MATERNAL REPRESENTATIONS DURING PREGNANCY:

A STUDY OF THE FIVE MINUTE SPEECH SAMPLE

AMONG PRIMIPAROUS WOMEN

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DECLARATION OF ORIGINALITY

I, Melike Hacıoğlu, certify that

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ABSTRACT

Maternal Representations During Pregnancy:

A Study of the Five Minute Speech Sample Among Primiparous Women

The present study examined primiparous women's mental representations about their unborn baby in relation to their age, prenatal distress, depression, and family income. The sample included 108 expectant mothers, who were in the last trimester of their pregnancy and aged between 21 and 42 years (M = 29.8). The data was collected through home visits. Maternal representations were measured through the Five Minute Speech Sample (Gottschalk & Glesser, 1969) procedure and the samples were coded using the Narrative Coherence scale (Sher-Censor & Yates, 2010). Prenatal distress (Yali & Lobel, 1999) and depression were assessed through the Prenatal Distress Inventory and the Center for Epidemiological Studies Depression (CES-D) Scale (Radloff, 1977) respectively. The correlations showed that there was variability in relationship among some scores such as focus, elaboration, acceptance, complexity, and coherence. The results of logistic regression analyses revealed that while mothers with higher levels of income used more elaborated narratives about their unborn babies and future mother-infant relationship, they were more concerned about the potential challenges of parenting compared to those with lower levels of income. Moreover, they were more likely to be distracted and lose their focus instead of keeping the baby and relationship as the focal subject of the speech. The practical and methodological implications are discussed from a scientist-practitioner perspective.

ÖZET

Hamilelikte Annelik Temsillerinin İncelenmesi:

İlk Defa Anne Olacak Kadınlarla Beş Dakikalık Konuşma Örneği Çalışması

Bu çalışma, ilk defa anne olacak kadınların doğmamış bebekleri ve gelecek ilişkileri hakkındaki annelik temsillerini Beş Dakikalık Konuşma Örnekleri alınarak, annenin yaşı, doğum öncesi stresi, depresyonu ve ve aile geliri gibi bazı demografik değişkenler bağlanmında incelemektedir. Çalışma, gebeliğinin son trimesterinde olan ve yaşları 21-42 arasında (M = 29,8) değişen 108 primipar kadın ile yapılmıştır. Çalışmanın verileri ev ziyaretleri yoluyla toplanmıştır. Katılımcıların anneliğe dair temsilleri Beş Dakikalık Konuşma Örneği (Gottschalk & Glesser, 1969) prosedürü ile ölçülmüştür ve alınan konuşma örnekleri Anlatı Akıcılığı ölçeği (Sher-Censor & Yates, 2010) kullanılarak kodlanmıştır. Doğum öncesi stres düzeyi ve depresyon sırasıyla Prenatal Stres Ölçeği (Yali & Lobel, 1999) ve CES Depresyon Ölçeği (Radloff, 1977) ile ölçülmüştür. Korelasyonlar odaklanma, detaylandırma, kabul, karmaşıklık ve akıcılık gibi puanlar arasındaki ilişkilerde değişkenlikler olduğunu göstermektedir. Lojistik regresyon analizlerinin sonuçları yüksek gelirli anne adaylarının, düşük gelirli olanlara kıyasla, bebekleri hakkında daha detaylı ve örneklendirilmiş konuşmalar ürettiklerini, ancak bunu yaparken daha fazla kaygı belirttiklerini göstermektedir. Ayrıca, yüksek gelirli grubun, konuşmanın odağını bebek üzerine tutmakta ve dikkatini sürdürmekte zorlanma olasılıkları daha yüksek bulunmuştur. Bulguların uygulamaya dair ve yöntemsel anlamları bilim insanı-uygulamacı bakış açısından tartışılmaktadır.

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CHAPTER 1

INTRODUCTION

1.1 Background of the study

Pregnancy, especially first-time pregnancy, is a period of transformation and psychological re-organization of the self that helps prepare the expectant mother for the emerging maternal role (Stern, Bruschweiler-Stern, & Freeland, 1998). The relationship between the baby and the expectant mother begins to develop on an imaginary level. Mental representations of expectant mothers have been studied to examine the intrapsychic process of motherhood and the subjective experience of becoming a mother (e.g., self as a mother, self as a woman, adjustment to the maternal role, social support, and perceived self-efficacy in childrearing) (Ammaniti et al., 1992; Gooding, 2012; Vizziello, Antonioli, Cocci, & Invernizzi, 1993). Following the first trimester, the presence of the baby becomes apparent for the mother with some consistent signs of his/her existence such as fetal movements (Ammaniti et al., 1992; Innamorati, Sarracino, & Dazzi, 2010). As the baby feels more real to her, she begins to imagine him/her and herself as-a-mother and as-a-self in the mother-child relationship (Slade, 2005). Thus, before the infant is born, the mother has an anticipatory mental structure of herself as a parent and of the expected infant. Her baby and their future relationship are unknown to her, thus her fantasies and mental representations that are a blend of her past experiences and expectations are used to fill this gap (Ilıcalı & Fişek, 2004; Theran, Levendosky, Bogat, & Huth-Bocks, 2005). Representations come from the mother's own knowledge of reality composed of conscious and unconscious content and they can change over time

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(Ammaniti et al., 1992; Gooding, 2012; Stern, 1991; Stern et al., 1998; Vizziello et al., 1993).

Pregnancy, besides the physiological aspect, is a bio-psycho-social change process with a high risk of encountering many factors that can create social anxiety and stress. Changes in the body, lifestyle, relationships, and responsibilities may cause experiencing more anxiety and distress for pregnant women (Yali & Lobel, 2002). It is stated that pregnancy-related anxiety is differentiated from general anxiety and other personality characteristics (Huizink, Medina, Mulder, Visser, & Buitelaar, 2004). Keeping in mind that pregnant women's body is the first environment for the baby, the psychological changes of the expectant mother regarding anxiety and distress may affect the baby's development. Prenatal stress is found to be a predictor factor for prenatal attachment and perception of the child (Coşkun, Okcu, & Arslan, 2019; Lefkovics et al., 2018), thus pregnancy-related anxieties should be considered when examining the organization of mental representations of expectant mothers.

Emotionally charged moments are building blocks of meaning-making, and language is a powerful tool for processing and organizing experiences in autobiographical memories (Oppenheim, 2006). The mother's capacity to reflect her mental representations about the baby in a coherent way is related to her ability to symbolize and regulate the affective components of her experience (Slade, 1999). Narrative approaches are particularly used to assess affective meaning-making as wishes, goals, fears and conflicts unfold in narratives (Oppenheim, 2006). Examining the coherence of mental representations about the baby in expectant parents is crucial to understand their meaning-making processes about their relationship with the unborn child. An organized and consistent narrative about the baby indicates the

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mother's capacity to access a full range of thoughts and feelings about it in a flexible way. In other words, if a mother is able to reflect upon her thoughts and emotional experiences about the upcoming baby, then she can acknowledge her own complex feelings and realize that the baby has its own needs as a real entity rather than an imagined/fantasy baby (Ammaniti et al., 1992). On the contrary, a one-sided, disengaged and meager narrative may indicate defensive processes such as denial and distortion of thoughts and feelings (Oppenheim, 2006).

Some studies showed that the coherence of the mother's narrative is a strong predictor for future mother-child interactions (Sher-Cencor, Grey, & Yates, 2013). That is to say, mothers who provide a coherent narrative of the representations regarding their children tend to respond to their infants' signals sensitively, provide them appropriate scaffolding and communicate emotional experiences, which is related to the development of the infant's cognitive skills (Lucassen et al., 2015; Roebers, 2017).

Assessment of maternal representations is fundamentally based upon verbal expressions of the relationship with the child. Borrowing from the attachment literature, representations can be utilized based on their qualitative content and affective features (e.g., positive/negative/neutral or balanced/non-balanced) in addition to content-free dimensions such as coherence and richness. Narrative content-based evaluation reflects whether the child and the relationship are mentioned as positive/negative while content-free evaluation puts an emphasis on the organization of thoughts, meaning *how* it is said is more important than *what* is said.

There are some Turkish studies in which mothers' narratives were examined for both content-based and content-free characteristics through qualitative methods (Buldur, 2009; Ilıcalı & Fişek, 2004; Sümer, Sakman, Harma, & Savaş, 2016). Ilıcalı

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and Fişek (2004) examined the content and affectional tone of the maternal representations and perceived efficacy in the mothering role in a sample of forty-five primiparous women, half of which were at four to eight months of their pregnancy and the other half had an infant between zero to seven months of age. They examined if there were any differences in mental representations about their baby between the groups of expectant and new mothers. They measured representations through a French instrument called L'entretien (Robert-Tissot et al., 1989) consisting of 18 questions including five bipolar adjectives (e.g., calm vs. excited, finds mothering easy vs. finds mothering hard) in addition to the Maternal Representation Interview (MRI; Ilıcalı & Fişek, 2004) that has eight open-ended questions about the unborn baby, herself as a mother, herself as a person, her own mother, her husband, perception of her partner as a father, feelings about the baby, anxiety and fears. This interview lasted about 10 minutes. The MRI data were coded both for content-free (i.e., coherence, affect and its congruence with content, richness, and flexibility) and content-based (i.e., positive, negative or neutral) dimensions of narratives. The results showed no significant difference between the expectant and new mothers in terms of content-free dimensions of the narratives. On the other hand, the results indicated a tendency toward higher coherence scores among older mothers' narratives than younger expectant mothers' narratives. Thus, it seems that narratives become more coherent with increasing age. Although these findings seem intriguing, the researchers noted the cross-sectional design and small sample size of their study as limitations.

Buldur (2009) also studied maternal representations in a sample of Turkish primiparous women through a 45-minute semi-structured interview that included 50 open-ended questions in a sample of 10 new mothers with infants between 6 to 12

months of age. The interview questions, which were designed to obtain information about participants' experiences during pre and postnatal periods as well as perceived maternal efficacy were based on the previous instruments such as the Working Model of the Child Interview (WMCI; Zeanah, Benoit, Hirshberg, Barton, & Regan, 1994), Interview of Maternal Representations During Pregnancy (IRMAG; Ammaniti et al., 1992) and L'entretien (Robert-Tissot et al., 1989). The participants' responses were evaluated with a qualitative method called "poetic structures and meaning method" in accordance with Stern's (1995) "motherhood constellation" themes consisting of the life-growth, primary relatedness, supporting matrix and identity reorganization. This narrative analysis approach focuses on the organization of narratives, the relationship between the parts and the whole to make a framework for the participants' narration in order to investigate the personal experiences and meaning-making process of the participants (Buldur, 2009). The findings provided a better understanding of maternal representations of primiparous women in Turkey, but the researcher stated that they could not be generalized due to the small sample size. Furthermore, she noted that the possible effects of some demographic variables such as education level, socioeconomic status, and working status of the mother should be examined in future studies.

