INTRODUCTION

The doula movement has grown dramatically since the inception of the first labor support focused organization, Doulas of North America, in 1992. In a 2001 national survey of more than 1,500 women, 5% reported having a trained doula at their birth (Declerq et all, 2002). Doulas are now recognized as members of the maternity care team in many countries, and doula care has been integrated into hospitals and community based organizations. Concurrent with the increase in doula care is a resurgence of interest in the emotional support of laboring mothers. The resulting research and one-on-one experience with individual doulas has influenced the behaviors and attitudes of obstetrical nurses (Miltner, 2002; Van Zandt et al., 2005). Some nursing schools have integrated doula training and clinical doula practice into their programs (Jordan et al., 2008). Over the last twenty years, doula care has become an influential consumer movement in obstetrics.

Labor support is defined as offering a woman comfort and encouragement during the active phase of labor, birth and the immediate postpartum period. A doula is "a woman who provides physical, emotional and informational support to the laboring mother throughout her entire labor" (DONA, 1998). "Doula" is an ancient Greek word referring to a female attendant for the new mother (Raphael, 1973). Common usage of the term "doula" to refer to a labor support companion began with the publication of *Mothering The Mother* in 1993 (Klaus et al., 1993).

Women are seen as desiring a high level of emotional care and desiring control over the use of technological interventions (Tiedje et al., 2008; Zwelling, 2008). However, the current atmosphere in western obstetrical practice is one of routine

technological intervention and a cursory nod to emotional support in most hospitals (Hauck et al., 2007; Waldenstrom et al., 2006; Zwelling, 2008). Even studies of nurses whose purpose is to increase emotional support and caring to patients feel that their practices have little impact due to these high levels of intervention (Hodnett et al, 2002; Sleutel et al., 2007). Examining professional careworkers in this technological setting is important. It can provide an understanding of why doulas have a positive impact on obstetric and neonatal outcomes even though they do not possess any power over the application of technology.

This study strives to uncover the relational processes and functions that doula care provides and how those factors contribute to the doula's positive effects. To date, few studies have attempted to answer these questions and most points of view expressed in the literature see doula care in a simplistic manner. Part of the overall impact of the first phase of my theory development was the realization that doula care is far more complex than previously envisioned. Further examination of the complexities involved in doula relationships, and the processes and functions of doula care is warranted to gain a more complete picture of effective labor support.

Understanding effective doula care more completely contributes both to research and practice. From a research standpoint, doula care of the laboring mother is a unique relationship. While the mother's relationship to her obstetric nurse, midwife and husband have been examined in the literature; none of those roles has emotional support of the laboring mother at its core. The doula-client relationship is unique. By examining it closely, it can contribute to our understanding of attachment theory and gender communication theory in this context.

Investigating effective labor support by doulas furthers the practice of labor support in many significant ways. First, it allows for the in-depth examination of the relationship between fathers and doulas. This relationship likely has a significant effect on the laboring mother. In addition, the doula and father's interactions affect his experience. Prior to this investigation, little was known about the relationship between fathers and doulas or how they worked together. In addition, there has been no investigation comparing hospital-based doulas who meet mothers in labor and independent practice doulas who established relationships prenatally. Furthering our knowledge about each of these aspects of doula care could seriously impact the practices of emotional support and caring for families.

The purpose of this research project was to continue developing Gilliland's 2004 theory of effective labor support (Gilliland, 2004). Specifically, this project had four research aims, with the overall goal of modifying the existing theory to encompass the new data and analysis. There are five components of the basic level of support strategies by doulas: emotional support, physical support, informational support, advocacy, and negotiating relationships with fathers and medical care providers (nurses, midwives and physicians). In the previous phase of theory development, emotional support and physical support were explored and the concepts were refined. In this phase, the three remaining concepts will be examined. First, informational support will be explored. Then advocacy will be defined and examined. In order to develop the concept of negotiating relationships, the third aim is to examine the relationship between birth doulas and fathers. Lastly, in order to further extend the model of support strategies employed by doulas, this project compares the similarities and differences between

independent practice and hospital-based doula support. The next chapter includes a detailed review of the literature pertinent to this exploration.

CHAPTER ONE

OVERVIEW OF THE RESEARCH

The Significance of Doula Support

In the United States and Canada, the common practice is for a doula to join the mother and her partner (or other friends or relatives) at the beginning of active labor and remain with her until several hours after the baby is born (DONA, 1998). Research has shown doula support to be associated with a wide range of positive effects on birth outcomes, maternal emotions and self-esteem during the postpartum period.

During the first study using controlled randomized trials of labor support (Klaus et al., 1986), cesarean delivery rates at one hospital in Guatemala were lowered from 17% to 7% in the doula supported group. The average length of labor decreased from 15.5 hours to 7.7 hours. Augmentation of labor[1] with artificial oxytocin was 13% in the standard care control group versus only 2% in the doula group. Women in the control group had no support person with them. All women were in a labor room with 6 to 8 other women, standard care for this hospital.

These results were confirmed in a tightly controlled trial of doula support in the United States (Kennell et al., 1991). Women were assigned to one of three groups: continuous doula support, observation only, or a control group. The observer stayed in the labor room during the entire labor but at some distance from the mother and never spoke with her. Cesarean section rates were 18% in the control group, 13% in the

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[1] Augmentation of labor refers to the intravenous administration of a labor stimulant (oxytocin) to strengthen contractions.

observed group and 8% in the supported group. Epidural anesthesia was used by 55% of the control group mothers, 22.6% of the observed group mothers, and 7.8% of the supported group mothers. Length of labor and oxytocin use followed a similar pattern. Fewer infants of doula-supported mothers suffered birth complications. Fewer of their infants required sepsis evaluations, which include a spinal tap and two to three day stay in the neonatal intensive care unit separated from their mothers. Given that mother/baby separation is a key factor interfering in the establishment of a functional breastfeeding relationship, this is an important infant health consideration. Interestingly, the observer also had an effect on outcomes. The majority of the mothers in this study were Latina, and when queried, they said they felt the observer was a comforting presence "like an angel" The authors postulate that part of the doula's "magic" may be solely her presence (Kennell et al., 1991, Kennell, 1998).

A Botswana study of labor support allowed women to have a female relative with them in labor (Madi et al., 1999). This is the only study that looked at rates of instrumental[2] delivery. Standard hospital policy prohibited companions of any kind in the labor room, and rooms were shared by at least six mothers. Significantly more mothers in the supported group had spontaneous vaginal deliveries, 91% compared to 71%. They also used less oxytocin (augmentation), 13% to 30%; less analgesia, 53% to 73%; or had an amniotomy (rupture of the membranes), 30% to 54%; a vacuum extraction, 4% to 16%, or a cesarean section, 6% to 13%.

Other studies have confirmed the findings of a lowered use of epidural anesthesia or analgesia (Cogan& Spinnato, 1988; Gagnon et al., 1997; Gordon et al., 1999; Hodnett

[2] Instrumental delivery refers to the use of forceps or a vacuum extractor to pull the baby's head through the birth canal.

& Osborn, 1989; Langer et al., 1998; McGrath & Kennell, 2008; Van Zandt et al., 2005); shortened duration of labor (Cogan& Spinnato, 1988; Hofmeyr et al., 1991; Langer et al., 1998; Sosa et al., 1980); lowered oxytocin use (Sosa et al., 1980); and lowered cesarean rate (Breart et al., 1992; Kennell & McGrath, 1993: McGrath & Kennell, 2008; Sosa et al., 1980) among women receiving doula support. Continuous female support during labor has been shown to have some or all of these effects cross-culturally from South America, North America, Europe, South Africa, and even Iran (Javadnoori et al., 2006). In a systematic review conducted by the Cochrane Collaboration[3], their meta-analysis of 16 trials with over 13,000 women confirmed these results (Hodnett et al., 2009).

There are confounding factors that may mitigate the "doula effect" on cesarean delivery. Already low rates of cesarean section at delivery sites (Klaus & Kennell, 1997), better prenatal care and education, higher education rates and income levels may have an influence (Gordon et al., 1999). However, Kennell found that the normally higher rates of cesarean deliveries among middle and high income mothers are also likely to be lowered by the presence of a doula (Kennell & McGrath, 1993).

Continuous versus Intermittent Support

One of the key components of the effectiveness of labor support is the continuous uninterrupted care of the mother by one doula (Scott et al., 1999). Except for toileting, the doula does not leave the mother no matter how long or short the labor. This is made exceptionally clear in a meta-analysis of 11 published clinical trials (Scott et al., 1999). Continuous labor support was significantly associated with shorter labors, decreased need

[3] The Cochrane Collaboration is respected in medicine worldwide for their systematic reviews of healthcare interventions.

for the use of any analgesia, oxytocin, forceps, and cesarean sections. Intermittent support was not significantly associated with any of these outcomes.

Prior to this meta-analysis, the results for labor support were regarded as mixed, and no study had ever directly compared the use of intermittent versus continuous support. Not until the Cochrane database meta-analysis did continuous care gain credence. However, a direct investigation comparing intermittent versus continuous doula support has not been conducted. It is needed in order to confirm the meta-analysis' findings.

In 2002, Hodnett completed a randomized, controlled trial involving 6,915 mothers focusing on the effectiveness of nurses as providers of labor support in North American hospitals (Hodnett et al., 2002). To qualify as continuous support, however, nurses only needed to be with the mother 80% of the time. The 80% minimum was chosen to "reflect the realities of everyday nursing practice" (Hodnett, et al., 2002). There were no differences in cesarean delivery, maternal or neonatal events, mother's sense of control during childbirth, or in maternal depression at eight weeks postpartum. This may be due to the inability of nurses to provide support more than 80% of the time; their different role as nurses rather than doulas; or the high rate of obstetrical intervention at the study hospital.

At the Maternity Hospital in Dublin, Ireland, the "active management of labor" program includes strict rules for how quickly labor must progress, including amniotomy (rupture of the membranes) to hasten labor progress, the use of oxytocin to stimulate slow labor (as defined by their protocols), and continuous one-on-one labor support by a maternity nurse. For the last 30 years, the active management of the labor program in

Dublin has had a low cesarean section rate, a low operative vaginal delivery rate, and almost all deliveries have taken place in twelve hours or less (O'Driscoll et al., 1993).

In a meta-analysis examining tests of active management of labor programs, the only factor that affected the length of labor, cesarean delivery rate or vaginal operative delivery rate was the use of continuous labor support (Breart et al., 1992; Thornton & Lilford, 1994). Thorton and Lilford analyzed combined randomized controlled trials. Six trials examined amniotomy, four explored early oxytocin use, three combined artificial oxytocin and amniotomy, and ten studies looked at the influence of a professional companion during labor. Amniotomy alone, oxytocin use alone, or strict protocols on the definition of labor do not have an effect on any of these outcomes. Artificial oxytocin and amniotomy combined had a very modest effect on length of labor but not on cesarean or vaginal delivery rate. These findings have been confirmed by examination of labor support studies conducted in Guatemala, the United States, Canada, South Africa, Botswana, Finland and Mexico (Hemminki et al., 1990: Hofmeyr et al., 1991; Hodnett & Osborn, 1989; Kennell et al., 1991; Klaus et al., 1986; Langer et al., 1998; Madi et al., 1999).

Nearly a decade lapsed before any more research was conducted on doula support. A more recent study took past findings into account and designed a program in which an intimate friend or relative of a mother served as her doula (Campbell et al., 2006). Each doula/mother pair met with a certified doula for four hours to be trained in labor support techniques. The importance of this lay doula's continuous presence was emphasized.

In this randomized controlled trial, there were 300 mothers in the control and doula groups. In the relative/friend as doula group, mothers had shorter labors, greater cervical dilation at the administration of epidural analgesia, and the infants had higher Apgar (health screening) scores at 1 and 5 minutes. Both the doula group and the control group had statistically significant lower cesarean rates than the hospital average, and although the doula group was lower than the control group, it was not statistically significant. The researchers posited that the 44% of control group mothers who brought female companions to stay with them in labor were alerted to the nature of the study at enrollment. This may explain the differences in the cesarean rate.

