

**Doctoral Thesis** 

# Professional and Social Support for First-time Mothers and Partners During Childbearing

Caroline Bäckström

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#### Doctoral Thesis in Health and Care Sciences

Professional and Social Support for First-time Mothers and Partners During Childbearing Dissertation Series No. 086

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ISSN 1654-3602 ISBN 978-91-85835-85-0 'When a baby is being born, it is not only about the arrival of a child, it is also about the creating of strong and confident parents, capable of loving and leading the family throughout challenges in life'

Caroline Bäckström



'Wrapped in Love' (2016)
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To all expectant and newly become parents, as well as to all those persons who the parents need to be supported by.

# **Abstract**

Background: Expecting a child and becoming a parent is one of life's major events, during which the parents' perspective on life and their couple relationship changes. For some parents, childbearing entails a decrease in parental couple relationship quality. The way in which parents are able to cope with childbearing may be connected with their Sense of Coherence; which is a person's ability to perceive life as comprehensible, manageable and meaningful. For parents' positive childbearing experiences, professional and social support have been proven to be valuable. However, far from all parents have access to social support; furthermore, professional support does not always meet the needs of expectant parents. Hence, more research is needed to increase knowledge about expectant parents' experiences of professional and social support. In addition, more research is needed to explore factors associated with quality of couple relationship among parents during childbearing.

*Aims:* The overall aim of the thesis was to explore professional and social support for first-time mothers and partners during childbearing in relation to quality of couple relationship and Sense of Coherence.

Methods: The study's designs were explorative, prospective and longitudinal; both qualitative and quantitative methods were used. Specifically, explorative designs, qualitative methods and phenomenographic analysis were used to explore expectant first-time mothers' (I) and partners' perceptions of professional support (II). Furthermore, an explorative design, qualitative method and qualitative content analysis were used to explore expectant first-time mothers' experiences of social support (III). Within Study IV, a prospective longitudinal design, descriptive statistics, non-parametric tests and multiple linear regression analysis were used to evaluate factors associated with quality of couple relationship among first-time mothers and partners, during pregnancy and the first six months of parenthood.

*Results:* The overall results of the thesis revealed both similarities and differences between expectant first-time mothers' and partners' perceptions of professional support, effects from social support and associated factors with perceived quality of couple relationship. The similarities were; both mothers

and partners perceived that professional support could facilitate partner involvement, influence their couple relationship and facilitate contacts with other expectant parents. According to first-time mothers' experiences, their couple relationship with their partner was also strengthened by social support during pregnancy. Further, the results showed that both first-time mothers' and partners' higher perceived couple relationship quality six months after birth, was associated with their higher perceived social support. The results showed also that both mothers and partners perceived their quality of couple relationship to decrease and Sense of Coherence to increase six months after childbirth, compared to the pregnancy. Differences revealed were such as: higher Sense of Coherence was only associated with mothers' higher perceived quality of couple relationship, and first-time mothers reported perceiving more social support compared to the partners both during pregnancy, first week and six months after childbirth.

Conclusions: Professional and social support can strengthen first-time mothers and partners both individually and as a couple, in their abilities to cope with childbearing. On the individual basis, the expectant parents could be strengthened through professional and social support that contributed to their understanding and feeling of being prepared for childbirth and parenting, for instance. As a couple, the parents were strengthened by professional support that included the partner's role, as well as higher perceived social support overall. In contrast, lack of support could have a negative influence on the expectant parents' feeling of being prepared for childbirth and parenting. Besides this, the results indicates that childbearing has a positive effect on parents' abilities to cope with life even though their quality of couple relationship decrease. Professionals can use these results in their further understanding about how to offer satisfactory support to first-time mothers and partners during childbearing.

*Keywords:* Pregnancy, Childbirth, Couple Relationship, Parent, Father, Comother, Sense of Coherence.

# Original papers

The thesis is based on the following papers, which are referred to using Roman numerals in the text:

#### Paper I

Bäckström, C., Mårtensson, L.B., Golsäter, M. & Thorstensson, S. (2016). 'It's like a puzzle': Pregnant women's perceptions of professional support in midwifery care. *Women and Birth*, 29:e110-118.

#### Paper II

Bäckström, C., Thorstensson, S., Mårtensson, L.B., Grimming, R., Nyblin, Y. & Golsäter, M. (2017). 'To be able to support her, I must feel calm and safe': Pregnant Women's partners' perceptions of professional support during pregnancy. *BMC Pregnancy and Childbirth*, 17:1-11.

#### Paper III

Bäckström, C., Larsson, T., Wahlgren, E., Golsäter, M., Mårtensson, L.B. & Thorstensson, S. (2017). 'It makes you feel like you are not alone': Expectant first-time mothers' experiences of social support within the social network, when preparing for childbirth and parenting. *Sexual and Reproductive Healthcare*, 12:51-7.

#### Paper IV

Bäckström, C., Kåreholt, I., Thorstensson, S., Golsäter, M. & Mårtensson, L.B. Quality of couple relationship among first-time mothers and partners, during pregnancy and the first six months of parenthood. *Resubmitted*, December 2017.

The articles have been reprinted with the kind permission of the respective journals.

# Contents

Abbreviations	1
Preface	2
Introduction	3
Background	5
Expecting a Child and Becoming a Parent	5
Parental Couple Relationship during Childbearing	6
Health during Childbearing	8
Professional Support during Childbearing	9
Professional Support Offered within Swedish Maternity Health Care	. 11
Professional Support Offered for Newly Become Parents in Sweden	. 13
Social Support during Childbearing	13
Conceptual Framework	15
Salutogenesis	15
Support	16
Rationale	18
Aims	19
Methods	20
Design	20
Explorative Design and Inductive Approach (I-III)	20
Longitudinal Prospective Design and Deductive Approach (IV)	20
Setting	21
Professional Support Offered for Expectant Parents	21
Participants and Procedure	23
Participants in Qualitative Studies (I-III)	23
Participants in Ouantitative Study (IV)	24

Data Collection
Qualitative Interviews (I-III)
Questionnaires (IV)
Phenomenographic Analysis (I-II)
Qualitative Content Analysis (III)
Quantitative Analysis (IV)
Ethical Considerations
Autonomy
Beneficence and Non-maleficence 38
Justice 39
Results41
Expectant First-time Mothers' Perceptions of Professional Support during Pregnancy (I)
Partners of Expectant First-time Mothers Perceptions of Professional Support during Pregnancy (II)
Expectant First-time Mothers' Experiences of Social Support during Pregnancy (III)
Quality of Couple Relationship among First-time Mothers and Partners, during Pregnancy and the First Six Months of Parenthood (IV)
Change over Time in Perceived Quality of Couple Relationship, Social Support and Sense of Coherence
Feelings for Childbirth and Parenthood
Factors Associated with Quality of Couple Relationship after Six Months of Parenthood, among First-time Mothers and Partners 54
Non-respondents
Discussion57
Methodological Considerations
Trustworthiness in Qualitative Studies (I-III)
Validity in Quantitative research (IV)
General Discussion of the Results

Perceptions of Professional Support and Experiences of Social Support	64
Professional and Social Support in Relation to Parental Couple Relationship	68
Professional and Social Support in Relation to Salutogenesis and Second Coherence among First-time Mothers and Partners	
Support for Parents during Childbearing: A Complex Phenomenon.	72
Comprehensive Understanding	74
Conclusion	76
Relevance and Implications	77
Future Research	78
Svensk Sammanfattning	79
Acknowledgements	87
References	94

# **Abbreviations**

IL Inspirational Lecture

MSPSS The Multidimensional Scale of Perceived Social

Support

SOC-13 Sense of Coherence scale

QDR36 Quality of Dyadic Relationship scale

# **Preface**

'This birth was fantastic, we managed it together', one new parental couple expressed. 'If only I had known in advance that this was what it would be like to give birth and become a mother' another mother stated. 'I feel helpless, I don't know what to do or how to help her' one partner said when the labouring mother cried because of birth pain and exhaustion.

The quotes above are fictitious, based on my experiences as a labour and postnatal ward midwife. With these quotes, I would like to explain what triggered my interest in support during childbearing. For numerous hours I have listened to expectant and new parents' experiences of pregnancy and childbirth. Many of those experiences have been about expectations and preparations for childbirth and parenthood. While some parents have expressed positive expectations and satisfactory preparations, others have expressed anxiety, fear and unpreparedness. In addition, some parental couples have tended to, instinctively or by being well prepared, know how to support and meet each other's needs during pregnancy, birth and the postnatal period. Others, on the other hand, have tended to *not* know how to support each other. In my work as a midwife, one endeavour has been to discover how to support the parental couple in their teamwork, giving them the ability to understand and meet each other's needs.

I am grateful for the valuable experiences I have shared with parents, because those experiences have made me interested in support from the parents' point of view. Questions I have been asking myself are: *How do expectant parents experience support during childbearing? What are the parents' individual support needs?* and *What do the parental couple need to be able to function together as a team?* This thesis has been conducted with the intention to increase our knowledge about these questions. In this thesis, childbearing as a theoretical concept includes both pregnancy, birth and the first six months of parenthood. The term *partner* refers both to father and co-mother.

# Introduction

Childbearing is a major life event for parents, entailing childbirth and the transition to parenthood; it is one of the biggest transitions in their lives (Cowan & Cowan, 1999), involving physiological, psychological and social adjustments for the parental couple (Klobucar, 2016). While some parents experience childbearing as positive, amazing and strengthening, others experience it as negative or stressful. Similarly, some parents report increased quality of parental couple relationship during childbearing (Feeney, Hohaus, Noller, & Alexander, 2001; Shapiro, Gottman & Carrère, 2000), while others report decreased quality (Twenge, Campbell & Foster, 2003).

Parents' feelings of high perceived stress, low social support or partner tension are connected with feelings of anxiety and depression during pregnancy (McLeish & Redshaw, 2017; Bayrampour, McDonald & Tough, 2015). Expectant parents' transition to parenthood can be inhibited when they have unrealistic expectations, feelings of unpreparedness or stress as well as when the expectants parents perceive lack of professional support (Barimani, Vikström, Rosander, Forslund Frykedal & Berlin, 2017A). Furthermore, parental stress and health-promoting behaviours affect mothers' quality of life (Loh, Harms & Harman, 2017). Within Salutogenesis, it is assumed that high family Sense of Coherence may be valuable for the way parents perceive and cope with the challenges that come with childbirth and parenting (Antonovsky & Sourani, 1988). Sense of coherence is the person's ability to cope with stressors in life and their perceiving life as comprehensible, manageable and meaningful (Antonovsky, 1993).

For parents to experience positive childbearing experiences, however, support has been proven to be a valuable factor (Habel, Feeley, Hayton, Bell & Zelkowitz, 2015; McLeish & Redshaw, 2015; Ferguson, Davis & Browne, 2013; Mbekenga, Pembe, Christensson, Darj & Olsson, 2011). Professional support increases knowledge and feelings of being better prepared for childbirth among expectant parents (Svensson, Barclay, & Cooke, 2009; Gagnon & Sandall, 2007), as well as feeling less deterioration in relationship satisfaction among mothers (Daley-McCoy, Rogers & Slade, 2015). In addition, social support influences parental functioning and is linked to

children's developmental outcomes (Trivette, Dunst & Hamby, 2010). Despite knowledge about these positive effects, parents' needs of support are not always met (Wells, 2016; Wells & Lang, 2016; Hildingsson, Dalén, Sarenfelt & Ransjö Arvidson, 2013; Bäckström & Hertfelt Wahn, 2011), which may lead to negative birth experiences (Waldenström, Hildingsson, Rubertsson & Rådestad, 2004).

Childbearing is a challenging part of life, which should be accompanied by access to satisfactory support for the parents. Nevertheless, there is limited knowledge about expectant parents' perceptions and experiences of professional and social support. There is also limited knowledge about the longitudinal effects of social support and its associations with quality of couple relationship and Sense of Coherence among parents. Therefore, professional and social support for expectant parents needs to be further explored, in a multidimensional and longitudinal perspective.

# Background

## Expecting a Child and Becoming a Parent

When expecting the first child, the parents-to-be are in a sensitive period of life. It is common that expectant parents worry about the baby's well-being, childbirth and the changes that parenthood will entail. The expectant mother is carrying the unborn, growing child and she experiences both physiological and psychological, as well as social contextual changes. Pregnancy includes different stages of maturation for the expectant mother. During early pregnancy (the first trimester), an expectant mother is often worried about miscarriage and the baby's health. In the middle of the pregnancy (the second trimester), she starts to recognize fetal movements, which make her begin to differentiate the baby from herself. Within the last phase of pregnancy (the third trimester), it is usual that the expectant mother worries about the upcoming birth and her capacity to manage the birth. Often, she starts to long to meet the baby. During these different phases, the expectant mother bonds with her unborn child. Feelings such as worry, anxiety, depression and stress might negatively influence the mother-baby bonding (Brodén, 2004); furthermore, parental stress affects mothers' quality of life (Loh et al., 2017).

The expectant mother's partner can follow the different phases and changes that the mother is going through. At the same time, he or she can engage in the unborn child's development and experience personal psychological as well as social changes. When expectant fathers are involved during pregnancy and childbirth, it is strengthening for expectant mothers, as well as positive in terms of health for the mother and new-born child (Martin, McNamara, Milot, Halle & Hair, 2007; Buist, Morse & Durkin, 2003). Fathers wish to be more involved during pregnancy (Widarsson, Engström, Tydén, Lundberg & Hammar, 2015; Hildingsson, Haines, Johansson, Rubertsson & Fenwick, 2014) and childbirth (Bäckström & Hertfelt Wahn, 2011), yet they find it difficult to understand what is expected of them (Bäckström & Hertfelt Wahn, 2011). Distress during pregnancy and early fatherhood is known to have a negative effect on father-to-child attachment (Buist et al., 2003). However, traditional heteronormative ideas of family constellations are challenged when an increasing number of lesbian couples enter a mutual motherhood. Previous

research has shown that although most lesbian women feel accepted on a personal level within motherhood (Dahl, Fylkesnes, Sorlie & Malterud, 2013), heteronormative barriers are still at work (Roseneil, Crowhurst, Hellesund, Santos & Stoilova, 2013), which indicates the need for further research on comothers' experiences and effects of support.

For a long time, transition to parenthood has been described as one of the most evolving changes that takes place in most people's lives (Barimani, et al., 2017A; Fox, 2009; Cowan & Cowan, 1999; Belsky, 1994). Transition is an event that takes place over time and involves some form of change concerning identity, behaviour patterns or role relations (Meleis, Sawyer, Im, Messias & Schumacher, 2000). Transition is also defined as a change in health status, expectations and abilities or as a passage from one life phase to another (Schumacher & Meleis, 1994). Transition to parenthood involves changing habits of mind and transforming the frame of reference, for the parents (Klobucar, 2016). It is influenced by expectations, levels of skill and knowledge, social contextual circumstances, as well as emotional and physical well-being among the parents (Schumacher & Meleis 1994). Factors that facilitate transition to parenthood are perceiving parenthood as a normal part of life, having satisfactory knowledge and a feeling of preparedness, social support and professional support (such as parental education classes). Conversely, factors that obstruct transition to parenthood include having unrealistic expectations, a feeling of unpreparedness, stress and loss of control as well as a lack of professional support, to mention just a few (Barimani et al., 2017A). However, giving birth to a child and becoming a parent can be accompanied by a broad variety of individual experiences for the parents. Parents can experience it as amazing, strengthening and as an opportunity for growth, as well as stressful or negative (Buultiens, Murphy, Robinson, & Milgrom, 2013).

#### Parental Couple Relationship during Childbearing

During pregnancy and childbirth, a child is about to develop and be born, as well as a parental couple and family are about to be created. When two people decide to have a child together, they may be each other's most important support system when making new meaning and changing their frame of reference during the transition to parenthood. Usually, couples want to be fully

engaged parents and take care of the child optimally (Klobucar, 2016). However, several studies (Ngai & Ngu, 2016; Doss, Rhoades, Stanley & Markman, 2009; Mitnick, Heyman & Smith Slep, 2009; Lawrence, Cobb, Rothman, Rothman & Bradbury, 2008), including a meta-analysis (Twenge et al., 2003), have found that relationship quality is significantly lower after the transition to parenthood. The decline in couple relationship has been explained using different factors, such as the changing roles from partners to parents and the increase in family stress (Kwok, Cheng, Chow & Ling, 2015). It has also been explained through less positive spousal interaction, parental couple conflict and a demanding task to combine childcare, household and workplace (Hansson & Ahlborg, 2016; Baxter, Hewitt & Haynes, 2008; Houts, Barnett-Walker, Pale & Cox, 2008).

In terms of assessments of relationship conflicts, gender differences have been identified between mothers and fathers. For example, only mothers report less conflict when they perceive the division of childcare as less unfair to themselves (Newkirk, Perry-Jenkins & Sayer, 2017). Further, the cohabiting father's commitment in the couple relationship has been proven to be more vulnerable in the transition to parenthood, compared to married fathers. No differences have been revealed between cohabiting and married mothers (Kamp Dush, Rhoades, Sandberg-Thoma & Schoppe-Sullivan, 2014). In spite of the above-mentioned negative changes resulting from being a parent, other studies indicate that some parental couples experience the arrival of a child as pleasurable, fulfilling and satisfying (Kluwer & Johnson, 2007). Some couples even report high relationship quality during the transition to parenthood (Feeney et al., 2001; Shapiro et al., 2000). Stable or an improved relationship during the transition to parenthood is associated with positive communication among the couple (Houts et al., 2008), relationship friendship (Shapiro et al., 2000) and shared enjoyment in the triadic interaction between the two parents and the child (Stroud, Durbin, Wilson & Mendelsohn, 2011). Irrespective of whether the parents experience their relationship quality as stable or not, it is clear that childbearing is a sensitive period of life which should be accompanied by support for the parents. During this period, firsttime parents may be most malleable (Feinberg, 2002). However, more research is needed to further explore changes in the quality of couple relationship, during childbearing, as well as to explore factors associated with quality of couple relationship among parents.

## Health during Childbearing

The time when patterns of parenting and relating to the infant are being formed is a sensitive period for the new family; this includes difficulties that may challenge the parent's sense of health. Many fathers feel anxious before labour (Eriksson, Westman & Hamberg, 2006), which may lead to childbirth fear that is associated with fathers' parental stress, poor physical and mental health (Hildingsson et al., 2014). At the same time, co-mothers describe that being neither father nor biological mother sometimes challenges their parental identity (Dahl & Malterud, 2015). Following childbirth, parents report both physical and emotional changes (Fahey & Shenassa, 2013). First-time mothers report higher levels of parenting distress and risk of postpartum depression (20.8%), compared to first-time fathers (5.7%) (Epifanio, Genna, De Luca, Roccella & La Grutta, 2015). Mothers who have high perceived stress, low social support or partner tension, are more likely to experience anxiety and depression during pregnancy (McLeish & Redshaw, 2017; Bayrampour et al., 2015). Parental stress also affects the quality of life for mothers (Loh et al., 2017). This indicates that childbearing is a vulnerable time in terms of the mental health of the mothers (Redshaw & Henderson, 2013).