Lastly, Sümer and his colleagues (2016) interviewed 30 first-time mothers and their children aged between four to seven years. They adapted the Working Model of the Child Interview (WMCI; Zeanah et.al., 1994) to assess attachment orientations and mental representations of mothers about their children. They conducted a 1.5-hour semi-structured interview on the mothers' perceptions about their children's characteristics, development, and difficulties. Mothers' responses were evaluated in terms of acceptance, openness to change, richness of perception,

coherence, infant difficulty, fear for infant safety, caregiving sensitivity, and intensity of involvement. They found out that a high level of education was a protective factor in terms of having more positive mental representations about the child, attachment orientation, and child behavioral outcomes (Sümer et al., 2016). Additionally, it was stated that the level of mothers' education was associated with the cognitive components of mental representations such as richness of perception about the child (i.e., elaboration on various aspects of the child). On the other hand, the level of maternal education was also positively associated with the level of anxiety. It might be interpreted in the way that highly educated mothers tend to obtain an elaborated and comprehensive perception of their children. At the same time, they tend to feel anxious by setting high standards for their children (Sümer et al., 2016). The study put importance in understanding the relationship between attachment orientation and mental representation of mothers regarding children's behaviors in the Turkish sample; however, the researchers stated the small sample size as a limitation.

The relationships between pregnancy anxiety, depression, and maternal representations have not been studied in Turkey, although they might be significant factors in examining mental representations. An international study that investigated the relationship between marital distress, depression, and prenatal mental representation included 153 expectant mothers and fathers, in which they used Revised Dyadic Adjustment Scale (Busby, Christensen, Crane, & Larson, 1995) to assess the quality of couple relationship, and the Edinburgh Postnatal Depression Scale (EPDS; Cox, Holden, & Sagovsky, 1987) to evaluate parental depressive symptoms both at 20 gestational weeks. Additionally, they used WMCI to assess parental attachment representations between 29 and 32 gestational weeks (Ahlqvist-

Bjorkroth et al., 2016). The results of the study showed that mothers who had depressive symptoms had more distorted representations (57%) about their upcoming baby than mothers with less depressive symptoms (17%). Marital distress did not have a significant direct effect on the mental representations, yet mothers who were in the satisfied/happy group had more balanced representations about the baby than mothers with depressive symptoms. Hence, it can be concluded that mothers with high levels of depressive symptoms, but low levels of marital distress are less likely to have distorted representations about their children. Better couple relationships would be a supportive factor for the expectant mother and this interpretation is compatible with the study of Hopkins and her colleagues (2018) examining the relationship between social support, anxiety, and distress symptoms and maternal-fetal attachment. In this study, maternal-fetal attachment was defined as expectant mothers' thoughts, feelings and behaviors towards the fetus and it is proposed that trait anxiety and maternal distress (anxiety, stress and depression) would be related to maternal-fetal attachment and that results would be moderated by social support. They studied 94 expectant mothers who were between 15 and 28 weeks in their gestation period and were with a mean age of 28.9. Depression, anxiety, and stress levels of the participants were composed as maternal distress and assessed through the Short-Form Version of the Depression Anxiety Stress Scales (DASS-21; Henry & Crawford, 2005) including 21 questions (7 for each subdimension) with 3-point Likert scale. In addition, mothers' state-trait anxiety, anticipated social support and maternal-fetal attachment scores were obtained through self-report measures. They found that only prenatal trait anxiety and social support (but not prenatal distress which was related to situational factors) predicted maternal-fetal attachment. It can be concluded that mothers who were more anxious were less engaged with the

thoughts, feelings, and behaviors regarding the upcoming baby which might predict future mother-child relationship and secure infant attachment. Furthermore, although the relationship between the frequency of engaging in attachment-related behaviors and trait anxiety was not moderated by social support, it was indicated that social support moderated the relationship between prenatal distress and maternal-fetal attachment. This result was interpreted by the researchers that trait anxiety indicated permanent symptoms of anxiety and was less likely to be affected by other variables, whereas prenatal distress is more situational so it could be attuned in relation to the different variables.

1.2 The purpose of the current study

The first aim of the study is to explore the intercorrelations among the components of narrative coherence which are the focus (i.e., ability to remain focused on the baby and their future relationship), elaboration (i.e., the capacity to generate a detailed and meaningful description about the child), separateness (i.e., parent's perception about the child as a unique and independent person with his/her own needs and with a distinct personality), concern/worry (i.e., parental concerns about the child or parenting skills), acceptance and warmth/rejection (i.e., the degree of understanding of child's characteristics and challenging aspects of their relationship) and complexity (i.e., comprehensive and balanced narrative with positive and negative aspects of the child supported by everyday life examples).

The second aim of the study is to examine the relationship between maternal age, prenatal stress and depression, family income, and the FMSS scores. Given previous findings showing that older pregnant women's narratives about their (unborn) infants were emotionally more involved (Lambregtse-van den Berg et al.,

2013), it is hypothesized that older participants' narratives will indicate higher levels of concern regarding the baby and their future relationship with the baby. No hypothesis is formulated regarding the associations between the other scores of the FMSS-NC (i.e., focus, elaboration, separateness, acceptance, complexity, coherence) and maternal age, given that there is no evidence indicating a link between these narrative characteristics and parents' age.

Third, it is hypothesized that the FMSS-NC scores (except concern) will increase as the family income level increases in the light of previous findings indicating a negative association between criticism and emotional over-involvement towards the unborn baby in narratives of expecting parents and their family incomes (Lambregtse-van den Berg et al., 2013). Similarly, it is also expected that participants with lower family income levels will report higher levels of concern about the baby and their future relationship with him/her.

Fourth, it is hypothesized that the FMSS scores (except for concern) will decrease as participants' prenatal stress and depression levels increase given previous findings showing the link among mothers' depressive symptoms and their negative depiction and distorted mental representations about the infant (Ahlqvist-Björkroth et al., 2016; Barnes et al., 2007). Likewise, it is expected that the concern scores will show an increase as prenatal stress and depression scores increase.

1.3 The significance of the study

Previous findings point out the importance of examining maternal representations both in pre and postnatal periods as it is a significant predictor of mother-infant relationship and child development (Ammaniti et al., 1992; Huth-Bocks, Theran, Levendosky, & Bogat, 2011; Korja et al., 2010; Sher-Cencor et al., 2013; Zeanah et

al., 1994). In a very recently published meta-analysis, Rea and colleagues showed that the narrative coherence that is measured through the FMSS significantly predicted parent-child interaction in 21 out of 25 studies (84%) especially through positive parenting skills such as warmth, problem-solving, lack of criticism and harshness (Weston, Hawes, & Pasalich, 2017), and supportive family environment (Psychogiou, Netsi, Sethna, & Ramchandani, 2012; Rea, Factor, Kao, & Shaffer, 2020). In addition, there are some findings demonstrating that coherence of mothers' narratives was significantly related to behavioral adjustment and emotional regulation of children from infancy to adolescence (Sher-Cencor et al., 2013; Sher-Censor, Khafi, & Yates, 2016). It was asserted that preschoolers' adjustment to school was moderated by mothers' narrative coherence. Especially children with self-regulation problems whose mothers produce incoherent narratives showed increased internalizing and externalizing behaviors, whereas children with better self-regulation abilities who had incoherent narratives had no such effect on their behaviors (Sher-Cencor et al., 2016). Thus, narrative coherence of maternal representations seems to be a concept that deserves further scientific attention. Most of the existing studies are based on qualitative methods and small sample sizes (Buldur, 2009; Ilıcalı & Fişek, 2004; Sümer et al., 2016). Exploring the correlates of maternal representations in a larger sample size may improve the generalizability of the findings so that its implications may be incorporated to parenting intervention programs that target expectant or new parents (e.g., programs focusing on the ability to see and understand both positive and negative aspects of children's characteristics, decreasing the level of mothers' idealization of their children, or individual counseling programs for pregnant women focusing on narrative re-production of their experiences regarding their transition period).

The Five Minute Speech Sample (FMSS; Gottschalk & Glesser, 1969) method has been increasingly used in developmental research and it has some additional methodological advantages besides the time efficiency of the administration and scoring. The FMSS does not have any prompting questions, which may cause participants to adjust their speech due to the social desirability effect (Rea et al., 2020). To the author's knowledge, this is the first time that the FMSS is used to assess mental representations in a Turkish sample. Therefore, this study might contribute to the theoretical background of mental representations and FMSS literature in Turkey.

CHAPTER 2

LITERATURE REVIEW

2.1 Conceptualization of mental representations

The concept of mental representations was proposed by Bowlby (1969) and called as 'internal working model' to define a set of expectations the child has for future relationships based on his or her attachment experiences with primary caregivers. The model basically includes the child's sense of confidence about the consistent availability of the attachment figures. The internal models begin to be formed in the first year of life and reformed until the age of five (Schermerhorn, Cummings, & Davies, 2008). Accordingly, children transform early interactions with caregivers into cognitive-affective schemas of self and other and these schemas shape their later behavior and relationship patterns (Fonagy & Target, 2003). The mental structure provides ones with a mental capacity for the evaluation of a variety of possible actions in the world (Bretherton, 1993).

Main, Kaplan and Cassidy (1985) made a move to expand the scope of the attachment research beyond the observation of the relationship and attachment patterns by examining the content of internal working models to better understand the parent-infant relationship. They theorized that internal working models are not only composed of pictures merged from past experiences or passive introjections of the attachment figures; rather, they include concepts of self and cognitive assets such as attention, memory, cognition and they are active constructions, which needs an organizational aspect of the representations. Understanding and examining the organization of mental representations gained importance in literature in addition to their content evaluation.

Furthermore, Zeanah and his colleagues defined internal representations as memory structures that re-present a version of lived experience to an individual. They are "the internal aspects of relationship patterns that guide external interactional behaviors" (Zeanah & Anders, 1987; Zeanah & Barton, 1989, p.137). Further, Nelson (1999) stated that mental event representations are the sequenced actions that have causal relationship activities within a particular time and place. They are not specific memories of events; rather, they are abstracted averages of these specific events. For example, a three-year-old girl asked to describe her birthday party might mention cake, candles, and presents (Zeanah & Barton, 1989). These responses are the abstracted and generalized experience of a birthday party constructing mental event representations but not the actual specific event. Routines and repeated actions build a repertoire of event knowledge from infancy to adulthood, which means the knowledge about what happens and how (Nelson, 1999). In addition, abstracted experiences within this knowledge is used as a source of everyday interaction with the self and other.