Other types of intervention rates were not different between the two groups. The hospital had an overall practice style of active labor management, without the labor support component and with epidural analgesia for the majority of patients. The epidural rate was 85% in the doula group and 88% in the control group, and the pitocin augmentation rate was 46% in the doula group and 49% in the control group. Because of these factors Campbell agreed with Hodnett's assertion that "the effects of the birth environment typified by high rates of medical intervention have the ability to overpower the benefits of continuous support in labor" (Hodnett, et al, 2002).

Doula Effects on the Postpartum Period

The positive effects of a doula carry over into the postpartum period. In a standardized observation situation through a one-way mirror, mothers were observed during the first 25 minutes after birth. Doula supported mothers "showed more affectionate interaction with their infants, with significantly more smiling, talking and

stroking than the mothers who did not have a doula" (Klaus & Kennell, 1997; Sosa et al., 1980).

In the days and weeks following childbirth, mothers felt more positive about their birth experience, their partner's participation, and their ability to handle their labor. In the Mexico study, mothers in the doula supported group felt they had a higher degree of control over their labor (Langer et al., 1998). In a two-group randomly controlled study of doula support in South Africa, the supported group reported less pain and felt that they coped well during labor (60% v. 24%) (Hofmeyr et al., 1991). In addition to these results, a health maintenance organization conducted a study of doula support with middle class white women in the United States (Gordon et al., 1999). They used three different hospital sites with a control group and a doula group at each site and conducted structured telephone interviews at 4-6 weeks postpartum. Mothers in the doula groups were more likely to rate the birth experience as good, to feel they had coped well during labor, to feel labor had a very positive effect on their feelings as women and perception of their bodies strength and performance.

In a recent study of labor support in which mothers were doulaed by trained friends or relatives (Campbell et al., 2007), mothers in the lay doula supported group also felt that their labors were easier and "better than they had imagined", rated their childbirth experience as very good, and felt they coped well with labor. Doula supported mothers wanted to spend less time away from their babies, reported that they picked their baby up more often when he or she cried, and were more likely to report that they sensed their babies' needs very well. They felt the transition to becoming a mother was easier than mothers in the control group, felt happier about having a baby, and felt more

positively about their self-worth. Fifty-one percent of the doula supported mothers initiated breastfeeding in the first hour after birth compared to only 35% of the standard care control group mothers. They were also more likely to continue breastfeeding, although the rates between the two groups were not significantly different at six weeks postpartum.

Because breastfeeding often leads to more contact between mother and infant, its association with doula support is important. A retrospective program evaluation of patient records examined the influence of hospital-provided doulas to laboring mothers to a multicultural population in Boston. The doula's presence was strongly related to higher rates of intent to breastfeed and early breastfeeding initiation, independent of all other possible influencing factors (Mottl-Santiago et al., 2008). Breastfeeding rates have been shown to be significantly higher in the doula supported groups in South Africa (Hofmeyr et al., 1991) and Mexico (Langer et al., 1998), whereas a Houston study found no differences (Landry et al., 1993). Women were also more likely to breastfeed exclusively and at flexible intervals (Hofmeyr et al., 1991; Langer et al., 1998). Feeding problems were significantly less likely in the doula group (Hofmeyr et al., 1991; Langer et al., 1998).

Postpartum depression may interfere with mother-baby interaction and cause anxiety and lowered self-esteem in mothers (Cox & Holden, 1987). In a South African study of the effect of doula support on postpartum depression (Wolman et al., 1993), 92 mothers received intermittent labor support and 97 mothers received standard care. Neither the doula group nor the control group of mothers had any other companions. Mothers were interviewed at 24 hours postpartum and again six weeks later. Comparing

prenatal and postpartum ratings on the Coopersmith self-esteem inventory, supported mothers had significantly higher self-esteem scores at six weeks postpartum. Doula-attended mothers had increasing self esteem from 24 hours to six weeks postpartum, whereas the control group mothers' self esteem decreased significantly. Control group mothers' scores were often in the medium to high depression categories on the Pitt Depression Inventory, whereas no doula supported mothers' scores fell into the high depression category.

Wolman also examined postpartum outcomes. Mothers with doula support took an average of 2.9 days to develop a relationship with their baby and "feel the baby was theirs" compared with 9.8 days for the no-doula mothers. The doula mothers also felt significantly more satisfied with their partners six weeks postpartum (71% compared to 30%). In addition, these mothers showed more positive behaviors with their babies, and more often rated their babies as better than a standard baby, more beautiful, clever and easier to manage than did the control mothers (Wolman, 1991; Klaus, 1997).

A Texas project provided impressive findings on the long-term benefits of doula support (Landry, 1993; Martin et al., 1998). During home visits to assess infant development at two months of age, trained observers looked at how mothers interacted with their infants in five predetermined situations: while entering the mother's house, while setting up the developmental interaction, while it was being scored, during a feeding, and during a diaper change. Doula-supported mothers had significantly higher mean interaction scores (more positive maternal behavior) than mothers who did not receive doula support. However, the infants did not score differently on the Bayley Scales for Infant Development.

There is strong evidence that continuous care provided by a doula has a positive effect on mothers' labors, birth outcomes, postpartum experiences, feelings about themselves, their babies, and their intimate partners. The key factor in all of these studies is that doula care was continuous. In addition, it was always provided by a woman. Other than continuous care, no other factors involved in doula care were examined or evaluated in terms of their effectiveness. Therefore, understanding what a doula does and what attitudes or beliefs she adopts that make a difference to mothers can extend our knowledge of this phenomenon.

Maternal Satisfaction with the Childbirth Experience

Additional insight on the doula effect comes from examining research on mother's satisfaction with their birth experience. If doula support directly influences the factors that relate to satisfaction, it may partially explain the mechanism involved in achieving positive obstetric and neonatal outcomes. Numerous studies focusing on maternal satisfaction have found that positive birth experiences for mothers depend on feelings of control, being cared for, treated respectfully by caregivers, treated as individuals, participating in decision making, and meeting their most important expectations (Cheung et al., 2007; Dannenbring & Stevens, 1997; DiMatteo et al., 1993; Fowles, 1998; Goodman et al., 2004; Green & Baston, 2003; Mackey, 1998; Melender, 2006; Slade et al., 1993).

A closer examination of the meaning of "in control" to mothers shows there are several dimensions: feeling in control of what staff do to you; feeling in control of your own behavior; and feeling in control during contractions (Green & Baston, 2003). Gibbins and Thomson found that women achieved this sense of being "in control"

through support from their partner, a positive attitude from their midwife, being given information, and being included in making decisions during labor (Gibbins & Thomson, 2001).

Another exploration in the birth literature is the inverse experience, feeling "out of control". Fowles described it as "when the woman perceived herself as vulnerable and unable to exercise control during labor, leading to feelings of frustration" (Fowles, 1998). One woman mentioned needing her glasses to see her baby and being unable to get the anesthesiologist's or anyone's attention to pick them up from the table six inches from her head. Others described the frustration over the use of many obstetric interventions, such as limited food and fluids during labor, being given an enema, and having labor augmented with Pitocin.

Loss of control emerged as a significant theme in predicting the perception of childbirth pain and maternal satisfaction (Dannenbring & Stevens, 1997). Wanting the pregnancy, skillful coaching during labor, and feeling motivated not to use medications ameliorated the labor pain experienced by first time mothers. Mothers who had more anxiety about pain or exhibited pre-existing depressive symptoms experienced childbirth as more painful. Pain was also experienced more strongly by mothers who felt a loss of control over their experience. Feeling out of control negatively influenced the perception of their birth experience.

One study found that 34% of mothers experienced their birth of their baby as traumatic, and 30% were partially symptomatic for post traumatic stress disorder (Soet et al., 2003). Contributing factors could be divided into two categories. Antecedent variables such as a history of sexual trauma, lower social support, higher trait anxiety,

and lower coping ability scores were related to symptoms. More significant were the contributing event characteristics: cesarean section, more medical intervention, more pain in the first stage of labor, longer labor, receiving inadequate information, feelings of powerlessness, and unmet expectations.

An additional contribution to maternal satisfaction is made when women's expectations of their birth experience are met (Blix-Lindstrom et al., 2004; Fenwick et al., 2005; Gibbins & Thomson, 2001; Hauck et al., 2007; Lobel & DeLuca, 2007). In order to perceive their birth positively, women had to achieve their priority expectations (Hauck et al., 2007). However, for some women whose expectations were not met, a moderating factor was the supportive behavior of midwives and nurses. Their caregivers were emotionally supportive, advocated on their behalf, and stayed beyond their work shift to guide and share in the birth. According to Hauck, this high level of support changed their perspective on their birth experience from negative to positive.

Responses to a questionnaire at 6 weeks postpartum queried women about their satisfaction with their birth experience. The more satisfied women felt more even-tempered, self-confident, healthy, calm, less depressed, and able to cope with life (Quine, Rutter & Gowen, 1993). Birth satisfaction was also correlated with a positive perception of the newborn baby. Their infants were perceived as easier to settle to sleep, easier to feed, crying less, and less irritable.

Examining maternal satisfaction more closely offers clues to defining effective labor support by doulas. The common theme in many of these studies is the importance of positive emotional support, control, involvement in decision making, respectful

treatment, and attention to prenatal expectations. The next series of studies examines doula support and clarifies how doula care adds to maternal satisfaction.

Maternal Perceptions of Doula Care

Maternal satisfaction with doula care is intimately linked with the factors involved in overall childbirth satisfaction. These themes are repeated in qualitative research on mother's experiences of doula support. In the past twelve years, six studies have utilized varying qualitative methodologies to locate themes present in maternal descriptions of their doula's care (Berg & Terstad, 2006; Breedlove, 2005; Campero et al., 1998; Deitrick & Draves, 2008; Koumouitzes-Douvia & Carr, 2006; Lundgren, 2010). Each of these studies had small groups of informants, yet they were conducted in varying locations: Mexico, Sweden, and in the states of Kansas, Florida, and Washington in the United States. The Florida study by Dietrick is notable since it contained interviews with 18 doula clients, 9 doulas, 10 labor and delivery nurses, and a survey of 142 doula clients. All of the findings are strikingly similar and overlapping.

The authors of the Mexico study interviewed eight women who had a doula and eight women who were alone twenty four hours after giving birth (Campero, et al, 1998). At this hospital, mothers were routinely separated from their husbands and families during labor. Using grounded theory methodology, Campero found that "women with a doula tended to have a positive attitude towards themselves. They felt they took an active part in their labor, helped their child to be born, and had a greater sense of participation and a higher self-esteem. In contrast, most of the women without a doula were left with the impression that the doctors had done all the work; it seemed to them that the moment of delivery was just the last in a series of interventions (Campero, et al, 1998, p. 400)."

In the first Swedish study, a phenomenological approach was used in the analysis of interviews with ten mothers who had doula support as well as midwifery care (Berg and Terstad, 2006). The doula was considered to be an essential part of the care team whose functions were unique and could not be replaced by anyone else. The first of six functions was that of an "experienced advisor". From her own experience as a laboring woman and a doula for others, she was familiar with birth and both the hospital and home environments. She was a neutral person who could provide unbiased feedback when needed. Second, the doula accepted and affirmed the woman as she was, whatever she was feeling. The doula also supported the woman's partner and encouraged him to take an active role if he wished it – the doula was seen "as a complement to him not a competitor".

Third, the doula acted as a mediator between the woman and the midwife, or the woman and her partner. Through her skillful communication, conflict between parties was avoided. Fourth, the doula was always there. Her continuous presence meant stability, which made the women calm and secure. The mothers reported feeling that she was vigilant to their needs. Fifth, the doula did small practical actions to make the woman more comfortable and free up her partner to stay at the mother's side. Lastly, the doula was available to the mother and her family at the latter part of pregnancy. She gave a sense of continuity between the pregnancy and the birth process.