Important protective factors for stress among mothers include perceived parenting confidence and maternal self-efficacy (Leahy-Warren, McCarthy & Corcoran, 2012), as well as health promoting behaviour (Loh et al., 2017). However, although some parents experience depression during childbearing, the event can also be experienced as pleasurable, fulfilling and satisfying for the parental couple (Kluwer & Johnson, 2007). Such experiences might influence the parents' feeling of health. According to the World Health Organization (WHO), health is defined as a 'state of complete physical, mental and social well-being and not merely the absence of disease or infirmity' p 459 (World Health Organization, 1958). Within this definition, there is a holistic perspective highlighted through social, mental and physical wellbeing. However, the inclusion of the word 'complete' is complicated, since it would classify most people as unhealthy (Huber, M. et al., 2011). According to Antonovsky (1993), a person's ability to maintain health is connected to the person's Sense of Coherence, which is the person's ability to cope with stressors in life and their perceiving life as comprehensible, manageable and meaningful (Antonovsky, 1993).

Previous research has shown that high levels of Sense of Coherence are connected with better pregnancy well-being (Ferguson, Davis, Browne & Taylor, 2014; Larsson & Dykes, 2009), more experienced support (Ferguson, Browne, Taylor & Davis, 2016), uncomplicated delivery (Ferguson et al., 2016; Oz, Sarid, Peleg & Sheiner, 2009) and willingness among women to deliver without epidural analgesia (Jeschke, Ostermann, Dippong, Brauer, Pumpe, Meissner & Matthes, 2012). On the other hand, low Sense of Coherence is associated with pregnancy-specific distress (Staneva, Morawska, Bogossian & Wittkowski, 2017), depression, anxiety and posttraumatic stress disorder (Ferguson et al., 2014). Mothers' Sense of Coherence has been claimed to increase from the antenatal to the postnatal period (Ferguson et al., 2016) and is assumed to be affected by positive maternal experiences (Habroe, Schmidt & Holstein, 2007), as well as by social support (Wolff & Ratner, 1999).

Previous research has shown that families with high Sense of Coherence tend to have a better functioning family, which may be because of shared common goals in bringing up a child, as well as shared motivation to mobilize available resources to deal with parenthood (Ngai & Ngu, 2016). However, Sense of Coherence changes during childbearing and during the first years of parenthood (Hildingsson, 2017; Ahlborg, Berg & Lindvig, 2013), wherein mothers report lower Sense of Coherence than fathers (Ahlborg et al., 2013). Nevertheless, there is limited knowledge about the associations between Sense of Coherence, support and perceived quality of couple relationship among the parents, for example. This results a need for further exploration.

#### Professional Support during Childbearing

Childbearing involves many challenges for the expectant parents and several international researchers have shown that parents and their child benefit from professional support. During pregnancy, professional support is shown to decrease the number of pre-term births (Ickovics, Kershaw, Westdahl, Magriples, Massey, Reynolds & Rising, 2007), increase parental knowledge, entail better preparation for childbirth (Barimani, et al., 2017A; 2017B; Svensson et al., 2009; Gagnon & Sandall, 2007) and infant care (Manant & Dodgson, 2011). Other effects of professional support during childbearing are

less deterioration in relationship satisfaction among mothers (Daley-McCoy et al., 2015), increased partner involvement (Ferguson et al., 2013) and increased confidence in and knowledge about the parental role (Barimani et al., 2017A; 2017B; Tiitinen, Homanen, Lindfors & Ruusuvuori, 2014; Svensson et al., 2009).

Despite knowledge about the positive effects of professional support for parents during childbearing, previous research has shown that expectant fathers feel excluded from antenatal care (Steen, Widarsson et al., 2015; Downe, Bamford & Edozien, 2012; Finnbogadóttir, Crang Svalenius & Persson, 2003). When fathers experience lack of support, they find it difficult to support the mother throughout pregnancy, birth and parenthood (Widarsson et al., 2015; Steen et al., 2012; Bäckström & Hertfelt Wahn, 2011; Finnbogadóttir et al., 2003). Experiencing lack of support may also lead to fathers feeling anxious or depressed during early parenthood (Castle, Slade, Barranco-Wadlow & Rogers, 2008). Co-mothers tend to feel excluded from access from professional support, when it focuses on expectant fathers and mothers (Erlandsson & Häggström-Nordin, 2010; Larsson & Dykes, 2009). On the other hand, it is common that when co-mothers are being recognized in midwifery care, they feel appreciated for the qualities that separate them from others (Dahl & Malterud, 2015). Mothers are also sometimes dissatisfied with the professional support they are offered during childbearing (Koehn, 2008), since the support does not correspond to their actual needs (Widarsson, Kerstis, Sundquist, Engström & Sarkadi, 2012; Bäckström, Wahn & Ekström, 2010).

Improving maternal health and universal access to antenatal care is one of the key indicators in the 2015 Millennium Development Goals (Lomazzi, Borisch & Laaser, 2014). The 2002 World Health Organization (WHO) promotes at least four antenatal visits with evidence-based interventions, also known as focused antenatal care (Organisation, 2002). In most Western countries, antenatal education exists. This education has become a well-established professional support and is an essential antenatal care component. Even though antenatal education goals vary internationally, a common goal is to prepare parents for childbirth and parenting (Gagnon & Sandall, 2007). This antenatal education is given with various names (e.g., expectant parent classes; antenatal parenthood education; antenatal education; childbirth

classes and antenatal classes). In this thesis, the term antenatal education class is used. During these classes, expectant parents are given the opportunity to receive information and to get in touch with other expectant parents (Barimani, Forslund Frykedal, Rosander & Berlin, 2017B; Ferguson et al., 2013). However, research has shown that some of these education classes have been offered without evidence of relevant outcomes for specific types of antenatal education (Catling et al., 2015; Gagnon & Sandall, 2007). For example, international research has shown that antenatal education in small classes versus large-group lectures makes no difference in the effects on parenting stress or parenting alliance, up to six months after birth (Koushede et al., 2017; Catling et al., 2015), or effects on first-time mothers' childbirth experiences or parental skills (Fabian, Rådestad & Waldenström, 2005). Furthermore, there is insufficient evidence on whether antenatal education in small classes is effective in regard to obstetric and psycho-social outcomes (Sjöberg Brixval, Forberg Axelsen, Lauemoller, Andersen, Due & Koushede, 2015; Catling et al., 2015), even though it increases first-time mothers' social network of new parents (Barimani, et al., 2017B; Murphy Tighe, 2010; Fabian et al., 2005). During pregnancy and the first period of parenthood, parents want early and realistic information about parenting skills and changes in couple relationship (Barimani, et al., 2017B). Further, they want to have the opportunity to seek professional support when necessary and to be able to meet other expectant parents (Entsieh & Hallström, 2016; Murphy Tighe, 2010). However, a realist synthesis report claimed that it is unlikely that a single, standardized format or programme could be sufficiently flexible to actually meet the needs of all parents (Gilmer et al., 2016). This suggests that public health units need to develop approaches that will allow people to access information or education at a time and in a format that suits them (Gilmer et al., 2016). However, professional support offered to expectant parents varies both internationally and nationally in Sweden.

# Professional Support Offered within Swedish Maternity Health Care

In Sweden, approximately 115 000 children were born during the year 2015 (Statistics Sweden, 2017). As in most high-income countries, almost all women give birth within hospital care. Less than one in a thousand births in Sweden is a planned homebirth (Hildingsson, Lindgren, Haglund & Rådestad,

2006). During 2015, the mean age for first-time mothers were 28.0 years and 31.5 years for first-time fathers. Approximately every fourth child was born by a mother who was born outside Sweden (Statistics Sweden, 2014). Professional support offered to expectant mothers is organized within the Swedish public primary health-care system and free of charge (Banke, Berglund, Collberg & Ideström, 2008). Within Swedish antenatal care, midwives are the primary caregivers and provide expectant parents with antenatal visits. During these visits, the midwife carries out health check-ups to detect any pregnancy-related complications. Also, parents are provided with psychological support and information about pregnancy, childbirth and the postnatal period. The midwife follows the psychological changes, identifies parental support needs and supports the family's adaptation to the new situation (Banke et al., 2008). In normal circumstances (a normal pregnancy), expectant mothers are offered between six and nine visits to a midwife. When necessary, the midwife can refer the expectant mother for extra assessments or specialized care to medical doctors/obstetricians, psychologists or to midwives specially trained in handling the fear of labour among expectant parents, for example. Professional support offered to expectant parents within Swedish antenatal care aims also to promote children's health and development, which supports parenthood development and parents' abilities to meet the needs of the child (Banke et al., 2008).

Since 1979, Sweden has a national commission that recommends education classes for all expectant parents (SOU 1978:5). Over the past few years, Swedish antenatal education offered to expectant parents has varied. Both large-group lectures and antenatal education classes in small groups have been and still are present (Hildingsson et al., 2013). These classes aim to prepare expectant parents for childbirth and for their new life with a newborn baby, as well as facilitating communication and the sharing of experiences between expectant parents (SOU 2008:131). All in all, professional support is offered to expectant parents through antenatal visits (individual meetings with parents), antenatal education classes (general and targeted) and collaboration with other professionals to meet specific needs among the parents. Almost 99% of the expectant Swedish mothers attend antenatal care. Partners of expectant mothers are encouraged to participate during these antenatal visits. Usually the expectant parent meets the same midwife during the antenatal visits (Banke et al., 2008). However, further research is needed to explore

expectant parents' perceptions of the different types of professional support offered in Sweden today. Some of the professional support offered has not yet been explored concerning parents' perceptions, such as specific large-group lectures provided by midwives (the Inspirational Lecture; further described within the Methods section).

# Professional Support Offered for Newly Become Parents in Sweden

In Sweden, first-time mothers stay in the hospital on average, 2.3 days after a vaginal birth and 3.4 days after a Caesarean birth (Statistics Sweden, 2017). During this hospital stay, midwives are usually the main care providers. Thereafter, professional support is offered through family centres with nurses specially trained for childcare as main care providers. This support aims to promote children's health and psychosocial development (SOU 2008:131). A family centre is a meeting place for families with newborn babies or children up to five years of age. In these centres, parent group activities are organized. Sometimes, the groups start within antenatal care and continue after the child is born. Within these family centres, a variety of professionals collaborate to offer support to the parents, such as psychologists, medical doctors, family therapists and nurses specially trained in childcare. Such support aims to deepen the parents' knowledge about children's needs and rights, contact between parents and children, as well as to strengthen parents in their parenthood (SOU 2008:131).

## Social Support during Childbearing

Social support is described as based on kinship/friendship, it must be developed and based on congruent expectations. Furthermore, this type of support is open, reciprocal and comparable (Hupcey & Morse, 1997). Women gain higher self-esteem from social support (Flannigan, 2001) and such support is valuable for mothers' health status during early motherhood (Ferketich & Mercer, 1990). In the literature from various countries, it is suggested that social support is an essential component for strengthening positive outcomes in families experiencing transitional life events, such as childbearing and child rearing (Habel et al., 2015; McLeish & Redshaw, 2015; Mbekenga et al., 2011). Social support during pregnancy and the transition to

motherhood has been proven to contribute in reducing feelings of anxiety and stress among mothers (McLeish & Redshaw, 2017). The quantity and quality of social support that parents receive influences parental functioning and is linked to children's developmental (Trivette et al., 2010). A realist synthesis identified four sources of social support during transition to parenthood: connections to the community; prenatal connections; internet connections and connections for fathers. The majority of literature related to parent programming did not consider the development of social connections as an important outcome, even though it is clear that social connectivity, with all its benefits, should be valued as a primary goal of any programming for parents (Bennett et al., 2017). Social connectivity could be seen as especially important during the transition to parenthood, since parents experience a significant life change that can result in social isolation (Schumacher & Meleis, 1994). In addition, expectant parents need to learn from their social network, such as peers and other new parents (Entsieh & Hallström, 2016).

According to Cowan and Cowan (1999), there are different central aspects of family life that are affected when partners become parents. Among others, the relationship between nuclear family members and other key individuals or institutions outside the family (work, friends, childcare), are affected (Cowan & Cowan, 1999). However, not all social support during the early days of parenthood leads to beneficial health outcomes for mother and child. For example, 'social visiting' by family members to hospital or home immediately following the birth are found particularly to interfere with new parents' pursuit towards privacy and family bonding (Mrayan, Cornish, Dhungana & Parfitt, 2016). Consequently, there is limited knowledge about parents' experiences of social support during childbearing, as well as limited knowledge about parents' benefits from social support during childbearing. Therefore, social support for parents needs to be further explored, also within a longitudinal perspective.

## Conceptual Framework

#### Salutogenesis

Within Salutogenesis, health is described as a continuous movement between poor health and good health. The core is within that which keeps individuals healthy despite stress and critical life events (Lindström & Eriksson, 2010), such as childbearing. Within Salutogenesis 'the origin of health' and what creates health is in focus, rather than the cause of disease (Antonovsky, 1979). Antonovsky claimed that perceived good health is a determinant for quality of life. The state of health is seen as a continuum, with the two extremes: complete health and absence of health. Health is a combination of many factors, including physiological, psychological, sociological, cultural, and spiritual factors (Lindström & Eriksson, 2005; Antonovsky, 1987; 1979). However, resources that support well-being even during stressful life events (such as childbearing) are described as internal ones (such as knowledge and attitudes), and external ones (such as social support). Antonovsky named a person's ability to use these internal and external resources to maintain and improve health, the Sense of Coherence (SOC) (1987).

A person's Sense of Coherence consists of three dimensions of health: Comprehensibility is about the person's sense of having her/his own life understandable and ordered; Manageability deals with the person's resources and skills to manage stressors in life and Meaningfulness is about the person's overall sense that life is filled with meaning and purpose (Antonovsky, 1996; 1993; 1987). Together, these three dimensions form a person's global orientation towards life in general. The relationship between the three dimensions is interrelational, which means that they are all needed to cope successfully. Even though all three dimensions interact with each other, the motivational factor, or the meaningfulness, has been considered as the most important one. This is because it is the driving force for life, because it does not only bring meaning of what in one's life that matters, but also that one's life as such has meaning (Antonovsky, 1996; 1993).

Antonovsky claimed that a person's Sense of Coherence is developed during childhood, adolescence and early adulthood (Antonovsky, 1987). People with a high Sense of Coherence tend to perceive life as coherent, comprehensible,

manageable and meaningful, which gives an inner trust and confidence to identify resources within yourself and your environment (Antonovsky, 1987). However, it is not only about seeing these resources, it is also about an ability to use them in a health-promoting manner. People with high Sense of Coherence tend to perceive that they are healthier than those with low Sense of Coherence (Lundberg, 1996). Within the Salutogenic framework, it is assumed that high Sense of Coherence can help parental couples conceptualize the world as meaningful, comprehensible and manageable. In the future, this may be important for the way parents perceive and cope with the challenges that come with childbirth and parenting (Antonovsky & Sourani, 1988).

#### Support

Support is described as an interactive process that is affected by the person's age, experience, personality, and environment (Langford, 1997; Kahn & Antonucci, 1980;). Acts of support can be divided into *emotional*, *affirmative*, informative and instrumental support. Emotional support involves providing empathy, love and trust and promotes a sense of safety and belonging. This type of support is described as most important for a positive experience of support, which is essential if the support is to have a positive impact (Mander, 2001; Langford, 1997) such as to buffer the negative effects of stress (Cohen, 1992). Affirmative support involves help in self-evaluation and promotes reassurance of the individual's ability and competence. *Informative support* is offering information to help solve the actual problem, and instrumental support (also referred to as practical support) is practical help in solving the actual problem (Mander, 2001; Langford, 1997). The different acts of support may not be distinctively different; for example informative support without having to ask for it seems important for a positive effect in reducing feelings of stress (Uchino, 2003). Asking for support might be difficult for individuals because the act of having to ask can instil a sense of not being competent in the actual situation (Hodnett, Gates, Hofmeyr & Sakala, 2013; Uchino, 2003).

However, when reasoning about support as a concept, it is important to define whether the support is professional or social (Thorstensson & Ekström, 2012). Professional support is offered by professionals, limited by professional knowledge and affected by ideology and attitudes (Hupcey & Morse, 1997).

Furthermore, professional support is based on role expectations, instantly available and not requiring financial compensation (Hupcey & Morse, 1997). Social support, however, is described as based on kinship/friendship, needed to be developed and based on congruent expectations (Hupcey & Morse, 1997). Furthermore, this type of support is open, reciprocal and equivalent (Hupcey & Morse, 1997). Mander (2001) states that 'To some of us the meaning of social support is so obvious that it is not necessary even to put it into words. For others the words may be problematic but we certainly know support when it happens' (Mander, 2001, page 7). An overview of the major characteristics of social and professional support is illustrated within Table 1.

<b>Table 1.</b> Comparison of the major characteristics of social and professional support.			
Characteristics	Social Support	Professional Support	
Type of services provided	Open	Delimited	
Duration	Must be developed	Instantly available	
Trust	Reciprocal (shared)	Unilateral	
Obligation	Kinship/Friendship	Professional defined or surrogate	
Expectations of relationship	Based on congruent	Based on role expectations	
	expectations		
Reciprocal action	Equivalent	Not required, services "purchased"	
		or financially compensated	

Hupcey & Morse, 1997, page 273.

# Rationale

For the parental couple, parenthood entails changing roles from partners to parents, as well as changing roles for the parents within their social network. Even though childbearing can be experienced as positive and an opportunity for growth for the parents, it can also be experienced as stressful. Important protective factors for stress among parents during the transition to parenthood include perceived parenting confidence, having satisfactory knowledge and a feeling of preparedness, as well as professional and social support. Several studies have, however, shown that childbearing entails a decrease in relationship quality among parents.

Parents' abilities to cope with the challenges that come with childbearing, might be connected to their ability to use their internal and external resources to maintain and improve health. Within the Salutogenic framework, it is assumed that high family Sense of Coherence can help couples conceptualize the world as meaningful, comprehensible and manageable, which gives an inner trust and confidence to identify resources within themselves and their environment.

However, since childbearing is a sensitive period in a person's life, a logical assumption could be that it should be accompanied with availability of professional and social support. Nevertheless, far from all parents have access to social support; furthermore, professional support does not always meet the needs of expectant parents. Hence, more research is needed to increase knowledge about expectant parents' experiences of professional and social support. In addition, more research is needed to explore factors associated with quality of couple relationship among parents during childbearing. Therefore, in this thesis, professional and social support for first-time mothers and partners during childbearing is explored in relation to quality of parental couple relationship and Sense of Coherence.

# **Aims**

The overall aim of the thesis was to explore professional and social support for first-time mothers and partners during childbearing in relation to quality of parental couple relationship and Sense of Coherence.

The specific aims of the different studies were as follows:

- To explore pregnant women's perceptions of professional support in midwifery care (I).
- To explore pregnant women's partners' perceptions of professional support (II).
- To explore expectant first-time mothers' experiences of social support within the social network, when preparing for childbirth and parenting (III).
- To evaluate factors associated with quality of couple relationship among first-time mothers and partners during pregnancy and the first six months of parenthood (IV).

# Methods

## Design

To answer the overall aim of this thesis, different designs were used in the four studies included (I-IV), as presented in Table 2.