Stern (1985) has suggested a detailed description for internal representations which have a hierarchy from the global (higher order) schemas to more specific ones. He proposes that interactive experiences are transformed into a memory of that specific experience, which is called episodic or autobiographical memory of specific events (e.g., feeding the baby last night). Then, similar episodic memories are abstracted into prototypical ones or representations (e.g., all feeding situations regardless of context). Similar prototypical interactive moments or sequences are called RIG (representation of interactions that have been generalized) by Stern (1985) and these sequences form representational scenarios, for example; all caregiving routines such as feeding and play sequences (Zeanah & Barton, 1989).

Selected RIGs and scenarios constitute internal working models that act as a part of unconscious guides to behaviors in the relationship. Stern (1991) focuses on the process of reorganization of expectant mothers' representations including the mothers' the sets of relationships. Representations about being a wife of a partner, or about the expectant mothers' own mother, father, or other parental figures could be some examples for the representational sets of relationship. These sets of relationships have the baseline for the representations of the upcoming baby which gradually evolve during pregnancy and particularly prominent since the seventh month (Ammaniti et al., 1992).

Cognitive psychology literature has a significant role in understanding and framing mental representations and narrative production in addition to representations' affective contents. The dynamic structure of mental representations requires complex multileveled cognitive processes including encoding, storage, retrieval, operation and reconstruction of working models (Bretherton, 1993). Past experiences that are stored in the long-term memory and new representations composed in the short-term memory are categorized and stored within the causal relationship which leads to having a mental representation of the experience. Oppenheim and Waters (1995) suggested that making connections and having a distinct causal organization makes experiences easier to be accessible to memory. Representations are the abstracted symbolic information which is needed to be held, manipulated and categorized in the mind in order to construct a narrative production (Oppenheim & Waters, 1995). These abilities lie under the information processing abilities such as encoding, storage, retrieval, monitoring, steering and controlling the information (Roebers, 2017). These abilities enable one to inhibit responses, represent mental plans and act in a goal-directed, self-determined, flexible way in

various situations. An organized, coherent, consistent and complex narrative requires flexibly accessing a full range of information and eliminating those regarding contextual factors to be meaningful, which requires each of the abilities mentioned above. Such an information processing enables one to make meaning from the experiences, accurately interpret interactions with others and give detailed examples in addition to predicting the future course of action.

2.2 Narrative coherence

Narrative coherence is a way of portraying the integration and organization of symbolic information such as ideas and feelings. It reflects individuals' information processing course as mentioned before, including storage and retrieval of the relational ascriptions (Hesse, 2008). It could be a reference for the adult mind in which different aspects of reality are contained and contradictory models of the same reality are held (Main, 1991). A coherent narrative is well-organized, understandable, consistent, authentic, and multi-directional, whereas an incoherent narrative is qualified with defensive exclusion of difficult feelings about the child, having inconsistency and contradictory statements, lack of emotional integration, and/or having an idealized or rejected perception of the child (Sher-Cencor et al., 2013). A coherent narrative reflects the connectedness of thoughts including consistency, continuity and flow of ideas and feelings in a logical way (Ilıcalı & Fişek, 2004). Logical organization of thought includes an orientation and referents enabling the listener to follow the track of the narrative easily.

The knowledge which is expected to have a singular model should be metabolized, acknowledged and integrated in order not to be inconsistent and disrupted in the narrative of the individual (Main, 1991). Otherwise, conflicting

and/or incompatible models, which are called "multiple models" by Bowlby (1969) would be established, which may lead to disruptions, logical contradictions in the narrative, slips of tongue and/or losing the track of the narrative.

Stern (1991) proposed different models about maternal representations which are the distortion model, dominant theme model, and coherence model. The first one is about the distance between the mother's subjective experiences and the objective truth. For instance, a mother may ignore the developmental delay of the child and act as if the child shows a normal development. The second model is about the ability to have some space to consider different possible features of the baby rather than getting stuck in her own theme. For instance, a depressed mother may expect her child to make her happier and less depressed. The third one is the narrative coherence model that focuses on the narration of the subjective experience rather than the objective historical truth. The latter is important in the sense that the individual's subjective experiences can be re-constructed along with the narration by the modification of prevalent internal working models (Huth-Bocks et al., 2011). Human beings are the authors of their own life and narration gives them a chance to reconstruct the story by making various connections and new meanings.

Richness and complexity of the narratives indicate balance and coherence of mental representations (Oppenheim & Waters, 1995). Repeated stories are more likely to be easily reached in memory, which increases the number of examples and details about them. Eliminating relevant everyday life evidence orderly during narration, portraying a multidimensional picture about the baby and the future relationship including caregiving, range of behaviors, characteristics and feelings, and presenting both negative and positive aspects of their baby in a balanced fashion are characteristics of complex narratives which require cognitive-affective

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processing (Sher-Cencor & Yates, 2010). On the other hand, a brief, meager or one-sided description of the baby indicates that the mother cannot operate a clear causal relationship between the events, which may lead her to have a distorted representation of the baby and their future relationship.

2.2.1 The development of the Five Minute Speech Sample (FMSS) Procedure

The FMSS procedure was developed by Gottschalk and Gleser (1969) to assess the content of psychiatric adult patients' speech samples through the assumption that an uninterrupted speech sample may help patients project their intrapsychic aspects such as anxiety (e.g., statements about the threat of death, separation, guilt or shame), hostility (e.g., statements of hostile or aggressive feelings and actions) and hope (e.g., statements reflecting the intensity of optimism). It was used to assess psychiatric symptoms of hospitalized adults, such as reaction to treatment and symptoms of relapse from schizophrenia and anxiety. Furthermore, its content was used to differentiate between psychotic and non-psychotic adults (Sher-Cencor, 2015). For instance, hostility scores were found higher for hospitalized adults than those of non-hospitalized.

Afterwards Brown and Rutter (1966) (as cited in Sher-Cencor, 2015) realized that hospitalized adult patients with schizophrenia had experienced more relapse when they return their home to live with their emotionally over-involved or highly critical parents. Therefore, they proposed the Expressed Emotion model indicating that family environment could be measured as an indicator of how parents treat their children in actual life and developed the Camberwell Family Interview (CFI; Brown & Rutter, 1966, as cited in Sher-Cencor, 2015). It was a semi-structured 1- to 2-hour-interview asking parents about the patient's difficulties, the parent's coping skills

with these difficult situations and how the two of them get along with each other. The responses were coded regarding criticism, hostility and emotional overinvolvement subscales (Sher-Cencor, 2015).

Later the FMSS was used to examine parents' thoughts and feelings regarding their relationships with their children, thus Magana-Amato (1993) adapted the FMSS protocol to code 'expressed emotion' model (FMSS-EE) in their uninterrupted 5-minute speech samples and the use of FMSS was expanded to child and adolescent populations among the clinically referred (e.g., intellectual disability, conduct disorder and depression) and community samples (Weston et al., 2017). The coding system focuses on caregivers' vocal and speech tone regarding criticism (i.e., statements including dislike or disapproval) and emotional overinvolvement (i.e., extreme overprotection or idealization) about their children. Hostility subdimension was removed from the FMSS-EE coding system to make it appropriate for 5-minute samples. The detailed information about why hostility subscale was removed from the coding system could not be reached but it might be interpreted that it included aggressive statements about the patient, generalized dislike and rejection of him/her which is similar to the criticism subscale.

High EE corresponds to high criticism and/or high emotional overinvolvement. A high level of criticism indicates that the relationship that the caregivers portray has more negative features than positive aspects or the caregiver expresses critical comments such as dislike, rejection, and resentment of the relationship. Concordantly, a high level of overinvolvement refers to showing intense emotions such as crying, giving excessive details about the past, statements indicating excessive willingness to do anything for the child and idealization (Magana-Amato, 1993).

There are different forms of the FMSS for different groups and using the Five Minute Speech Sample procedure has been quite common in assessing affective components of parent-child dynamics in recent years (Sher-Censor, 2015; Sher-Cencor & Yates, 2015; Sher-Censor et al., 2013, Sher-Censor, Dolev, Said, Baransi, & Amara, 2017; Kaugars, Moodyb, Dennis, & Klinnert, 2007; Lambregtse-van den Berg et al., 2013; Psychogiou et al., 2012). In the meta-analysis conducted by Weston and his colleagues (2017), it is stated that speech samples are reliable tools to assess parent-child quality of interaction and mothers' mental representations about different age groups ranging from infancy to adolescence. In addition, it is an appropriate tool for a diverse range of populations and children with different developmental characteristics such as infants with special needs; children with asthma / ADHD / autism / internalizing and externalizing problems / OCD or panic disorder; low-income families, homeless families, traumatized children, children of depressed and non-depressed mothers, and adolescents with antisocial behavior. Preschool Five Minute Speech Sample (PFMSS; Daley, 2001 as cited in Sher-Cencor, 2015) which was designed to assess the content of mothers' mental representations about their preschool children can be given as an example of FMSS measure. Moreover, Daley and Benson (2008, cited in Sher-Cencor, 2015) adapted the PFMSS for parents of children with autism, which is called as Autism-Specific Five Minute Speech Sample (AFMSS). Unstructured and free-flowing nature of the speech samples enable researcher to have more naturalistic observation and assessment than other data collecting techniques.

