not know to what extent the continuation was going to be possible. All of them had a personal goal of getting back into training and competing if everything went out well with the baby.

Mary, Erica and Kristin talked about pregnancy as a timely “break” in careers. But not a break in that way that they stopped training, but more of a mental break, -it was not the same focus on excellence in sport. Mary and Kristin had a bit of a lack of motivation before pregnancy, but both of them said that at once when they got pregnant their thoughts and feelings changed. They felt more motivated and decided to come back to sport and competing after birth. Mary, who struggled with injuries and felt a lack of motivation because she had lost her place in the national team, felt that the break would be good for her. The frustration because of injuries and lack of results was replaced by motivation when she got pregnant:

Very early in pregnancy I changed my mind and I felt it would be very nice to have a break. And then I became more motivated. The frustration went over and replaced with motivation. So it was very timely with a break.

## Motivation and attitude to sport

Their way of describing their thoughts about sport before, during and after pregnancy indicate in a realistic, but strong purposefulness. They talked about pregnancy as a chosen break in career during which they aimed to gather their thoughts, find focus again, get new motivation and also a little different perspective on sport.

All of them expected to continue their sporting careers after pregnancy. Erica, who felt a lack of motivation and focus the season before pregnancy, set specific goals for her time after pregnancy:

Yeah, I definitely had the ambition to return to elitesport! Before, I was little pointless, but then when I was pregnant, I thought it was pretty funny again.

Erica got stronger motivation to sport again when she got pregnant. She was positive and hopeful about continuing her career, but at the same time she was unsure how everything would develop with pregnancy and motherhood. But she trusted her body and her own feelings:

I had a very strong goal then like; 'I am pregnant now, process I make a bet against the Olympics. I was completely familiar with and it was a pretty strong goal I had.

## Season before pregnancy, -the experiences and feelings women carried within pregnancy

Mary described her pregnancy as a period during which she could relax a bit in mind. The focus on the results and performance was not that strong and she gained distance from sport. She continued racing the first months, even that she felt that her physical capacity was not the same.

Women had different experiences from the season before they got pregnant. Some of them get into pregnancy with good results and a successful season behind, as did Anna:

My season before my pregnancy was a great season. I won a lot of medals, silver, gold and bronze in World championship and gold in the relay.

Anna did not plan to get pregnant in exactly that period, but she welcomed it because she wanted to have children during her career. The others also had successes but some had lost motivation. When looking back on her career, Kristin remembered highlights and setbacks:

The season before my pregnancy... I can hardly remember it... 2009 must have been ... But then I was pretty unsatisfied, but aah, I did well anyway. I raced ironman in Kalmar and beat the Swedish record ... But I was still not fully motivated.

Erica was in good shape the season before pregnancy, but came directly from a disappointing World Championships. At the same time she also split from her coach of 17 years. The time before pregnancy she started to train herself. She continued training but was rather aimless. Erica felt that it was perfect to get pregnant during this period when she felt that she was losing her self a lot in the sport. She had no direct physical targets with sport. She did not know how or if she should proceed. During this time she thought a lot about what sport meant to her identity:

Who was I if I could not continue training? “To get pregnant in that stage, even if I ran well, was absolutely perfect for me!

## Pregnant as an endurance athlete

The women in this study had good pregnancies. There were temporary struggles like illness, back pain, SPD (symphysis pubis dysfunction) and cough, but these were relatively ephemeral. The positive experiences and a positive attitude occurred in light of the struggles. Erica had some problems with SPD in the first trimester. But when it healed, she started to run again and continued to the beginning of the 8<sup>th</sup> month. She did not do any alternative exercises:

Alternative workouts are not my cup of tea. Or is it that I'm not mentally fixated to sit on a bike or swim?!

After three months, she received a form of SPD. Then she spoke to the midwife and she thought that she probably had to stop running during that time. But she rested a little bit and



after a few weeks she could cautiously run again. Then she ran until first week in 8<sup>th</sup> month, and after that she kept to fast walking.

Anna did not experience that the pregnancy influenced her season in a negative way. She got pregnant in October and her race-season started in the middle of the first trimester. She felt a little bit ill and was very tired. But at that period was the beginning of the season and she was out on the World Cup:

I made the effort out there on the race, then I could of course go back to the hotel room and just lie down and sleep if I wanted to.