Similar themes were discovered using content analysis to examine interviews with eleven mothers who had doula support during a recent hospital birth in the Seattle, Washington area (Koumouitzes-Douvia & Carr, 2006). As in the Berg study, mothers considered their doula to be essential to the positive experience of their birth. Her

contributions were unique. They also appreciated the fact that she was a woman, experienced with birth, and familiar with hospital procedures. Second, mothers found her encouragement and acceptance to be extremely important to their wellbeing during labor. Mothers reported that their doulas reminded them to advocate for themselves and ask questions of care providers. Third, the doulas were seen as being attentive to the mother's needs and treating them as individuals. Her continuous presence and calmness meant a great deal to these mothers. A fourth major theme was that their doulas provided direct support for their husbands as well as helping the husbands to support their wives. She showed the male partners how to do certain labor techniques as well as getting snacks and offering him a break when needed. These practical activities were also seen as a significant contribution to the quality of their birth experience.

In another Swedish study of nine single mothers, Lundgren (2010) found that the doula fulfilled several important roles. The doulas were student midwives who had attended a labor support course and maintained the boundaries of the doula's role (i.e. no clinical tasks, continuous care, etc). Medical care was supplied by midwives and most mothers had other support people present. Through phenomenological analysis, Lundgren found that the doula fulfilled a professional care role as well as a natural care role. Mothers described their doula providing natural care when she was like "a sister on my side". Lundgren gave six reasons why the doula fulfilled a professional role. She possessed medical knowledge; performed as a "mediator to the unknown"; provided a "human life line to help the woman through labor"; "followed the woman's wishes"; and provided continuity throughout labor that the midwife could not. In addition, Lundgren

stated, "the doula is a coach who mediated the belief in the woman's capacity to give birth".

The Kansas study also used content analysis to examine interviews from twenty-four teen mothers (Breedlove, 2005). They received doula support from women in their own neighborhoods or communities. The mothers were receiving social support services from a variety of agencies and each agency had their own doulas available to the mothers. Community based doulas offered additional services besides labor support. They taught pregnancy, birth, and parenting classes, developed lasting relationships with the mothers, and served as positive role models. Mothers in this study found their doula's continuous support in labor invaluable. They mentioned her attentiveness to their needs, her continuous presence, calmness, and familiarity with the hospital procedures and birth process. Their doulas saw each mother as an individual and encouraged her to create "a brighter future" (Breedlove, 2005, p. 18).

Deitrick and Draves (2008) described a large scale community-based doula program in Tampa, Florida. A doula met with a mother for several months during the prenatal and postpartum periods, but might not be available for the actual birth. Doula care was part of a federally funded Healthy Start program to improve birth and infant outcomes among at risk mothers. Data collection was ongoing for eight months and 142 mothers were surveyed about birth doula support at 24 hours postpartum. In-depth interviews were conducted with 18 mothers, 9 doulas, and 10 labor and delivery nurses. All mothers were satisfied with their doula's services, although some mothers did not like having a different doula for their labor support. All other comments were positive from mothers and nurses. In a taxonomy of birth doula support, doulas were seen as providing

physical comfort measures (cold washcloths, massage) and physical assistance (breathing, ice chips); verbally supportive measures (explained things, talked to family); and emotional and social supportive measures (encouragement, stayed with me, comforting presence). The doulas were chosen from the same ethnic communities as the client's families. They stated they saw their role as one of education, support, and empowerment of mothers. Many of the doulas also experienced significant life changes as a result of their doula role. They saw it as a career, not a job; and had increased feelings of self-worth. Several went on to nursing school or college, which they attributed to their doula experience.

Although these studies involved small groups of women, they are from various backgrounds and locations, which adds to their strength. Using different qualitative methods, each research team had similar findings. One of the most notable is that mothers found that their doula occupied a unique niche: any other member of the birth team could not have her presence and fulfilled all of the same functions. To clarify, women have voiced similar desires for advocacy, control, individualized care and loving support in other studies about their support needs in labor (Price et al., 2007). No one but a doula has been shown to meet all of the needs identified in these studies.

In the first national U.S. survey of women's childbearing experiences, women ranked doulas, midwives, and other family members more highly than their partners or husbands in terms of supportive care (Declercq et al., 2002). Although women felt that their partner's presence and support was essential to their positive experience, they did not feel he had the ability to provide the same types of support as a doula or midwife. In the only study comparing support by doulas and by fathers, paternal support behaviors

were observed to be significantly different than the doulas especially in late labor and mothers appeared to be less satisfied with paternal behaviors (Bertsch et al., 1990). Another study linking the effect of father's presence in the delivery room and obstetrical outcomes found that Taiwanese women whose husbands were present during labor used significantly higher dosages of analgesia than those whose husbands were absent (Ip, 2000). There has been no other examination of paternal labor support.

It should be noted that the father's presence during labor and birth is unique and irreplaceable. Very little acknowledgement of his emotional experience is present in current cultural expectations for men during labor (Chandler & Field, 1997; Chapman, 1991; Johnson, 2002a). It is important to realize that a comparison between the father's presence and role during birth and that of the doula may be inappropriate. Their relationships to the mother are entirely different even though both provide a unique sense of caring and support. However, it is appropriate to examine how doulas and fathers negotiate their different roles and relationship to the laboring mother. A purpose of this study was to closely examine these relationships.

Nursing Support and Doula Support

A common assumption that is often made by those not involved in the perinatal professions is that hospital nurses are able to fulfill many of the functions that have been identified with doula care, most notably emotional support. This has been confirmed by a study of 57 nulliparous women who were asked a single open-ended question about what they expected from their nurse during labor. Answers were then tallied into the same categories that are used in work sampling studies of labor and delivery nurses. Women expected that their nurse would spend 29% of her time giving emotional support and

physical comfort; 24% of her time giving information and advocating for a mother's wishes; 21% of her time monitoring mother, baby and labor progress; 21% doing other clinical nursing tasks "relating to my birth"; and 5% of her time conducting indirect clinical tasks out of the room (Tumblin & Simkin, 2001).

However, in work sampling studies of nurses' actual activities, the percentages turned out to be quite different. McNiven (1992) noted that nurses spent less than ten percent of their time giving supportive care. (See Table 1.) This finding was confirmed in a more comprehensive study by Gagnon and Waghorn (1996). In 3,367 observations, the percentage of time in supportive care was 6.1%. Nurses with less than seven years of intrapartum experience spent 2.7 percent more time providing supportive care than nurses with more experience. Although primiparous women received more supportive care than multiparous women, their labors were also longer. Supportive care rates were not statistically different for women with or without epidural anesthesia.

An additional study sampling of nurses' work practices revealed that nurses perceive that they give more supportive care than they actually do (Gale et al, 2001). In fact, nurses only spent 28% of their time in the room in contact with the patient. This is in marked contrast to the expectations of nursing care by mothers and their families. Doulas, on the other hand, are schooled from the very beginning to provide continuous and individualized emotional support (Merton, 2000). It is a part of their professional and personal identity to be caring, nurturing women. Giving information, suggestions regarding physical comfort, providing reassurance and acting as advocate are integral parts of doula's activities. It is probable that the doula meets the expectations for providing support that mothers usually have of nurses.

Table 1.

Percentage of Time in Various Nursing Tasks versus Patient Expectations

Nursing Tasks	*Mother's Expectations (Tumblin, 2001)*	*Work Sampling (McNiven, 1992)*	*Work Sampling (Gagnon, 1996)*	*Work Sampling (Gale, 2001)*
Giving emotional support and physical comfort	29%	2.9%	6.1%	12.4%
Giving information and advocating for my wishes	24%	6.65%	Included in previous category	Included in previous category
Monitoring mother, baby and labor progress	21%	38.9%	10.6%	8.7%
Other clinical nursing tasks relating to my birth	21%	Included in previous category	8.5%	6.7%
Conducting indirect clinical tasks out of the room	5%	51%	74.9%	72.2%

Whereas nursing support is valuable to laboring mothers, it is substantially different than the support offered by doulas (Brown et al, 2009; Chen et al., 2001; Brown et al, 2009). The most significant differences are that the nurse's presence is not continuous and that nurses care for more than one patient at a time. This may be why a positive effect of nurses' presence on obstetrical or neonatal outcomes has not been found (Rosen, 2004). Whereas other smaller studies on nursing support have been conducted (Bryanton et al., 1994; Callister, 1993; Corbett & Callister, 2000; Mackey & Stepans, 1994; MacKinnon et al., 2005; Manogin et al., 2000), the largest and most significant is a randomized, controlled trial of 6,915 mothers (Hodnett et al, 2002). In the experimental

group, nurses had been trained in labor support techniques and were with mothers 80% of the time, a standard that was considered within the possibility of current nursing practice. The control group had usual nursing care. There were no differences in cesarean delivery, maternal or neonatal events, mother's sense of control during childbirth, or in maternal depression at eight weeks postpartum.

Closer examination of this study reveals some additional differences between nursing care and doula care. Nurses were responsible for administering all interventions, conducting all evaluations of labor progress, and labor charting. A work sampling study of the percentage of time the nurses actually spent in labor support activities was not conducted. Whereas doulas spend close to 100% of their time when close to the patient in labor support activities, it is doubtful that nurses were able to do so even if they were in the patient's room. Further, the authors claim that the results were the result of high numbers of routine intrapartum interventions. These interventions had to be administered by the nurse, whether the mother wanted them or not. A nurse is not free to perform an advocacy role for the mother because her job is to follow orders given by physicians. This creates conflict for the nurse (Sleutel, 2000; Sleutel et al., 2007), as well as a feeling of helplessness for the patient who cannot refuse an unwanted intervention from the person on whom she is relying for emotional support. When seen in this light, it is possible to understand the results of the Hodnett study in a different way. In fact, a critical review of the literature on different types of labor support persons concluded "health professionals may not be the best persons to provide labor support" (Rosen, 2004). Besides the evidence from work sampling studies, technical proficiency is often more highly valued than a supportive labor and birth role (Carlton et al., 2009; Miltner,

2000; Sleutel et al., 2007). Zwelling and Johnson make clear that, "As labor and delivery nurses know, the reality of labor care in many institutions in 2006 is lack of staff, increasing cesarean rates, rising induction rates, growing risk of litigation…and under-empowered labor nurses" (Zwelling et al., 2006). Rosen states that in their role as supporters of hospital policy and administers of intervention, "the control that nurses assume throughout the childbirth process may be a barrier to providing supportive care" (Rosen, 2004, p. 28). Adams and Bianchi state that implementing physical, emotional, and informational labor support strategies "requires special knowledge and a commitment" that most labor and delivery nurses are not encouraged to develop or are not valued in their workplace (Adams & Bianchi, 2008). In fact, nurses have expressed that medical interventions they are required to implement prevent them from providing labor support (Sleutel et al., 2007). Thus, expecting hospital nurses to provide the kind of supportive care to mothers that doulas do is not seen as possible by nurses themselves in light of their current role and responsibilities.

The Influence of Birth Memories

As studies on maternal satisfaction have noted, memories of birth may affect a mother's self concept and perception of herself as a mother (Quine et al., 1993). These memories are also long lasting. Simkin used a qualitative approach in her study of twenty mothers' memories of their birth experience (Simkin, 1991, 1992). Each mother had taken a childbirth course from the author fifteen to twenty years earlier and written a detailed narrative in the month following her birth. These records were kept and compared to the recall of their experiences 15 to 20 years later. Simkin found that birth memories remain largely intact and that most mothers recalled key details of their

experiences. Their memories did not fade over time. However, positive memories tended to become more positive, and negative memories became more negative. Women who had positive and negative memories had similar rates of anesthesia use and birth interventions. However, the mothers' positive memories were not the result of outcomes or interventions, but were associated with the way they were treated. Mothers who felt that their experiences were positive had felt a stronger sense of control, sense of achievement, and self-esteem. Interactions with hospital staff mattered. Being treated with a sense of respect and being included in decision making added to their sense of control and positive feelings about themselves.