2.2.2 Five Minute Speech Sample - Narrative Coherence (FMSS-NC) Coding System

The coherence of speech reflects the ways individuals process, store, and retrieve information and schemas about the child. The FMSS-NC coding system mainly focuses on the organization or coherence of the speech as a whole (Sher-Censor & Yates, 2010). It was adapted from the Insightfulness Assessment (Oppenheim, Koren-Karie, & Sagi 2001). The coding system includes six sub-scales ranging from 1 to 7 to assess various dimensions of the coherence of narratives. (1) Focus refers to caregivers' ability to remain focus on the child, their relationship and making them the central theme of the narrative. (2) Elaboration reflects the capacity to generate a detailed and meaningful description of the child, which means that the parent has the capacity to hold the child in mind. (3) Separateness assesses the parent's perception of the child as a unique and independent person with his/her own needs and with a distinct personality. A low level of separateness may be accompanied by boundary dissolution (BD), in which the roles of the child and the caregiver are equal or reversed. The child might be narrated as a caregiver (or entertainer), as a peer (or best friend – neither child nor parent has control in dyad), as a partner or a parent (the child has the control). (4) Concern/Worry indicates parental concerns about the child or parenting skills. Parents who are overly concerned about their own themes such as concerns about work, being a single mother, being depressed are less likely to provide a multidimensional description of the child. (5) Acceptance and warmth/rejection indicate the degree of acceptance and understanding of the child's characteristics and challenging aspects of their relationship in the narrative. Disappointment, derogation and devaluation undermine the coherence of speech because it reflects incapacity to be flexible and find alternative explanations for the

child's misbehaviors. (6) Complexity refers to describe the child and the relationship in a comprehensive and balanced way with positive and negative aspects supported by everyday life examples. Positive and negative aspects of the relationship, feelings and thoughts can be discussed openly and freely when the information about the child is processed by parents. In addition, a global rating of coherence is elicited by a Narrative Coherence scale integrating the six scales to have a general consideration of the organization, consistency, and authenticity of the narratives.

It is stated that relative to affective content assessed by expressed emotion, parents' organizational dimension of narratives, namely narrative coherence, is more related to sensitive parenting and children's adjustment because parents who have coherent and integrated representations about their children will be open and free from defenses, which may allow them to be responsive during interaction (Weston et al., 2017). They construct and maintain their coherent narratives not only about their positive but also negative depiction of the children.

2.3 Narrative coherence as a predictor of child outcomes

Previous studies examined the relation between narrative coherence of maternal representations both in pre and postnatal periods and its outcomes in the mother-infant relationship and child development (Benoit, Parker, & Zeanah, 1997a; Benoit, Zeanah, Parker, Nicholson, & Coolbear, 1997b; Sher-Censor & Yates, 2015; Sher-Censor et al., 2013, 2016). Sher-Cencor and her colleagues (2013) investigated the relationship between content-based (e.g., positive, negative) and content-free dimensions (e.g., focus, elaboration, complexity) of mothers' narratives about their relationship with their children and children's play narratives in a group of 250 parent-child dyads. They used the FMSS-EE and NC to assess the mothers' negative

and positive comments about the child and their relationship with the child. Children were given six stem stories including typical family situations and conflicts from the commonly used procedures (e.g., spilled juice, parental separation, parental reunion; see Bretherton, Oppenheim, Buchsbaum, & Emde, 1990 for details) (Oppenheim, 2006). Children's depiction of their relationship with the mothers in play narratives were rated by the coders, who were blind to any information about the family on a five-point scale in which the low end of the scale portrayed mothers as aggressive, harsh, rejecting or ineffectual and the high end of the scale as safe, rewarding, and consistent. In addition, children's narrative coherence was evaluated in terms of fluency, engagement with the problem in the story and the resolution of the problem. The results indicated that mothers' narrative coherence was a better predictor than mothers' narrative content for the children's perception of mother-child interaction. Coherence (but not affect) of mothers' narratives was positively correlated with children's positive portrayal of the relationship with their mothers and children's coherent play narratives. This result indicated that mothers who provided coherent, complex and well-integrated narratives had preschoolers, who had the parallel qualities in their narratives and portrayed the mother as supportive and responsive.

In a more recent study, Sher-Censor and Yates (2015) also examined the maternal narrative coherence and its developmental correlates. They indicated that children of mothers with coherent narratives were less likely to have behavioral problems during preschool years. Similar to their former study, the researchers assessed mothers' representations about their children through the FMSS-EE and NC. In addition, they assessed children's behavior problems rated both by the mothers and the examiner, receptive vocabulary, and intelligence. They found that the mothers' narrative coherence significantly predicted children's internalizing and

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externalizing behavior problems such as attention issues and aggressive behaviors. The results also showed a strong agreement between the mother and observer-reported child behavior problems and narrative coherence, but a moderate agreement between mother and observer behavior problems and incoherent NC. These results indicated that the mothers who had coherent narratives about their children perceived their children's behaviors and signals more accurately than the mothers who had incoherent narratives. It can be concluded that the coherence of narratives better reflects the reality regarding preschoolers' behavior problems. Furthermore, mothers' incoherent narratives include more negative comments, which can be an indicator of defensive information-processing leading parents to be more overwhelmed, intrusive, hostile, and withdrawn.

Theran and colleagues (2005) investigated if there was a change in maternal representations from the prenatal to the postnatal period. The study was conducted with 180 participants both prenatally (during the last trimester of pregnancy) and postnatally (when the infant was 1 year of age). The mothers' representational change from prenatal to postnatal in addition to maternal sensitivity, maternal depression, and domestic violence assessed at the postnatal period were examined. They used the Working Model of the Child Interview (WMCI; Zeanah et al., 1994) to assess mental representations of mothers. The interviews were coded for content-related and affective features (i.e., intensity of involvement, fear of infant, safety, joy, indifference) and then clustered into three categories as 'balanced', 'disengaged' and 'distorted' representations. Balanced narratives were described as having integrated positive and negative affect, rich in detail and having a high intensity of involvement with the child. The mother who had a balanced description of the child was characterized as having an ability to see the child as an individual having his/her

own needs and provided an integrated description of difficulties of the child with a warm and accepting manner.

On the other hand, disengaged narratives were characterized by the mother's lack of emotional and personal involvement with the child, a less elaborated description and less integration of positive and negative aspects of the relationship. Emotionally detached mothers' narratives could be examples of this category. Furthermore, distorted narratives were characterized by inconsistency, contradictions, and emotional fluctuations while speaking. Mothers who had distorted representations were more involved with the child than mothers who had disengaged ones. However, they had difficulties in staying focused on the child during narration and had problems with separation in addition to producing an understandable and coherent description of the child. As a general result, they found that 71% of the participants kept their representations the same over time (Theran et al., 2005) which indicates that mothers, who had balanced, disengaged, or distorted representations, continued to stay in the same category after the child was born. Additionally, they examined the differences between women who had continuingly a non-balanced representation and those who had balanced representation during pregnancy but then had non-balanced representation after the child was born. Results showed that women who had changed their 'infant' representation from a balanced to a non-balanced showed higher sensitivity scores than the other group. It seems that having a balanced representation about the baby during pregnancy is a protective factor for sensitive parenting after the baby is born (Theran et al., 2005).

Similarly, Benoit and her colleagues (Benoit et al., 1997b) clustered the narrative descriptions of representations into the same categories with the study mentioned previously. The study investigated the mental representations of mothers

who had infants with problems such as failure to thrive and sleep disorders. The results showed that 91% of infants with these problems had mothers with disengaged or distorted representations. Moreover, the mothers with coherent narratives and who had children with Autism Spectrum Disorder (ASD) were found to be more emotionally available for their children than mothers with incoherent narratives and having children with ASD (Sher-Cencor et al., 2017).

The explanations of the above findings might be twofold. The first one is that mothers' sensitivity level has an interaction with their distorted representation referring to their inability to see the child as an individual with his/her own needs and unable to have integrated positive and negative features of the child with warm and accepting manner. So, distorted or disengaged representations might predict children's regulation problems especially for children with sleep problems. The second possible explanation might be that children in the autism spectrum can trigger mothers' distortion and denial mechanisms and prevent mothers from keeping their children as a whole in their mind.

Benoit and colleagues (1997a) used qualitative methods to examine 96 expectant mothers' internal representations of their infants both in the last trimester of their pregnancy as well as in the postnatal period (approximately 12 months later after the baby was born) and their relationship with the infant's attachment classification at their 12th month. They both used the Working Model of the Child Interview (WMCI; Zeanah et al., 1994) and Strange Situation procedure (SS; Ainsworth, Blehar, Waters, & Wall, 1978) to assess infant attachment classification. They found 74% concordance between maternal representations during pregnancy and infants' attachment classifications after the birth. This result seems consistent with the findings of the study by Huth-Bocks and colleagues (2011) which

demonstrated that 63% of the mothers with balanced representations had infants with a secure attachment while 57% of women with non-balanced representations had infants with an insecure attachment style. Thus, both of these studies revealed that there is an association between mothers' balanced/non-balanced representations and attachment security of their infants. Given these results, it can be concluded that mothers who had balanced representations of their infants during pregnancy were more likely to have securely attached infants in the first year of their life.

2.4 Prenatal distress and depression

Pregnancy is an adaptation period for women, in which physiological, psychological, and social changes emerge in relation to pregnancy and motherhood. Problems related to pregnancy (such as bodily changes, thoughts and feelings about birth, anxiety about childcare and self-efficacy in future mothering, and hospital visits) could be sources of stress (Coşkun et al., 2019; Huizink et al., 2004) and pregnancy period could be more difficult because of these stressors.

In the study of Huizink and her colleagues (2004), it is proposed that pregnancy anxiety is differentiated from general anxiety because of its specific sources of pregnancy-related stressors. They specifically examined pregnancy anxiety with 230 primiparous women at early (15-17 weeks), middle (27-28 weeks) and late (37-38 weeks) gestation with a mean age of 30.9. The participants were given a 34-item questionnaire including pregnancy-related anxiety (Pregnancy Related Anxieties Questionnaire-Revised; PRAQ-R; Van der Bergh, 1989; as cited in Huizink et. al., 2004), other questionnaires about constructs such as state-trait anxiety (State-Trait Anxiety Inventory; STAI; Spielberger, Gorsuch & Lushene., 1970; as cited), depression (Edinburgh Postnatal Depression Scale; EPDS; Cox et al., 1987),

neuroticism (a subscale of the Amsterdam Biographical Questionnaire; Wilde, 1963; as cited), locus of control (Internal locus of control, Powerful Others and Chance-Scale; IPC; Brosschot et al. 1994; as cited), and lastly two single items with which appraisal of pregnancy was measured by asking perceived threat and perceived control of the pregnancy situation. The results indicated that there was not a single underlying factor for the pregnancy anxiety, rather three aspects were noticeable from early to late pregnancy: fear of giving birth, fear of having a physically or mentally handicapped child, and concerns about one's appearance (Huizink et al., 2004). The stability and changes of these factors were examined during pregnancy and it is stated that fear of giving birth decreased from early to mid-pregnancy and it remained stable thereafter. Moreover, fear of bearing a handicapped child was found to be highest during the early phase of pregnancy, lowest at mid-pregnancy and increased from mid to late pregnancy. Lastly, concerns about mothers' own appearance were found to be more stable than other factors. Thus, it could be concluded that a high level of pregnancy-related anxiety was more likely to be experienced by expectant mothers during the early and late phases of the pregnancy as compared to the mid-phase (Huizink et al., 2004).