When it comes to the physiological parts the findings in this study is in line with what other studies have come up with. It is possible for elite endurance sport women to exercise a lot more than what the general recommendations advocates (FYSS, 2013, Hale and Milne, 1996, Pivarnik, 1996, Öberg 2012). All the four women in this study trained until the day, or a few days before, birth. They did their discipline to the extent that it was possible. Noone of them found any specific recommendations for how to exercise as an elite athlete while pregnant. The women described how they used the internet, books, journals and asked other athlete mother's for advices on training and pregnancy. Anna, who was pregnant for five years ago, experienced that she became kind of a model for elite athlete mothers. She was very successful in her sport and she perform top of the world, both before pregnancy and after. She said:

I had no other athletes to consult. It was not that many people in Sweden who had done it before, it felt like. It was mostly Eastern European girls who had a child and then come back to the sport. So I felt a little bit like a pioneer then. Afterwards there were many athletes who got in touch with me and asked for advices.

She was also the only one who received medical support from a Norwegian sport doctor. He was a specialist in pregnancy and high performance sport. He had researched other high performance athletes and he did some test for checking that everything was okay with the baby. The other women received advice from their midwives to be careful and listen to their bodies. Mary and Kristine said that they thought that their midwives did not realize how much they actually trained. As Kristin recounts:

The midwife thought I would feel by myself. But she took probably never really know how much I actually trained! But as long as the stomach grew, she did not think there was any danger.

Mary felt that she held a little back how much she actually trained during her first pregnancy. She was unsure what people would think if they knew how much she trained. Today being pregnant again, she feels more comfortable with telling how much she actually exercises:

It's like the more accepted and less questioned. I'm not getting as much comments.

## **Trainingintensity**

When talking about training intensity all of the women said that they gave up the most intense workouts in the first trimester, but that they felt that exercising in threshold, around 80% of VO2 max, was comfortable later on. Anna, Kristin and Mary competed during the first trimester, but none of them felt that they wanted to go as hard as they normally did. Anna competed in the world cup during the first trimester. It worked quite well and she felt good, but she felt early that she was not in the same level.

Anna and Maria, the two winter-sport athletes, got pregnant in a time of hard training, training camps and preparing for following season. Both of them competed in the first four months of pregnancy. Anna could do her normal training in the first trimester, both in intensity and duration:

I did that until the beginning of the season. Then, when we started racing, we did a radical reduction of duration. I could exercise normally, there were no differences.

Anna used her heart rate for control and measure training intensity. She experienced that she had a little bit lower heart rate when she exercised during pregnancy. She also experienced that when she started training again after pregnancy had lot higher heart rate than before and also produced more lactate than she had done earlier. Anna thought that her body controlled the intensity of training by itself. She felt that her head wanted more, but then the body told her to not go harder. In the middle of the season Anna got a protracted influenza and got a

break in training, and after that she continued her training but in a lighter level, with shorter sessions:

I did shorter sessions, maybe 45 minutes, I exercised not in high intensity either. Maximum strength I did anyway, the exercises that were possible to do. As bench press,-bench tensile was impossible!

Even that she competed the first four months, Mary felt that she controlled the intensity of training. She kept on training in threshold level, which she felt was comfortable and hard enough:

At the end when there was really a catch... I felt that I couldn't press my body, I did not dare to do it totally... And I felt that it was time to stop competing. And especially in elite - competitions. Then I proceeded to go a few races where I did not press myself fully.

All of the women described that they felt that their bodies guided them how much and how hard they could exercise during pregnancy.

Above all, it was of the interval-sessions that I held in 80% of max instead. I did not want to run too hard, did not lace the oxygen supply. It was very important for me to keep me on the right side there (Erica).

I ran a lot. I ran the 90 minutes several days a week until I got pain in my back, -just because I think running is the funniest branch.  
(Kristin)

Kristin had an experience during the first trimester that made her to be careful and listen to her body. In the beginning of first trimester she had competed and after that she tried exercise as hard as normally but then she started feeling sick and ill and got fever. After that she considered to not train so long and intense.

## Back on track, better than before...or?

All these four women had different ways to return to sport, but they were all quickly back into high performance training and they all experienced that they got into shape quite quickly after birth.