Table 2	Table 2. Overview of studies including design, sample, data collection and data analysis.			
Study	Design	Sample	Data	Data analysis
			collection	
I	Explorative	15 expectant first-time	Interviews	Phenomenographic
	Inductive	mothers		analysis
II	Explorative	14 partners of expectant	Interviews	Phenomenographic
	Inductive	first-time mothers		analysis
III	Explorative	15 expectant first-time	Interviews	Qualitative content
	Inductive	mothers		analysis
IV	Prospective	162 first-time mothers	Repeated	Multiple linear
	Longitudinal	and 140 partners of first-	questionnaires	regression analysis
	Deductive	time mothers		

#### Explorative Design and Inductive Approach (I-III)

To explore expectant first-time mothers' and partners' perceptions of professional support and experiences of social support, explorative designs were used in Studies I-III. Previously, there was limited knowledge about the phenomena studied. Therefore, explorative designs were conducted in order to investigate the new area and to shed light on underlying processes for these phenomena (Polit & Beck, 2016). Explorative research has previously been described to form the basis of more conclusive research, or as a guide for further research (Bell, 2014). The inductive approach is derived from facts that have been acquired through observations (Chalmers, 2013). Qualitative methods were used to describe and interpret experiences, as well as to provide new insights about the area studied (Polit & Beck, 2016).

#### Longitudinal Prospective Design and Deductive Approach (IV)

To evaluate factors associated with first-time mothers' and partners' quality of couple relationship six months after childbirth, a prospective and longitudinal design was used in Study IV. To study changes over time,

longitudinal designs are appropriate since they enable data collection at more than two points of time (Polit & Beck, 2016; Kazdin, 2002). For this study, the longitudinal design enabled collection of data on the parents' quality of parental couple relationship, perceived social support and Sense of Coherence at up to three different points of time. Since the design of the study was both longitudinal and prospective, it enabled assessments for the presumed future effects of a certain cause. The advantage of using a prospective design is that it makes it possible to establish a time relation between exposure and outcome (Creswell & Poth, 2017). In Study IV, first-time mothers' and partners' perceived quality of parental couple relationship, social support and Sense of Coherence were assessed both before and after childbirth. Furthermore, a deductive approach was used in Study IV. Such approaches start with models or theories to describe predictions or explanations that are observed (Chalmers, 2013).

## Setting

The setting for Studies I-IV was a county in south-western Sweden with approximately 280,000 inhabitants. The catchment area included both urban, suburban and rural districts. Within the area, there is one county hospital with a labour ward which sees an average of around 2,600 births per year.

#### Professional Support Offered for Expectant Parents

The Swedish public primary health-care system offers different kinds of professional support for expectant parents within the setting; such support is free of charge. The expectant parents were offered professional support from a midwife during antenatal visits, according to Swedish guidelines (Banke et al., 2008). In normal circumstances (a normal pregnancy), expectant mothers were offered between six and nine visits to a midwife. When necessary, the midwife could refer the expectant mother for extra assessments or specialized care to medical doctors/obstetricians, psychologists or to midwives specially trained in handling the fear of labour among expectant parents, for example. Partners of expectant mothers were encouraged to participate during these antenatal visits (Ims Johansson, G. Personal communication, Mars 2015).

Besides this, professional support was offered by midwives through antenatal education classes (Banke et al., 2008). Classes were offered to a varying extent, mostly for expectant first-time parents. Usually, these classes were provided by a midwife four to five times during pregnancy (two hours each time), for groups of six to eight expectant first-time parental couples. During these classes, parents were provided with information about pregnancy, birth, breastfeeding, parenthood and the relationship between partners. The expectant parents were also able to discuss with each other (Ims Johansson, G. Personal communication, Mars 2015).

Within the study setting, professional support was also offered through a lecture at the hospital (the 'Inspirational Lecture') according to the routines already established. The Inspirational Lecture was developed by midwives from the hospital with an intent to meet expectant parents' requests for more information about how to prepare for childbirth. When developing the Inspirational Lecture, the midwives used their clinical experiences from working as labour ward midwives. Furthermore, they were inspired by their knowledge acquired as certificated Prenatal Instructors (Melbe, A. & Wallin, S. Personal communication, May 2017). The training to become certificated Prenatal Instructors was based on Psychoprophylaxis of Labour, originally the Lamaze technique. The training included discussions of how expectant parental couples can be strengthened for childbirth (Frisk, A. Personal communication, October 2017). Since 2012, expectant parents have been given the opportunity to attend the Inspirational Lecture, which is a largegroup based lecture. The expectant parents can attend the Inspirational Lecture as many times as they need, since it is an open lecture they do not have to apply for. However, it is not only expectant parents who attend the lecture; the expectant parent can attend together with a friend, next-of-kin or significant other. According to the midwives who provide the Inspirational Lecture, the intention with the two-hour long lecture is to prepare expectant parents for normal childbirth. To achieve this, the midwives use different types of pedagogical approaches, such as practical illustrations (the midwives are roleplaying to describe different childbirth scenarios etc.) and providing information with a mixture of humour and seriousness. In the lecture, the midwives make the partner's role visible by providing information about how he or she could feel or act during the preparations for childbirth (Melbe, A. & Wallin, S. Personal communication, May 2017). During the time of the studies

within this thesis, four midwives provided the Inspirational Lecture in pairs. Before the start of the studies included in this thesis, no research had been carried out concerning the Inspirational Lecture. Within a larger research project 'The Study of Parental Support', there is an ongoing research study that aims to elucidate the presenting midwives' understanding of the Inspirational Lecture, as a group-based parental-education for expectant parents.

According to the routines already established in the setting, the expectant parents within Studies I-IV were offered professional support through antenatal visits, antenatal education classes and the Inspirational Lecture at the hospital, as described previously. The participants were free to choose to receive or decline the professional support offered, which was in line with the established routines in the setting.

## Participants and Procedure

In total, fifteen antenatal units were included in the recruitment process for Studies I-IV. During prenatal assessments in gestational week 25, midwives recruited expectant first-time mothers (I, III, IV) and partners (II & IV) who fulfilled the following criteria: 1) singleton pregnancy; 2) intention to give birth at the county hospital in the geographical area of the study and 3) ability to understand and speak Swedish. For Studies I-III, participants were recruited between September and December 2014. For Study IV, participants were recruited between September 2014 and January 2016.

#### Participants in Qualitative Studies (I-III)

For Studies I & III, 40 mothers were asked to participate, 22 of which accepted to take part (Studies I & III include the same participants). For Study II, 59 partners were asked to participate and 20 accepted. Among those parents who accepted participation within Studies I-III, strategic sampling was used to ensure maximum variation in terms of age, place of residence, education and received professional support during pregnancy. In total, 15 mothers in heterosexual and same-sex relationships were included in Studies I & III (Table 3). For Study II, a total of 14 partners (both expectant fathers and comothers) were included (Table 3). The specific number of expectant fathers

and co-mothers will not be presented because of ethical considerations and the risk revealing the identity of a participant.

Table 3. Characteristics and professional support received during pregnancy (Antenatal
education class and/or Inspirational Lecture), among expectant first-time mothers (Studies I
& III) and partners (study II).

Characteristics	Study I & III	Study II
Age (yrs.), Range, (Mean)	20-37, (26.4)	26-39, (33.4)
Place of residence, n		
Urban district	8	7
Suburban district	3	3
Rural district	4	4
Education (yrs.), Range, (Mean)	12-20, (13.8)	12-18.5, (13.9)
Received professional support during pregnancy, n		
Antenatal Education Class (AEC)	10	11
Inspirational Lecture (IL)	12	12
None of AEC or IL	2	1

#### Participants in Quantitative Study (IV)

For Study IV, participants were consecutively selected since the recruitment process was tailored to a specific period of time. During the seventeen months of recruitment (September 1st 2014 - January 31st 2016), approximately 3400 parents were eligible for the study (expectant first-time mothers n=1700; partners n=1700) (Petersson, K. Personal communication 29 June 2017). The midwives responsible who asked expectant parents about their willingness to participate in the study, asked in total 480 expectant parents (mothers n=248; partners n=232). The midwives described different reasons for not informing parents about participation, such reasons as their high workload or failing to remember to inform about the study. In total, 302 parents (mothers n=162; partners n=140) accepted participation and 178 parents (mothers n=86; partners n=92) declined participation. This results in a total 'willingness to participate rate' of 63% (mothers 65%; partners 60%) among those 480 parents who were asked to participate. Those eligible for analysis were the parents who responded to all three questionnaires (Q) (Q1: gestational week 25; Q2: first week after childbirth; Q3: six months after childbirth). In all, 207 participants were eligible for analysis (mothers n=122; partners n=85) (Figure 1). Characteristics for the participants eligible for analysis within Study IV are shown in Table 4.

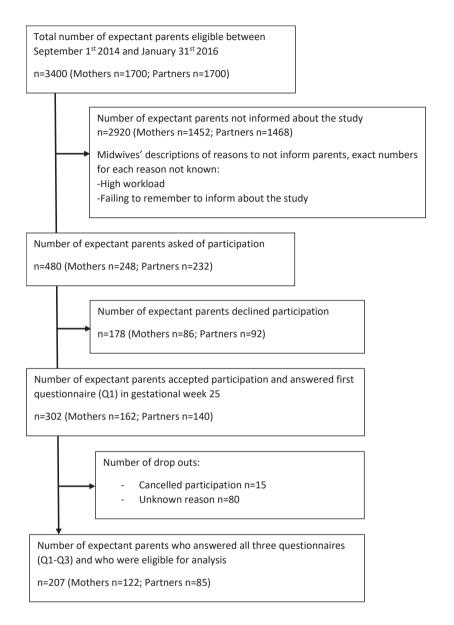


Figure 1. Flowchart over the inclusion process in Study IV. *Questionnaire Q1:* gestational week 25; *Questionnaire Q2:* first week after childbirth; *Questionnaire Q3* six months after childbirth

<b>Table 4.</b> Overview of characteristics for participants in Study IV.			
	Participants study IV		
	Mothers	Partners	
Characteristics	(n = 122)	(n = 85)	
Age (yrs.), Mean (SD), Range	27.8 (4.2), 19-40	30.1 (5.9), 20-55	
Birth country, n (%)			
Sweden	115 (94)	83 (98)	
Norway, Finland, Denmark, Island	2 (2)	0 (0)	
Europe	2 (2)	1 (1)	
Other country outside Europe	3 (2)	1 (1)	
Education, n (%)			
Compulsory school	2 (2)	1 (1)	
High school	45 (37)	59 (69)	
University	75 (61)	25 (29)	
Education (yrs.), Mean (SD), Range	14.2 (2.4), 9-21	13.3 (2.1), 9-20	
Civil status, n (%)			
Married	23 (19)	20 (24)	
Cohabiting	97 (79)	63 (74)	
Not living together	1 (1)	2 (2)	
Couple relationship, (yrs.), n (%), Range	4.7 (3.2), 1-19	4.9 (3.1), 1-18	

#### **Data Collection**

Different methods for collecting data have been applied, such as qualitative interviews (I-III) and repeated questionnaires (IV). Data collection took place from year 2014 to 2016.

#### Qualitative Interviews (I-III)

Qualitative interviews were used to explore expectant first-time mothers' and partners' perceptions of professional support (I-II) and experiences of social support (III), during pregnancy. All interviews followed a semi-structured interview guide, consisting of both open-ended and follow-up questions. The open-ended questions were used to let the expectant parents describe their thinking and experiences about the phenomena studied. The follow-up questions were used to encourage the parents to broaden their descriptions when necessary (Polit & Beck, 2016), for example by further explaining their understanding or perceptions about professional support. The follow-up questions were also used to guide the parents in their descriptions so that the different phenomena studied (professional and social support) were

differentiated. Prior to the first interview, the interview guide was pilot tested using two interviews conducted by the author of this thesis. During these interviews, the interviewees were able to describe the experience of answering the questions and being interviewed on the telephone (Polit & Beck, 2016). The results of the pilot interviews were discussed among the authors who participated in the design of Studies I-III (CB, LM, ST and MG). A mutual assumption was that the interview guide and technical equipment were adequate to correspond to the aim of the studies. Consequently, the interview guide was not changed after the pilot interviews. The pilot interviews were not included in the data analysis, since the interviewees did not meet the inclusion criteria.

Subsequently, the interview guide included both open-ended questions about the participants' perceptions of professional support (I-II): What types of professional support have you received for childbirth and parenting? What has the support been like, in your experience? and What has the support meant to you? as well as open-ended questions about experiences of social support (III): How have you prepared for childbirth and parenting? Follow-up questions were for example: Could you explain more? Could you explain how you experienced/perceived it? and What has it meant to you in your preparation for childbirth and parenting? The follow-up questions were used to encourage the interviewees to describe how they perceived the professional support. In addition, the questions were used to encourage the parents to describe in what way the support was helpful in their preparations for childbirth and parenting. During the interviews, the interviewer took brief notes to be able to remember which part of the expectant parents' descriptions needed to be further questioned. When the expectant parents indicated that they were satisfied with their answers to each question, the interviewer made a summary which the parents then responded to; this was done to clarify the answers and confirm the interviewer's interpretation (Creswell & Poth, 2017).

All interviews included in Studies I-III were held between November 2014 and February 2015. Before each interview, the interviewer contacted each expectant parent to describe the interview procedure and to let them choose a time for the interview. The interviewer's perception was that this first telephone conversation was helpful in creating a relaxed relation with the expectant parent, in connection to the interviews. The interviews were

conducted individually and via telephone during gestational weeks 36-38. The intention of conducting telephone-based interviews was to increase the level of comfort for the participants, since being interviewed via telephone was assumed to be less time consuming for the participants (Polit & Beck, 2016). However, using the telephone for data-collection may be challenging for the research process, because there is no possibility for the interviewer to analyse (for example) body language or facial expressions. On the other hand, using the telephone for data-collection interviews has also been proven to increase the level of comfort for both the interviewer and the participant, which could result in a more relaxed interview (Musselwhite, Cuff, McGregor & King, 2007); this is because the interviewer and the participant will potentially be less affected by each other's presence. The anonymity associated with telephone contact may enable participants to be more forthcoming with their responses, while the absence of face-to-face contact enables the interviewer to take notes discreetly; in addition, the different forms of bias (i.e. through facial expressions or the researcher's appearance) may be reduced (Musselwhite et al., 2007).

The author of this thesis conducted all interviews included within Studies I-III, as well as the two pilot interviews. The interviewer had previous experience of using the telephone to consult with expectant and newly become parents, which was helpful in creating relaxed interviews. After each interview, the expectant parent was asked about her/his experience of participating in the interview. Usually, the parents expressed positive experiences about the advantages that telephone interviews offered, such as saving time and that they were relaxed and anonymous. Some parents said that being interviewed via telephone made their participation possible. This were especially so those expectant mothers who had physiologically related difficulties in their pregnancy. The interviews lasted between 30 and 70 minutes; they were recorded and transcribed verbatim. In all, the transcribed interviews resulted in 196 pages (A4) for expectant mothers (Studies I & III) and 172 pages (A4) for partners (Study II). Among the authors of Studies I-III, a mutual assumption was that the interviews were rigorous and answered according to the aims of the studies.

## Questionnaires (IV)

For Study IV, data was collected with repeated questionnaires (Q). The three questionnaires (Q1-Q3) used included several different measurements, as described in Table 5. The questionnaires were sent to the participants at: Gestational week 25 (Q1); First week after birth (Q2) and Six months after birth (Q3).

Table 5. Included measurements in Questionnaire	1 (Q1), 2 (Q2)	and 3 (Q3).	
	Q1	Q2	Q3
	Gestational	First week	Six
	week 25	after birth	months
Measurements			after birth
Quality of Dyadic Relationship (QDR36)	X	X	X
36 items, divided into five dimensions: <i>Dyadic</i>			
Consensus (11 items); Dyadic Cohesion (4			
items); Dyadic Satisfaction (11 items); Dyadic			
Sensuality (5 items) and Dyadic Sexuality (5			
items). Index is the sum of mean values from all			
dimensions (dimension range 1-6). Index score			
range 5-30, the higher the score, the higher			
perceived quality of dyadic relationship.			
Sense of Coherence (SOC-13)	X	X	X
13 items, divided into three dimensions:			
Comprehensibility (5 items); Manageability (4			
items) and Meaningfulness (4 items). Index is			
the sum of all items. Index score range 13-91,			
the higher the score, the higher Sense of			
Coherence.			
The Multidimensional Scale of Perceived	X	X	X
Social Support (MSPSS)			
12 items, divided into three dimensions: Family			
(4 items); Friends (4 items); and Significant			
others (4 items). Index is the sum of all items.			
Index score range 12-84, the higher the score,			
the higher the perceived social support.			
Feelings for Childbirth	X		
4 questions. Index is the sum of all four			
questions. Score range 4-28, the higher the score			
the more positive feelings for childbirth, among			
the respondent.			
Partner's feelings for Childbirth	X		
4 questions. Index is the sum of all four			
questions. Score range 4-28, the higher the score			

the more positive feelings for childbirth, among		
the respondent's partner. According to the		
respondent's perception.		
Feelings for Parenthood	X	
4 questions. Index is the sum of all four		
questions. Score range 4-28, the higher the score		
the more positive feelings for parenthood,		
among the respondent.		
Partner's feelings for Parenthood	X	
4 questions. Index is the sum of all four		
questions. Score range 4-28, the higher the score		
the more positive feelings for parenthood,		
among the respondent's partner. According to		
the respondent's perception.		

#### Measurements

#### Quality of Dyadic Relationship (QDR36)

To assess quality of couple relationship, QDR36 was used (Ahlborg, Lillengen, Lönnfjord & Petersen, 2009), which consists of 36 items, forming a Likert scale from 1-6. The items are divided into five dimensions: *Dyadic Consensus* concerning family finances, decision making, household work etc.; *Dyadic Cohesion* relates to common stimulating exchange of ideas, laughter or discussions etc.; *Dyadic Satisfaction* includes variables about how often a divorce/separation has been considered, how often things work well between the couple etc.; *Dyadic Sensuality* concerns how often the couple hug or kiss each other etc., and *Dyadic Sexuality* contains variables that relate to sexual desire and partners' attention to sexual needs etc. For index calculation, see Table 5. QDR36 has been thoroughly described, tested and validated with its psychometric properties (Ahlborg et al., 2009; Ahlborg, Persson & Hallberg, 2005).

### Sense of Coherence (SOC-13)

The 13-item Sense of Coherence scale (SOC-13) was used. SOC-13 is based on three dimensions: *Comprehensibility* is about the person's sense of having her/his own life understandable and ordered; *Manageability* deals with the person's resources and skills to manage stressors in life and *Meaningfulness* which is about the person's overall sense that life is filled with meaning and purpose (Antonovsky, 1993; 1987). Each item is scored on a Likert scale ranging from 1-7 (Langius & Björvell, 1996), for index calculation, see Table

5. The Swedish version of the SOC questionnaire has been validated and used for several years (Langius, Björvell & Antonovsky, 1992). Validation studies on SOC-13 used on pregnant women have been carried out earlier (Aune, Dahlberg & Haugan 2016; Ferguson et al., 2014).

### The Multidimensional Scale of Perceived Social Support (MSPSS)

The Multidimensional Scale of Perceived Social Support (MSPSS) aims to assess perceived social support (Zimet, Dahlem, Zimet & Farley, 1988). MSPSS includes twelve items which cover three dimensions: *Family; Friends* and *Significant Others*. Each item is rated on a seven-point Likert-type response format, ranging 1-7 (1=very strongly disagree; 7=very strongly agree), for index calculations see Table 5. A validation study on pregnant women has been carried out previously (Zimet, Powell, Farley, Werkman & Berkoff, 1990). The Swedish version of MSPSS is validated among women with hirsutism and nursing students (Ekbäck, Benzein, Lindberg & Årestedt, 2013).