Other personality characteristics such as trait anxiety, control, and neuroticism also affected the amount of pregnancy-related anxieties. The reason why pregnancy-related anxieties were less common and more stable during mid-pregnancy was explained by the fact that personality traits were found to be more dominant in this period. In other words, expectant mothers were less inclined to worry about the pregnancy during mid-phase; therefore, differentiation between pregnancy-related anxiety and other factors could be harder in this period.

A literature review including 50 studies about prenatal stress and anxiety effects on birth outcomes draws a comprehensive picture about stress measurements, moderator variables, and results of prenatal stress and anxiety on development of the baby both in pre and postnatal periods (Graignic-Philippe, Dayan, Chokron, Jacquet, & Tordjman, 2014). According to this review, previous studies indicated that psychological assessment of stress and anxiety could be measured regarding life events (such as unemployment and job loss), because major changes were more likely to be a stressor in one's life and pregnancy period was signified as one of these life events that cause major changes in life. Moreover, related studies also showed that anxiety and stress levels were moderated by social support and coping abilities according to Graignic-Philippe and her colleagues (2014).

Furthermore, besides the psychological assessment of prenatal anxiety and stress, biological measures were also used to obtain data about prenatal stress and anxiety such as maternal plasma CRH, blood samples, and cortisol level (Graignic-Philippe et al., 2014). This study also revealed that prenatal stress and anxiety could result in perinatal (birth-related) (such as shortened gestational time, preterm birth, low birth weight, delivery difficulties), neurodevelopmental (anomalies in fetal brain growth), emotional (decreased heart rate, decreased motor bouts and activity level, greater irritability and fearfulness), behavioral (internalizing behaviors such as withdrawal and somatic complaints; externalizing behaviors such as delinquency and aggression), cognitive (low neuromotor development) and psychopathological implications (ADHD symptoms, anxiety and depression, symptoms of schizophrenia) on the developing fetus both in pre and postnatal periods including even adolescence. A recent review study conducted in Turkey by Atasever and Çelik (2018) is compatible with the study of Graignic-Philippe and her colleagues' (2014).

They also stated that prenatal stress and anxiety would have implications both in prenatal and postnatal periods in bio-socio-emotional factors such as delay in language and psychomotor development, problems in social abilities, learning and memory deficiencies, ADHD symptoms, and low school success.

Overall, previous studies indicate that the mother's narrative coherence is a crucial predictor for the mother-infant relationship and child's socio-emotional development (Korja, et al., 2010; Rea et al., 2020; Sher-Cencor, 2015; Sher-Cencor et al., 2013, 2016; Weston et al., 2017). Narrative coherence is a complex phenomenon that contains multiple dimensions; expectant mothers' age, household income, and prenatal distress are some of these dimensions that should be taken into account. Examining the narrative coherence of expectant mothers with its various dimensions would be crucial in understanding mothers' symbolic organizational systems (Ilıcalı & Fişek, 2004; Vizziello et al., 1993). Therefore, with regard to previous studies conducted in Turkey, the current study suggests a comprehensive understanding of Turkish primiparous women's organization of thought about their upcoming babies.

CHAPTER 3
METHOD

3.1 Participants

The sample consisted of 108 primiparous (first-time mothers) women, who were in

the last trimester of their pregnancy, particularly in 32-39 weeks with a mean of 34.3

(SD = 1.8) weeks as it was stated that those women who are in late pregnancy have

higher anxiety level than those who are in the mid-trimester of their pregnancy

(Huizink et al., 2004). The participants were aged between 21 and 42 years with a

mean age of 29.8 (SD = 4.3). The majority of the sample (70.4%) was not working at

the data collection time. Thirteen of those reported that they were unemployed, 95 of

them were employed but 63 of them were on maternity leave. In addition, 19 mothers

reported that they have health problems (i.e., thyroid, allergic asthma, iron deficiency

anemia, myoma, hepatitis B, diabetes, high blood pressure, or migraine) and 99

mothers stated that they regularly use medication or supplement (i.e., iron, vitamin,

folic acid, drugs for thyroid, etc.). Regarding the development of the baby, two

mothers reported that there were developmental problems in check-ups such as

entreated cardiac dysrhythmia and developmental retardation due to myoma. Further

demographic information is provided in Table 1.

3.2 Instruments

After the informed consent (Appendix A and B) was obtained, intake questions

(Appendix C) were asked to obtain some of the demographic information of the

participants. Then the Turkish version of the instructions for the Five Minute Speech

Sample procedure (Appendix D and E) was orally presented to the participant and it

was also given in the written form as a reminder.

Table 1. Demographic information

Level of Education	n	%
Secondary school	1	.9
High school	12	11.6
Vocational (2 years)	7	6.5
Bachelor degree	61	56.5
Graduate degree	26	24.1
Illiterate	1	.9
Household Income		
1.000-3.000 TL	11	10.2
3.001-5.000 TL	20	18.5
5.001-7.000 TL	22	20.4
7.001-9.000 TL	14	13.0
9.001-11.000 TL	9	8.3
11.001-13.000 TL	10	9.3
13.001-15.000 TL	6	5.6
15.001 TL and above	16	14.8
Total	108	100.0

Just after the FMSS procedure, Prenatal Participant Survey Booklet in which there were more demographic questions (Appendix F) and depression (Appendix G and H) and prenatal distress (Appendix I and J) scales was given.

3.2.1 Five Minute Speech Sample-Narrative Coherence Scale (FMSS-NC)

The FMSS scale was developed by Gottschalk and Gleser (1969) and the FMSS-NC (Sher-Cencor & Yates, 2010) coding system was adapted from the Insightfulness Assessment (Oppenheim et. al., 2001) as mentioned above. The coding system includes six subscales that are rated from 1 to 7. The Focus subscale measures the mother's capacity to keep her focus on the child and their relationship. A respondent who gets a high score is able to make the child as the central theme of the narrative

rather than getting distracted by irrelevant topics. Elaboration refers to the ability to generate a detailed and meaningful description of the child. A high score on elaboration subscale indicates that the narrative is rich in detail. Separateness measures parent's perception about the child as a unique and independent person with his/her own needs and with a distinct personality. A high score on separateness can be applied to meager narratives or mothers who exhibit rejection of the baby. Thus, a high score on separateness does not necessarily indicate acceptance or complexity. Furthermore, low separateness may be accompanied by boundary dissolution and the child might be narrated as a caregiver (or entertainer), as a peer (or best friend), as partner or as parent (child has the control). Concern/worry subscale indicates parental concerns about the child or her parenting skills. The high end of the continuum refers to the repetition of thematic concerns/worries (e.g., effects of being a working mother on baby's personality characteristics) and mothers with a high score might be overwhelmed by their concerns. Acceptance and warmth/rejection subscale measures the degree of accepting/rejecting the child's full range of characteristics. Disappointment, derogation and devaluation undermine the acceptance score. Complexity points out the capacity to give multifaceted and supported examples from everyday life and to portray a multidimensional picture for the baby. A high score is applied to caregivers who provide mostly positive but also some negative aspects in various contexts.

Lastly, a general consideration of the organization, consistency, and authenticity of the narratives are captured by integrating the six subscales to provide general coherence score. It ranges from 1 (There is no coherent narrative about the child) to 7 (The caregiver constructs a comprehensive and integrative picture of the child and the relationship.). (See Appendix K for narrative coherence coding form).

The original instructions of the Five Minute Speech Sample were adapted to be more appropriate for the pregnancy period and translated to Turkish by the researcher. For example, sentences in the present tense which convey the existing interaction with the baby were replaced with future tense which expresses the expectations about the baby. Immediately after the informed consent, the instruction given to the participant mother is that: "I would like to hear your thoughts and feelings about your unborn baby, in your own words and without my interrupting with any questions or comments. When I ask you to, I would like you to speak for 5 minutes, telling me what you think your baby will be like and how the two of you will get along together. After you begin to speak, I prefer not to answer any questions until after the 5 minutes are over. Do you have any questions you would like to ask before we begin?" If the mother stopped talking before the 5 minutes was completed, the interviewer waited for 30 seconds and then prompted her to continue by saying that: ''Please tell me anything about your baby for a few more minutes."

3.2.2 Demographic Information Form

The questions regarding participants' demographic characteristics were developed by the primary investigator of the project in communication with the collaborators. The information about the week of pregnancy and the expected date for labor as well as the date of birth, education level, working status of the participants and their partners were obtained through the Intake Question Form and the Prenatal Participant Survey Booklet. In addition, they reported their family income on an 8-point scale. Lastly, the participants were asked if they had any health problems, were on any medication or supplements and if there was any problem regarding the development of the baby that had been reported in check-ups.

3.2.3 Center for Epidemiologic Studies Depression Scale

The Center for Epidemiologic Studies Depression Scale (CES-D) was developed by the American National Mental Health Institute (Radloff, 1977). It includes 20 items on a 4-point scale to screen the depressive symptoms of the participants. Mothers in the study were asked to score their last week regarding depressive symptoms, positive affect, somatic symptoms, and difficulties in interpersonal relationships on the scale (0 = rarely- never, 3 = most or all of the times (5-7 days a week)). Four of the items have reversed scores and the total range of scores is from 0 to 60 of which higher score indicates the presence of more symptomatology. The original version of the scale has high reliability with α = .85 for the general population and even higher for the patients with .90 values. The Turkish adaptation of the scale has a high internal consistency with a Cronbach Alpha coefficient of .89 and high validity with r = .70 (Tatar & Saltukoğlu, 2010). The questions about depression were included in the Prenatal Participant Survey Booklet.

3.2.4 Prenatal Distress Inventory

Participants' worries and concerns about the fetus and body and mood changes related to the pregnancy were assessed through the Prenatal Distress Inventory (i.e., feeling tired and having low energy, changes in weight and body shape during pregnancy) (Yali & Lobel, 1999). It is a 3-point self-report scale (0 = not at all, 1 = somewhat, 2 = very much) including 17 questions. The scale was adapted by Yüksel, Akın and Durna (2011) and it has a high level of internal consistency (α = .85) and test-retest reliability. The Turkish version of the questions about prenatal distress was included in the Prenatal Participant Survey Booklet of the primary project.

3.3 Procedure

This study is a part of a comprehensive research project that was funded by Boğaziçi University (Project Number: BAP 14582). After the ethics permissions of Boğaziçi University Ethics Committee (Appendix L and M) and the Ministry of Health (Appendix N) in Istanbul were obtained, the research team contacted perinatology clinics as well as prenatal training sections of some public and private hospitals. Recruitment process was carried out in close contact with two midwives and a perinatologist, who referred a considerable number of expectant mothers to the research team. The project was also announced through social media and personal networks.