Halldordottir and Karlsdottir (1996) took a phenomenological approach, asking mothers about their birth experience two to five years after it occurred (Halldordottir & Karlsdottir, 1996). Interviewees were mothers who had experienced multiple births, and had had one birth during they felt cared for by their nurse midwife and another during which this was not the case. Mothers stated that during the birth experience with an uncaring nurse midwife, they spent their time during labor and for many months afterward trying to make sense out of the experience. They felt alone, anxious, abandoned, afraid, out of control, angry and humiliated. The memories of uncaring experiences seemed to last longer and have a stronger impact than the positive ones. Most mothers stated that these memories affected their sense of self-esteem and confidence in mothering. Some decided not to have more children based on the experience with an uncaring midwife.

In a more recent longitudinal study focusing on birth memories in 2,428 Swedish women, mothers were asked at two months postpartum and again at one year postpartum

to rate their birth experiences. Almost fifty percent made the same assessment at one year regarding pain intensity, and sixty percent rated the birth overall the same (Waldenstrom, 2003). This study confirmed Simkin's findings: negative experiences were perceived more negatively at the one year mark by the majority of women, and positive experiences tended to stay positive or be regarded more highly. In a closer examination of the data, changes in assessments from positive to "mixed feelings" were associated with difficult childbirth, dissatisfaction with intrapartum care, and psychosocial problems (Waldenstrom, 2004). Mothers who changed their assessment from negative to "mixed feelings" had a more positive experience of support by the birth-attending midwife. Thus, the experience of positive support during what was initially considered a negative experience changed that perception positively over time. Understanding the importance of birth memories may provide insight into why continuous supportive care by a doula may have very long term effects. Perhaps the positive effect of doula care is due to the possibility that doula-supported mothers make sense of the experience or grapple with its negative outcomes with an appropriate level of caring support. By defining the overt and subtle nature of doula support, we may be able to understand what happens for mothers in the postpartum period and to give us a better idea of why the positive effect of a doula occurs.

Summary. Childbirth is a significant, important event in a woman's life and is remembered for many years. These memories may influence women's perceptions of themselves, their child and their ability to mother. High maternal satisfaction comes from feelings of control, participating in decision making, meeting their expectations, and satisfactory levels of emotional, physical and informational support. The current

literature outlines clear evidence that continuous care by a doula during labor and birth has positive consequences for mothers and infants. There is also evidence that nurses, because of the limitations of their role and accompanying responsibilities, cannot offer the same types of care that a doula can.

This review of the literature demonstrates that women have needs for control, support, involvement in decision making, to feel respected by caregivers, and to feel treated as an individual during their birth experience. Whereas the doula studies show the positive impacts of doula care, they do not define what it is about doula care that makes a difference for mothers. Whereas Berg's 2006 Swedish study of mothers who received doula support begins to outline the functions of a doula, further examination of these functions is needed. It is also important to involve doulas as informants in any research about their care.

Father's Experiences of Pregnancy and Childbirth

For the past several generations, childbirth was viewed as a purely female activity with women receiving support from other women and birth attendants (Leavitt, 1986; Wertz & Wertz, 1977). Within a single generation, childbirth turned into a couple's activity with expectations that the partner will provide primary emotional and physical support (Johnson, 2002a; McCutcheon-Rosegg & Rosegg, 1984). In the 1980's, a father's presence during labor became expected whether the mother was planning a medicated or natural childbirth (Callister, 1995). Originally, many men desired to be present at the birth of their children and to show their love and care to their wives during the labor process. With men accompanying their wives during labor, labor could no longer occur in a group ward setting. Women required individual rooms. Thus,

husbands were assigned care responsibilities for their wives (Callister, 1995), although there was considerable debate about whether men could handle watching the birth (Draper, 1997).

This shift in expectations occurred with “little apparent negotiation with the relevant role partners” (Johnson, 2002a). In other words, the man’s role at birth was not based on asking the individual man what role he would like to take or felt comfortable for him, nor was it based on what was best for his psychological health or development as a father. The medical system assigned him a role and tasks to perform (Campbell & Worthington, 1982; Cassidy-Brinn et al., 1984; Taubenheim & Silbernagel, 1988). For the current generation of fathers, this was a period of transition between a “traditional” male role that was culturally salient for their fathers, and a “new” male role that was not yet firmly defined (Belsky et al, 1986; Palkovitz, 1985).

The effects of this period of vacillation between modern societal expectations and traditional gender role training from their family of origin was revealed as difficult for many men in the studies of their experiences during pregnancy and childbirth. Men reported experiencing ambivalence, uncertainty, and role ambiguity (Barclay et al., 1996; Buist et al, 2003; Chandler & Field, 1997; Chapman, 1991; Condon et al., 2004; Donovan, 1995; Ellsbury, 1987; Hall, 1995; Johnson, 2002a; Jordan, 1990; Kaila-Behm & Vehvilainen-Julkunen, 2000; May, 1982a, 1982b; Nichols, 1993; Palkovitz, 1985; Vehvilainen-Jlkunen & Liukkonen, 1998).

For example, men in several studies felt coerced to be present during the birth when they would rather not be there (Draper, 1997; Johnson, 2002b; May 1982a). Men reported that their presence during childbirth was stressful as well as joyful. These

feelings of stress interfered with their ability to offer support to their laboring partners (Chandler & Field, 1997; Johnson, 2002a, 2002b; Nichols, 1993; Vehvilainen-Jlkunen & Liukkonen, 1998).

A historical review of nursing, obstetric and social science studies since 1979 of men's attendance at childbirth reveals an interesting trend. Prior to the early 1990's, studies focused on how men's attendance could be of benefit to the mother or the parenting relationship. There was little interest in men's concerns or feelings or how presence during childbirth affected paternal role development (Campbell & Field, 1989). For instance, in 1986 Cox examined the ultrasound experience for couples. The main conclusion was that the father's presence at the ultrasound exam may increase his commitment to meeting the woman's needs and enhanced the role of the father as a helpmate (Cox et al., 1987).

Almost all research conducted on the transition to fatherhood has been done on married or partnered, Caucasian, middle class men taking childbirth classes and having their first child. The majority of these study samples were obtained from the United States and Canada, although a few are from northern England.

Men's Experiences During their Partner's Pregnancy

Unlike their female partner, men had few social or physiological reminders of pregnancy. During this nine month period, the literature illustrates the adaptive process for fathers from viewing their child as a mental representation to an independent individual. In May's grounded theory study of men's experiences of pregnancy (May, 1982b), three phases of paternal involvement evolved: the announcement, the moratorium and the focusing. During the announcement phase, men felt great joy and

excitement if the pregnancy was desired, and pain and shock if it was not. The second phase, the moratorium, was characterized by emotional distance and ambivalence. The pregnancy was separate and not yet integrated into his life. During the focusing phase, men concentrated on the reality of the new baby and how their lives will be redefined. According to May, he must accept the reality of the baby in order see himself as a future father. Donovan expanded on these developmental changes by finding that men experienced disequilibrium repeatedly on many levels (Donovan, 1995). Their experience of pregnancy was characterized primarily of loss. Because of this, men expressed ambivalence, anxiety, and confusion. They reported feelings of loss of a previous role and lifestyle, loss of a comforting sexual relationship, and loss of their spouse as an emotional support. This latter experience was especially important since many men rely on their female partner as their primary source of emotional support (Cronenwett & Kunst-Wilson, 1981; Dulude et al., 2002). During pregnancy she was preoccupied with her own changes and preparations and may be less available (Beaton & Gupton, 1990; Campbell & Worthington, 1982; Ellsbury, 1987; Laplante, 1991).

Several studies have found that pregnancy was the most distressing time for men (Buist et al., 2003; Condon et al., 2004; Genesoni & Tallandini, 2009). It was more difficult and challenging than the postpartum transition period, which was popularly viewed as most stressful for both mothers and fathers. Men experienced more anxiety and depression during pregnancy than in the postpartum period (Buist et al., 2003). They had lower levels of marital satisfaction, and perceived lower caring by their mates antenatally than they did at four months postpartum. Younger men also experienced

more distress. When the pregnancy was unplanned, these feelings of powerlessness or a lack of control over their lives were exacerbated. This continued throughout the infant's first year (Buist et al., 2003; Clinton & Kelber, 1993). In one study of men's psychosomatic symptoms during pregnancy it was found that men who had more symptoms felt more anxiety or changes in their partner relationship than expected (Brennan et al., 2007; Laplante, 1991). Interestingly, partners of women experiencing a high risk or a low risk pregnancy reported similar levels of anxiety or stress (Ferketich & Mercer, 1994). While the higher risk of loss or complications was more difficult for mothers, it was not reported as more difficult for fathers.

For a minority of men their main experience of pregnancy was development (Barclay et al., 1996). While they still experienced adjustment, these men responded with very little or no anxiety, ambivalence, or distancing behavior. They were excited and felt the changes in their relationships were positive. Barclay and Donovan interpreted their information gathering "as a desire to prepare for a new role rather than as a response to feeling a lack of control and confusion about what their role should be" (Barclay et al, 1996). This research revealed that men may have at least two different developmental paths on the transition to fatherhood. Some men struggled with self-definition and confusion and subsequently withdrew to sort through their feelings. Other men welcomed the developmental changes in self that the disequilibrium of this period brought forth.

The Influence of Obstetric Technology on Men's Experience

For women, the markers of growth and adjustment in pregnancy are usually physiological and kinesthetic. Nausea, fetal movements, and attaining a pregnant shape

are several of the many markers for women. Men accept these changes as observers. However, medical technology may now provide men with their own markers. The most significant events were: the confirmation of pregnancy, the public announcement, the ultrasound scan, seeing and feeling the baby's movements, and the labor and birth (Draper, 2002a, 2002b). According to Draper, men's experiences of pregnancy were consistently body-mediated by the mother. Everything he knows came through her, with the man never having direct embodied experience of the baby's existence.

For example, the significance of the ultrasound scan for men was the powerful visual image that it provided. Through ultrasound imaging, the father had a direct experience of his child. The fetus, once hidden and unknown, was now exposed. Prior to the advent of ultrasound, only women had the direct experience of the fetus (Sandelowski, 1994). Seeing the baby on the screen seemed to bring about an escalation of the father's awareness of the baby, in their own words "it seemed more real" (Draper, 2002a) and confirmed their developing identity as fathers. It went from being a "potential baby" to being a "real baby" (Jordan, 1990). Men experienced the ultrasound as an "integral part of their cultural script of expectant fatherhood" (Sandelowski, 1994). After the scan, men felt more attached and emotionally involved with the pregnancy, their wife and the baby.

Men's Presence During Childbirth

Historical perspectives. Beginning in the 1980's, the societal expectation shifted so that a father's active participation as a helper or "labor coach" was expected (Campbell & Worthington, 1982). Men wanted to be present to be close to their partner and offer support (Palkovitz, 1987). Other reasons for attending the birth were to develop

a close relationship with the baby; to express loving feelings towards the baby; to make it easier to become involved in the baby's daily care; and to make it clear that he is a parent and participating in all the "associated responsibilities" (Palkovitz, 1987; Taubenheim & Silbernagel, 1988). To confirm their presence, nurses and physicians developed some father involved symbolic rituals, such as the cutting of the umbilical cord connecting mother and baby (Campbell & Worthington, 1982).

Research articles in the late seventies and eighties focused on the benefits to mothers and health professionals of father's presence (Campbell & Worthington, 1982; Shannon-Baitz-1979). Fathers were seen as providers of care, alleviating the burdens on nurses to provide labor support (Genesoni & Tallandini, 2009; Palkovitz, 1987). It was not until the 1990's that the focus in published research shifted to men's experience of childbirth and its meaning to them as fathers. In an in-depth Canadian study of eleven women regarding their expectations of childbirth, all expected their mate to serve as a labor coach, and "be a busy, active participant in the childbirth process" (Beaton and Gupton, 1990). These expectations were detailed and included massaging, giving back rubs, offering encouragement, walking and talking with the woman, and remembering to take care of the family pets. In addition, men were expected to help the mother maintain control in late labor, recall proper positions for dilation and pushing stages, and instructions for breathing. Fathers were viewed as "orienting agents who would tell the woman what was going on and act as a go-between for her with the hospital staff". Berry found that men felt the pressure on them to act as effective coaches as stressful and felt these expectations are unrealistic (Berry, 1988). For the men in his descriptive study,

labor and birth were stressful events. They were concerned about their partner's well being and their own abilities.