## Feelings for Childbirth and Parenthood/Partner's feelings for Childbirth and Parenthood

To assess the expectant parents' feelings for childbirth and parenthood, questions were developed for the current study (Feelings for childbirth: 4 questions and Feelings for parenthood: 4 questions). The questions deal with the expectant parent's feelings of expectation, joyfulness, preparation and security for childbirth and parenthood. Each question was rated on a Likert scale from 1-7 (1=very strongly disagree; 7=very strongly agree) (Appendix 1). The feelings for childbirth were assessed using an index that was the sum of the results for all four questions. The feelings for parenthood were assessed equally. For index calculations, see Table 5.

Furthermore, questions were developed to assess the expectant parent's perception about her/his *partner's* feelings for childbirth and parenthood (Partner's feelings for childbirth: 4 questions *and* Partner's feelings for parenthood: 4 questions) (Appendix 2). These questions were equal as for feelings for childbirth/parenthood; the indexes were calculated equally (Table 5). The following items: *Feelings for childbirth; Feelings for parenthood; Partner's feelings for childbirth;* and *Partner's feelings for parenthood* were

designed for the present study and previously tested in both pilot-studies, as described in the following.

### The 'Study of Parental Support'

Study IV is part of a large ongoing Swedish research study called the 'Study of Parental Support (Swedish: Föräldrastödstudien)'. This is a prospective and longitudinal cohort study, with repeated questionnaires (Q) at: Gestational week 25 (Q1); First week after childbirth (Q2); Six months after childbirth (Q3); One year after childbirth (Q4); Two years after childbirth (Q5); Four years after childbirth (Q6), and Eight years after childbirth (Q7). The first three questionnaires (Q1-Q3) are included in Study IV. Since the participants within Study IV are included in the 'Study of Parental Support', they will receive all the questionnaires included in the large research study (Q1-Q7). Consequently, the participants within Study IV are monitored in a further longitudinal perspective.

Within the 'Study of Parental Support', first-time mothers' and partners' quality of couple relationship, Sense of Coherence, perceived social and professional support, childbirth experience, breastfeeding and parent-child contact are evaluated. The questionnaires included in Study IV (Q1-Q3) consist therefore also of measurements concerning the parents' childbirth experience, breastfeeding, parent-child contact and perceived/received professional support, besides the measurements included within Study IV (Table 5). In all, the three questionnaires included in Study IV consisted of the following number of questions: Q1 n=196; Q2 n=173; Q3 n=122.

### Quantitative Pilot Studies within the 'Study of Parental Support'

Two pilot studies were carried out before the 'Study of Parental Support', to test participant information and composition of the questionnaires (Q1-7). The pilot studies were conducted during 2014. In the first pilot study, 16 parents (both expectant and current parents) participated and answered the Q1-Q7 in paper format. The study was carried out to evaluate the participants' experience of responding to the questionnaires, as well as considering whether any important issues were missing. In the second pilot study, 22 parents (both expectant and current parents) participated and answered Q1-Q7 using the web based computer system entitled Education Survey Automation Suite (EvaSys). The study was carried out to evaluate experiences of responding the

electronic questionnaires and considering whether any important issues were missing. During both pilot studies, the author of this thesis chose some participants (three participants included in the first pilot study and two participants included in the second pilot study), to let the participants describe their experiences of responding to the questionnaires (Creswell & Poth, 2017; Polit & Beck, 2016). All the participants responded to how long it took to answer the respective questionnaires; this was between 10 and 25 minutes.

The participants in the pilot studies all varied in terms of age, sociodemographic aspects and experiences of pregnancy and childbirth. The results of the pilot studies were discussed among the researches who participated in the design of the 'Study of Parental Support' (CB, LM and ST), as well as within the research group 'Woman, Child and Family' at the University of Skövde. A mutual assumption was that participant information and the composition of the questionnaires were for the most part understandable and manageable to the participants. After the pilot studies, minor changes were carried out to clarify participant information within the questionnaires.

### Data Collection (IV)

For Study IV, data was collected with web-based questionnaires (Q1-Q3) using the EvaSys computer system (Table 5). Q1 was sent to the 302 participants (mothers n=122; partners n=140) via email in gestational week 25. The participants had the possibility to answer the web-based Q2 at the postnatal unit at the hospital, after birth. For those participants who did not answer Q2 in the hospital, the questionnaire was sent via email during the first week after birth. Q3 was sent via email six months after birth. A further three reminders were sent at the three time-points (Q1-Q3) to those participants who did not answer the questionnaires. Participants who did not answer all three questionnaires, Q1-Q3, were excluded from the data analysis. Consequently, those eligible for analysis were 207 participants (mothers n=122; partners n=85) (Figure 1).

## Phenomenographic Analysis (I-II)

To explore expectant first-time mothers' (I) and partners' (II) perceptions of professional support during pregnancy, a phenomenographic analysis was used. The phenomenographic method was originally developed by Marton (Marton, 1981) and is derived within the pedagogical rather than phenomenological tradition; knowledge and learning are the focus of studies that utilise this approach (Marton, 1986). The central assumption is that people differ in their perceptions of phenomena; the intention is to discover the underlying structure of variance in the perceptions of a phenomenon, rather than the phenomenon's actual core (Marton, 1986; 1981). These perceptions might be described by 'how things are perceived or understood' (i.e. the second-order perspective); this differs from the first-order perspective ('how things really are'), which is the focus of other qualitative research methods (Marton, 1986). In Studies I-II, professional support was described as the phenomenon and the seven steps described by Sjöström & Dahlgren (2002), were used for the data analysis (Table 6). Quotations were presented to illustrate descriptive categories and perceptions.

Table 6. Phenomenographic	data analysis (according to (Sjöström & Dahlgren, 2002)), as
used in Studies I-II.	
1. Familiarisation	The interviews were read and reread to become familiar
	with the material and to obtain a sense of the whole.
2. Compilation	Statements belonging to professional support during
	pregnancy were compiled.
3. Condensation	Different statements were concentrated to obtain a
	representative description of pre-perceptions.
4. Grouping	Similar statement (pre-perceptions) were grouped together
	into perceptions.
5. Comparison	Comparisons were made between the groups to find
	similarities and differences in their perceptions.
6. Naming	Appropriate labels were given to the descriptive categories
	which described their content.
7. Contrastive comparison	The categories were compared so that they were clearly
	defined. The logical relationship between descriptive
	categories formed a hierarchical arrangement that was
	presented as an outcome space.

### Qualitative Content Analysis (III)

A qualitative content analysis was applied to analyse interviews within Study III; this entails a close reading of texts. The aim is to obtain new insights and understanding of a phenomenon by systematically analysing verbal or written text (Krippendorff, 2013). Content analysis gives an opportunity to test theoretical issues, to increase an understanding of the phenomena studied. When there is limited knowledge about the area studied, an inductive approach has previously been recommended (Elo & Kyngäs, 2008).

A qualitative content analysis with an inductive approach according to Elo & Kyngäs (2008) was used as the method of analysis to explore expectant firsttime mothers' experiences of social support when preparing for childbirth and parenting (III). This analysis involves different phases, which can be described as a step-by-step process of categorization. During the preparation phase, the transcripts were read repeatedly and independently, to ensure that each author understood the content and would captured the essential structure of the interviews. This was the step to make sense of the data or to 'become immersed with the data'. Thereafter, meaning units relating to the aim of the study were extracted. In the next phase, referred to as the organizing phase, the contents of the different meaning units were described using codes. For this, notes and headings were written down while reading the text, to describe all aspects of the content related to the aim of the study. The codes were then compared based on similarities and differences in content, and sorted into subcategories. The sub-categories were abstracted into three generic categories on the basis of their underlying meanings. Finally, an overall main category based on the categories was produced (Elo & Kyngäs, 2008). Quotations were presented to illustrate categories and subcategories.

## Quantitative Analysis (IV)

For the statistical registration and analyses of the data, the Statistical Package for the Social Sciences (SPSS) version 22 was used. In order to present socio-demographics for participants, descriptive statistics were carried out (Table 4). Index and dimensions for measurements included were calculated. To compare results at Q1, Q2 and Q3 the non-parametric Friedman's test was used. After a statistically significant Friedman's test, the Wilcoxon Signed Rank test for post hoc testing was performed. The analyses were carried out

for first-time mothers and partners respectively. Furthermore, to compare differences between mothers' and partners' QDR36, SOC and MSPSS at Q1, Q2 and Q3; the Kruskal-Wallis equality of populations rank test was used (Kruskal & Wallis, 2012). The Dunn nonparametric comparison for post hoc testing after a statistically significant Kruskal-Wallis test was performed (Edwards, 1984). The level of significance was defined as p<0.05.

To evaluate the strongest associated factors with first-time mothers' and partners' perceived quality of couple relationship (QDR36) six months after birth (Q3), a multiple linear regression analysis was performed in different steps. Within this analysis, index for QDR36 at Q3 was used as a dependent variable. The choice of background and independent variables was theoretically grounded in results from previous research in which Sense of Coherence and social support are connected with quality of couple relationship. For Sense of Coherence (SOC-13) and perceived social support (MSPSS), both index at Q1 and the change in index between Q1 and Q3 were used as independent variables. This was done to evaluate whether it was the Q1 (baseline) level of the index (SOC-13 and/or MSPSS at Q1), the change in index between Q1 and Q3, or both Q1 level and change in index that were associated with parents' perceived quality of couple relationship six months after childbirth. The different steps in the multiple linear regression analysis were performed as follows:

- *Step 1* included only background variables entered simultaneously, to evaluate their associations with QDR36 at Q3. The background variables: age; education and length of couple relationship were originally included but excluded since they were not significant;
- *Step 2* include each of the other independent variables separately, controlling for background variables;
- Step 3 included the independent variables that were significant for either mothers or partners at step 2, controlling for background variables. The variables were included in blocks that were theoretically decided (Block 1 included variables concerning feeling for childbirth; Block 2 included variables concerning feeling for parenthood, and Block 3 included variables concerning support and cooping);

• *Step 4* included all variables that were significant at Step 3 and background variables, entered simultaneously. P-values less than 0.05 were regarded as statistically significant (Polit & Beck, 2016; Tabachnick & Fidell, 2007).

### Non-respondents

Participants who did not respond to all three questionnaires were excluded from analysis. To evaluate differences between respondents (participants who responded to all three questionnaires) and non-respondents (parents who responded to one or two questionnaires), different analyses were carried out for mothers and partners respectively: Kruskal-Wallis equality of populations rank test for ordinal variables and  $\chi 2$ -test for discrete variables. The Dunn nonparametric comparison for post hoc testing after a statistically significant Kruskal-Wallis test was performed to correct for multiple comparisons errors (Edwards, 1984).

## **Ethical Considerations**

When conducting research, it is important to plan for and anticipate any potential or actual risks for the participants (Doody & Noonan, 2016). In accordance with Swedish law, the Regional Ethical Review Board in Gothenburg, Sweden gave permission to undertake the four studies included in this thesis (Dnr 197-14; Dnr T 623-14). The ethical considerations undertaken in the studies will be presented in relation to the four ethical principles: *Autonomy*, *Beneficience*, *Non-maleficence* and *Justice* (Polit & Beck, 2016; Beauchamp & Childress, 2012; Buchanan, 2006).

## **Autonomy**

The principle of autonomy protects a person's right to self-determination (Polit & Beck, 2016). In the present thesis, autonomy has been protected by making it possible for the expectant parents to sign an informed consent to participate in the studies. Parents who met inclusion criteria were given information, both verbally and in writing, about the following: study rationale; the anticipated benefits and potential risks of the study; the right to refuse to participate; the right to withdraw at any time without specifying reason and finally that the care the parents received would not be affected by their decision to participate. A possible threat to autonomy could have been that the antenatal midwives who cared for the expectant parents provided them with study information. When a caregiver asks his/her patient about interest in participating in a research study, it can result in the patient having a sense of lack of autonomy, because of the patient's dependency in relation to the caregiver (Polit & Beck, 2016). Therefore, answers concerning participation were given in a sealed envelope that was opened by the author of this thesis.

## Beneficence and Non-maleficence

The principle of beneficence involves the desire to maximize benefits and to minimize the risk to harm (Polit & Beck, 2016; Beauchamp & Childress, 2012; Buchanan, 2006). The individual benefits for the participants in this thesis could be that they were given the opportunity to express their

experiences of different phenomena during pregnancy and the first six months of parenthood. These experiences were conveyed to a researcher who did not participate in the care offered. The benefits on a larger scale could be that this thesis contributes with new knowledge about parents' needs of support during the childbearing period. Throughout this period, professionals can increase their understanding of how to better meet the support needs of parents experiencing childbearing. Consequently, an increased understanding among professionals can lead to promoting future care that is based on the needs of expectant and newly become parents, to a far greater extent.

To minimize the risk of harming the participants, their identities were kept confidential; this entails that only the researchers had access to the identities of the participants. Furthermore, in the reporting of the data, it was ensured that none of the participants in the studies (I-IV) could be identified. In order to ensure the privacy of the participants during the interviews (I-III), an interview guide was followed (Polit & Beck, 2016). The interviewer ensured not to intrude in the participants' privacy more than needed. Both before and after the interviews, the participants were told about their right to withdraw their consent to participate. At the end of each interview, the parents were asked about their experiences of participating in the interview. None of the participants said that their privacy had been violated during the interview. Conversely, it was common that they stated that the questions had made them thinking about their own situation, which they expressed as positive. For the quantitative questionnaires, the measurements included were taken into consideration with the intention of including only the measurements that could contribute with knowledge about the research topics specified.

## **Justice**

The fourth ethical principle, justice, deals with the participants' right to fair treatment and their right to privacy (Polit & Beck, 2016; Beauchamp & Childress, 2012; Buchanan, 2006). Since none of the four studies included in the thesis were based on interventions, the participants were offered the same care as those who declined participation. The inclusion criteria made it possible for both mothers and partners to participate, regardless of the partner's gender. This decision was based on an ethical intention to treat all partners of expectant first-time mothers with fairness. However, the inclusion

criteria excluded expectant parents such as mothers who had given birth before. This was because those mothers were already excluded from access to antenatal education classes given by midwives at the antenatal units, according to the routines in the geographical area of the studies. If those mothers had been included in the study, the study participants would have been treated differently, depending on whether the expectant mothers were about to deliver their first or following child. Expectant parents who were unable to speak or understand Swedish were also excluded, because they were already excluded from access to parental education classes/hospital lectures, since those were held in Swedish according to established routines. The decision to exclude non-Swedish-speaking expectant parents from the current research may be considered as unethical, since research is not supposed to exclude people from minority groups. On the other hand, those parents had already been excluded from access to parental education, which entails that they are excluded from access to such care already. Consequently, further research is needed to explore support for non-Swedish speaking parents, as well as for parents giving birth two or more times.

Subsequently, with these ethical considerations taken into account, the assumption is that the participants included within this thesis have been treated with respect and fairness. In addition, the research beneficence is considered to be greater than the potential risk for the participants.

## Results

The overall results of the thesis revealed both similarities and differences between expectant first-time mothers' and partners' perceptions of professional support, effects of social support and associated factors with perceived quality of couple relationship. The similarities were that both mothers and partners perceived professional support could increase partner involvement, influence their couple relationship and facilitate contacts with other expectant parents. Furthermore, when midwives provided reliable information through humorous role-plays, for example, both expectant mothers and partners perceived it was easier to absorb the information. According to first-time mothers' experiences, their couple relationship with their partner was also strengthened by social support during pregnancy. Moreover, the results showed similarities concerning the effects of social support, since social support was an associated factor with both mothers' and partners' perceived increased quality of couple relationship six months after childbirth. The results showed also that both mothers and partners perceived their quality of couple relationship to decrease and Sense of Coherence to increase six months after childbirth, compared to the pregnancy.

Differences revealed were such as: higher Sense of Coherence was only associated with mothers' higher perceived quality of couple relationship, and first-time mothers reported perceiving more social support compared to the partners both during pregnancy, first week and six months after childbirth. The respective results from the four studies within this thesis will be presented in the following.

# Expectant First-time Mothers' Perceptions of Professional Support during Pregnancy (I)

The expectant first-time mothers' perceptions of professional support during pregnancy were presented in six descriptive categories: Reassurance and emotional professional support; Perceived reliability of information; Professional support mediated with pedagogical creativity; Professional support facilitates new social contacts; Professional support facilitates

partner involvement; Professional support contributes to mental preparedness and a further fourteen related perceptions within Study I. The results showed that the expectant first-time mothers perceived that professional support contributed to their mental preparedness for childbirth and parenting. By 'mental preparedness', the mothers meant knowing what could happen and how they could respond to anything that happened, as well as feelings of being relaxed or safe. This appeared, for example, when the professional support included satisfactory information about how best to prepare for birth and parenting. On the other hand, when the mothers perceived lack of professional support, it negatively influenced their mental preparedness.

The reliability of information provided by professionals increased when the mothers could trust the health-care professionals. When they perceived this reliability as being satisfactory, the trust towards the health-care professionals increased throughout the whole chain of antenatal and labour-ward care. The professional support provided by the same midwife to all the mothers' prenatal assessments at the antenatal unit, or a continuum of care with consistent and repeated information throughout the whole antenatal and labour-ward care chain were perceived as satisfactory. Outdated information was perceived as irrelevant and lack of informative support could hamper the mothers' feeling of preparation and safety for childbirth. Furthermore, information mediated with pedagogical creativity was easier to absorb, according to the mothers' perceptions. Pedagogical creativity entailed when the midwives used practical illustrations such as: role-plays; practical exercises; illustrative shapes drawn on a whiteboard or narratives based on the midwives' experiences of working in a labour-ward. When the midwives provided the information in an undramatic way, the mothers perceived it as creating a calming atmosphere which further contributed to the mothers' ability to absorb information. Humorous stories, for example, allowed the mothers to laugh at something they in fact were quite nervous about (giving birth), which made them relax in relation to the feeling they had about childbirth. It was mostly the midwives in the Inspirational Lecture that provided support mediated with pedagogical creativity.

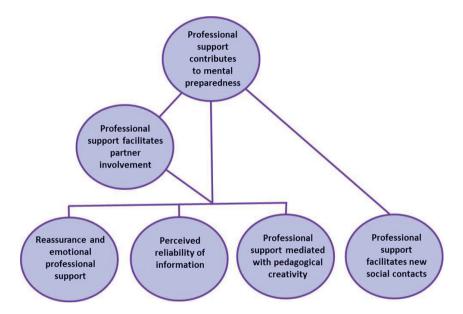
The mothers perceived that professional support with a focus on the partner facilitated partner involvement. Since information about how partners could

prepare for, feel or act during birth, facilitated partners' willingness to absorb and to take advantage of this information afterwards. The mothers perceived that when receiving professional support with their partner, it contributed to the expectant parental couple's unity. This was because then they could start from a mutual experience within their ongoing preparations and discussions at home. In particular, it was the support from the midwives providing the lecture at the hospital (Inspirational Lecture) that triggered this. Furthermore, when the expectant parental couple received professional support together, the mothers perceived that they could relax, because then they were knowledgeable about the information their partner had received.

Professional support could also be reassuring (i.e. affirmative) and emotional, according to the mothers' perceptions; this included the midwives listening to, confirming or meeting the individual needs of the mothers. When the midwives created a relaxed atmosphere, the mothers perceived that this provided the opportunity for them to express their experiences. From this support, the mothers were able to release anxiety which then led to feelings of security. This particular kind of support was described as provided by midwives at the antenatal units, during prenatal assessments or antenatal education classes. On the other hand, lack of reassurance (i.e. affirmative) or emotional support could hamper the mothers' ability to trust themselves and in their capacity to give birth. However, the midwives in the antenatal units provided professional support that enabled meetings between expectant parents, such as antenatal education classes. During these classes, it was important that the midwives created an atmosphere that allowed the mothers to discuss and ask questions. These discussions could contribute to recognition between parents, which was especially valuable for those mothers who did not have other friends who were pregnant or who had had children. Not having the opportunity to participate in an antenatal education class was perceived as unsatisfactory by the mothers.