The delivery appeared different for all of the four women. Delivery resisted from about eight hours to almost two days, and all of them were normal. All had different experiences and different narratives to tell. No one of them thought that the fact that they were athletes affected labour and delivery in any direction. Mary commented as follows:

Well, I started quite rapidly to move after birth. I started walking after a few days. Then I went further and further walk and then after a week so I stood on roller skis. But then, I was just out there and felt a bit ... and then I started cycling, I thought it was almost better.

Mary trained less, but even than she felt a boost in performance quite soon after birth. She shortened down her workouts, but felt that she was in shape quite quickly anyway. Not like for Anna, who quickly got back to full training, it took quite a long time for Mary to reach full duration in training, and she could start racing before that:

I exercised the two hours, but well not three or four hours. I exercised quite a lot of high intense training in the autumn. I ran intervals. When I was ready to do intervals I exercised a lot of high intense training.

She thought that higher intensity training made her to get into shape quicker than if she ran longer and slower. She thought that the basic training course she had maintained during pregnancy, and that it was speed workouts she needed. Her concept worked. When she started to compete she felt very strong and her first season as a mother brought many successes.

Erica was very careful in the beginning. She also prioritised shorter, more intensive sessions after birth. Since running is a sport with quite high load on joints and muscles, she waited six weeks before starting to run again. Before that she did strength training, walking and some cycling. Kristin, who got birth to her son in late January and started to compete in June, said that she never experienced that she was in really bad shape. After birth the pain in back that she

struggled with the last trimester was gone, and she started to run after about a week after delivery.

All of the women talked about training after pregnancy as quality a time for themselves. And they also mentioned how wonderful to get back their 'own' bodies and the feeling of losing weight. Anna remembers:

I was out on training for the first time in about 10 days after birth. On roller-skies. I remember that it was so fantastic! First, just to get away from everything for a little while, but then also that I was so light suddenly! And I could move as normal again!

## Motherhood

There is a picture of me from one of my first competitions as a mother. There was a few minutes to start; all the other competitors do their warm up in the water, I sat on the bridge and breastfed my child.

Kristin brought her child on travels and competitions when she still breastfeed. Then she had support from her partner or family members and friends. Today she mostly leaves her child at home. She thinks it is hard sometimes because she misses him, but she also thinks that it will be a good opportunity for the father and child to have quality time when she is away. Mary considered that attitude and a strong will to go on is important. To be parent is tough regardless of employment. But she compared her career in sport with which other working careers:

It's tougher now. It requires more careful planning. But I don't think it's tougher than other careers. But I think it's more difficult for women to do career as a parent then for men.

Mary thinks that it is easier to fall into the gender roles of how you expect to be as a man and women, and mother and father, when you got a baby in family:

To go back to sport career immediately after you get a baby It's a little bit against the norm of how what is expecting of a mother, I think. Normal is to stay home the first year, you don't follow norm as an elite athlete.

Erica, who in the early pregnancy sat the goal to come back to elite sport and go for the Olympics experienced that her view changed when her son was born:

But then ... once I got this little baby in my arms ..then my attitude changed radically. From being an egotistical runner who largely could walk over corpses,- to ehhh .. put the run in 2nd 3rd hand ...

She described that sport is as important for her today as before she get her son, but that she now has a different perspective of the meaning of performance. She ran her first race in 3000m three months after birth with the knowledge that her shape was not like before. She had no problem with doing that. The perspective on the importance of performance and doing good results had changed:

Then there was always a prestige somehow then. Those runners I beat, but what if I do not do it! I was able to go out and lose before. But now I feel that it does not play a big role, now I run even more for my own sake. Most important is to be satisfied with my training and know that I'm fine. It has become a fundamental goal for me to feel good.

Erica describes that her training routines became adjusted accordingly her babies routines. She needs to train more effectively and can't control her time to the same extent as before.

Kristin also talked about more carefully planning of training today. Especially as her partner also does endurance sport. But she believes that as quite positive in that way that now she can't wait or do other stuffs first, before get out training. Kristin highlights the fact that they devote less time to think about and analyse her training. She doing her best in the sessions, rest of the time she became a mother.