Prenatal expectations and reality of birth. Chandler and Field (1997) interviewed fourteen Caucasian well educated men about their labor and delivery experiences. Eight of the men were also interviewed prenatally, and five main themes emerged. Men felt that their wives would manage labor; that together they would get through it; they would share their feelings reciprocally; the medical staff could be trusted and would be there to help; and that the baby was not quite real. Once labor began, men felt excited and still expressed the idea that together they would be able to get through it. As labor progressed, men utilized the comfort measures they had learned but realized they would have to work harder than they anticipated. Fathers became tired and exhausted from the physical work of labor support. Emotionally, they were distressed from seeing the pain of their partner, as it was much greater than they had imagined. They were disappointed in themselves, having entered labor with the belief that through their efforts alone women would be able to cope with the sensations and discomforts of the contractions. Men felt afraid for their wives, anxious about the baby, and surprised that the medical staff made decisions that didn't include his input. Certain procedures seemed to be arbitrary or unexplained, and several men felt frustrated that they were not consulted about their wives' care. Contrary to their prenatal ideas, men could not share these feelings or concerns with their partners, making them feel more isolated in their own emotional experience of labor.

As the birth became imminent, the father's fears and hidden emotions receded and excitement came to the forefront. They were satisfied with their more active role during

the pushing phase, and pleased that their partners seemed to be suffering less. Lastly, fathers felt a sense of relief, "we made it". Some fathers reported having to continue to advocate for their partner and baby's care, which irritated them. It was not until some time had passed that the men recognized that "these babies were real and were theirs" (Chandler & Field, 1997, p. 22). In contrast to their prenatal expectations, labor and birth was more physically and emotionally demanding, viewing their partner's pain was highly distressing, and conflicts with staff were surprising. Rather than feeling competent in providing comfort to their wives, men questioned whether their coaching had actually been effective.

In a United Kingdom study of fifty-three men whose partners experienced uncomplicated singleton births, men were asked about their role at the birth. Almost three quarters of the group reported it was to support their partner, 15% stated it was to bond with the baby, and another 11% did not know. Forty-one of the men were present during childbirth, and over half of that group expressed that they had not been supportive. They felt "simply in the way", despite the fact that 80% of the group reported hoping to play an active role during labor (Johnson, 2002b). Men who had unfulfilled expectations and feelings of helplessness at not being able to help their partner, had higher stress related scores during the postpartum period (Johnson, 2002b).

Preferred roles. In Johnson's (2002b) study of men who attended his child's birth, 61% perceived some social pressure to be there. Men perceived this pressure coming largely from medical staff, more so than from their wives or partners, and finally family and friends. This pressure was not only to be present at the birth, but also to be actively involved. Chapman also found that pressure on fathers to attend and be actively involved

at the birth was stressful for them (Chapman, 1991). In her qualitative study of twenty couples from diverse economic, racial and educational backgrounds, families had a variety of birth and labor experiences. Yet remarkable similarities were found in the needs and experiences of fathers. Men desired to "co-labor" or labor along with their wives or partners. They looked to her for signals about meeting her needs and chose a labor role accordingly. In analyzing the narratives of their births, Chapman classified participants as coaches, teammates, or witnesses. As coaches, men saw themselves as "leaders or directors of the labor experience". They breathed with the mother with each contraction, and actively made eye contact or massaged her. As teammates, men were helpers or followers conducting instrumental tasks and support activities. They offered ice chips, and provided back support. As witnesses, men were present as a companion and to observe the birth of their child. These fathers watched television, visited with family, or took walks. The majority of men preferred the witness role, as it felt more comfortable to them and allowed them their own experience of the birth (Chapman, 1991).

As men co-labored, they described finding themselves floundering and attempting to redefine their role as labor progressed. Men felt helpless and inadequate as they tried to help their partners cope, especially when their role expectations of themselves were not congruent with what the mothers needed. Johnson remarks that men's role ambiguity was not unprecedented. "Roles are rarely given but are tentatively created during social interaction and involve some role reciprocity on behalf of other actors" (Johnson, 2002b). A specific role is usually centered on a specific task, but the task for the male participant at birth is unclear and undefined. Besides helping their laboring mates, the men in

Johnson's study replied that they were at the birth for themselves – for the rite of passage into fatherhood.

Pain medication. Over half the men in Johnson's study stated in follow-up interviews that their most "overwhelming memory of the birth" was the pain endured by their partner and their inability to assist her or to share in the pain. Many of the men stated that their wives or partners had been striving for a drug-free birth and were satisfied with their choice not to use pain medication. However, the man observing "may be opening himself up to a more negative experience as a consequence" (Johnson, 2002b). In a study of 243 Italian fathers and their reactions to epidural anesthesia, 60% of the mothers had epidurals and 40% had no pain medication at all (Capogna et al., 2007). Fathers were comparable in both groups. Fathers whose partners did not receive epidural analgesia felt their presence as troublesome and unnecessary, had significantly increased anxiety scores, and much lower satisfaction scores with their role in labor. The presence of maternal epidural analgesia increased threefold paternal feelings of helpfulness and was associated with a greater involvement, and less anxiety and stress, greatly increased paternal satisfaction. Additionally, 93% of the fathers in the epidural group would recommend other fathers attend the birth while only 78% in the unmedicated group would.

For 17 men whose partners chose epidural anesthesia, men experienced the onset of active labor as "losing her" (Chapman, 2000). Once the epidural took effect, the mother's usual personality returned and she was able to interact with those around her again. Men felt comforted by this return to normal, expressed as "she's back". Men expressed relaxation and enjoyment when the epidural worked well at pain relief. They

regained a sense of control over the labor experience. Their role with an epidural during dilation is one of reassurance and interacting with the mother in a normative fashion. During the active pushing stage, the father may be more involved in physical support and active coaching (Simkin, 1989).

Medical Staff. Interactions with midwives, physicians, and nurses were also challenging. In Johnson's interviews, men expressed that it was clearly communicated that their role was to support the mother. However men felt "in the way" and that their questions were not welcomed by hospital staff (Johnson, 2002b). In Chapman's diverse San Francisco cohort, men expressed the same bewilderment and confusion about their roles. They felt a lack of direction from the hospital staff and wished for more personal support (Chapman, 1991). Other studies also reported the same uncertainty and mixed messages in their relationships with staff (Chandler & Field, 1997; Nichols, 1993; Vehvilainen-Jlkunen & Liukkonen, 1998). One researcher observed that men felt "they were not treated as a laboring couple, but as a laboring woman with a partner present" (Chandler et al, 1997). In the immediate postpartum period, men found their interactions with nurses to be most influential on their relationship with their newborn but those interactions were overwhelmingly negative (de Montigny & Lacharite, 2004). In health care interactions with infants or children, men were frequently marginalized or ignored by medical providers (Tiedje & Darling-Fisher, 2003). Medical providers utilizing video technology have also noted this behavior among midwives even though it was unintended (Hallgren et al., 2005).

Distressing memories. In a military-based population of fathers who were present at the birth of their first child, the majority of men found the birth to be distressing

(Nichols, 1993). They listed more negative than positive comments on an open-ended questionnaire. In a Finnish study, men were asked what the most difficult part of delivery was for them (Vehvilainen-Jlkunen & Liukkonen, 1998). The most common response was “to watch one’s spouse in pain”, followed by concerns about the baby’s welfare. Next, men regarded “the sense of helplessness”, accompanied by discomfort, fear and tension. This sense of helplessness was widespread in their sample. Studies in Japan (Yokote, 2007) and Taiwan (Li et al., 2009) confirmed that fathers often experience anxiety and distress during their partner’s labor. Tzeng found that father’s birth-related fatigue is a mask for his unexpressed anxiety (Tzeng e al., 2009). Studies of Swedish men have found that during the postpartum period, 13% of men have “intense fear of childbirth” related to seeing their partner in pain, fear for her health and life, and not being treated with respect by medical staff (Eriksson et al., 2005, Eriksson et al., 2006). For many men, being present at the birth is intense and they are also in need of support, however they rarely receive it (Chapman, 1991; Draper, 1997; Nichols, 1993). They have unmet needs during labor which may drift over into the postpartum period, causing distress, depression, or uncertainty (Buist et al., 2003; Goodman, 2004; Johnson, 2002b). In Johnson’s group, only 78% stated they would attend a subsequent birth of their child (Johnson, 2002a). In a large scale study of 340 men, fathers displayed hyperarousal and anxiety related behaviors at six weeks postpartum (Bradley et al, 2008). These behaviors were significantly correlated with attendance at the birth. While higher trait anxiety was related with higher levels of these behaviors, men with lower trait anxiety still displayed stress related behaviors linked to birth attendance. Bradley states, “Specific obstetric procedures were mainly unrelated to symptomatology, again

indicating that appraisal of events rather than the experience of the event itself (other than whether present for delivery) was more important."

Positive memories. Alternately, in the Finnish study, men were asked what the "best thing" was about the birth (Vehvilainen-Jlkunen & Liukkonen, 1998). Most of the answers mentioned individual experiences with the baby, followed by feelings about themselves as fathers. Almost all the fathers regarded their presence as extremely important for the process of becoming a father. In the United Kingdom study, many men stated that cutting the umbilical cord was the only time they felt themselves to be a useful part of the birth. It signaled "a liberation, a rite of passage, and the beginning of a redefining of relationships" (Johnson, 2002b). Presence at the birth has become a marker event for men in the journey to fatherhood. When a man holds his baby in his arms, the realization that this child is connected to him is powerful and overwhelming (Campbell & Field, 1989; Campbell & Worthingon, 1982; Chandler & Field, 1997; Chapman, 1991; Draper, 1997; Johnson, 2002a; Jordan, 1990; Kaila-Behm & Vehvilainen-Julkunen, 2000; May, 1982a; Nichols, 1993; Palkovitz, 1985; Vehvilainen-Jlkunen & Liukkonen, 1998; Williams & Umberson, 1999; 2000). Men described the visual impact of his child, or even its fragrance, as being their most overwhelming memory.

Summary. The period of pregnancy and the intensity of birth are marked by confusion, disequilibrium and distress as well as unique joy for most men. They are uncertain of who they are and who they are becoming. Their main source of support (the laboring mother) is unavailable and preoccupied. Messages from the majority culture as conveyed through the media, friends, family and medical professionals communicate his role as helper and subordinate to the mother. Rarely does he receive support for his own

individual experience of pregnancy or labor and delivery. Technology was his helpmate, in that it provides experiences that directly relate to him and are not body mediated by his mate.

Historically, in order to obtain admittance to the obstetric ward men had to legitimize their presence. Being a coach gave men a role at birth, but its rigidity may now have become constricting. Men in different studies reported feeling pressured and subsequent disillusionment and depression over their ineffectiveness at labor support. Men's presence at birth has different meanings to those who are present: the laboring mother sees his presence as essential, while the nurse may seem him as a primary helper or as a nuisance. Many first-time fathers were unaware of what it meant to be present at the birth.

Lastly, pregnancy was discovered to be a more difficult and stressful time for many fathers than the first weeks or months after the infant arrived. These two transitional periods are distinctly different. Pregnancy was reported by men as being a period of disequilibrium and confusion. There was a great deal of uncertainty, and much of the change in their lives was symbolic and internal. Postpartum, the infant was an individual person and those changes in his life were real and external. The postpartum lifestyle changes were shared with his wife or partner, and possibly with other family members. While it was disruptive and required adjustment, men did not report that period as being the root of their anxiety or difficulty. Rather it was the unresolved anxieties that surfaced during pregnancy or the unpleasant aspects of being at the birth that continued to bother men and made their postpartum adjustment more difficult (Buist

et al, 2003; Clinton & Kelber, 1993; Condon et al., 2004; Deater-Deckard et al., 1998; Dulude et al., 2002; Ferketich & Mercer, 1994, 1995; Goodman, 2004; Johnson, 2002b).

In my previous research on effective labor support that I conducted for my master's thesis, I started out with the general research question, "What is effective labor support by doulas?" Utilizing a grounded theory approach, and mothers and doulas as informants, I outlined a theory of effective labor support. The next section will detail my findings followed by areas for future research.