The participants were fully informed about the purposes and the procedure of the study. Informed consent was obtained from volunteers who were in the 32 to 39 weeks of their pregnancy. Those who were in an earlier phase of their pregnancy were listed to be interviewed in the last trimester. Interviews were conducted in a convenient place such as a room in the hospital, a relatively quiet cafe or the participant's workplace. Firstly, some of the demographic information was obtained through the Intake Questions Form and then they were asked to talk about their thoughts and feelings regarding their babies for 5 minutes. After this procedure, they were given the Prenatal Participant Survey Booklet of the project, in which questions about more demographic information of the mother (e.g., age, educational level, household income, and gestational age) and the depression and prenatal distress scales were included. Each interview lasted about 25 minutes. Participants were given a gift package including baby products (e.g., baby shampoo, cream) as an incentive.

The interviews were audio-recorded during data collection time and then were transcribed verbatim by four senior students from the Guidance and Psychological Counseling Department after the data was collected. Speech samples were coded by the thesis student and a graduate student who received a special training on the coding procedures, including twenty different speech samples for training. The coding manual, training samples and datasets were provided by Rosanneke Emmen at Leiden University and permissions were obtained from the owner of the scale. In training period, the coders first read the manual and discussed it. Then they coded two training sets, including six subscales of the narrative coherence instrument consisting of focus, elaboration, separateness, concern, acceptance and complexity. Boundary dissolution (BD) assessment for the separateness score was also included as BD caregiver, BD peer, BD partner and BD controlling, and they were also coded ranging from 0 (no BD) to 2 (major indication of BD). Disagreements were resolved through discussion until consensus was reached for the prenatal training data set.

After the training was completed, the transcripts of the current study's speech samples were read at least two times by the two coders. During the initial reading, they were rated using 7-point primary dimensions of coherence scales which are focus, elaboration, separateness, concern, acceptance, and complexity. The second reading provided integration of impression of these scales as well as the organization, internal consistency and authenticity of the narrative for the coders as a whole. Then, a global narrative score was assigned between 1 (There is no coherent narrative about the child) and 7 (The caregiver constructs a comprehensive and integrative picture of the child and the relationship.).

3.4 Data analysis

Statistical analyses were conducted through the IBM Statistical Packages for Social Sciences- Version 22.0. First, descriptive statistics were computed to examine the distributions and frequencies of scores on the variables of interest. Second, correlation coefficients were computed to examine the nature of relations among the variables. Since the outcome variables (i.e., FMSS scores) were measured on the ordinal level, Spearman test was used. Third, Ordinal Logistic Regression Analysis was used to explore the variances of predictors on the outcome variables. Ordinal Logistic Regression is a type of nonparametric regression in case the outcome variable is categorical (Field, 2013). As it is not possible to compute mean values for ordinal or categorical variables, the frequencies are used in ordinal logistic regression analyses. Five sets of regression analyses were conducted as there were five outcome variables (i.e., focus, elaboration, acceptance, complexity, coherence) as they met the test of parallel lines assumptions. Two other variables (i.e., concern, separateness) were disregarded because of their unequal variances. Model fit was checked, and individual contributions of predictors were interpreted. Furthermore, maximum-likelihood estimation, which predicts the probability of an event to occur for a given situation was used. The test of parallel lines was executed to examine if the data fulfill the assumptions. The statistical significance value was $p < .05$ unless otherwise indicated, and odds ratios were computed using Microsoft Office Excel.

CHAPTER 4

RESULTS

4.1 Results of the preliminary analyses

Several steps were conducted prior to the inferential analyses. First, the distributions

of the scores on the outcome variables were examined through histograms. Second,

family income was grouped into 3 categories: low income ranged from 1000 to 5000

TL (n = 31), middle income ranged from 5001-11.000 TL (n = 45), and high income

indicated 11.000 TL and above (n = 32). Third, correlation coefficients were

computed through the Spearman correlation analysis to examine the nature of the

relations among the variables of interest.

4.1.1 Descriptive statistics

Frequencies of the scores on the FMSS variables are demonstrated in Table 2.

Detailed information about the income levels was provided in Table 1 in the Method

chapter. In addition, the mean score for depression was found to be 32.9 (SD = 10.1)

with a range of 20 to 80 and the mean score for prenatal stress was 27.9 (SD = 4.4)

with a range of 17 to 51.

4.1.2 Bivariate correlations among the variables of interest

The relations between the FMSS variables, mothers' age, family income, prenatal

depression and stress levels were displayed in Table 3. Regarding the

intercorrelations among FMSS variables, the focus (i.e., parents' ability to keep the

focus of the FMSS on the baby or the relationship) score showed a negative relation

Table 2. Frequencies of FMSS Variables

	Focus		Elaboration		Separateness		Concern		Acceptance		Complexity		Coherence	
	n	%	N	%	n	%	n	%	n	%	n	%	n	%
1	0	.0	3	2.8	4	3.7	51	47.2	0	.0	7	6.5	6	5.6
2	1	.9	1	9.0	1	.9	19	17.6	1	.9	5	4.6	3	2.8
3	2	1.9	10	9.3	5	4.6	20	18.5	3	2.8	16	14.8	13	12.0
4	3	2.8	5	4.6	12	11.1	4	3.7	6	5.6	20	18.5	33	30.6
5	20	18.5	17	15.7	3	2.8	10	9.3	62	57.4	28	25.9	25	23.1
6	23	21.3	27	25.0	5	4.6	1	.9	17	15.7	16	14.8	18	16.7
7	59	54.6	45	41.7	78	72.2	3	2.8	19	17.6	16	14.8	10	9.3
Total	108	100	108	100	108	100	108	100	108	100	108	100	108	100

with concern/worry about parental functioning ($r = -.36$, $p < .01$) and a positive relation with acceptance of the baby and possible challenges regarding the future relationship ($r = .22$, $p < .05$), which means that narratives of those who were less concerned and more accepting about the baby and future relationship were more focused as well. Elaboration while narrating was found to be positively correlated with acceptance ($r = .45$, $p < .01$), complexity ($r = .71$, $p < .01$) and coherence ($r = .63$, $p < .01$) of the narratives. It means that mothers who spoke about their baby and relationship in a more elaborative way provided more accepting, complex, and coherent narratives. In addition, more coherent narratives were found to show higher levels of separation ($r = .28$, $p < .01$).

Table 3. Correlations Among Variables of Interest

	1	2	3	4	5	6	7	8	9	10	11
1 Focus	1	-.01	.07	-.36**	.22*	.10	.13	.03	-.33**	-.13	-.14
2 Elaboration		1	-.10	.16	.45**	.71**	.63**	.20*	-.14	-.07	.28*
3 Separateness			1	-.13	.12	.05	.28**	-.08	-.01	-.09	-.11
4 Concern				1	-.01	.11	-.00	.28**	.21*	.19*	.29*
5 Acceptance					1	.66**	.63**	.06	-.29**	-.16	.06
6 Complexity						1	.84**	.11	-.12	.01	.24*
7 Coherence							1	.17	-.12	-.04	.19*
8 Age								1	-.07	-.01	.52**
9 CESD									1	.42**	-.11
10 PDI										1	.01
11 Income											1

CESD: Center for Epidemiologic Studies Depression Scale, PDI: Prenatal Distress Inventory

*p < .05, **p < .01

Furthermore, FMSS acceptance was found to be significantly correlated with complexity and coherence as well as focus and elaboration as indicated above with a correlation coefficient of .66 and .63 respectively ($p < .01$) meaning that mothers who had more accepting narratives had more complex and coherent speech while narrating about the baby and their future relationship and they were more focused and had more elaborated narratives. Moreover, complexity had also a positive correlation with coherence ($r = .84, p < .01$) in addition to elaboration and acceptance as indicated above. It can be concluded that mothers who had more complex narratives had also more elaborated, accepting, and coherent speech in their narratives. To indicate coherence, as it was reported that mothers who had more elaborated ($r = .63, p < .01$), accepting ($r = .63, p < .01$), complex ($r =. 84, p < .01$)

and separated ($r = .28$, $p < .01$) narratives about their baby and future relationship provided more coherent narratives.

In addition, mothers' age had a positive relation with elaboration and concern. Older mothers did more elaboration ($r = .20$, $p < 0.5$) during their five-minute speech and they were found to be more concerned ($r = .28$, $p < .01$) about their baby and relationship in their narratives.

Income also showed significant relations with the FMSS variables. Higher-income mothers did more elaboration ($r = .28$, $p < .05$) during their five-minute speech and they were found to be more concerned ($r = .29$, $p < .01$) about their baby and relationship in their narratives. Moreover, complexity had also a positive correlation with family income ($r = .24$, $p < .05$) meaning that mothers who had high family income had more complex narratives during their speech. Family income also had a positive correlation with coherence ($r = .19$, $p < .05$) indicating that mothers' narrative coherence increased as their family income increased. Income had also positive relation with mothers' age ($r = .52$, $p < .01$) which means that older mothers reported higher family income.

Lastly, prenatal depression and distress were found to be related to focus, concern and acceptance scores of participants. Narrative focus revealed a significant negative relation with maternal depression ($r = -.33$, $p < .01$) meaning that mothers who were more depressed were less focused on the baby while narrating about him/her and their relationship. Further, more depressed ($r = .21$, $p < .05$) and distressed ($r = .19$, $p < .05$) participants were found to be more concerned about their baby and relationship in their narratives. Furthermore, depression level ($r = -.29$, $p < .01$) showed a negative association with mothers' acceptance meaning that mothers

who had more depressive symptoms provided narratives that were less accepting about their baby and their future relationship.

4.2 Results of the regression analyses

As stated above, a set of seven ordinal regression analyses were conducted by taking the results of the Spearman correlations into consideration. For each model, a test of parallel lines was computed to check the proportional odds assumption which tested if the ordinal regression equation model was valid. The null hypothesis states that parameters' slope coefficients are same across the response categories, which should be accepted to conduct analyses (Field, 2013). For this reason, the outcome variables that did meet this assumption were analyzed in ordinal regression (i.e., focus, elaboration, acceptance, and coherence). The outcome variable which did not meet the test of parallel lines assumption (i.e., complexity) was re-coded into two categories which were low complexity scores ranging from 1 to 4 and high complexity scores ranging from 5 to 7 and was analyzed using multinomial (rather than ordinal) regression. A multinomial analysis provides comparison between categories and computes more than one equation, unlike ordinal analysis (Field, 2013). Furthermore, no regression analyses were conducted for the other two outcome variables (i.e., separateness, concern) due to unequal variances in the rating categories (e.g., about 72% of mothers were rated 7 on separateness, about 64% of them rated 1 or 2 on concern).