In summary, the way in which the expectant mothers used different types of professional support in their preparations for childbirth and parenting could be described as a strategy like doing a jigsaw puzzle. When the mothers prepared and did the puzzle, each type of professional support worked as a valuable piece in the whole puzzle. The absence of any kind of piece could hamper the mothers' ability to complete the puzzle, which could in turn

decrease their ability to prepare themselves mentally, for childbirth and parenting. When exploring the logical relationship between the descriptive categories, a theoretical assumption was that there was a hierarchical arrangement between them. Within this, the category *Professional support contributes to mental preparedness* formed the top, since it was influenced by the other five categories. The category *Professional support facilitates partner involvement* formed the second level, since it was connected to both the base and top categories (Figure 2).



**Figure 2:** Illustrative figure of the phenomenographical 'outcome space' (Sjöström & Dahlgren, 2002), in which the findings and hierarchical arrangement of the descriptive categories in Study I are presented (Figure I within article: 'It's like a puzzle': Pregnant women's perceptions of professional support in midwifery care).

## Partners of Expectant First-time Mothers Perceptions of Professional Support during Pregnancy (II)

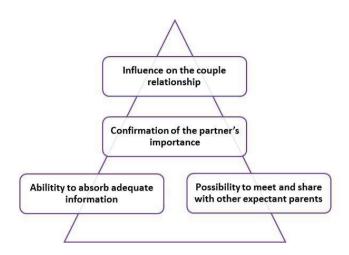
The partners' perceptions of professional support during pregnancy were presented in four descriptive categories: Ability to absorb adequate information; Possibility to meet and share with other expectant parents; Confirmation of the partner's importance; Influence on the couple relationship and nine associated perceptions within Study II. The partners perceived that professional support could influence their couple relationship with the expectant first-time mother. When the expectant parental couple received professional support together, it increased their ability to communicate with each other, according to the partners. For example, the partners perceived that when they had different needs to prepare for childbirth and parenting, compared to the expectant mother, these different needs could cause frustration within the couple. Usually, it was the mothers who had greater preparatory needs. Professional support could decrease that frustration, because it made the expectant parents understand their importance for each other. The support could increase the partners' understanding of how to best prepare for childbirth and parenting, as well as their willingness to prepare together with the expectant mother. Subsequently, this influenced the partners' willingness to become parents and a feeling of strengthened couple relationship.

Furthermore, professional support could confirm the partner's importance. This occurred when the midwives or other healthcare professionals in the chain of antenatal and labour-ward care included the partner's role and individual needs. The professionals could include the partner's role by providing information about how partners could help and support the mothers during labour. This information could include massage and breathing techniques, or the best ways to help the mothers cope with labour pains using mental strategies. However, the partners perceived there was a lack of information concerning the following: childbirth complications (Caesarean birth, breastfeeding complications etc.); economic issues; parental leave; baby-related items that they needed to purchase and finally how to meet the baby's needs. The partners' ability to absorb information were increased with the help of practical information and concrete advice, such as when the partners had the possibility to visually follow the information provided

(through role-plays or PowerPoint slides) which contributed to their ability to absorb the information. This is also the case when the partners were emotionally engaged or interested in the information. The midwives could support the partners in their emotional engagement by using humour, since it made the partners laugh, relax and feel more engaged. When the partners were able to absorb information about their role, it contributed to their knowledgeability, calmness, security and strengthened self-esteem, since then they were able to trust their own abilities.

However, the partners wanted the antenatal education classes to include the role of the partner to a greater extent. Receiving information that is too focused on the mothers' situation, being excluded from, or limited in, access to antenatal education classes was perceived to be unsatisfactory. The partners wanted access to different kinds of classes, with a focus on homogeneity between expectant parents such as the following: groups for expectant parents in same-sex relationships (according to co-mothers); groups for partners only (i.e. excluding the expectant mothers) or groups held by new parents. The partners perceived the antenatal education classes as an opportunity to meet and share with other expectant parents. They expressed the importance of the midwives creating a relaxed atmosphere during these classes, to make the expectant parents feel safe enough go exchange experiences. When midwives changed from information to discussion sessions, the partners felt more willing to engage in the discussions.

When exploring the logical relationships between the descriptive categories, a theoretical assumption was that a hierarchical arrangement between the categories was current. Within this arrangement, the category *Influence on the couple relationship* formed the top of a pyramid, because it was influenced by the three other categories. The category *Confirmation of the partner's importance* formed the second level in the arrangement because it was connected to both the bottom *(Ability to absorb adequate information; Possibility to meet and share with other expectant parents)* and top *(Influence on the couple relationship)* categories (Figure 3).



**Figure 3.** Illustrative figure of the phenomenographical 'outcome space' (Sjöström & Dahlgren, 2002) in which the findings and hierarchical arrangement of the descriptive categories in Study II are presented (Figure I within article: 'To be able to support her, I must feel calm and safe': pregnant women's partners perceptions of professional support during pregnancy).

# Expectant First-time Mothers' Experiences of Social Support during Pregnancy (III)

The expectant first-time mothers' experiences of social support during pregnancy were described using the following: one main category (Social support can strengthen expectant first-time mothers' relationship with their partner and contribute to feelings of calm and security about childbirth); three generic categories (Mutual preparation with partner facilitated the feeling of a strengthened relationship; Being able to share experiences with others was both strengthening and frightening and Adequate information facilitated a feeling of understanding) and seven sub-categories (Table 7).

Overall, the expectant first-time mothers described different types of social support which could strengthen their relationship with their partner and contribute to feelings of calm and secure about childbirth and parenting. For this to appear, it was among other things essential that the partner was willing to participate in the preparations for childbirth and parenting. When the expectant parental couple prepared together, it could create feelings of

togetherness and shared responsibility. It could also make the partners understand pregnancy and the upcoming parenthood as more real, according to the experiences of the mothers. In the following, this could help the mothers relax, relinquish control and focus more on themselves. The mothers described pregnancy as a sensitive period of their lives in which they were forced to talk about intimate things they would not have discussed with their partners otherwise. This challenged their relationship. The mothers valued communication abilities within the parental couple, since it could bring the expectant couple closer together on a mental level. Furthermore, communication could contribute to increased confidence and trust in the couple relationship.

Moreover, the expectant first-time mothers' feeling of calm and security about childbirth and parenting were facilitated by sharing experiences with others. Others who were the same age as the expectant mothers were more likely to share experiences that seemed positive or reality-based. Such experiences could strengthen the mothers. However, sharing experiences could also be frightening, since taking part of others' negative childbirth experiences could instil fear in the mothers. Those who shared 'horror stories' were especially people such as the expectant first-time mother's own mother, friends, relatives, colleagues or unknown people with whom they came into contact via the Internet, for example.

The mothers used their social contacts and the Internet to obtain information about childbirth and parenting. They experienced the Internet as the fastest way to obtain information and as a diversified source that allowed anonymity. They expressed a need for different types of information such as: pregnancy-related questions (e.g. Braxton Hicks contractions or foetal movements); what they needed to purchase and prepare at home before the arrival of the baby; childbirth-related questions (how to recognize the beginning of labour) and questions about parenting. Satisfactory information facilitated the mothers' understanding about childbirth and parenting. On the other hand, when the information varied in content or was overly exaggerated, it could cause feelings such as confusion or uncertainty among the expectant first-time mothers.

Table 7. Overview of sub-categorie	s, generic categories and mair	n category in Study III.
<b>Sub-categories</b>	Generic categories	Main category
-Mutual preparation with partner	Mutual preparation with	
-Being able to communicate with	partner facilitated the	
the partner	feeling of a strengthened	
-Practical support from the partner	relationship	Social support can
-Sharing experiences with other	Being able to share	strengthen expectant
expectant first-time parents	experiences with others	first-time mothers'
facilitated feeling of recognition	was both strengthening	relationship with their
and belonging	and frightening	partner and contribute
-Taking part in others'		to feelings of calm and
experiences was both		security about
strengthening and frightening		childbirth and parenting
-Obtaining information about	Adequate information	
childbirth and parenting	facilitated a feeling of	
-Adequate amount of consistent	understanding	
information		

## Quality of Couple Relationship among First-time Mothers and Partners, during Pregnancy and the First Six Months of Parenthood (IV)

Those deemed eligible for analysis were 207 parents (mothers n=122; partners n=85) who responded to all three questionnaires (Q1-Q3) (Figure 1). Different factors associated with first-time mothers' and partners' perceived quality of couple relationship six months after childbirth were explored. Further, the following were also explored: the changes in perceived quality of couple relationship, social support and Sense of Coherence during pregnancy and the first six months of parenthood among mothers and partners. In the following, the respective results will be presented.

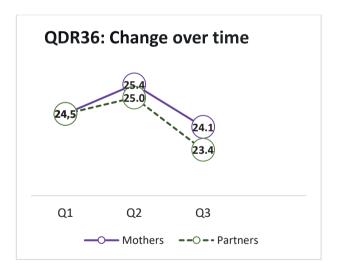
## Change over Time in Perceived Quality of Couple Relationship, Social Support and Sense of Coherence

Both the first-time mothers' and partners' perceived quality of couple relationship *decreased* between pregnancy and six months after childbirth

(mothers: p=0.001; partners: p<0.001) (Figure 4, Table 8). Besides this, the results showed a *decrease* in relationship quality between first week after childbirth and six months after childbirth, among both mothers and partners (mothers: p<0.001; partners: p<0.001).

When comparing the mothers' and the partners' perceived quality of couple relationship at Q1, Q2 and Q3, the results showed no significant difference between the first-time mothers and the partners (Figure 4, Table 8).

In addition, the change over time for the five dimensions of QDR36 were analysed between pregnancy and six months after childbirth. Between Q1 and Q3 the results showed a *decrease* in the mothers' perceived couple satisfaction (p=0.010) and sensuality (p<0.001), as well as in the partners' perceived couple cohesion (p=0.019), satisfaction (p=0.042), sensuality (p<0.001) and sexuality (p=0.002) (Table8).



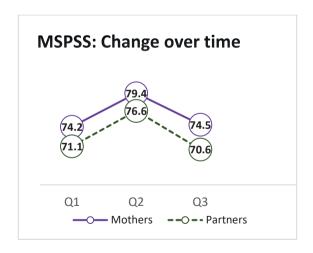
**Figure 4:** Change over time in the QDR36 index for quality of couple relationship at Q1, Q2 and Q3.

and parties in government of the four and of the four of and of the four of th	ige between Q	1 and Q2; Q2	and Q3; and be	etween Q2 and	I Q3.	) mucon m	o). P-values	101 110 1110	ovon Signor	a reality test to	T IIIII W	120, 200-
		21	0	52	0	Q3	Change	Change between	Change	Change between	Change	Change between
	Gestation	Gestational week 25	First week	First week after birth	Six month	Six months after birth	Q1 a1	Q1 and Q2	Q2 a	Q2 and Q3	Q1 a	Q1 and Q3
	Mothers	Partners	Mothers	Partners	Mothers	Partners	Mothers	Partners	Mothers	Partners	Mothers	Partners
	(SD)	M (SD)	(SD) M	M (SD)	M (SD)	M (SD)	p-value	<i>p</i> -value	p-value	p-value	p-value	p-value
QDR36 index	24.5 (2.3)	24.5 (1.9)	25.4 (2.0)	25.0 (1.9)	24.1 (2.4)	23.4 (2.6)	0.132	0.085	<0.001	<0.001	0.001	<0.001
Dimensions:												
Consensus	5.2 (0.5)	5.1 (0.5)	5.4 (0.4)	5.2 (0.7)	5.2 (0.5)	5.1 (0.5)					0.792	0.363
Cohesion	4.9 (0.7)	4.9 (0.7)	5.2 (0.7)	5.2 (0.7)	4.8 (0.9)	4.7 (0.8)					0.072	0.019
Satisfaction	5.1 (0.5)	5.1 (0.5)	5.3 (0.4)	5.2 (0.4)	5.0 (0.6)	5.0 (0.6)					0.010	0.042
Sensuality	5.5 (0.6)	5.5 (0.6)	5.5 (0.6)	5.3 (0.6)	5.1 (0.8)	5.0 (0.9)					<0.001	<0.001
Sexuality	4.1 (0.7)	4.1 (0.7)	4.0 (0.7)	4.0 (0.6)	3.9 (0.7)	3.8 (0.8)					0.059	0.002
MSPSS index	74.2 (10.2)	71.1 (10.9)	79.4 (6.8)	76.6 (8.4)	74.5 (10.0)	70.6 (11.3)	<0.001	< 0.001	<0.001	< 0.001	0.214	0.536
Dimensions:												
Family	24.2 (5.0)	23.5 (4.5)	26.3 (3.2)	25.7 (3.2)	24.3 (4.5)	24.3 (4.0)					0.189	0.101
Friends	23.5 (4.6)	22.6 (4.5)	25.6 (3.5)	23.9 (4.7)	23.6 (4.6)	21.9 (4.9)					0.122	0.378
Significant others	26.5 (3.0)	25.0 (3.8)	27.6 (1.4)	27.6 (3.2)	26.6 (2.5)	24.6 (4.0)					0.572	0.295
SOC-13 index	66.0 (12.3)	(10.7)	71.7 (11.5)	72.9 (10.0)	70.7 (12.2)	71.4 (12.0)	<0.001	0.001	0.771	0.191	<0.001	0.010
Dimensions.												
Comprehensibility	24.2 (5.7)	26.2 (4.9)	26.2 (5.5)	27.0 (4.7)	25.9 (5.7)	26.6 (5.6)					<0.001	0.172
Manageability	19.6 (4.4)	21.6 (3.6)	21.6 (4.0)	22.6 (3.3)	21.3 (4.3)	22.2 (3.4)					<0.001	0.029
Meaningfulness	22.3 (3.6)	22.0 (3.7)	23.8 (3.5)	23.2 (3.3)	23.4 (3.7)	22.7 (3.4)					0.001	0.025
Response mean values:	ies:		Ī		Ī	Ī		Ī				
QDR36-index: theoretical range 5-30, dimensions: range 1-6.	etical range 5	30, dimensions	s: range 1-6.									
MSPSS-index: theoretical range 12-84, dimensions: range 4-28.	tical range 12.	-84, dimension	is: range 4-28.									
SOC-13-index: theoretical range 13-91, dimensions: Comprehensibility (5 items) range 5-35; Manageability (4 items) range 4-28, Meaningfulness (4 items) range 4-28.	etical range 13	3-91, dimension	ns: Compreher	sibility (5 iter	ns) range 5-35	: Manageabilit	y (4 items) r	ange 4-28, N	<b>1</b> eaningfuln	ess (4 items)	range 4-28.	
	0		4		, ,			)	)	`	)	

The results showed also that both mothers and partners perceived that their social support (MSPSS) *increased* between gestational week 25 and first week after childbirth (mothers: p<0.001; partners p<0.001) (Table 8, Figure 5). Thereafter, the perceived social support *decreased* until six months after childbirth (mothers: p<0.001; partners: p<0.001).

When comparing the first-time mothers' and the partners' perceived social support at Q1, Q2 and Q3 the results showed that mothers reported higher perceived social support at all three measures (Q1: p=0.017; Q2: p=0.012; Q3 p=0.014). This indicates that first-time mothers perceive higher social support (compared to partners) both during pregnancy, first week after childbirth and six months after childbirth (Table 8, Figure 5).

In addition, the three dimensions of MSPSS were analysed in regard to the change over time between pregnancy and six months after childbirth. The analyses were performed for the mothers and partners respectively and resulted in no significant difference between Q1 and Q3 (Table 8).

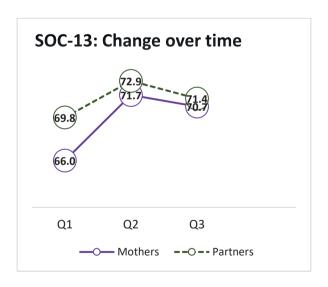


**Figure 5:** Change over time in the MSPSS index for perceived social support at Q1, Q2 and Q3.

Further, both mothers and partners reported *higher* Sense of Coherence first week after childbirth compared to the pregnancy (mothers: p<0.001; partners: p=0.001) (Table 8, Figure 6). Besides this, the parents reported *higher* Sense of Coherence at six months after childbirth compared to the pregnancy (mothers: p<0.001; partners: p=0.010).

When comparing the mothers' and the partners' levels of Sense of Coherence, the results showed that the partners reported higher levels during pregnancy compared to the first-time mothers (p=0.039) (Table 8, Figure 6). This indicates that partners' Sense of Coherence is higher during pregnancy, compared to first-time mothers'.

For the three dimensions of SOC-13, the results showed the following changes between Q1 and Q3: mothers' higher comprehensibility at Q3 (p<0.001); mothers' and partners' higher manageability at Q3 (mothers: p<0.001; partners: p=0.029), and mothers' and partners' higher meaningfulness at Q3 (mothers: p=0.001; partners: p=0.025) (Table 8).



**Figure 6:** Change over time in the SOC index for Sense of Coherence at Q1, Q2 and Q3.

## Feelings for Childbirth and Parenthood

The first-time mothers' and partners' feelings for childbirth and parenthood were assessed at gestational week 25, as well as the participant's perception of her/his partner's feelings for childbirth and parenthood. Index related to the following: Feelings for childbirth; Feelings for parenthood; Partner's feelings for childbirth and Partner's feelings for parenthood were calculated (Table 9) and explored as associated factors for the parents' perceived quality of couple relationship six months after childbirth; this is described in Table 10.

Table 9. Index related to feelings for childbirth a	and parenthood, among	mothers and partners
at gestational week 25 (Q1).		
Feelings for childbirth, Mean (SD), Range	Mothers (n=122)	Partners (n=85)
Feelings for childbirth	22.3 (3.2), 12-28	23.3 (3.0), 12-28
Non-response, n (%)	3 (2)	1 (1)
Partner's feelings for childbirth	22.4 (3.4), 14-28	23.3 (3.4), 10-28
Non-response, n (%)	3 (2)	1 (1)
Feelings for parenthood, Mean (SD), Range		
Feelings for parenthood	24.8 (2.5), 15-28	24.7 (2.8), 16-28
Non-response, n (%)	1 (1)	0 (0)
Partner's feelings for parenthood	24.4 (3.0), 16-28	25.6 (2.1), 19-28
Non-response, n (%)	1 (1)	0 (0)

#### Items:

*Feelings for childbirth:* Index was calculated by adding the results for all items, score range 4-28. The higher the score, the more positive feelings for childbirth.

*Partner's feelings for childbirth:* Index was calculated by adding the results for all items, score range 4-28. The higher the score, the more perceived positive feelings for childbirth among the partner.

*Feelings for parenthood:* Index was calculated by adding the results for all items, score range 4-28. The higher the score, the more positive feelings for parenthood.

*Partner's feelings for parenthood*: Index was calculated by adding the results for all items, score range 4-28. The higher the score, the more perceived positive feelings for parenthood among the partner.