Gilliland's Theory of Effective Labor Support By Doulas

At its current stage of development, my theory of effective labor support has identified the main processes involved in the functions of providing labor support. These processes and their relationships to one another are illustrated in Figure 1. The foundational level encompasses the personal characteristics of the individual doula: her personality, skills, desires, and abilities. Next is the base element for effective labor support: continuous care, which has been described in the literature. Building on this are the five essential strategies for effective labor support. These are used by every doula at each birth. After these two levels of basic support is the primary relationship process that occurs between a mother and her doula. The mother may focus attachment behaviors towards her doula and the doula may in turn act as a secure base for the mother during labor.

The next level of the model is dependent on the doula's level of experience. Novice doulas may not use these implementation strategies. Rather, use of these strategies develops over time as doulas decide what types of basic labor support strategies to use in a particular situation. The most experienced doulas in the study mentioned at

least three of these operational strategies in their interviews. The top of the diagram indicates attunement, a secondary relationship process between mothers and doulas that is dependent on the levels below. It occurs between a mother and her doula only when certain conditions are met.

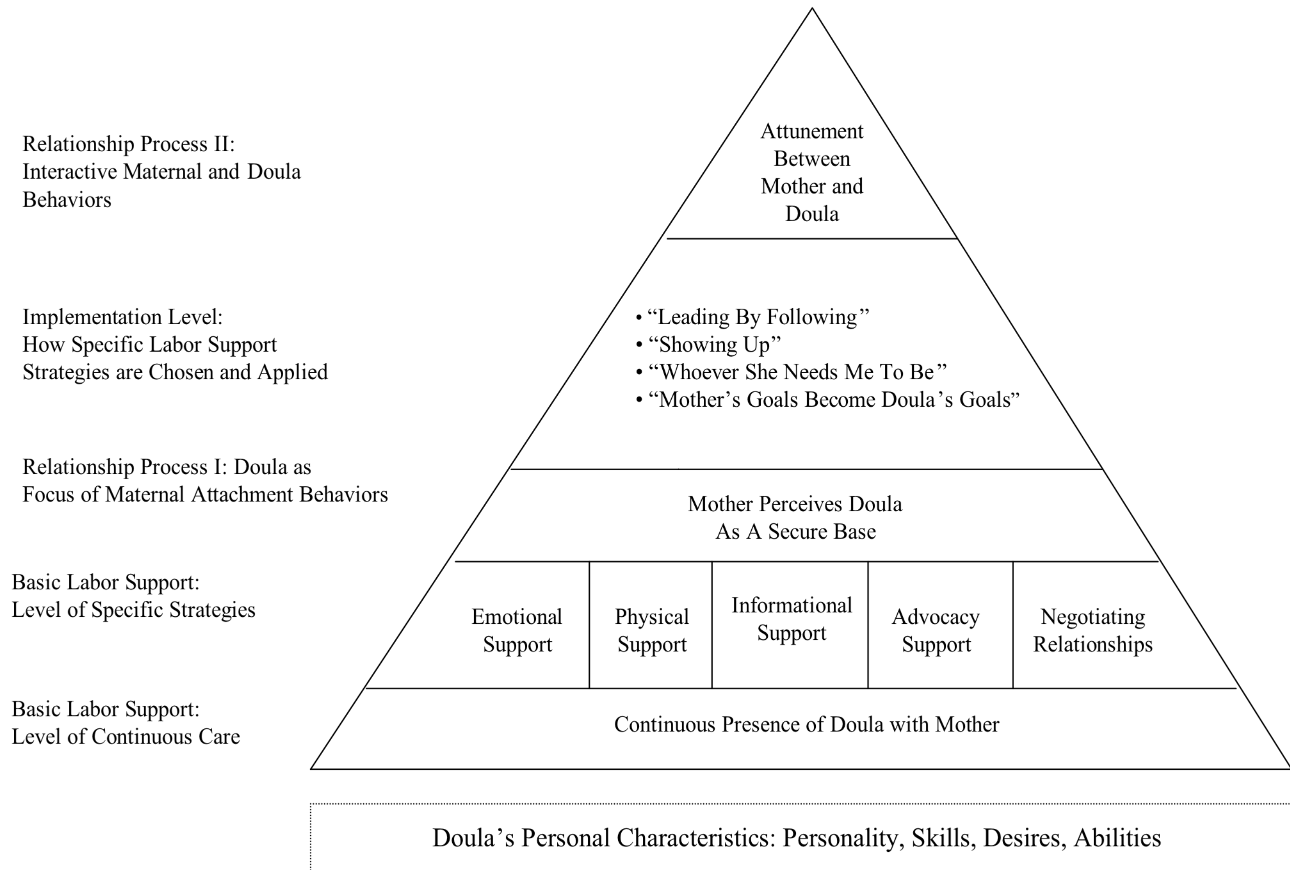

Figure 1. Elements of Effective Labor Support by Birth Doula

It is important to note that for most of these aspects of labor support, the division between them is artificial. At a birth, a doula's action of stroking a mother's forehead may signify both emotional support and physical support. Through this act of reassurance, the mother perceives herself as safe in the presence of her doula, thus

perceiving her as a secure base in the experience of laboring. In this way, the same action has different meanings and levels of significance for the participants. However, by uncovering the purpose and meaning of the action, it was possible to identify the many levels of complexity that make up effective labor support.

Defining the five specific strategies. This theory also established a categorization of the functions that doulas provide during labor. Whereas DONA International has defined birth doula care as "providing physical, emotional and informational support to the laboring mother throughout her entire labor" (DONA, 1998), this definition was not created on the basis of research but on the lived experience of birth doulas. While a valid source, a closer scientific examination from doulas and mothers provided greater illumination on the subject. In fact, two more categories, advocacy and negotiating relationships, emerged in addition to substantiating the three already described.

Emotional support encompasses the utilization of basic and complex strategies that enhance the mother's well being, increase her confidence and her ability to cope. Physical support refers to the use of comfort measures to less labor discomfort, techniques to enhance fetal descent, and fulfilling housekeeping duties. Informational support refers to clarifying information the mother is being given by medical personnel and breaking down concepts into easily understood language. Advocacy[1] is the skill of

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[1] Advocacy has different meanings for different professions and in different medical settings. In some contexts, advocates speak out for what is in the best interests of a particular person or group especially one deemed not capable of advocating on their own behalf. According to the National Patient Safety Foundation (2003), medical patient advocates may communicate on the patient's behalf or make choices for them. Professional standards for obstetrical nurses oblige them to respect patients' autonomous choices and to act as their advocates to other medical professionals. However, this can be challenging for nurses to act upon due to personal feelings and ethical conflicts (Sleutel, 2000; Simmonds, 2008). Doula advocacy is defined by DONA International's Scope of Practice in Appendix A. In contrast to other forms of advocacy, one of its important precepts is that doulas do not make decisions for a mother or speak on a mother's behalf. Laboring mothers are seen as capable of expressing their preferences. Because of this, advocacy in a doula context deserves to be explored more fully.

encouraging mothers to communicate their needs and desires during labor, and understanding when and how to speak on the mother's behalf. The doula must also be skilled at negotiating relationships with fathers, immediate family members, nurses, physicians, and midwives. The needs and requirements of each of these individuals and their relationship to the laboring mother vary unpredictably from birth to birth. In order to be effective to the mother, the doula must develop a working relationship with each of these people that is functional for the mother and for the doula.

Defining each of these concepts was one of the important early findings that helped to delineate the course of the remaining research project. Both emotional support and physical support were developed further, illustrating more deeply the categories and processes involved in each one. Informational support, advocacy, and negotiating relationships remain to be further analyzed.

Physical support. Along with emotional support, physical support is one of the areas of labor support most strongly associated with doula care. Doulas are defined by their ability to lessen discomfort and enhance comfort, to know positions that enhance fetal descent, and to be physically able to massage, stroke, or hold women's bodies in a variety of positions. Doulas are therefore expected to have a variety of techniques at their disposal and to know when to use each one. Mothers respond to labor in a variety of ways, and no set combination of techniques works for every woman. It is the ability to individualize her knowledge to the mother that makes the doula so valuable to the mother and the health care team. Effective physical support during labor is the use of strategies to lessen discomfort and enhance comfort and relaxation; the use of positions and techniques to enhance cervical dilation and fetal descent; structuring the environment to

make it conducive to laboring; assertive vocal communication; and fulfilling essential housekeeping and personal care duties. These five functions of physical support are accomplished through the application of specialized doula knowledge and emerge as a four step continuous process (Figure 2). The doula must be skilled enough to observe the mother carefully and then become involved in her care. Observation of the mother is the first step. The doula looks for the mother's rhythm, ritual, and her chosen physical position during a contraction. Next the doula inquires about the mother's physical state, her level of comfort with that position, areas of pressure, and physical sensations. She looks for symptoms such as nausea and back pressure. After this initial assessment, the doula may make suggestions that would make the mother more comfortable or lessen a particular discomfort. The doula employs this process to fulfill each of the five functions.

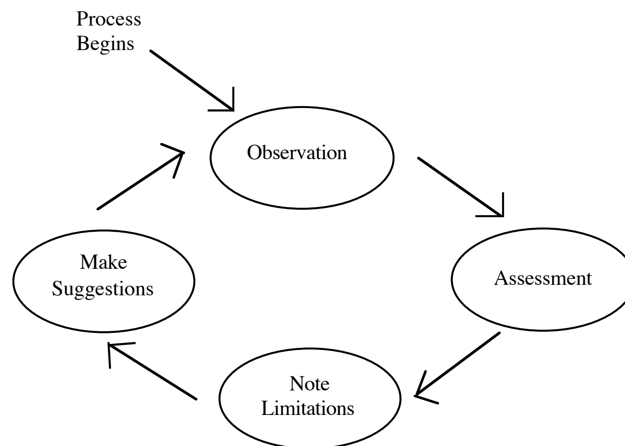


Figure 2. Doula's Continual Process of Applying Physical Support Skills

Emotional support strategies. Emotional support identifies doula care and is its main purpose. All of the varied activities of a doula, such as physical support and

advocacy, indirectly support the mother emotionally. Emotional support strategies are the direct mechanisms through which mothers perceive the caring of their doula. Doulas employed nine specific emotional support strategies to assist the mother during labor. Five of these were simple strategies: reassurance, encouragement, praise, explaining, and mirroring. Mothers gave examples of all of these techniques except mirroring being used by nurses and their husbands or partners during labor. The simple strategies are often used in combination with one another. Four strategies were more complex: acceptance, reinforcing, reframing, and debriefing. The complex strategies and mirroring were used exclusively by doulas in the mother's birth narratives. They are more complex because they require experience at multiple births, reflection, a deeper understanding of the mother's needs, and ultimately a higher level of emotional intelligence and skill. A definition of each of these strategies is provided in Table 2.

Complex emotional support strategies invite further explanation. In mirroring, the doula states calmly and concisely the situation that is occurring, and echoes back to the mother her same feeling and intensity. This is emotionally supportive because it helps the mother to focus in the present and face what is occurring with less anxiety. Mirroring is a behavioral strategy that has been explored in many contexts, including the mirroring of facial and vocal contingent reactions during infant-mother interactions (Legerstee & Varghese, 2001; Nichols et al., 2001) and postural mirroring between therapists and clients (Sharpley et al., 2001). Doulas in the study presented examples of using the mirroring strategies of nonverbal synchrony and rapport (Bavelas et al., 1987; Van Swol, 2001), contingent facial and verbal responses (Nichols, Gergely, & Fonagy, 2001), and motor mimicry (Bavelas et al., 1986, 1987; Bavelas et al., 1988). In these ways,

Table 2.