4.2.1 The results of ordinal and multinomial regression analyses

To examine the variance of maternal age, prenatal stress, depression, and family income on the FMSS focus variable, the ordinal logistic regression model was

executed and the results demonstrated that the model significantly explained the outcome variable with $\chi^2(5) = 12.29$, Nagelkerke $R^2 = .12$ with $p = .03$. Table 4 demonstrates the detailed information.

Table 4. Ordinal Regression Results for FMSS Focus

Parameter	b (SE)	95% CI for Odds Ratio		
		LL	OR	UL
FMSSFocus = 2	-4.74 (2.27)	.00	.01	.75
FMSSFocus = 3	-3.62 (2.12)	.00	.03	1.71
FMSSFocus = 4	-2.88 (2.08)	.00	.06	3.31
FMSSFocus = 5	-1.11 (2.05)	.01	.33	18.31
FMSSFocus = 6	-.05 (2.05)	.02	.96	52.73
Income[a] = 1	1.12 (.59)*	.97	3.06	9.70
Income = 2	.47 (.49)	.61	1.59	4.17
Income = 3[b]	0	.	1	.
MAge	.04 (.05)	.94	1.04	1.15
CESD	-.06 (.02)*	.90	.94	.98
PDI	.02 (.05)	.93	1.02	1.12

Note. $R^2 = .11$ (Cox & Snell), .12 (Nagelkerke). Model χ^2 (5) = 12.29, $p = .03$. Dependent Variable: FMSS Focus; CI = confidence interval; LL = lower limit; UL = upper limit; OR = odds ratio

[a]1 = low, 2 = middle, 3 = high. [b]Reference category.

*$p < .05$, **$p < .01$

According to the results, depression was a significant negative predictor of the FMSS focus. For every one-unit increase in the depression level, there was a predicted decrease of .06 in the log odds of the focus scores. This indicates that mothers with greater depression scores were more likely to be low in the FMSS focus score. Furthermore, low family income was a positive significant predictor for the focus scores. The log odds of having high scores on the focus variable was 1.12 point higher for those who reported lower family income than those who reported

higher family income, which indicates that the participants with lower levels of family income were 1.12 times more likely to have higher scores on the focus variable than those with higher levels of family income.

The second ordinal regression analysis was conducted to examine the contribution of the predictors to the FMSS elaboration variable. The model was significant with χ^2 (5) = 14.69, p = .01 and the results revealed that 13% of the FMSS elaboration scores were explained by the predictors in the model. The detailed results are shown in Table 5.

Table 5. Ordinal Regression Results for FMSS Elaboration

Parameter	b *(SE)*	95% CI for Odds Ratio		
		LL	OR	UL
FMSSElaboration = 1	-3.30 (2.04)	.00	.04	2.28
FMSSElaboration = 2	-3.00 (2.02)	.00	.05	2.96
FMSSElaboration = 3	-1.56 (2.00)	.00	.21	11.33
FMSSElaboration = 4	-1.17 (2.00)	.01	.31	16.71
FMSSElaboration = 5	-.24 (2.00)	.02	.79	41.66
FMSSElaboration = 6	.89 (2.00)	.05	2.42	129.79
Income[a] = 1	-1.06 (.54)*	.12	.35	1.02
Income = 2	.16 (.47)	.47	1.17	2.95
Income = 3[b]	0	.	1	.
MAge	.06 (.05)	.96	1.06	1.17
CESD	-.02 (.02)	.95	.98	1.02
PDI	-.02 (.05)	.90	.98	1.07

Note: R^2 = .12 (Cox& Snell), .13 (Nagelkerke). Model χ^2 (5) = 14.69, p = .01. Dependent Variable: FMSS Elaboration; CI = confidence interval; LL = lower limit; UL = upper limit; OR = odds ratio

[a]1 = low, 2 = middle, 3 = high. [b]Reference category.

*p < .05, **p < .01

According to the results, there was a predicted decrease of 1.06 in the log odds of having a higher score on elaboration for the participants who had low family income than those who had high family income, which indicates that those with low

family income were less likely to elaborate on the baby and the future relationship compared to the participants with high family income.

An ordinal regression analysis was conducted to examine the contribution of the predictors to the FMSS acceptance variable. The results revealed that the model was significant with $\chi^2 (5) = 14.74$, $p = .12$ and depression was a negative predictor of acceptance (Table 6). For every unit increase on the depression level, there was a predicted decrease of .05 in the odds of the mothers being in higher categories (as opposed to lower categories) of the acceptance score. These results mean that more depressed participants were less likely to be accepting of the challenging aspects of parenting and future relationship with the baby in their narratives.

Table 6. Ordinal Regression Results for FMSS Acceptance

Parameter	b *(SE)*	95% CI for Odds Ratio		
		LL	OR	UL
FMSSAcceptance = 2	-6.65 (2.30)	1.43	.00	.12
FMSSAcceptance = 3	-5.24 (2.13)	8.17	.01	.35
FMSSAcceptance = 4	-4.23 (2.10)	.00	.02	.89
FMSSAcceptance = 5	-.89 (2.03)	.01	.41	22.09
FMSSAcceptance = 6	.04 (2.03)	.02	1.05	56.14
Income[a] = 1	-.18 (.57)	.27	.84	2.58
Income = 2	.88 (.48)	.94	2.41	6.17
Income = 3[b]	0	.	1	.
Mage	.03 (.05)	.93	1.02	1.13
CESD	-.05 (.02)*	.91	.96	1.00
PDI	-.05 (.05)	.87	.96	1.05

Note. $R^2 = .13$ (Cox& Snell), .14 (Nagelkerke). Model $\chi^2 (5) = 14.74$, $p = .12$. Dependent Variable: FMSS Acceptance; CI = confidence interval; LL = lower limit; UL = upper limit; OR = odds ratio

[a]1 = low, 2 = middle, 3 = high. [b]Reference category.

*$p < .05$, **$p < .01$

A multinomial logistic regression analysis was done to examine the model for the FMSS complexity variable as the model did not meet the linearity assumption. Complexity scores were recoded as low (1-4; n = 48) and high (5-7; n = 60) as noted earlier. The model was significant with χ^2 (5) = 13.26, p = .021 and family income was a significant predictor for this model. More specifically, the participants who were grouped into the low income category were 1.59 times more likely to have low complexity scores (1-4) than high complexity scores compared to those who were the high-income category. It means that for lower income mothers, the probability of having low score on complexity score was more probable as compared to high income mothers. The results are provided in Table 7.

Table 7. Multinomial Regression Results of FMSS Complexity

	b (SE)	95% CI for Odds Ratio		
		LL	OR	UL
1-4 Intercept	-.32 (2.27)			
MAge	.01 (.06)	.91	1.01	1.13
CESD	.01 (.02)	.97	1.01	1.06
PDI	-.04 (.05)	.86	.96	1.07
Income[a] = 1	1.59 (.64)*	1.41	4.92	17.12
Income = 2	.03 (.53)	.37	1.03	2.90
Income = 3[b]	0	.	.	.

Note: R^2 = .12 (Cox & Snell), .16 (Nagelkerke), .09 (McFadden). Model χ^2 (5) = 13.26, p = .021. Dependent Variable: FMSS Complexity; CI = confidence interval; LL = lower limit; UL = upper limit; OR = odds ratio

[a]1 = low, 2 = middle, 3 = high. [b]Reference category.

*p < .05, **p < .01

An ordinal regression analysis was conducted to examine if the predictors contribute to narrative coherence. The results revealed that mothers' age, prenatal stress, depression and family income significantly explained 14% of the variance in the coherence outcome. However, none of the predictors did a unique contribution. The findings are demonstrated in Table 8.

Table 8. Ordinal Regression Results for FMSS Coherence

Parameter	b *(SE)*	95% CI for Odds Ratio		
		LL	OR	UL
FMSSCoherence = 1	-1.39 (1.99)	.01	.25	12.19
FMSSCoherence = 2	-.92 (1.97)	.01	.40	18.94
FMSSCoherence = 3	.21 (1.96)	.03	1.24	57.88
FMSSCoherence = 4	1.73 (1.97)	.12	5.62	264.65
FMSSCoherence = 5	2.82 (1.98)	.35	16.71	806.64
FMSSCoherence = 6	4.15 (2.01)	1.23	63.23	3260.07
Income[a] = 1	-.62 (.52)	.19	.54	1.48
Income = 2	.82 (.45)	.95	2.28	5.49
Income = 3[b]	0	.	1	.
Mage	.07 (.46)	.98	1.07	1.17
CESD	-.02 (.19)	.94	.98	1.02
PDI	.01 (.44)	.93	1.01	1.10

Note. R^2 = .13 (Cox& Snell), .14 (Nagelkerke). Model χ^2 (5) = 16.23, $p < .01$.
Dependent variable: FMSS Coherence; CI = confidence interval; LL = lower limit; UL = upper limit; OR = odds ratio

[a]1 = low, 2 = middle, 3 = high. [b]Reference category

*$p < .05$, **$p < .01$

4.3 Summary of the results

4.3.1 Mothers' age as a predictor of concern

It was hypothesized that the FMSS concern/worry scores in the narratives would increase as the participants get older. Spearman correlations revealed that the narratives of older participants were rated more concerned/worried as expected ($r = .28$, $p < .001$) (Table 3). However, this result should be considered tentatively. Due to unequal variance in the concern scores, further analyses were not conducted. Based on these findings, it could be stated that the first hypothesis is not supported.

No hypothesis was formulated regarding the relation between maternal age and the other scores of the FMSS (i.e., focus, elaboration, separateness, acceptance, complexity, coherence). Spearman correlations showed that age was positively correlated with the FMSS elaboration score. However, the results of the ordinal regression analysis in which the FMSS elaboration score was an outcome, revealed that age did not uniquely predict elaboration while narrating about the baby and relationship. No correlation was observed between age and other FMSS variables. Further, age was not a unique contributor for other FMSS scores.

4.3.2 Income level as a predictor of the FMSS scores

The second hypothesis was that the FMSS scores (except concern) would increase as the family income level increases and a negative association was expected between the concern/worry and family income level. The hypothesis was partially supported. Bivariate correlations showed that family income was positively related to elaboration, concern complexity, and coherence of narratives. The results of the regression analyses revealed different patterns for the outcomes.