## Factors Associated with Quality of Couple Relationship after Six Months of Parenthood, among First-time Mothers and Partners

To evaluate the strongest associated factors with first-time mothers' and partners' perceived quality of couple relationship (QDR36) six months after childbirth, a multiple linear regression analysis was carried out in different steps. Results showed that within the fourth and last step, four factors were statistically significant associated with first-time mothers' higher perceived

quality of couple relationship six months after childbirth; these factors were: 1) partners with higher positive feelings for parenthood at gestational week 25 (p=0.021); 2) higher perceived social support at gestational week 25 (p=0.037); 3) higher Sense of Coherence at gestational week 25 (p=0.013); and 4) more positive change in Sense of Coherence between gestational week 25 and six months after childbirth (p=0.002); and 4) (Table 10).

For partners' higher perceived quality of couple relationship six months after childbirth the following factor was statistically significant associated: more positive change in perceived social support between gestational week 25 and six months after childbirth (p=0.005) (Table 10).

### Non-respondents

Parents who did not respond to all three questionnaires were excluded from analysis (mothers n=40; partners n=55). Results from analyses between the respondents and the non-respondents showed that; non-respondent mothers reported higher Sense of Coherence at Q3 (76.1) compared to respondent mothers (70.7) (p=0.048), and non-respondent partners reported higher perceived quality of couple relationship at Q3 (24.6), compared to respondent partners (23.4) (p=0.029).

Table 10. Covariates of perceived quality of couple relationship (QDR36) six months after childbirth (Q3). Results from multiple linear regressions, performed in steps (mothers n=122; partners n=85).	d quality o	f couple re	lationship	(QDR36) siz	x months aft	er childbirt	h (Q3). Re	sults from n	nultiple lir	near regress	ions, perf	ormed in ste	sps (mothe	rs n=122; p.	artners n=	85).
		Step 1 (c	Step 1 (one model	_		Step 2 (12 models)	(slapour)			Step 3 (three models)	ee model	s)		Step 4 (o	Step 4 (one model)	_
													Adj I	<b>Adj R</b> <sup>2</sup> (Mothers) = $0.276 = 27\%$ ;	0 = 0.276	= 27%;
													Adj 1	<b>Adj R</b> <sup>2</sup> (Partners) = $0.353 = 35\%$ .	0 = 0.353	=35%
	Me	Mothers	Pa	Partners	Mot	Mothers	Paı	Partners	Mo	Mothers	Pa	Partners	Mo	Mothers	Pa	Partners
	β	p-value	В	p-value	β	p-value	В	p-value	В	p-value	β	p-value	В	p-value	В	p-value
Cohabiting with partner Q11	1.87	.434	4.63	*010*	-(-)	(1	(1	1)	1)	(1	1)	1)	3.06	.172	-1.89	306
(ref. not living together)																
Employment, Q3	-4.28	.013*	06:	.219	(1	(1	(1	1)	1)	(1	1)	(1	-1.96	.250	.94	.159
Perceived economy, Q3	.33	.313	.92	.021*	-	1	(1	(1	1)	(1	1)	(1	10	.750	.26	.526
$Age, (yrs.)^2$					.02	.702	07	.180								
Education, (yrs.) <sup>2</sup>					.13	.182	.01	626								
Couple relationship, (yrs.) <sup>2</sup>					05	.485	.01	.983								
Expecting first child							.93	.410								
										Blo	Block 1					
Feeling for childbirth, Q1					.22	.004**	80.	.480	0.16	.065	60.	764.				
Partner's feeling for childbirth, Q1					.18	**800	.02	.830	.12	.123	01	.902				
										Blo	Block 2					
Feeling for parenthood, Q1					.30	.004**	.02	868	.14	.283	04	3775				
Partner's feeling for parenthood, Q1					.28	***000°	.10	.513	.21	.034*	.13	.486	.19	*120	.01	.941
										Blo	Block 3					
MSPSS, Q1					.10	***000	.07	**500	60.	**100.	.05	.101	90.	.037*	.05	.087
MSPSS change Q1-Q3					.12	.002**	.15	***000	20°	.055	.11	.011*	.07	580	.12	**\$00
SOC-13, Q1					60.	***000°	.10	**100	90°	.004**	70.	.055	90.	*£10°	90'	.064
SOC-13 change, O1- O3					60'	***000	.10	*S10	80	.003**	90.	.119	80.	**Z00°	90.	.124

SOC-13 change, Q1-Q3

Questionnaires: O1 Gestational week 25; Q2 First week after childbirth; Q3 Six months after childbirth.

Agustionnaires: O1 Gestational week 25; Q2 First week after childbirth; Partner's feeling for childbirth. Feeling for parenthood; and Partner's feeling for parenthood; Sense of Coherence (SOC-13); The Multidimensional Scale of Perceived Social Support (MSPSS).

The Multidimensional Scale of Perceived Social Support (MSPSS).

A variable with two categories: coherbing and not living together: \*2 Linear representation.

P-values: \*p <0.05; \*\*p <0.01; \*\*\*\*p <0.001.

## Discussion

## Methodological Considerations

When carrying out research about childbearing, it is valuable to take the complexity of this phenomenon into consideration. To meet this complexity, a researcher could use a variety of methods (Enkin, Glouberman, Groff, Jadad & Stern, 2006). Consequently, it was valuable to use both qualitative and quantitative methods, as well as inductive and deductive approaches within this thesis. It was also valuable to use different data collection methods such as interviews (I-III) and repeated questionnaires (IV). This facilitated different perspectives and deepened the understanding about professional and social support for first-time mothers and partners, which were the phenomena studied (Patton, 2002).

### Trustworthiness in Qualitative Studies (I-III)

To describe the methodological considerations of Studies I-III, the terms credibility, dependability, confirmability and transferability are used. The use of these terms contributes to the trustworthiness of the research and are described by Lincoln and Guba (1985).

### Credibility

Credibility deals with the confidence in how well the data addresses the intended focus (Lincoln & Guba, 1985). Prior to the first interview, pilot interviews were conducted to test the procedure, achieve coherence in performing the interviews and to determine whether the interview guide and data collection method were suitable to provide answers to the research questions (Polit & Beck, 2016; Elo, Kääriäinen, Kanste, Pölkki, Utriainen & Kyngäs, 2014). Those interviewed were able to describe the experience of answering the questions and being interviewed using the telephone (Polit & Beck, 2016). The results of the pilot interviews showed that the interview guide and technical equipment were suitable for responding to the research questions. Therefore, no changes in the interview guide were conducted after the pilot interviews. During the interviews, the interviewer made a summary that the interviewees subsequently responded to; this was done to clarify the

answers and confirm the interviewer's interpretation (Creswell & Poth, 2017). Furthermore, the condensing (I-II) and coding (III) of transcripts were carried out both independently and jointly between the authors to be able to compare differences and similarities until an agreement was reached (Creswell & Poth, 2017; Lincoln & Guba, 1985). The authors had varying experiences of working with support for expectant parents; this was useful to maintain objectivity during the analysis process. To further establish credibility, the results of the data analysis were discussed with researchers who represented different professionals and who had different experiences of using qualitative methods. These discussions contributed to a valuable objective perspective on the data analysis and could be described as a triangulation of investigators that strengthened credibility (Lincoln & Guba, 1985).

### Dependability

Dependability refers to the replicability and consistency in qualitative research (Lincoln & Guba, 1985). For this, it is essential that both the descriptions of the inclusion criterion are clarified as well as the processes concerning how the study has been conducted (Shenton, 2004). A strategic sampling was carried out among those expectant parents who were willing to participate within the Studies I-III. The sampling procedure aimed to achieve a variety among the participants included. When considering if the sampling was appropriate, topics such as whether the participants were representative or had the knowledge about the phenomena studied were included (Creswell & Poth, 2017). A mutual assumption among the authors was that the participants represented a broad variety of expectant parents who had knowledge about the topics of interest. However, a relatively large number of expectant parents were unwilling to participate in the studies, which might have influenced the variety among the parents. It might have been the case that the expectant parents who refused to participate had negative experiences of support (or childbearing) and therefore were unwilling to describe them. Another possible reason why the parents were unwilling to participate might have been that they were asked about their interest to participate both within a qualitative interview, Studies I-III, and in a quantitative research study with repeated questionnaires (Study IV). Participating within two research studies that meant both being interviewed and answering questionnaires might have been perceived as too overwhelming for the parents.

All interviews followed an interview guide and were conducted by the author of this thesis with the intention to decrease the risk of a change in interview technique. However, interviewing and observing is an evolving process (Polit & Beck, 2016). The interviewer's insight into the phenomenon of the research question might change with each interview given (Creswell & Poth, 2017). This can be considered as a threat to dependability, because it might influence the interviewer's ability to keep an objective approach when asking follow-up questions in the latter interviews (Lincoln & Guba, 1985). On the other hand, since the interviewer's insight into the phenomenon increased with each interview, the interviewer's interpretation was that it was easier to ask followup questions that guided the informant in her/his descriptions about professional and social support respectively. The first author transcribed the interviews shortly after they ended to be able to discuss the transcripts and interview technique with the co-authors. From these discussions, a mutual perception was that the interview technique was accurate throughout the entire data collection.

### Confirmability

Confirmability refers to objectivity and that the findings are grounded in the data (Lincoln & Guba, 1985). To strengthen confirmability, the interviews were recorded and transcribed verbatim to avoid distorting the data. In addition, the analyses followed the different analysis steps described for phenomenography (Sjöström & Dahlgren, 2002) (I-II) and qualitative content analysis (Elo & Kyngäs, 2008) (III). Even though all the authors read the interview transcripts, one (I-II) or a few researchers (III) were responsible for the analyses. The other members of the research team followed up the analyses with discussions of options about categorizations, which is in line with recommendations (Elo et al., 2014). Similarly, one of the authors was responsible for writing the manuscripts and the others read the text and discussed options of how to write to obtain a closeness to the findings. The final analyses and manuscript were discussed with other researchers, both researchers with and without experiences in working with support during childbearing. These discussions contributed further to the objectivity of the findings and the way to present them. Moreover, to strengthen confirmability, quotations were presented in the findings section to enable validation of the relevance of the perceptions (Creswell & Poth, 2017; Lincoln & Guba, 1985).

### Transferability

Transferability refers to the extent to which the findings can be transferred to other groups and settings (Lincoln & Guba, 1985). To enhance transferability, clear descriptions of the participants and settings could be applied (Creswell & Poth, 2017; Polit & Beck, 2016; Lincoln & Guba, 1985). The inclusion criteria, recruitment and strategic sampling process have been demonstrated. The variation among the participants strengthened the possibility of achieving a rich variety of perceptions and experiences, which is described as an important strategy to attain trustworthiness in qualitative research (Creswell & Poth, 2017; Polit & Beck, 2016; Lincoln & Guba, 1985). Nevertheless, when considering the implications of the findings, it is important to bear in mind that the informants were a limited number of expectant parents in a limited geographic region in Sweden. Within the setting, the professional support offered to expectant parents was different to other regions within Sweden, since the way professional support is offered to expectant parents varies nationally in Sweden. For instance, some regions offer parental education through large group lectures, while other regions offer parental education through smaller classes, or both. However, the intent with qualitative research is to increase the understanding of the phenomena studied within the contextual circumstances for the research participants. In addition, the intent with qualitative research is not considered to generalize the results to other setting (Shenton, 2004). However, whether the results are transferable to other contexts or not is up to the reader to determine (Lincoln & Guba, 1985).

## Validity in Quantitative research (IV)

## **External Validity**

External validity refers to whether the findings can be transferred to other groups and settings, often referred to as generalizability or applicability (Kazdin, 2002). One way to enhance external validity is to present a rich description of the population and contextual circumstances (Glasgow et al., 2006). Within Study IV, the exclusion criteria were few and the inclusion criteria were quite wide-ranging. The fact that only one hospital was included in the study could be interpreted as a limitation, since it only enabled participants from a relatively small area in Sweden. It is valuable to note that the informants for the present study represented a lower mean age (mothers'

mean age 27.8; partners' mean age 30.1), compared to Swedish first-time mothers' and first-time fathers' populations (mothers' mean age 28.0; fathers' mean age 31.5) (Statistics Sweden, 2014). Furthermore, the mothers were between 19 and 40 years old and the partners between 20 and 55. This means that extrapolation outside this age range is unwise (Altman, 2000). Moreover, the national statistics of Swedish first-time mothers' and partners' education levels and birth country are not published. Therefore, the amount the education levels among the participants can be compared to national Swedish statistics published is limited.

To enhance external validity, a general recommendation when conducting quantitative analysis is to use the largest sample possible (Polit & Beck, 2016). Participants were consecutively selected since the recruitment process was tailored to a specific time period. Consecutive sampling involves recruiting all of the people from an accessible population who meet the eligibility criteria over a specific time interval (Polit & Beck, 2016). For Study IV, the consecutive sample was made prospective and aimed to include every expectant parent who enrolled in the antenatal clinics and met the inclusion criteria, during a seventeen-month period (September 2014 – January 2016). The sampling period was considered as sufficiently long to be able to reduce potential bias concerning seasonal or other time-related fluctuations (Creswell & Poth, 2017). However, the participant recruitment was limited by practical constraints such as time and resources available to the parents in question. There is reason to believe that not all the expectant parents who met the inclusion criteria were asked to participate. The midwives who were active in the recruitment process were asked to make calculations as to how many expectant parents were asked to participate. Unfortunately, the reported number of calculated eligible expectant parents was smaller than the actual number of included participants. To calculate the number of eligible expectant parents, an approximate estimation was carried out through 'The Swedish Pregnancy Register'. From this calculation, approximately 1700 expectant first-time mothers and 1700 partners were eligible for the study during the time for recruitment (Petersson, K. Personal communication 29 June 2017). It is therefore likely that far from all eligible expectant first-time mothers and partners were asked to participate in Study IV; this could be considered as a limitation.

Furthermore, no power analysis was conducted for Study IV, which could be considered as a limitation. However, according to previous research sample size should be at least 10-15 individuals per independent variable when carrying out multiple regression analysis (Polit & Beck, 2016). However, De Winter (2013) argues that for bivariate analyses it is sufficient with five or even fewer observations. This corresponds five (or fewer) observations per degree of freedom. From this perspective, the sample size was large enough for the analysis. In addition, similar results have been reported previously (Hildingsson, 2017; Ngai & Ngu, 2016; Hansson & Ahlborg, 2012; Ahlborg et al., 2009); this could be considered as strengthening the results.

### Internal Validity

Internal validity refers to issues related to construction of a study (Kazdin, 2002). For Study IV, three questionnaires were developed which included mostly validated instruments. To minimize information bias, the questionnaires were pilot-tested in two steps; this could be considered as strengthening the internal validity. However, another threat to internal validity could be changes in measurement procedures during the periods of study that affect the outcome (Kazdin, 2002). In Study IV, the same questionnaires were sent to all participants who answered them using the same computer system. Furthermore, all data collection was carried out by the author of this thesis, with the intention of reducing the risk of changing procedure (Creswell & Poth, 2017).

In prospective studies, selection bias is usually introduced by the biased allocation of participants to groups. As previously mentioned, there is reason to believe that many expectant parents who were supposedly eligible were not asked to participate in Study IV. Furthermore, Study IV represented a follow-up design, since data was collected prospectively and the outcome variable was collected ten months after baseline. The limitation of a follow-up design is lost to follow up. Polit and Gillespie (2009) have earlier revealed that the average participant loss is 18% when the final data collection is more than six months after baseline. For Study IV, a total loss of 31% was present (302 parents completed the first questionnaire, 207 parents were eligible for analysis). One explanation for the loss of participants could be that the parents might have prioritized taking care of the child instead of answering questionnaires. A further explanation could be that the questionnaires

included a large number of questions which might have been considered too time consuming to answer (Polit & Beck, 2016). However, a strength is that both mothers and partners were approached and answered the same questions about quality of couple relationship, social support, Sense of Coherence and feelings for childbirth and parenthood.

Among those expectant parents who were asked to participate in the study (n=480, according to the reported numbers), the total 'willingness to participate rate' was 63% (mothers 65%; partners 60%). There was no possibility to compare characteristics among those expectant parents who met the inclusion criterion but were not asked to participate, with those parents who were asked. This could be considered as a limitation. However, characteristics among those parents who were willing to participate in the study but who did not answer all three questionnaires (non-respondents), were compared to characteristics among those participants who answered all three questionnaires and who were eligible for analysis (respondents). The results indicated that first-time mothers with higher Sense of Coherence and partners with higher perceived quality of couple relationship six months after childbirth, tend to not respond to repeated questionnaires during childbirth and the first six months of parenthood.

### Reliability

Reliability concerns the level of agreement between different assessments of the same outcome, made by the same rater at different times, or by different raters (Polit & Beck, 2016). Most of the instruments used in study IV are previously validated; this could be considered as a strength of the study. The questions developed for study IV (Feelings for childbirth/parenthood) were tested in the two pilot studies, to evaluate participant experiences of answering the questions. However, these questions are non-validated so far, therefore further exploration of the questions needs to be carried out. Nevertheless, since the questionnaires were web-based, the participants' answers could be directly transferred to SPSS; this could be considered as a strength of the study. To control for values entered incorrectly, however, all data was elucidated with descriptive statistics (Polit & Beck, 2016). Incorrect data, such as numeric errors, were excluded from analysis.

Replication studies would, however, be highly desirable, for example, perceived quality of couple relationship changes during the first years of parenthood (Hansson & Ahlborg, 2012; Ahlborg et al., 2009). In addition, Sense of Coherence has changed when a new pattern in one's life is initiated (Nilsson, Holmgren, Stegmayr & Westman, 2003). Therefore, both perceived quality of couple relationship and Sense of Coherence carry the potential to be reexamined and modified at times of great life experiences such as childbearing (Staneva et al., 2017).

### General Discussion of the Results

This thesis revealed both similarities and differences between first-time mothers' and partners' perceptions of professional support, effects from social support and associated factors with perceived quality of couple relationship, which will be discussed in the following.

## Perceptions of Professional Support and Experiences of Social Support

Concerning professional support, both the expectant mothers and partners perceived that it facilitated partner involvement, among other things. The expectant parents described that when the professional support included the partners' role and perspective, it increased their knowledge about how they could prepare for, feel or act during birth, which made them feel calm and secure. The mothers perceived that the partners took advantage of this within the parental couple's mutual preparations. It is previously known that when expectant fathers are present during pregnancy, they expect to be treated as part of a birthing couple (Draper, 2002). Many fathers feel responsible for the support of the birthing mother and find it more difficult than they expected (Finnbogadóttir et al., 2003; Chandler & Field, 1997). Meanwhile, co-mothers experience that being neither father nor biological mother sometimes challenges parental identity (Dahl & Malterud, 2015). Professional support can lead to increased parental knowledge and better preparation for childbirth (Barimani, et al., 2017A; 2017B; Svensson et al., 2009; Gagnon & Sandall, 2007), which may lead to higher engagement during pregnancy and childbirth. Fathers who are take an active role during birth seem to better manage feelings of helplessness (Bäckström & Hertfelt Wahn, 2011), better support the mother

(Kainz, Eliasson & von Post, 2010) and experience their first meeting with their baby more positively (Dellmann, 2004; Hallgren, Kihlgren, Forslin & Norberg, 1999). When expectant fathers are involved during pregnancy and childbirth, it is strengthening for expectant mothers, as well as positive for health in the mother and new-born child (Martin et al., 2007; Buist et al., 2003). Obviously, the partner's role should be included within professional support for expectant parents.