Mary describes similar approach. She does not think about training all the time now, sport is just one of many other things in daily life now. She describes that becoming mother has not done sport less important for her, but she feel mentally stronger:

The fear of failing is not that strong. The will to succeed is stronger.

The mothers have different perspectives in how motherhood affected their routines around training. Anna did not talk about being a mother as something that changed her view and daily routines in training as much:

I think really, I did not think life changed so much, not when he was a little baby anyway because then ... he corrected himself into my routine. We got up in the morning ..., got ready ... left him(to babysitter) ... went out and trained ..., came home and ate lunch, we slept together, out on the next sessions... sometimes he joined in the cart behind, too.

Erica and Kristin feel that they can not control their time in the same way, but that there also are positive aspects to that: they have to be more effective and really get out training when the opportunity arises.

All of the our women breastfed their children. Kristin, who usually do long bike-rides around five hours were very pleased that she without problem could get out on a ride for 3 hours during the time she breastfed. When she started to do long races her son had start eating some food and was satisfied with that. Mary, experienced the breastfeeding as quite tricky sometimes:

It worked, but it was tricky sometimes. I had a goal that I should try to breastfeed her as long as possible. I pumped a lot. That she will take the bottle was a presumption to get through it.

## Eyes from others

Anna did not care about whether other expected her to come back to sport or not. She did her own race. In her case everything went out very well. She was careful and listened to her body, but even that she wasn't afraid to proceed when it felt all right:

After 4 weeks, I was in in full training again I was faster than ever again!

These mothers did not mention anything about any support from their national leadership or from coaches or other people in sport. Anna experienced that others expectations on her possible return to elitesport was weak. The leadership of the national team did not support her to structure or planning her comeback.

Kristin never felt that someone questioned her for exercise during pregnancy or because she continued her sport career as a mother. But she does not exclude that she wasn't susceptible for opinions of people who questioned her training in that time. She also reflected if that's

because everything went out very well for her. She got a healthy child who eat and grew that he would. She said:

What if he didn't, if he were small and tiny! Maybe people had questioned me then?

Women in this study experienced that they have good support form family in their sporting career. They all believed that the support from their family was very important for their possibilities to succeed in sport. No one of them experienced that other people, friends or family had significant opinions about whether they should do sport as mothers. Their partners were involved in sport in some way. Kristin and Erica have partners as also doing the same sport and Maria and Anna have partners who are involved in sport in other ways.



# Discussion

When analysing the results three key findings were formed. These findings are important for the understanding of how elite endurance sports mothers believe that motherhood affects their performances as elite endurance athletes. The findings are also important for the understanding of these women's experiences of the possibility to continue training elite endurance sports during their pregnancies.

## Key findings

- These elite endurance sporting mothers have developed a multiple habitus. They have a strong sporting habitus, but they also separate parts of their identities from sport.
- Sport is no longer the dominant capital: The love and relation to their child is high capital in the new field as a mother. This kind of capital contributes in a positive way to their field of sport. It seems to result in these athletes relaxing more and finding stronger motivation and joy in their sport.
- Support from partner and family is important in managing to stand strong with one foot in the two separate fields, sport and family. Institutional support was limited.

## Formed by their sporting habitus

Analysing how these endurance sport mothers experiences of combining sport and motherhood is, in the light of Bourdieu's theories, about the meeting between cultural background and social environment of sport. Bourdieu argues that habitus is about how childhood and past experiences shapes an individuals taste, a taste that influences and controls how the individual thinks and acts, a taste that is the basis for both conscious and subconscious choices in everyday life and life in general.

These elite sporting mothers have strong sporting dispositions. Their habitus was shaped by their many years as elite athletes. Continuing doing sport at a high level appeared obvious to these mothers. Not in the way that they took for granted that they would be able to continue to the same extent, but that they all hoped and worked for a successful comeback. One of the

key findings of this study is that their sporting identities, countered dominant gender-roles (Johnston et al, 2006). They considered the fact of being a mother as a natural part of life, a step in their sporting careers, not the end to them.

The women talked about sport as a huge part of their life and identity. Two of them had sport as their profession before they became mothers, and the other two worked in other jobs beside their sporting careers. But even though sport is so important and plays such a central role in their lives their stories gave me the impression that they had gained distance to their sport. They did not identify themselves only with their sport. Sport seemed to characterize their habitus in a healthy way. Another aspect of their strong sporting disposition is that their trust in themselves and their bodies during pregnancy and after helped them to not solely identify with sport. I believe that this helped their decision to stay in the sport.