Definitions of Emotional Support Strategies

Strategy	Definition
Reassurance	The verbal acknowledgement of a mother's feelings accompanied by a statement to help the mother feel less anxious or worried
Encouragement	The verbal and non-verbal behavior of the doula that inspires confidence or courage in the mother and a will to continue
Praise	A verbal statement that expresses approval or admiration for the laboring mother and her accomplishments
Explaining	To express ideas or thoughts in a way that can be easily understood by the laboring mother or to give her a reason for something that has occurred
Mirroring	A verbal and non-verbal strategy where the doula describes the situation that is occurring calmly and concisely, and echoes back to the mother her same feeling and intensity
Accepting	A verbal or non-verbal emotional support strategy that takes in the response of the mother or facts of the situation without attempting to change the mother's response or feelings
Reinforcing	A comment or action designed to support and encourage something the mother is already doing or feeling
Reframing	A verbal dialogue between the doula and the mother designed to shift the mother's perception of herself or the labor situation to a more positive outlook
Debriefing	Focusing one's attention on the mother in an empathetic way so that she can talk about her feelings and feel listened to

mirroring becomes a sophisticated emotional support and communication technique applied by doulas in labor support contexts.

Acceptance is a verbal or nonverbal emotional support strategy that can be used by doulas in two ways. First, the doula tolerates or takes in the response of the mother without attempting to change her response or feelings. Second, she acknowledges the facts of the situation before her and comes to terms with it, once again without trying to change it or see it differently than it is. Many mothers find the doula's acceptance of their behavior supportive.

Reinforcing is a strategy used by doulas to make stronger something the mother is already doing or feeling. A reinforcing behavior is a comment or action designed to support and encourage the mother to continue what she is doing. This strategy is frequently used when mothers are questioning their own feelings. Mothers want to know that their feelings are valid and appropriate for the situation. The reinforcing response is, "You feel what you feel." The doula will reiterate what the mother has said and amplify it slightly.

Reframing is a verbal dialogue between the doula and the mother designed to shift the mother's perception of herself or the labor situation to a more positive outlook. This outlook is based on the doula's perception of the situation or experience with past mothers and past births. The purpose of reframing is to assist the mother in adopting a more positive point of view of herself and her capabilities, which then raises her level of emotional functioning. The doula offers a different opinion of a situation, one that arises from her credibility as a childbirth professional. The act of offering a different outlook is called "framing" or "reframing" (Bandler & Grinder, 1982). Reframing is frequently

used in counseling situations. Language used by the doula in reframing is gentle and ambiguous: “maybe”, “possibly”, “could”, “consider”, “why don’t we”, “how about”. In these ways, the process of reframing by the doula is similar to reframing techniques used in a counseling context by therapists. According to many doulas, frequently mothers cannot foresee how the tasks of labor will affect them. Because women don’t understand birth they tend to judge themselves negatively and feel badly about their reactions to the pain or intensity of the experience. The act of reframing in this context is to portray that behavior as positive. It is a constructive coping mechanism for what she is going through.

In their interviews, numerous doulas mentioned another situation when reframing is vital to the mother’s future concept of herself. Many mothers hire doulas because they desire a birth with few interventions and less reliance on pain medication for coping. Reframing is often used by the doula if the mother eventually decides to utilize narcotic or epidural medication. Sometimes mothers set a drug-free birth as a goal for themselves, and judge themselves poorly if they make the decision to use medications. Through the technique of reframing, the doula can influence how the mother will remember the decision and how she will perceive herself later on.

Debriefing is an emotional support strategy that utilizes active listening skills. It is focusing one’s attention on the mother in an empathetic way so that she can talk about her feelings and feel listened to (Small et al., 2000). Frequently, doulas utilize this skill during labor when the decision to do a cesarean for non-progression of fetal descent has been made. Many mothers want to discuss their labor, to talk about how they feel about what has happened in the last few hours. Even though, by its definition, they are still in

labor waiting for the birth of their child. Thus debriefing is a skill used during labor only in certain circumstances.

Emotional support emerged as one of the most salient concepts in describing the functions of doulas assisting mothers during labor. When providing care for mothers, the doula's primary goals are the emotional health of the mother and facilitating the mother's positive memories of the birth experience. The doula understands from training or life experience that those memories impact significantly on women's lives (Morton, 2002, Simkin 1993). Use of these nine different emotional support strategies make the woman feel cared for and respected as an individual and raise her confidence in herself (Corbett & Callister, 2000). Application of the five complex strategies requires a higher level of emotional intelligence and skill than the first four strategies mentioned above.

Implementation strategies. As doulas grow in labor support experience and increasingly reflect on those experiences, a new level of decision making emerges. Implementation strategies are the processes that doulas employ to choose specific strategies to apply in different situations. These implementation strategies include "Leading By Following", "Showing Up", "Being Whoever She Needs Me To Be" and "Mother's Goals Become Doula's Goals". "Leading By Following" and "Showing Up" have been developed, but the other two strategies remain to be examined.

"Leading by following" is a way of offering physical and emotional support to the mother based on observing her, using one's acquired knowledge to ascertain what the mother needs, and being willing to do what is necessary to help the mother meet the demands of her labor. Leading by following is a combination of skills that doulas utilize to tailor their care for each mother at any given moment. Mother's needs shift during

labor and the doula must shift with the mother and her labor. When the doula leads the mother, she is following the mother's cues to see what she needs, and to answer those needs.

"Showing Up" is several steps beyond the emotional support strategy of acceptance. Acceptance is tolerating something without attempting to change it, and is used in the present moment. Showing up is an approach of non-judgment and a series of continuing actions over time that support the mother wholeheartedly even when others are unable to accept or support the mother's needs.

The doula as a secure base during labor. The term "secure base" was initially used by attachment theorists John Bowlby (Bowlby, 1969; 1982) and Mary Ainsworth (Ainsworth et al., 1978) to describe an infant's use of the mother as a base of operations from to explore his or her surroundings, secure in the knowledge that she will come to his or her aid when needed. This requires that the mother be perceived as accessible as well as appropriately and promptly responsive to the infant's attachment signals.

Bowlby (1979) also proposed that the psychological need for security and safety continues throughout the life course, noting that contact with nurturing caregivers lessens perceived stress. The attachment system is activated most strongly during adversity, whether that adversity comes from the individual's own efforts at exploration and achieving goals or from unexpected distressing events (Bowlby, 1988; Feeney, 2004). The provision of a secure base is the type of support that occurs with regard to a significant other's exploratory behavior. According to attachment theory, a secure base gives individuals the confidence and courage to accept challenges and take risks (Bowlby, 1969/1982). In adulthood, exploratory behavior can be defined as challenges

"that are possible to accomplish with some effort, focus, and planning, and not those events that are impossible or beyond one's abilities to accomplish, which would create distress and activate the attachment system and safe haven behavior" (Feeney, 2004, p. 633). In comparison, the provision of a safe haven in an attachment relationship occurs when an individual feels distress in response to an event or circumstance that feels distressing, overwhelming, and that they are incapable of responding to without assistance (Feeney, 2004, p. 632; Feeney & Collins, 2006).

Pregnancy, while seen as a normative developmental change, is a time of emotional upheaval. Labor and childbirth are events that are possible to anticipate, plan for, and get through. They meet the requirements of exploratory behavior and the application of secure base theory. While there may be moments during labor that are distressing where trusted family members may provide a safe haven, the event itself is more applicable to secure base models of attachment theory.

At this time a mother anticipating childbirth as a stressful or life changing event and sensing her need for comfort may decide to work with a doula whom she considers trustworthy and capable of providing that secure base once the labor has begun. As her doula displays consistent caring behaviors oriented towards the mother, the mother will feel more secure and able to cope (Richardson, 1979). Although this does not mean the mother has developed an attachment to her doula, an effective doula fulfills functions that resemble those of a sensitive attachment figure whom the laboring woman can trust to "be there" for her when needed.

It is important to distinguish between the relationship to an attachment figure, and the doula as a focus of directed attachment behaviors. In adulthood, an attachment figure

is a person to whom one has a significant attachment bond and enduring relationship (Kirkpatrick, 1998; Lopez & Brennan, 2000), such as a spouse or mate, sibling, or parent. However, when one feels vulnerable or is in distress, attachment behaviors may be directed towards someone other than or in addition to an attachment figure in order to elicit comfort and assistance in regulating emotions (Kirkpatrick, 1998). It is in this way that the mother reveals her distress and need to the doula. The doula becomes a secure base for the mother through her continuous presence, genuine encouragement, and comforting touch.

During analysis of maternal narratives, themes surfaced that had a definite attachment and secure base ideas. It was upon the detailed analysis of these concepts that a detailed model of attachment behaviors and caring responses emerged. There was no pre-existing idea that any attachment ideas would be present before the project was commenced. Various relationship processes and their connection to emotional support and physical support strategies clearly emerged from the data during the analysis process. There are five properties of the secure base function in doulas. All of these properties are based on the mother's perception of the doula as being able to serve in these capacities. It is not built upon the doula's actual abilities or behaviors. First, the mother perceives the doula as being available to her at all times during labor. The doula is available when the mother first wants her during labor. Additionally, the doula's presence is continuous during labor and birth. Second, the doula perceives the mother's emotional needs accurately. Mothers display an innate sense of trust in their doula, as exemplified in this typical statement: "Because of her experience, she will know what I'm feeling and she will know what to do about it." Third, the mother must be able to trust the doula to

effectively represent her interests during labor, both to the mother herself and to other people present. Fourth, the doula is viewed as strong and capable, both emotionally and physically, no matter now the labor experience may unfold. Even though the birth experience may be overwhelming or totally encompassing for the mother, she perceives that her secure base can handle it. The doula copes with whatever happens and stays no matter how long it takes. Fifth, the doula is seen as having resources, such as information and knowledge, which the mother does not possess. It is the perception by the mother of the doula as possessing these resources that is significant, not only their application.

One area of complexity is the integration of support strategies and processes that allow the doula to establish a relationship as a secure base for the mother. I posit that this aspect of labor support is crucial for its success. If the doula does not make the mother feel safe and supported, then she is not successful in her aim. However this is not entirely up to the doula; it is the mother's perception of her doula as functioning in those five capacities that sets up a relationship in which the mother can feel comfortable in asking for and accepting help when needed. Doulas and mothers may not describe their experiences using attachment terminology, but the essence of their experience is a catalog of terms we associate with attachment: "cared for", "soothed", "safe", "there for me", "trusting".

Specific strategies of physical support, emotional support, informational support, advocacy, and negotiating relationships all serve to enhance the doula's position as a secure base for the mother. The implementation strategies of "Leading By Following", "Showing Up", "Being Whoever The Mother Needs Me To Be" and "Mother's Goals Become Doula's Goals" are the ways in which experienced doulas increase the

appropriateness, promptness and effectiveness of their responses to mothers' needs or to situations as they arise in labor. While I assert that implementation strategies are not necessary for the doula to be a secure base for the mother, their use does enhance that aspect of the relationship. All of these strategies used together serve as the methods through which the attunement process is possible. These relationships are summarized in Table 3.

Because of the emotional complexity of human relationships, these concepts interact in a dynamic fashion. They do not form a static, linear, or even circular model. Rather, these skills are utilized by doulas as they respond to situations that arise during unique labors. The doula moves from one to the other, using processes she has developed over time. She murmurs encouragement while assisting a mother to hold an uncomfortable physical position during a contraction. In the next moment, she requests a position change to help the mother be more comfortable. Then she smiles reassuringly at the father. In the space of two minutes, this typical doula has performed emotional support, physical support, advocacy, and negotiating a relationship with the father. In order to examine each of these concepts more closely and thoroughly, they were separated as different functions. But in the context of giving support during a birth, these concepts interact and weave together to create a unique interaction during every labor.

Table 3

Interrelationships between the Secure Base Functions and Support Strategies and Processes

Secure Base Functions:		Availability	Accurately perceive her emotional needs	Effectively represent her interests during labor	Strong and capable, both emotionally and physically	Having resources which the mother does not possess
Level of Strategy	Strategy					
Basic	Continuous Care	X				
Specific	Emotional Support		X	X	X	
Specific	Physical Support				X	X
Specific	Informational Support			X		X
Specific	Advocacy			X		X
Specific	Negotiating Relationships		X	X	X	X
Implementation	Leading by Following		X		X	X
Implementation	Showing Up		X		X	
Implementation	Be Who She Needs Me To Be	X	X	X	X	X
Implementation	Mother's Goals are Doula's Goals			X	X	

This table shows how each of the doula's strategies support fulfilling the secure base functions for the mother. The levels of strategy refer to the elements of effective labor support outlined in the Elements of Effective Labor Support figure.