In this thesis, when the partners perceived lack of professional support, it contributed to their feeling of unimportance. Such feelings may hamper their ability to support the mother throughout childbearing (Widarsson et al., 2015; Steen et al., 2012; Bäckström & Hertfelt Wahn, 2011; Finnbogadóttir et al., 2003). Feelings of being unimportant, being excluded from access to professional support, and/or unprepared to support the mother during birth may cause feelings of childbirth fear (Hildingsson et al., 2014). In addition, partners' feelings of being unimportant may lead to negative effects for the mother as well. Previously, first-time fathers have expressed a need for more information about how to be involved during childbirth (Widarsson et al., 2015; Steen et al., 2012; Bäckström & Hertfelt Wahn, 2011; Castle et al., 2008; Finnbogadóttir et al., 2003). This further highlights the value of the thesis findings related to including partners in professional support. However, the extent to which the professionals focused on the partners' role seemed to be a challenging balancing act. According to the expectant first-time mothers, information that focused too much on what partners should do to support mothers could put too much responsibility on the partners.

However, the way for professionals to make partners involved was not only to make the partner's role and perspective visible, according to the results of this thesis. It was also to increase their ability to absorb the information provided. The midwives could trigger this by using different pedagogical approaches. For instance, both the expectant first-time mothers and partners perceived that a pedagogic approach including practical illustrations or humour made them relax and laugh. From this, they could better absorb the information provided. Midwives using humour within labour care have previously been shown to create feelings of security (Thorstensson, Ekström, Lundgren & Hertfelt Wahn, 2012). Furthermore, humour and role playing have been described as improving learning, since they serve to capture

attention and create interest in comprehending information (Baid & Lambert, 2010). This is in line with the results of this thesis, namely, that role playing and humour increased the expectant parents' interest in the information provided, as well as increasing their understanding about how to prepare for childbirth. Therefore, information concerning childbirth should be presented in ways that help expectant parents to relax and increase their ability to absorb and understand. However, to be able to describe the humour used by the midwives during the Inspirational Lecture, further research is needed. More research is also needed to explore the use of humour within other contextual circumstances wherein professional support is offered to expectant parents. In addition, the research within this thesis is carried out on Swedish speaking expectant parents. It would, therefore, be valuable to explore how non-Swedish speaking expectant parents perceive the humour used by midwives during the Inspirational Lecture, for example.

Moreover, the results of this thesis show that both expectant first-time mothers and partners perceived that the information provided through the professional support should be relevant and presented with clarity and continuity. Outdated or irrelevant information was perceived to be negative for the feeling of being supported. Besides this, the expectant first-time mothers described how they used their social contacts to obtain information. When the information was adequate and consistent, without contradiction, the expectant mothers experienced it as facilitating their understanding about childbirth and parenting. Becoming a parent and undergoing the transition to parenthood can be challenging since it demands engagement in personal development (Berg & Premberg, 2010). Such engagement might consist of searching for information and support in the preparations to adapt to the changes in one's life (Kralik, Visentin & van Loon, 2006). Parents would like early and realistic information about parenting skills and changes in couple relationship (Entsieh & Hallström, 2016). Having satisfactory knowledge and feelings of preparedness facilitate the transition to parenthood (Barimani et al., 2017A). The expectant parents within this thesis were offered information through professional support from midwives at antenatal units, antenatal education classes and the Inspirational Lecture. However, the results showed that expectant first-time mothers used their social contacts on the Internet to corroborate the information given by professionals. It is previously known that parents experience it as positive to connect with other parents through the

Internet (Evans, Donelle & Hume-Loveland, 2011). However, the fact that expectant mothers put more trust in information obtained from the Internet than in information obtained from professionals is essential to note, since it should be the professionals who provide the most trustworthy information, not the Internet. Far from all information published online is controlled by professionals who are most capable of determining whether the information is trustworthy. Subsequently, this points out the value of offering information based on the expectant parents' individual needs. Professionals can use these results in their further understanding about *what* type of information expectant first-time mothers and partners request, as well as *how* the information should be provided to increase their ability to absorb the information. However, to increase knowledge about partners' experiences of social support, such as how they use the Internet to obtain information, more research is needed.

Similarities were also found between the expectant mothers' and partners' perceptions of professional support provided through antenatal education classes. They perceived it as positive to have access to other expectant parents during these classes, which has been stressed earlier (Bennett et al., 2017; Entsieh & Hallström, 2016; Fabian et al., 2005). However, especially the partners perceived it was negative to be excluded from access to antenataleducation classes, or being limited in that access. For instance, they desired to have access to different kinds of classes, with a focus on homogeneity between expectant parents. These suggestions included groups for expectant parents in same-sex relationships, groups for partners only or groups held by new parents. Previously, co-mothers' needs of professional support have been revealed, such as professionals paying attention to use of language (using the expression partners instead of fathers etc.) and including the co-mothers' role to acknowledge them as parents (Dahl & Malterud, 2015; Dahl et al., 2013). Even though the current Swedish guidelines for antenatal care state that the midwife's work should encompass the entire family and no longer focus solely on the expectant mothers (Banke et al., 2008), partners' feelings of being excluded from antenatal care have recently been shown (Andersson, Norman, Kanlinder & Plantin, 2016) and affirmed from thesis results. However, the results of this thesis namely, that professional support could facilitate contact with other expectant parents, meets the Swedish guidelines (Banke et al., 2008). For expectant parents to be able to create social networks with other expectant parents it is, however, of importance that classes are offered to meet

the desires of the expectant parents. Previous studies indicate that Swedish parental classes need modification to fulfil parents' expectations (Ahlden, Ahlehagen, Dahlgren & Josefsson, 2012). Meanwhile, midwives have expressed a lack of professional competence in meeting both expectant mothers' and partners' needs during these classes (Fabian, Sarkadi & Åhman, 2015). Therefore, the result of this thesis, with both expectant first-time mothers' and partners' perceptions of professional support, as well as mothers' experiences of social support is valuable, since it can increase professionals' knowledge about how to provide the expectant parents with antenatal-education classes during pregnancy.

## Professional and Social Support in Relation to Parental Couple Relationship

It was shown that both professional and social support could have a positive influence on the expectant parental couple relationship. This occurred when the expectant parental couple mutually received professional support and especially when the midwives made the partner's role visible. Such support could facilitate feelings of better communicative abilities, togetherness and understanding within the expectant parental couple. Similarly, the first-time mothers experienced social support as strengthening the couple relationship with their partner. Professional support during pregnancy has previously been shown to lead to better relationship satisfaction among mothers (Daley-McCoy et al., 2015), communication (Houts et al., 2008) and couple relationship (Shapiro et al., 2000). However, the thesis results showed that both mothers' and partners' perceived quality of couple relationship decreased between pregnancy and the first six months after childbirth, which is in line with previous research (Ngai & Ngu, 2016). It is previously known that the demands of new parenthood are accompanied with an increase in family stress, lack of intimacy, insufficient communication (Hansson & Ahlborg, 2016) and a demanding task to combine childcare, household duties and the workplace (Baxter et al., 2008). This stresses the value of the qualitative thesis results, namely that both expectant first-time mothers and partners perceived that support increased communication and feeling of togetherness in the parental couple. Subsequently, first-time mothers and partners should have access to support that facilitate communication and understanding among the parental couple. Such abilities might be helpful for the parents in their capacity

to mutually cope with the influence that childbearing has on their couple relationship. However, the perceived quality in couple relationship fluctuates during the first years of parenthood (Hansson & Ahlborg, 2012; Ahlborg et al., 2009; Ahlborg et al., 2005). Parents' perceptions of quality in couple relationship are complex and need, therefore, further exploration in a multidimensional and longitudinal perspective.

Furthermore, the results showed that social support was an associated factor with both first-time mothers' and partners' higher perceived quality of couple relationship, at six months after childbirth. Previously, social support has been described as non-associated with quality of relationship among parents (Hansson & Ahlborg, 2012). Social support has also been described as valuable during childbirth (Moshki & Cheravi, 2016) to reduce feelings of stress among mothers (McLeish & Redshaw, 2017), and essential for positive outcomes for families experiencing transitional life events (Habel et al., 2015; McLeish & Redshaw, 2015; Mbekenga et al., 2011) and influencing parental functioning (Trivette et al., 2010; Ghate & Hazel, 2002). In addition, social support and overall societal expectations about most aspects of pregnancy and motherhood have been explained as crucial factors for the expectant mother's wellness during pregnancy (Staneva, Bogossian, Pritchard & Wittkowski, 2015; Pilkinton, 2015; Elsenbruch et al., 2007). However, the results of this thesis showed that mothers perceived higher social support than the partners both during pregnancy, first week after childbirth and six months after childbirth. The fact that the mothers perceived more social support six months after childbirth might be because most of them were on parental leave and therefore probably the main caretakers of the baby. An effect of this might be that the mothers were more comfortable about asking for help and support from their social network, which might explain the results that mothers perceived more social support. Further, the fact that the mothers perceived more social support during pregnancy compared to partners, could be because her physiological pregnancy changes made others more attentive to her situation (Brodén, 2004). The qualitative thesis results showed that expectant first-time mothers used their social contacts in their preparation for childbirth and parenting. To be able to compare mothers' and partners' experiences of social support during pregnancy it is, however, necessary with more research. Nevertheless, it is valuable that professionals are aware of the benefits of social support, since such support could be strengthened through professional

support according to thesis results and previous research (Thorstensson, Nilsson, Olsson, Hertfelt-Wahn & Ekström, 2015; Hupcey & Morse, 1997).

# Professional and Social Support in Relation to Salutogenesis and Sense of Coherence among First-time Mothers and Partners

The results of this thesis highlight how both first-time mothers and partners benefit from professional and social support. This can be understood as valuable for the parents' well-being. According to the WHO Alma Alta declaration (World Health Organization, 1978) and the Ottawa Charter (World Health Organization, 1986), professionals should have a positive wellbeing and health in focus, instead of the absence of illness. However, obstacles to professionals' ability to focus on parents' well-being, health and individual support needs, could be multi-dimensional. Examples of such obstacles might be lack of professionals or a transfer in focus from health and well-being to illness and thereby medical issues concerning childbearing. Within a pathologic, or medical approach, professionals are trying to understand the process of ill health and the means by which health may be restored (Bryar & Sinclair, 2011). To exemplify this, Bryar and Sinclair (2011) have presented pregnancy and childbirth through two different models. In the first model, pregnancy is treated as a normal life event and as a period of growth for women. In the second model, pregnancy is treated as an illness and women are encouraged to view themselves as patients (Bryar & Sinclair, 2011). A risk with the second model is that some normal life events, such as childbearing, may be classified as potential sources of ill-health. It is previously known that a focus on risk during pregnancy and birth does little to boost the confidence of women, who hope to achieve normality (Ferguson et al., 2014). Such focus neither helps the expectant parents to manage stressors linked to pregnancy, nor mobilize the resources required to prepare for the changes that come with childbearing.

According to the results of this thesis, professionals could strengthen expectant first-time mothers and partners through different types of support, such as: *informative support* consisting of adequate information about childbirth and parenting; *emotional support* which is when the professionals listened to the parents' experiences and *affirmative support* that confirmed the

parents' ability to handle challenges of childbearing, for instance. When the professionals provided these types of support, it could be understood as if they were focusing on the normality of childbearing (Bryar & Sinclair, 2011) or parents' well-being and healthiness, as within the theory of Salutogenesis (Perez-Botella, Downe, Magistretti, Lindstrom & Berg, 2015). The need of a more specific Salutogenic approach within midwifery care has been emphasized previously (Downe, 2008). With such an approach, professionals could strive to put childbirth into a comprehensible, manageable and meaningful life experience for the parents. For this to succeed, it is valuable that health professionals balance the natural and medical perspective of childbearing. Midwives possess valuable knowledge about the normality and healthiness of childbearing, they should therefore have a natural role in keeping childbearing as a period of growth for the parents.

However, the thesis results showed that higher Sense of Coherence among first-time mothers was an associated factor with their higher quality of relationship six months after birth. This could be explained as first-time mothers with higher capacity to cope with childbearing (perceive it as comprehensible, manageable and meaningful) also perceived higher quality of couple relationship, six months after birth. In previous research, high Sense of Coherence has been shown to be associated with increased health (Ferguson et al., 2014), more confidence in one's parenthood (Ahlborg et al., 2013) and less depression (Ferguson et al., 2016). Parents with high Sense of Coherence are more able to use social support in a health promoting manner (Ferguson et al., 2016; Wolff & Ratner, 1999; Antonovsky, 1979). The mothers and partners within this thesis reported higher Sense of Coherence six months after birth compared to pregnancy which indicates that parents' Sense of Coherence is affected by childbearing. This is in line with earlier research (Ferguson et al., 2016; Downe, 2008; Habroe et al., 2007) and points out the possibility that parents' abilities to cope with life increases during childbearing, even though their perceived quality of couple relationship decrease. Nevertheless, to further increase knowledge about factors associated with higher Sense of Coherence among newly become mothers, more research is needed.

## Support for Parents during Childbearing: A Complex Phenomenon

Making expectant parents feel prepared for childbearing is a valuable aspect of professional and social support according to this thesis. The parental couple's ability to work together as a team is valuable for the child, since coparenting and couple relationship units' influence a child's emotional and cognitive outcome (Fivaz-Depeursinge & Favez, 2006).

Nonetheless, the birth of a child and its development occurs in a complex relational context that includes the entire family, its social networks and professionals. Subsequently, childbearing is a multifaceted phenomenon, which includes several different aspects among the individuals included. For parents, childbearing involves major physiological, psychological, and social adjustments. When health care professionals attain more knowledge about expectant parents' perceptions of professional support, experiences and effects of social support, this new knowledge will contribute to parents' needs for support being met to a greater extent.

Subsequently, this thesis highlights and provides more knowledge about the complexity of support for first-time mothers and partners during childbearing. Previously, it has been claimed that it is unlikely that a single, standardized format or programme could be sufficiently flexible to actually meet the needs of all parents (Gilmer et al., 2016). Together with the results of this thesis, this suggests that professional and social support should be offered with multidimensionality to expectant parents. Within midwifery care, healthcare professionals can use the results to acquire wider knowledge that enhances their supportive skills for parents to a higher level. It is, however, vital that professionals work under the right circumstances to be able to offer satisfactory support for parents. For this, it is crucial that decision makers understand the importance of professional and social support that meet the parents' individual needs. With such support, the parents' positive experiences, health and well-being during childbearing would probably be maintained to a greater extent; both the individual parent, the family and society would benefit from this. As a matter of fact, childbearing is the parents' individual experience, even though it is a common and usually normal process occurring in most people's life. For decision makers, professionals, people within the parents' own social network, as well as the expectant parents

themselves, it is valuable to bear in mind that when a baby is being born, it is not only about the arrival of a child, it is also about the creating of strong and confident parents, capable of loving and leading the family throughout challenges in life.

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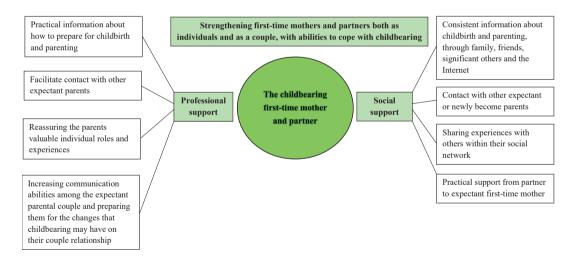
#### Comprehensive Understanding

This thesis highlights the value of satisfactory professional support for expectant first-time mothers and partners during pregnancy. It also highlights the value of social support during childbearing. The results revealed that the parents could benefit from different types of support, in their preparations for childbirth and parenting. A theoretical assumption could be that different types of support could strengthen the mothers and partners both individually and as a couple. As individuals, the expectant first-time mothers and partners could be strengthened through support that contributed to their understanding and feeling of being prepared for childbirth and parenting. This type of support could be described as informative support, provided both by professionals and social contacts. Such informative support could include practical information about how to prepare for childbirth and parenting. Furthermore, the expectant parents were strengthened as individuals through emotional support, such as the professionals listening to their experiences of pregnancy. Emotional support was also obtained from social contacts, through sharing of experiences or a feeling of belonging to a social network. Affirmative support was strengthening when professionals reassured the expectant parents as valuable individuals with different roles, needs and abilities to handle childbearing. In contrast, lack of support could have a negative influence on the expectant parents' feeling of being prepared for childbirth and parenting.

As a couple, the parents could be strengthened by professional support during pregnancy, as well as social support during childbearing. An example of this was support including the partner's role, which contributed to partner involvement within the parental couple's mutual preparations for childbirth and parenting. This could be explained as affirmative support, since it reassured the partner and strengthened her/his ability to engage and understand how to support the mother. When the expectant parents prepared mutually, it facilitated feelings of improved communication abilities and strengthened relationship. This could be described as the parents giving each other emotional support, when communicating and listening to each other's experiences and needs. Through this communication and listening, the parents were able to reassure each other by meeting each other's needs, which is affirmative support. The fact that social support could strengthen the parents as a couple was confirmed by the quantitative results, which showed that higher perceived social support was an associated factor to higher perceived

quality of couple relationship six months after childbirth. First-time mothers' perception of higher quality of couple relationship six months after birth was also associated with their higher Sense of Coherence. Since Sense of Coherence is described as a coping mechanism, the results indicate that mothers who were more able to experience childbearing as comprehensible, manageable and meaningful perceived higher relationship quality. In addition, the results showed that both first-time mothers' and partners' Sense of Coherence increased during childbearing. Which indicates that parents' abilities to cope with their life as comprehensible, manageable and meaningful improve during childbearing.

In summary, this thesis reveals that professional and social support can strengthen first-time mothers and partners both individually and as a couple. This emphasizes the value that expectant first-time mothers and partners have access to professional and social support that meet the parents' individual and mutual needs during childbearing, as well as support that increases their abilities to cope with the challenges that come with childbearing. A theoretical illustration of comprehensive understanding is shown in Figure 7.



**Figure 7:** Illustrative picture of comprehensive understanding of the results of the thesis. The illustration clarifies different types of professional and social support that strengthen first-time mothers and partners both as individuals and as a couple, with abilities to cope with childbearing.

## Conclusion

Both similarities and differences between first-time mother's and partners' perceptions of professional support, effects from social support and factors associated with the parents' perceived quality of couple relationship are revealed within this thesis. Also included are similarities in changes over time for the parents' perceived quality of couple relationship, social support and Sense of Coherence. Professional and social support were shown to strengthen first-time mothers and partners both individually and as a couple. For this, different types of support were needed. On the individual basis, the expectant parents could be strengthened through professional and social support that contributed to their understanding and feeling of being prepared for childbirth and parenting. They were also strengthened by support that allowed them to share experiences, both with professionals and social contacts within their social network, as well as when professionals reassured them of being valuable individuals with different roles and needs. As a couple, the parents were strengthened by professional support that included the partner's role. Social support was also an associated factor with the parents' higher perceived quality of couple relationship six months after childbirth. In contrast, lack of professional support could have a negative influence on the expectant parents' feelings of being prepared for childbirth and parenting.

Differences shown where that, the first-time mothers perceived higher social support during pregnancy and the first six months after childbirth, compared to partners. Furthermore, differences were shown in associated factors with the parents' higher perceived quality of couple relationship six months after childbirth. For first-time mothers, higher perceived social support, higher Sense of Coherence and partners' more positive feeling for parenthood were associated factors. For partners, higher perceived social support was an associated factor. However, both mothers and partners reported higher Sense of Coherence and lower perceived quality of couple relationship six months after childbirth compared to during pregnancy. Professionals can use these results in their further understanding about how to offer support that meets first-time mothers' and partners' individual and mutual needs of support, which could strengthen the parents both as individuals and as a couple, with abilities to cope with the challenges that comes with childbearing.