Daily life struggles was something these mothers talked very little about. One reason could be that they avoided it because they wanted to show a good image of themselves as elite endurance athletes and mothers. These endurance sport mothers can be seen in the light of a general research area about mothers who combine family life and career in an occupational context. At least among themselves. Pedersen (2001) describes his working process with Danish athletes as a process which changed from first being an empirical case about combining three life spheres, elite sport work and family life, to eventually end up as a case about achievement of excellence. My research points to a similar picture: it became a story of how the sporting career inevitably turns out the way it does. This is also what characterizes those four women. They talked about struggles as a natural part. Other researcher's have earlier also discuss barriers and attitudes around this topic. By focusing on what could be achieved rather than the barriers, snowboarding women study, developed strategies that enabled them to continue sport (Spowart, 2008). Spowart concluded five themes from her findings. I want to highlight two of them since they are similar to mine: negotiating constraints, and one other was about support from partner and other people. Spowart concluded that the reason why women in her study had possibility to get support from their husbands and families and could continue their careers, probably was related to their socioeconomic status. I did not go that deep in my research's about how and why women in my study had the possibilities to continue sport. I did not either asked about the economical situation in their families. But I think that it is important for the possibilities to continue career.

The first key finding led to the second one: elite endurance sporting mothers are able to continue training, with a higher duration and intensity than the common recommendations for pregnant women advocates. That could be explained by physiological factors because these women are much fitter than general public, but also by the sense of habitus they developed. They have a strong sporting habitus and doing sport is so important and such a huge part of their lives that they had the attitude to try to train as long as possible during pregnancy. To perform at a high level in sport requires focus, determination and self-confidence. The four endurance athletes in this study show that these factors also characterized them when they became mothers. The women knew their bodies so well and were not afraid to continue exercising during pregnancy. They listened to, and trusted their bodies.

## One foot in two different fields

Being a mother means for an elite athlete to tread a totally new and unknown field. To succeed performing as an elite sporting mother means combining two fields. In order to achieve this in a balanced way, it is important to have strong confidence and distance to oneself, and also that people that surround you have good understanding to each of the several fields. The women's stories point out how sport was a natural part of their childhood and that doing sport was joyful and undemanding for them as children. They talked about their family and friends as supportive and understanding when they got pregnant and kept on doing sports during that time. Receiving support from people around them seemed necessary for them to succeed as elite sporting mothers, primarily in terms of a supportive partner. All of the mothers experienced that they had that support. And the support of parents and parents in law who helped with baby-care.

It seems as if people from "the mother field" (family and friends), were more supportive and more understanding towards the other field, (the field of sports). Family and friends accepted the fact that the women had decided to continue their sporting careers. Significant people in the field of sport was less understanding for the mother-field. No one of the four mothers mentioned any support from their national sports association during pregnancy or after. I think it was because people in the field of sport did not know how to support these women. This gap in knowledge could be filled by these mothers' experiences. That could hopefully lead to giv-

ing coaches and national leaders more knowledge about sporting mothers, so that they can be more supportive. Other researchers have also discussed this aspect. Palmer (2009) mentioned that his research in the multiple identities of elite sporting mothers have provided suggestions for how sport practitioners and decision-makers can increase the retention of women in elite sport after they become mothers. The women in my study did not emphasized the non-existing or weak support from leadership in their sport as a problem. They emphasized, however, that support from partner and family was very important. An important aspect here is that these women are individual athletes. When it comes to athletes in teams, for example soccer or basketball, who become mothers support from a coach and the leadership might be more crucial to whether a mother will choose to continue her sporting career or not.

These four mothers did not focused on difficulties with combining motherhood with elite endurance sport. Life changed for them all and they experienced new challenges. But all of them had the attitude that this was what they wanted to do and they seem to promote the possibilities and the positive things. They all talk about returning to sport as something positive and something that they had looked forward to. To manage performing in their new situations as mothers, both in their training and in their preparations, they had to make a lot of adjustments. But none of them talk about that as something they suffered from. It was something that they adjusted themselves to because of their love to do sports. Maybe it is because they were able to stand still which one foot each in two separate fields?