Attunement. Attunement emerged from the data as one of the culminating processes of effective labor support between mothers and doulas. When the doula has fulfilled the secure base function and used one or more implementation strategies to individualize the use of specific support strategies, attunement between mother and doula may result. Attunement is defined here as the occurrence over time of a rhythmic, patterned, sequence of events where both the doula and the mother feel a sense of trust, oneness, and communication of sensations and the mother's need during the first stage of labor. Attunement begins during the first stage of labor (dilation) and may extend into the second stage (pushing). However, if it is not present during first stage it will not begin during the activity of second stage.

A complex set of processes and conditions must be in place for attunement to occur. It involves interaction between all of the people present, the events of the birth, as well as the actions of the doula. The doula must approach the mother in a receptive and confident manner and utilize appropriate labor support measures that are individualized for her and her circumstances. Attunement is different from any of the implementation strategies, since the purpose of an implementation strategy is to choose specific emotional, physical, informational, or relationship support techniques. Attunement is not a strategy, it is a relationship process. A doula can work to create conditions where attunement is more likely to happen, however she cannot create it. It is an interactive, dynamic process that happens between a mother and a doula, or a mother, intimate family member and a doula.

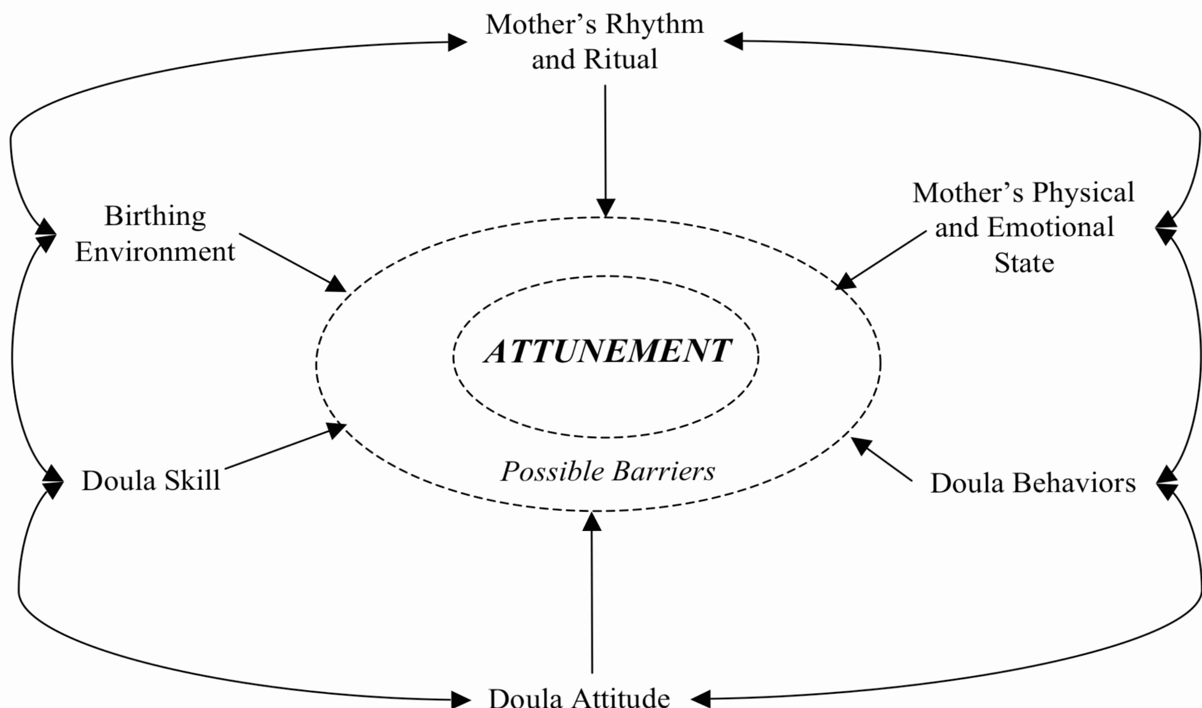
Attunement may be an outgrowth of the laboring mother's own rhythm and ritual. A key concept of emotional support in labor is rhythm and ritual (Simkin, 1989, p.74).

During the early to active phase of labor, a mother will naturally start to move to an individual rhythm. As a part of acting out that rhythm, mothers will also begin a coping ritual (Simkin, 1989). Ultimately, attunement is the culminating process of all the strategies and processes involved in effective labor support. It builds on the mother's psychological need for a secure base during labor. If that is not thoroughly met, attunement is not possible. There are many factors involving both the doula's internal processes and external actions, the rhythm of the labor, and the openness of the mother that make it more emotionally complex than any other concept in this study. The doula is the leader in attunement. A summary of the attunement process and conditions is in Figure 3.

In summary, my theory encompasses what doulas actually do in the labor room and offers possible explanations for the doula's positive effect on obstetric and neonatal outcomes. Through an attachment connection, the use of attunement strategies, and counseling techniques, doulas increase the likelihood of a positive birth experience for mothers independent of the events of the birth. Previous research has shown that involvement in decision making and feelings of control are integral to a mother's perception of her experience. However doula care goes beyond creating positive memories into creating experiences that are life-changing for many women. Through the doula's presence and her use of these processes of labor support, she may change the atmosphere, the mother's attitude, and the progression of the labor itself.

Figure 3.

The Attunement Process



Doula Skill

- Knowledge of birth process
- Observational abilities
- Ability to convey sense that doula is a secure base

Doula Attitude

- Mother-focused
- Non-judgmental
- Empathetic
- Confidence in mother's ability to birth
- Willingness to push aside distractions

Doula Behaviors

- Physical proximity
- Protective of space
- Anticipating needs
- Paying attention
- Remembering
- Addressing mother's immediate needs

Mother's Physical and Emotional State

- Established rhythm of labor
- Trusting of and open to doula
- Ability to cope with pain using doula's help

Possible Barriers

- Lack of doula skill
- Problem with doula attitude
- Problem with doula behavior
- Precipitous labor
- Pain medication
- Epidural

Research Questions

After an examination of the literature regarding doula care and my previous work on labor support by doulas, several interesting questions remain. What are the main reasons why the doula effect occurs? What relational factors might contribute to positive obstetric and neonatal outcomes? The previous phase of my research and theory development revealed that doula care was far more complex than originally envisioned. Further examination of the complexities involved in doula relationships and the processes and functions of doula care is warranted to gain a more complete picture of effective labor support.

Understanding effective doula care more completely would contribute both to research and practice. From a research standpoint, doula care of the laboring mother is a unique relationship. While the mother's relationships with her obstetric nurse, midwife and husband have been examined in the literature, none of those roles has emotional support of the laboring mother at its core. Emotional and physical support of the mother by the doula was examined in my master's thesis and revealed intriguing, albeit incomplete findings. The other components of its constructed doula care model may be equally interesting when given the same investigation. Namely, this dissertation sought to define and investigate the processes of informational support and advocacy, plus the dynamics present between the doula and the father or the baby. For this project, the father of the baby was also the laboring mother's male partner or spouse who is present during the labor and birth. A cursory examination would likely reveal that the relationship between the doula and the father would be vital to the mother's labor coping

and quality of satisfaction with her birth experience. However, to my knowledge, there has been no study done on this relationship.

Another area of interest was the differences and similarities between hospital-based doulas who meet mothers in labor and independent practice doulas who establish relationships prenatally. Comparing and contrasting the voices of these different doulas and the parents who are the recipients of their care has the potential to further enlighten us about aspects of birth doula support. All of these areas of inquiry have the potential to seriously impact the practices of emotional support and caring for families.

While the main research question remained "What is effective labor support by doulas?", this dissertation aimed to answer questions about three intriguing areas of doula care. The first area was alluded to in my original model figure under "Basic Labor Support: Level of Specific Strategies". (That figure is repeated here as Figure 4 with the areas of remaining inquiry indicated.) The guiding questions for this part of the inquiry were: (1) what is informational support by doulas? (2) how do doulas define and practice advocacy during labor? (3) where does informational support end and advocacy begin?

The second area of interest was the relationship processes between doulas and fathers. What are the significant factors influencing the relationship between a doula and a father? Do they work together effectively to do labor support or not? How do doulas successfully or unsuccessfully support fathers? In Figure 2, "negotiating relationships" is the area that is indicated for covering this relationship as well as the doula's relationship with the mother's nurse(s).

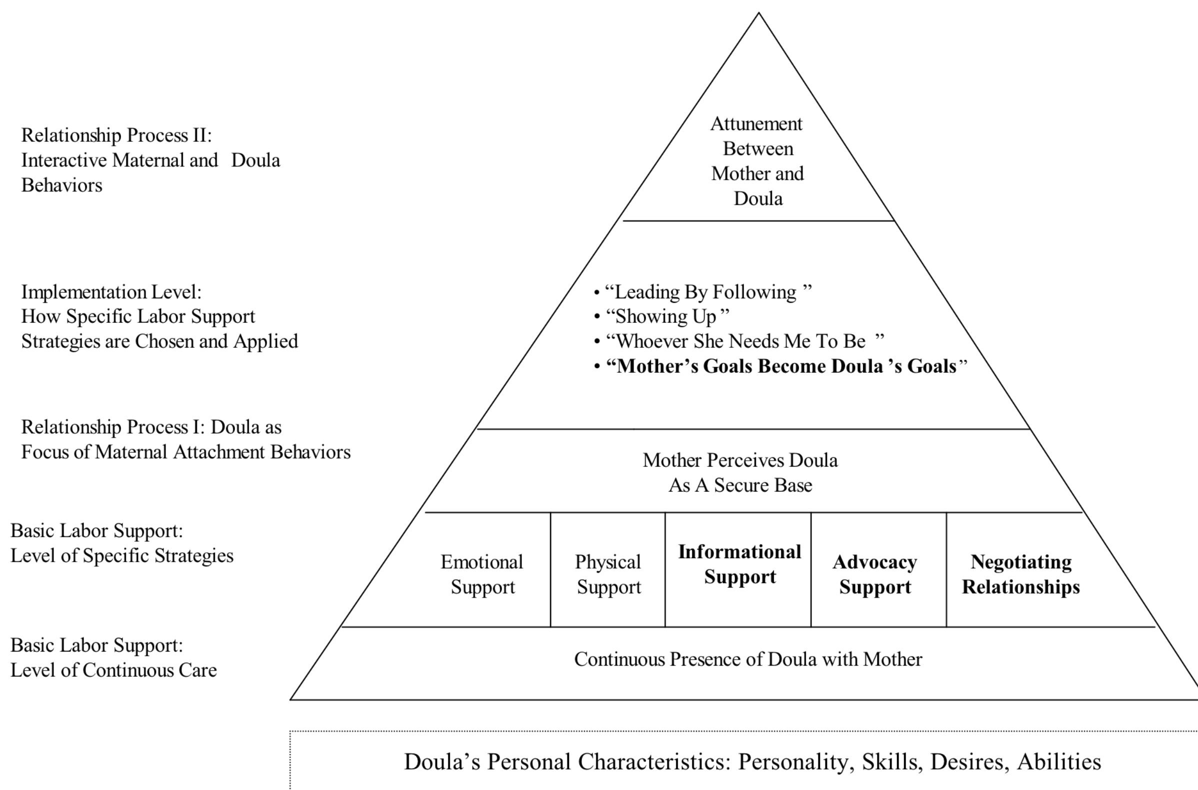


Figure 4. Elements of Effective Labor Support By Birth Doulas
Items in bold type are areas of inquiry included in this dissertation.

Lastly, this dissertation sought to answer questions about hospital-based doulas. How is their care different from doulas who know the mother (and father) before labor? Do parents consider it effective? What is it like to be a doula and a hospital employee? The next chapter covers the methodological structure that was followed in order to effectively answer these guiding questions.