## Relevance and Implications

Expectant first-time mothers and partners should have access to professional support including:

- emotional support that allows the parents to express their experiences about pregnancy, childbirth and the upcoming parenthood
- affirmative support that reassures the parents' valuable individual roles and abilities to handle childbearing
- reliable information about how the parents can prepare for childbirth and parenthood. Such information should be provided with a pedagogical creativity that increases the parents' abilities to absorb the information
- information about how the parents' couple relationship may be affected by childbearing and how they can meet each other's needs during that period of life
- contact with other expectant parents, within an atmosphere that allows the parents to share experiences with each other

Expectant first-time mothers and partners should have access to professional and social support that:

 strengthens the parents both as individuals and as a couple with abilities to cope with pregnancy, childbirth and the first six months of parenthood

Expectant first-time mothers should have access to:

 reliable information about pregnancy, childbirth and parenthood on the Internet

## **Future Research**

Further research is needed to explore:

- factors associated with healthiness and well-being among first-time mothers and partners during childbearing
- if the changes over time for perceived quality in couple relationship, social support and Sense of Coherence among first-time mothers and partners identified in this study are replicable, transient or permanent
- expectant and newly become first-time mothers' and partners' experiences of social support
- effects of professional support for first-time mothers and partners during childbearing
- professional and social support for non-Swedish speaking parents and parents giving birth two or more times

## Svensk Sammanfattning

#### Introduktion

Att vänta barn och bli förälder är utmanande livshändelser som inkluderar såväl fysiologiska, psykologiska som sociala förändringar. För det specifika föräldraparet medför föräldraskapet ändrade roller i och med att de går från att vara partners till att även vara föräldrar tillsammans. Somliga föräldrar upplever barnafödandet som positivt, fantastiskt eller stärkande, medan andra upplever det som negativt eller stressande. Likaledes uppfattar vissa föräldrapar att deras kvalitet i parrelationen förstärks i samband med barnafödande, medan andra uppfattar sämre kvalitet. Föräldrars förmåga att hantera de utmaningar som barnafödande och föräldraskap medför, har tidigare beskrivits ha ett samband med deras känsla av sammanhang. En persons känsla av sammanhang är dess förmåga att uppfatta begriplighet, hanterbarhet och meningsfullhet i livet, vilket är personens förmåga att identifiera såväl egna inre resurser som resurser tillgängliga i sin omgivning. Tidigare forskning har visat att höga nivåer av känsla av sammanhang är förenat med ett bättre välbefinnande under graviditet, okomplicerad graviditet samt att personen upplever stöd i större utsträckning. Låga nivåer av känsla av sammanhang är istället associerat med graviditetsspecifik stress, depression och oro.

Uppenbarligen är barnafödande en känslig livshändelse som borde erfaras med tillgång till stöd. Såväl professionellt (stöd som erbjuds av professionella) som socialt stöd (stöd som erbjuds av närstående i personens sociala nätverk) har påvisats öka föräldrars kunskap och känsla av att vara förberedda inför barnafödande. Sådant stöd har även visats ge ökad tillfredsställelse inom parrelationen. Det professionella stöd som erbjuds blivande föräldrar varierar såväl internationellt som nationellt i Sverige. I Sverige ansvarar barnmorskor för normal graviditet, förlossning och efterbördsskede. Barnmorskor erbjuder blivande föräldrar professionellt stöd via barnmorskemottagningar i form av rutinkontroller och föräldraträffar (traditionellt benämnt föräldrautbildningar). Barnmorskor har även möjlighet att remittera föräldrar till specialistkunskap vid behov, exempelvis till: obstetriker; barnmorska med specialistkunskap om förlossningsrädsla; sjukgymnast eller psykolog.

Emellertid, trots att tidigare forskning har visat på det professionella stödets betydelse i samband med barnafödande är föräldrars behov av stöd inte alltid tillgodosedda. När pappor upplever bristande stöd kan det leda till att de har svårt att stödja kvinnan i barnafödandet, det kan även leda till att papporna känner oro eller depression. Även mammor har berättat om otillfredsställande professionellt stöd som inte tillmötesgår deras behov av stöd. Tidigare kunskap finns om att föräldrar (mammor, pappor och medmammor) känner sig uppskattade som individer när de erhåller bekräftande professionellt stöd. För att föräldrars behov av stöd ska kunna tillmötesgås i större utsträckning behövs mer forskning för att öka förståelsen kring hur blivande föräldrar uppfattar professionellt och socialt stöd, samt effekter av sådant stöd. Professionellt och socialt stöd i samband med barnafödande behöver därmed ytterligare forskning ur ett multidimensionellt och longitudinellt perspektiv. Inom denna avhandling syftar begreppet barnafödande till såväl graviditet, förlossning som de första sex månaderna av föräldraskap. Med partner menas både pappa och medmamma.

## Avhandlingens Syfte

Det övergripande syftet för avhandlingen var att utforska professionellt och socialt stöd till förstagångsmammor och partners i samband med barnafödande, i relation till kvalitet i parrelation och känsla av sammanhang.

#### Specifika syften för delstudierna:

- Att utforska gravida kvinnors uppfattningar av professionellt stöd i barnmorskevård (I).
- Att utforska gravida kvinnors partners uppfattningar av professionellt stöd (II).
- Att utforska blivande förstagångsmammors upplevelser av socialt stöd inom sitt sociala nätverk, i samband med att de förbereder sig inför förlossning och föräldraskap (III).
- Att utvärdera faktorer associerade med kvalitet i parrelation, hos förstagångsmammor och partners i samband med graviditet och de första sex månaderna av föräldraskap (IV).

#### Metoder

För denna avhandling användes såväl explorativ som prospektiv och longitudinell design, samt kvalitativ och kvantitativ metod (Tabell 11). För att utforska förstagångsmammors och partners uppfattningar av professionellt stöd i samband med graviditet tillämpades fenomenografisk analys (Studie I-II). För att utforska förstagångsmammors upplevelser av socialt stöd i samband med graviditet, tillämpades kvalitativ innehållsanalys (Studie III). Dessutom användes beskrivande statistik, icke parametriska test, post hoc test samt multipel regressionsanalys för att utvärdera faktorer associerade med kvalitet i parrelation, hos förstagångsmammor och partners i samband med graviditet och de första sex månaderna av föräldraskapet (Studie IV).

Tabell 11. Förtydligande av de fyra delstudiernas design, deltagare, datainsamling samt						
dataanalys.						
Studie	Design	Deltagare	Datainsamling	Dataanalys		
I	Explorativ	15 blivande	Intervjuer	Fenomenografisk		
	Induktiv	förstagångsmammor		analys		
II	Explorativ	14 partners till blivande	Intervjuer	Fenomenografisk		
	Induktiv	förstagångsmammor		analys		
III	Explorativ	15 blivande	Intervjuer	Kvalitativ		
	Induktiv	förstagångsmammor		innehållsanalys		
IV	Prospektiv	162	Upprepade	Multipel linjär		
	Longitudinell	förstagångsmammor	enkätutskick	regressionsanalys		
	Deduktiv	och 140 partners till				
		blivande				
		förstagångsmammor				

Inklusionskriterier för studierna var: 1) förstagångsmamma (I, III, IV) eller partner (II & IV) som 2) hade en enkelbördig graviditet; 3) hade tillräckliga kunskaper i det svenska språket för att kunna förstå studieinformation och instruktioner samt 4) hade plan om att föda barn vid det sjukhus som ingick i studien. Datainsamling för delstudier I-III genomfördes med hjälp av kvalitativa, enskilda intervjuer i graviditetsvecka 36-38. Samtliga intervjuer genomfördes av författaren för denna avhandling, hölls via telefon och följde en semistrukturerad intervjuguide. För delstudie IV skedde datainsamling via upprepade enkätutskick: 1) graviditetsvecka 25; 2) första veckan efter förlossning och 3) sex månader efter förlossning. Enkäterna var webbaserade och innehöll validerade mätinstrument som berörde föräldrarnas: kvalitet i

parrelation (QDR36); sociala stöd (MSPSS) samt känsla av sammanhang (SOC-13). Dessutom inkluderade enkäterna frågor utformade för studien gällande föräldrarnas känsla inför förlossning och föräldraskap (Appendix 1 & 2).

#### Resultat

Det övergripande resultatet för avhandlingen visade både likheter och skillnader mellan blivande förstagångsmammors och partners uppfattningar av professionellt stöd, effekter av socialt stöd och faktorer associerade med uppfattad kvalitet i parrelation. Likheter som påvisades var att både blivande förstagångsmammor och partners uppfattade att professionellt stöd erhållet under graviditet kunde öka partnerns delaktighet. Vidare uppfattade föräldrarna att professionellt stöd kunde inverka positivt på deras parrelation eftersom deras förmåga att kommunicera och förstå varandras roller ökade. Dessutom bidrog stödet till föräldrarnas kontakt med andra blivande föräldrar, vilket uppfattades värdefullt eftersom de då fick möjlighet att dela sina upplevelser med andra i liknande situation. Föräldrarna önskade information om hur de skulle förbereda sig inför förlossning och föräldraskap. När barnmorskor förmedlade tillförlitlig information till exempel genom rollspel med humoristiska inslag uppfattade både mammor och partners att det underlättade deras förmåga att ta till sig information. De blivande mammorna berättade även att de införskaffade information om förlossning och föräldraskap genom att ta del av sociala kontakters erfarenheter, vilket är socialt stöd. Att dela erfarenheter med andra kunde dock upplevas både stärkande och skrämmande. Mest vanligt förekommande var att andra blivande eller nyblivna föräldrar delgav erfarenheter som var stärkande för de blivande mammorna. Äldre personer bidrog till större utsträckning med erfarenheter som var irrelevanta för den situation mammorna befann sig i. Vid sidan av detta berättade mammorna om det sociala stöd de erhöll via Internetbaserade kontakter. Emellanåt använde mammorna just dessa kontakter för att kontrollera att den information professionella delgivit var tillförlitlig. Sammantaget upplevde de blivande mammorna att socialt stöd kunde bidra till att de fick en förstärkt relation till sin partner samt en känsla av förberedelse inför förlossning och föräldraskap.

Vidare visade avhandlingens resultat på likheter vad gällde effekter av socialt stöd. Detta eftersom ett högre uppfattat socialt stöd var associerat med en högre kvalitet i parrelationen sex månader efter förlossning, hos såväl mammor som partners. Däremot uppfattade förstagångsmammorna mer socialt stöd under både graviditet och de första sex månaderna efter förlossningen än vad partners gjorde. Ytterligare likheter som påvisades var att både förstagångsmammor och partners rapporterade signifikant sänkning i kvalitet i parrelation och höjning i känsla av sammanhang, sex månader efter förlossning jämfört med under graviditeten. Vilket indikerar att förstagångsmammors och partners känsla av sammanhang påverkas positivt i samband med barnafödande trots att deras uppfattade kvalitet i parrelation sjunker.

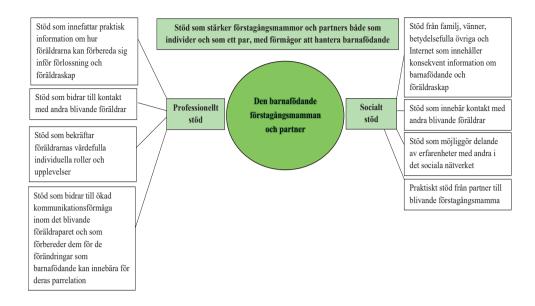
Avhandlingens resultat visade även på skillnader avseende faktorer associerade med föräldrarnas högre uppfattade kvalitet i parrelationen sex månader efter förlossning. För mammor var följande faktorer associerade med en högre kvalitet i parrelationen: 1) partnerns mer positiva känsla inför föräldraskap i samband med graviditet; 2) högre uppfattat socialt stöd i samband med graviditet; 3) högre känsla av sammanhang i samband med graviditet samt 4) mer positiv förändring i nivå av känsla av sammanhang mellan graviditet och sex månader efter förlossning. För partners var det en faktor som var associerad med högre kvalitet i parrelation: mer positiv förändring i uppfattat socialt stöd mellan graviditet och sex månader efter förlossning.

### Slutsatser och Rekommendationer

Resultatet för denna avhandling belyser värdet av att blivande förstagångsmammor och partners erhåller ett tillfredsställande professionellt stöd baserat på deras individuella behov av stöd. Resultatet belyser även värdet av att föräldrar erhåller socialt stöd i samband med barnafödande. Det visade sig att föräldrar drar fördel av olika typer av stöd i samband med att de förbereder sig inför förlossning och föräldraskap. Ett teoretiskt antagande kan vara att olika typer av stöd kan stärka förstagångsmammor och partners både individuellt och som ett par. Sådant stöd kan bidra till att föräldrar får en ökad förmåga att hantera de utmaningar som barnafödande innebär. Som individer stärktes föräldrarna av professionellt och socialt stöd som bidrog till deras

förståelse och känsla av att vara förberedd inför barnafödande. Sådant typ av stöd kan beskrivas som informativt stöd. Föräldrarna stärktes även av emotionellt stöd, vilket var när professionella lyssnade till föräldrarnas upplevelser eller när de fick dela erfarenheter med sina sociala kontakter. Bekräftande stöd var, till exempel, när de professionella bekräftade föräldrarna som värdefulla individer med olika roller, behov och förmåga att hantera de utmaningar som barnafödande innebär. Ett bristande stöd däremot, kunde ha en negativ inverkan på förälderns känsla av att vara förberedd inför barnafödande.

Både professionellt och socialt stöd kunde även stärka föräldrarna som par. Detta var till exempel när partnerns roll synliggjordes, vilket bidrog till att partnern i större utsträckning var delaktig i parets gemensamma förberedelser inför barnafödandet. Teorin att socialt stöd kan stärka föräldrarna som par bekräftas av resultatet från den kvantitativa delstudien (IV) som påvisade att ett högre socialt stöd var associerat med högre kvalitet i parrelationen sex månader efter förlossning, för både mammor och partners. Att mammors kvalitet i parrelationen förstärks av högre känsla av sammanhang indikerar att förstagångsmammor som har förmåga att uppleva barnafödande som begripligt, hanterbart och meningsfullt har en större förmåga att hantera de utmaningar som barnafödande innebär. En teoretisk illustration av de olika typer av professionellt och socialt stöd som stärker förstagångsmammor och partners i samband med barnafödande presenteras i figur 8.



**Figure 8:** Illustrativ bild för den övergripande förståelsen för avhandlingens resultat. Illustrationen redogör för olika typer av professionellt och socialt stöd som stärker förstagångsmammor och partners både som individer och som ett par, med förmågor att hantera barnafödande.

Sammantaget bidrar denna avhandlings resultat till ökad kunskap om komplexiteten kring stöd till föräldrar i samband med barnafödande. Resultatet är värdefullt eftersom professionella kan använda det i deras vidare förståelse för hur stöd kan erbjudas för att tillmötesgå föräldrars behov av stöd. Ett sådant stöd kan bidra till att stärka förstagångsmammor och partners både som individer och som ett par med förmågor att hantera barnafödande.

Förslag till kliniska implikationer baserade på denna avhandlings resultat är att blivande förstagångsmammor och partners bör ha tillgång till professionellt stöd som inkluderar:

- Emotionellt stöd som tillåter föräldrarna att uttrycka sina upplevelser av graviditet, förlossning och det stundande föräldraskapet
- Stöd som bekräftar föräldrarnas värdefulla individuella roller och förmågor att hantera barnafödande
- Tillförlitlig information om hur föräldrarna kan förbereda sig inför barnafödande. Sådan information bör förmedlas med pedagogisk kreativitet som ökar föräldrarnas förmåga att uppfatta/förstå informationen
- Information om hur föräldraparets relation kan påverkas av barnafödande och hur föräldrarna kan möta varandras individuella behov i samband med detta
- Kontakt med andra blivande föräldrar i en miljö som tillåter föräldrarna att dela erfarenheter med varandra

Blivande förstagångsmammor och partners bör ha tillgång till professionellt och social stöd som:

 Stärker föräldrarna både som individer och som ett par med förmågor att hantera graviditet, förlossning och de första sex månaderna av föräldraskap

Blivande förstagångsmammor bör ha tillgång till stöd som inkluderar:

• Tillförlitlig information om graviditet, förlossning och föräldraskap via Internet

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**Appendix 1** – Instrument: Feelings for Childbirth and parenthood. Included in questionnaire Q1 (IV).

### Hur uppfattar du din känsla inför förlossningen?

Trygg	Orolig
Ej förväntansfull	Förväntansfull
Glad	Ledsen
Oförberedd	Förberedd

### Hur uppfattar du din känsla inför att bli förälder?

Trygg	Orolig
Ej förväntansfull	Förväntansfull
Glad	Ledsen
Oförberedd	Förberedd

### Eng: How do you perceive your feelings for childbirth?

Secure				Worried
Not at all expectant				Expectant
Joyful				Sad
Unprepared				Prepared

## Eng: How do you perceive your feelings for parenthood?

Secure	Worried
Not at all expectant	Expectant
Joyful	Sad
Unprepared	Prepared

**Appendix 2** – Instrument: Partner's feelings for Childbirth and parenthood. Included in questionnaire Q1 (IV).

### Hur uppfattar du din partners känsla inför förlossningen?

Trygg	Orolig
Ej förväntansfull	Förväntansfull
Glad	Ledsen
Oförberedd	Förberedd

### Hur uppfattar du din partners känsla inför att bli förälder?

Trygg	Orolig
Ej förväntansfull	Förväntansfull
Glad	Ledsen
Oförberedd	Förberedd

### Eng: How do you perceive your partner's feelings for childbirth?

Secure	Worried
Not at all expectant	Expectant
Joyful	Sad
Unprepared	Prepared

## Eng: How do you perceive your partner's feelings for parenthood?

Secure	Worried
Not at all expectant	Expectant
Joyful	Sad
Unprepared	Prepared

**Appendix 3** – Instrument: Received Professional Support, included in questionnaire Q1-Q2 (IV):

## Vilken form av förberedelse har du tagit del av inför födelsen av ditt barn?

Inspirationsföreläsning
Föräldrastöd i grupp, MVC
Annan förberedelse
Ingen förberedelse

## Om du har tagit del av förberedelse, gjorde du det tillsammans med din partner?

Ja, helt och hållet
Ja, i stor utsträckning
Ja, i liten utsträckning
Nej
Vet ej

## Eng: Which type of preparation have you received for the birth of your child?

Inspirational Lecture
Antenatal education class
Other preparation
None preparation

## Eng: If you have received preparation for childbirth, did you receive it together with your partner?

Yes, totally
Yes, to a large extent
Yes, to a small extent
No
Do not know

## **Appendix 4** – Extra questions added for instrument Mother-Perceived-Professional-Support (MoPPS-scale). Included in questionnaire Q1-Q2 (IV).

## Om du har tagit del av föräldraförberedelse i grupp (föräldrautbildning) via Mödravårdscentralen, hur uppfattar du personalens stöd?



## Om du har tagit del av Inspirationsföreläsning via sjukhuset, hur uppfattar du personalens stöd?



#### Eng: If you have received antenatal-education class from midwives

#### at the antenatal unit, how did you perceive the support from the professionals?



#### Eng: If you have received Inspirational Lecture from midwives

#### at the hospital, how did you perceive the support from the professionals?

Did not provide	Provided very good
good preparation	preparation for labour
for labour	
Did not provide	Provided very good
good preparation	preparation for parenting
for parenting	

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