## Loosing or winning capital?

Bourdieu talked about different types of capital: cultural, economical and social (Månsson, 2007). In their field of sport women in this study have gained symbolic (cultural) capital since they were very successful. None of the women knew for sure that they would be able to continue sport in the same level after becoming mothers. To not being able to continue sport in elite level would, with Bourdieuan eyes, mean a loss of capital. How they described their experiences about becoming mothers, -and how motherhood affected their careers as athletes, indicates that their child and their new role in their field of mothers gave them new symbolic capital. They now have high capital in two fields, and their challenge is to balance them. Today the gender roles in sport are a lot more smudged than in previous generations and it is accepted to be a women and an elite athlete. Need to compromise time for training, and have to

adjust routines after family, could easily be reasons for an athlete who became mother to lose motivation to continue career. Less time for training leads to loose capital in the world of sport. It's easy to believe so, and just give up. But these mothers are self-made experts and find new ways to perform! They do not talk about that in a way like they think that might be a problem. They find ways to adapt, very early and very late sessions, and shorter more intense sessions. And even that they changed routines around training all of the mothers were fit to perform very good results the first season after birth. Their strong sporting habitus, but also the high capital in the love and relation to their child they have as mother might be what gave them the energy and the motivation to continue their sport career also as mothers. Their strong sporting habitus give them the possibility to gain high capital in sport. And the high capital in sport, that they have built up during their career, have also made their sporting habitus stronger. This is, according to my result and analysis, what have made them to successful elite sporting mothers.

My results indicate that support from family is very significant when choosing whether to continue a sports career or not. All the mothers in my study stated that they had full support from their partner. Otherwise there would be an imbalance in the family-field. The fact that these mothers seem to have a good balance in both spheres – the family-field and the sport-field – and that the two spheres affect each other, can also be an important reason for them performing. Pedersen (2001) had a similar way of thinking. He mentioned that by coping with several life spheres, each elite athlete became their own self-made-expert. I would like to lift this to a higher level. I think that the women's sporting habitus, the support from their partner and family, and all the love, responsibility and other things that come with motherhood, is what made it possible for them to be their self-made expert. All these women had different stories to tell and their ways back to the top appeared different. The only thing that they actually all have common stated was that they had support from their partner and family. To have a strong sporting habitus and a will to succeed is important, but even if you have that it is very hard to continue career as a mother if you don't have social support or support from family. It would be interesting for future researchs to study if lack of support can be a reason why many women quit sport career after becoming mothers.

## A Bourdieuan perspective

The findings in this research are very important for better understanding these elite endurance sports mothers. Using Bourdieu's concepts habitus, capital and field helps in letting the phenomenon elite endurance sports mother take place in a scientific context. These four women are only a few of the female athletes who have succeeded in sports after becoming mothers. Their stories and experiences are individual, but also give important information that helps fill the gap between media's picture of elite sports women becoming mothers and the scientific knowledge of them. In line with Bourdieu's culture-sociological view the women's childhoods, and sports being a natural part for them during that time, became something that characterized their sporting habitus. Klang and Kumar (2009) had similar aspects in their study on sport-teachers. They discussed that performances in sports were based on earlier experiences from childhood (Klang and Kumar, 2009). The fact that these women have a strong sporting habitus affects their choice to continue their sports careers as mothers, according to Bourdieu's thinking. The women had different experiences of combining motherhood and a career in elite endurance sports, but what was similar was their attitude. They were very positive about what they were doing and did not talk much about struggles. One explanation could be that they actually did not experience any particular struggles. Another could be that talking about negative aspects was against their habitus. Their similar attitudes have to do with them, with their sporting habitus, being socialised and raised into the world of sports, becoming a part of the field of sports, and later on also a part of the field of elite sporting mothers.

My results are in many ways similar to the findings of Palmer and Leberman (2009). According to me, Palmer's work could very well also be analysed in the light of Bourdieu. Palmer's research did not only focus on endurance sports athletes, and she did not have a strong theory base, but her study also indicated that elite sports mothers have a strong sporting habitus.

In summary, all participants described competitive sport as core to their sense of self and motherhood was positive influence on their approach to sport and life.

(Palmer and Leberman, 2009, p.251)

Palmer and Leberman (2009) also concluded that becoming a mother made the women realize how essential sport was to them, and that something happened on a mental level when they

became mothers. That is also what the women in my study express. Palmer and Leberman (2009) also talked about how elite sporting mothers challenge and change the gendered expectations that society have: that once women become mothers they should forego elite sports to focus on family. The women who continue their sports careers contribute to changing this apprehension. The more women that continue in their footsteps the less strange and questioned it will become. Pedersen (2001) concluded that these historical changes in society, and also how the social experiences are perceived and organized by the athletes, are very interesting in the understanding of elite sporting mothers as a social phenomenon.

My results also indicate that it is possible for endurance sports women on elite level to exercise a lot more than the recommendations. But the recommendations about how pregnant women should exercise are actually not adapted to elite athletes, and they have a huge margin of safety. But the recommendations still encourage pregnant women to be active 30 minutes per day, and to not being sedentary. I think that the recommendations are very abundant so that no one risks doing something that could put the woman's or her baby's health at stake. More studies need to be done to establish recommendations in training for elite sporting women. The question is if it is even possible to create universal recommendations around something as individual as a pregnancy. Of course, more physical tests have to be done on pregnant athletes. My research only studies women's experiences of the possibility to exercise during pregnancy. I did not do any physical tests. But I actually think that women's experiences of this topic are just as important as tests in a lab. The women's stories indicate that their bodies signalled to them how much and how hard they could exercise during their pregnancies. All of the mothers in this study, and many mothers in other studies before, have used their own feelings as a barometer of how they could exercise. I have not heard about any athlete who has given birth to an unhealthy baby.

## Method discussion

To study people's experiences in depth, it is necessary to speak with them, to do interviews. A disadvantage to this method is that it tends to produce non-standardized answers. It is more difficult to code data from semi-structured interviews because the answers and narratives are so different. Influence of the interviewer and the context on data makes more it difficult: It is always a risk that the interviewer in the analysis interprets data (Denscombe, 2009). In this

research the interviews were held in Swedish, and the report was written in English. This means that misunderstandings in the process of translation are possible. Some expressions are hard to translate correctly and since this research is built on people's experiences and narratives expressions are significant.

Conversing with the women before data collection began created a framework for social interaction and security, resulting in that they were open from the outset. They were told about what types of questions they could expect and through that they could prepare themselves. I did not consider that to affect the outcome of the responses. All the interviews were held in the home area of the women. One interview was held face to face, and the other three on Skype. From the beginning, the plan was that all of them should be held face to face, but for economical and temporal reasons they were not. That is a possible weakness, because it is easier to build a relationship and confidence through direct contact with a person (Denscombe, 2009). But it can also be a security when the interviews are held at home, which is a safe place for the women. Recording has both pros and cons. The risk when recording is that the interviewed person can feel uncomfortable and enclosed. But that was not my feeling in these interviews. All of the four women were very open and shared their experiences. To have full access to data it is necessary to record, it is hard to listen and write at the same time. Active listening is an presumption to build a good relationship with the interviewed person (Denscombe 2009). And even if I took notes to 100 % it is impossible to have enough time to write down everything that a person says in a normal conversation. Tone and expressions, which are important to take into account in the analysis of data, are very hard to include if you only document by pen and paper.

The result is built more on descriptions than analysis. To draw clear conclusions and come up with precise results is against the nature of this kind of study. It is not possible to draw precise values or truths from people's narratives. It is always a question of interpretation. Whether that is bad or good, that is the way of sharing people's experiences and learning from narratives. Time between pregnancy and the time the interview was held was between 18 months and 5 years. That means the women had to think back and remember their feelings around the time. Man is by nature created so that we would forget things that were tough (Hassmèn et.al 2003).



In this study there were four women who shared their experiences around motherhood, pregnancy and elite sports. Is that enough to generalize from the findings? Probably not. To get a deeper understanding of elite sports mothers the sampling has to be expanded. More interviews with more women have to be done. But as indicated by its name, qualitative research focuses on quality not quantity, and that is necessary to come close to data.

My experiences of doing interviews were limited before this study. I made sure the questions would respect the women's integrity and let them steer the interview and tell their stories. Afterwards I think that it is necessary to follow up with a second interview, after transcribing the first one. In the second one it would be possible to get deeper into interesting parts or to clarify certain things.

For future research it would also be interesting to follow pregnant elite endurance women during a longer period of time in a longitudinal study, from getting pregnant to their return to sport, and even a few years after that. Based on the nature of the findings from the analysis it would also be interesting to study mothers who do not continue their careers after giving birth.

A longitudinal study would also allow for the possibility to include physiological perspectives and doing tests during training sessions. From a gender perspective the choice of only using women athletes can be discussed. The only reason why it might be more interesting to study elite sporting mothers than elite sporting father's is the physiological aspects. The question if women get stronger and get a physiological boost after pregnancy is very interesting. Results from this research indicate that women endurance athlete's can come back stronger or at least as strong as before pregnancy after getting birth. Results also indicate that they're able to train harder than the recommendations for pregnant women. I leave the physiological part to simply state this fact. More studies are necessary to investigate the physiological aspects.

The fact that these women entered pregnancy with different experiences from the season before – for some it had been a successful season, for some not so successful – would be interesting to follow up. One option could be doing a closer study of their motivation and attitudes

to elite sports and if they change during pregnancy. And if that is the case, why do they change? And also if their experiences from the season before pregnancy and the attitudes from their sport federations relate to the choice to continue with elite sports after giving birth or not.

This study has a strong scientific base when it is based on and analysed in the light of Bourdieu's theories. The fact that I present my analysis and data in light of such a human, strong and modern theorist as Pierre Bourdieu makes the study more socially intelligible. In the light of my results I believe that also Pedersen (2001) and Palmer and Leberman (2009), which have done the research the most similar to my, and also were my strongest literature sources, also advantageously could have used Bourdieu's theoretical tools.

# Conclusion

The aim of this study was to examine how it is possible for high performing endurance athletes to combine their careers with motherhood.

This research has provided a unique interpretation of elite endurance athletes who are also mothers. The study focuses on the lived experiences of these women, which leads to a greater understanding for these athletes and mothers in a social context. All of the four mothers had different stories to tell and different experiences of pregnancy and motherhood. But all of them talked about sport as something that influenced their habitus. Sport and everything around sport was, and still is, high capital for them. Even though sport did not become less important when they became mothers, something changed. Before they got pregnant, sports had been a huge part of their lives and also the most important for them, but now there was something more. A awaited child.

They all described being a mother rather as a part of their career than a total break from it. Even though they continued training, and even competing, during pregnancy it actually became a temporary break from performing. And they were all comfortable with that. All of them had a positive attitude about returning to their sport after giving birth. The women who felt a lack of motivation before pregnancy describe that these thoughts changed when they got pregnant. To manage training during pregnancy and then continue their careers as mothers became a new challenge in a new unknown field. With their strong sporting habitus this was exciting and challenging!

Their experiences of the possibility to go on training elite endurance sports during pregnancy were overall positive. Even though the pregnancies for these four women were all different, and their experiences individual, there is a clear similarity in their stories: their attitude and will to continue their sport. They listened to their bodies and almost all of them could exercise until the day they gave birth. All of them exercised practically as usual during the first trimester. The results from this study indicate in that it is possible for elite endurance sporting women to continuing with endurance training at a relatively high level during pregnancy. The

main change in training seems to be adjusting the intensity and avoiding high intensity levels, over threshold. It would be interesting to do more physiological studies in pregnant elite endurance athletes to get more specific guidelines for training during pregnancy.

The stories and experiences of these women are very important for increased knowledge in this area. Not at least for the women themselves. They express that they during their pregnancies felt unsure how much and how hard it was okay to exercise. If elite sporting mother's experience from training during pregnancy, and also from combining a sports career with motherhood, becomes scientific knowledge it would be a great support for these women. And it would also give sport-federations support to how they shall relate to and respond to these female athletes.

Further research is needed about sporting mothers as individuals, and it would be interesting to also study mothers who choose to not come back to their sport after giving birth. By doing that the factors of why and how it is possible to combine motherhood and elite sports, and how motherhood affects the elite athlete, hopefully would get clearer. Studying these mothers in light of Bourdieu, it would also be interesting to research if the women who chose to continue their sport after becoming mothers have a habitus stronger characterized by sports and better support from family than those who continue their career.

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