Focus. Expectant mothers with low income (between 1000-5000 TL) were1.12 times more likely to have higher scores on the focus dimension of the FMSS with an odds ratio of 3.06 (95% CI, .97 to 9.67; Wald χ^2 = 3.63, *p* <.05) than those with high family income (11.001 TL and above). This finding was unexpected. Contrary to the research hypothesis, the results indicated that mothers who had lower family income were more likely to keep their focus on the baby and their future relationship while narrating.

Elaboration. In line with the hypothesis, the mothers who had low family income were 1.06 times less likely to have more elaborated narratives about their baby and the future relationship than those who had high family income with an odds ratio of .35 (95% CI, .12 to 1.02; Wald χ^2 = 3.73, *p* <.05).

Acceptance. Neither bivariate correlations nor regression results supported a link between family income and acceptance of the possible challenges regarding parenting while narrating.

Complexity. The results were compatible with the hypothesis for the narrative complexity scores. An estimated increase in family income was associated with an increase in the narrative complexity scores of mothers (Table 7). As expected, mothers who had low income were 1.59 times more likely to have a complexity score of 1 to 4 which were low complexity scores, than mothers having a high family income. It indicates that expected mothers with family income ranging from 1.000 to 5.000 TL were less likely to give examples about their baby regarding different contexts as opposed to high-income mothers.

Coherence. Although bivariate correlations showed a positive association between family income and narrative coherence, this link disappeared when all of the

predictors were put into the regression model. Thus, family income did not predict the narrative coherence uniquely.

4.3.3 Prenatal distress and depression as predictors of the FMSS scores

The third hypothesis was that the FMSS scores (except for concern) would decrease as the prenatal stress and depression scores increase. Similarly, it was expected that the FMSS concern scores would show an increase as prenatal stress and depression scores increase. Bivariate correlations demonstrated that depression was negatively correlated with focus and acceptance whereas it was positively related to concern/worry in narratives. Prenatal stress, on the other hand, was only associated with concern/worry in five-minute speech.

The results of the regression analyses revealed that depression predicted only focus and acceptance scores of the FMSS. In line with the hypothesis, an increase in depression score was found to be associated with a decrease in the odds of mothers' focus scores, with an odds ratio .94 (95% CI, .90 to 98), Wald $\chi^2 = 7.76$, $p < .01$. For every one-unit increase in the depression scores, there was a predicted decrease of .06 in the log odds of being in a higher level of the outcome, meaning that more depressed mothers were less likely to keep their focus on their baby and the future relationship in their narration. Similarly, consistent with the research hypothesis, the regression findings demonstrated that an increase in depression score was associated with a decrease in the odds of mothers' acceptance scores with an odds ratio .96 (95% CI, .91 to 1.00), Wald $\chi^2 = 4.28$, $p = .04$. For every unit increase in the depression scores, there was a predicted decrease of .05 in the log odds of having a higher score on the FMSS acceptance. It means that more depressed mothers were

less likely to be accepting in their narratives, as it was expected. Prenatal stress did not make a unique contribution to any of the FMSS scores.

CHAPTER 5

DISCUSSION

This chapter indicates a summary of the major findings that are discussed in relation

to the research hypotheses considering the previous studies. Further, the limitations

of the study and recommendations for future research are presented.

5.1 Review of the findings based on literature

5.1.1 Associations among the FMSS variables

The first aim of the study was to explore associations among the components of

maternal narratives. As it was expected, mothers who expressed less concern in their

narratives were able to focus more on the baby and their future relationship. A

possible explanation might be that concerned mothers might have greater mental load

(Main et al., 1985), which may hinder them to keep their attention on the baby and

the future parenting. Oppenheim and Waters (1995) state that representations are the

abstracted symbolic information and they need to be held, manipulated, and

categorized in mind to construct narrations. An organized, coherent, consistent and

complex narrative requires abilities including encoding, storage, retrieval,

monitoring, steering, and controlling the information as it was mentioned above

(Roebers, 2017). These abilities enable flexible access to a full range of information

and eliminating those regarding contextual factors to be meaningful. It might be

interpreted that these information processing abilities contributing to remain focused

on the subject are crucial factors in organization of thought to produce meaningful

narration and concern is a factor which negatively affects mothers' organization of

thoughts. It seems that mothers who have high concern have difficulty in focusing on the baby in their narrations since they are distracted with the concerns they have about the baby. These results might be interpreted that mothers may have difficulty to have a mental space for the baby in their minds since they are overwhelmed with the high concern level. In addition, the mothers who were more focused on their babies were found to be more accepting and warmer about them. They were able to speak more lovingly about the baby and show understanding of challenging aspects of their future relationship. It might be concluded that mothers who have an accepting stance have also a greater mental space for their (unborn) baby. It might be easier for them to hold the baby as focal subject as opposed to mothers who have less accepting stance.

Furthermore, the findings revealed significant associations of elaboration with acceptance, complexity and coherence of narratives. Mothers who provided more details about their upcoming baby and the future relationship showed a more accepting manner in their narrations and vice versa. Mothers who were more accepting of the upcoming caregiver role were more likely to have vivid and solid expectations that cover both exciting and challenging aspects of the parenthood. An elaborated and detailed narrative includes mostly positive and but also some negative aspects of the children and the relationship in different contexts, which are also the characteristics of accepting and complex narratives. A high score on complexity requires mostly positive but also some challenging aspects of the baby and future parenting. Thus, mothers who have complex narratives provide mostly positive depiction which is an indication of mothers' accepting manner. Mothers who provided rich and detailed descriptions about the baby portrayed more balanced and multidimensional pictures of their babies and future relationships that were supported

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with spontaneous examples from (future) everyday life. This result does not seem surprising as accepting mothers might be more comfortable when they give positive and negative examples of future parenting regarding different contexts. It might be easier for those mothers to reach a wider range of thoughts and feelings and to acknowledge their own complex feelings about the upcoming baby as they elaborate on him/her. Furthermore, a positive correlation between complexity and elaboration is expected because both of the dimensions are fundamentally based on producing speech, giving different examples from different contexts, and giving details about the unborn baby and their future relationship with the baby. On the other hand, separateness is only related to coherence scores, which can be interpreted in the way that mothers who perceive their unborn baby as a unique and independent person with his/her own wishes and needs were also more able to hold the baby in their mind coherently.

Lastly, this study reveals that mothers' narrative coherence is related to their capacity to generate a detailed picture of the baby, to see the baby's individual needs, and to give everyday examples from different contexts in an accepting manner. It should be reminded that scoring of coherence depends on the scoring of other subscales and it was strongly related to complexity. The strong relationship between complexity and coherence can be interpreted in a way that complex narratives are characterized by comprehensive and balanced statements with positive and negative aspects of the child supported by everyday life examples. Thus, it would be easier to reach repeated experiences and stories in memory, which increases the number of examples and details about them. Giving relevant everyday examples in order and portraying a multidimensional picture about the baby and the future relationship in balance requires cognitive-affective processing. Oppenheim and Waters (1995) state

that richness and complexity of the narratives indicate balance and coherence of mental representations. In line with this statement, the current study supports that complexity and coherence have a strong relation.

5.1.2 Maternal age and the FMSS scores

The second aim of the study was to examine the relationship between maternal age, prenatal stress and depression, family income, and the FMSS scores. It was hypothesized that older participants' narratives would convey higher levels of concern. No hypothesis was formulated about the associations between the other scores of the FMSS (i.e., focus, elaboration, separateness, acceptance, complexity, coherence). The bivariate correlations revealed that older participants expressed more worry in their narratives. The finding showing the positive relationship between age and concern seems consistent with the findings of Lambregtse-van den Berg and her colleagues (2013) which demonstrate that older mothers were emotionally more involved when they were asked to depict their unborn baby.

Bivariate correlations showed a positive correlation between maternal age and elaboration in narratives, too. It is also interesting that both of these variables were correlated with family income, which means that participants with higher incomes were older and elaborated the narratives better. When both age and income were entered into the regression models to examine whether they predict maternal elaboration or not, age did not uniquely contribute to elaboration, while family income remained as a significant predictor. In other words, it seems that the relationship between maternal age and elaboration in narratives disappeared when family income and other variables (e.g., depression) were taken into account. Given that there is no previous research showing a link between the narrative characteristics

and age, no hypothesis had been formulated regarding the associations between the other scores of the FMSS-NC (i.e., focus, elaboration, separateness, acceptance, complexity, coherence) and maternal age. The findings seem in line with the expectations. In summary, older expectant mothers were more concerned about their unborn baby and their future relationship, but they do not differ from younger ones in terms of other aspects of mental representations that are captured by the FMSS.

The age range of the participants was wide (i.e., 21 to 42 years with a mean of 29 years). Some researchers argued that three aspects of pregnancy anxiety were fear of giving birth, fear of having a physically or mentally handicapped child, and concerns about one's appearance (Graignic-Philippe et al. 2014; Huizink et al., 2004). One may argue that older mothers might be more anxious about health-related factors and bodily changes. However, the results of this study showed that the associations of maternal age with prenatal distress and depression were not significant, which means that they did not report higher levels of distress about their pregnancy and labor. One possible explanation might be that some mothers may be on the in vitro fertilization (IVF) treatment. We did not obtain information about fertility methods, thus the question of whether older mothers are more likely to receive IVF treatment, which may lead them to express more concern while narrating about their upcoming baby is not known. Gibson, Ungerer, Tenannt, and Saunders (2000) found that IVF mothers are more likely to report lower self-esteem and parenting competence regarding their parental attitudes. Thus, it is possible that in the current study older participants stated their concern about their future parenting in their narrations although they did not report distress and depression.

5.1.3 Family income and the FMSS scores

Second, it was hypothesized that the FMSS-NC scores (except concern) would increase as the family income level increased, and the concern scores would decrease as the income level increased. Bivariate correlations showed that family income was positively related to elaboration, concern, complexity, and coherence scores of the FMSS.

Sher-Censor, Grey, and Yates (2013) discovered that word count in the FMSS is related to family socioeconomic status. Similarly, Sümer and his colleagues (2016) also state that parental education level is positively related to the cognitive aspect of the representations (i.e., richness of perception). Thus, mothers' education level, which is correlated with income level, might contribute to these aspects of the representations. Keeping in mind that approximately 80% of the participants of the current study had a bachelor's or graduate degree family income was used as an indicator of the SES level of the participants. Depending on the functional definition of the incoherent speech samples referring to meager narratives and having little to say about the unborn baby, the amount of mothers' words may be related to their coherence of representation. High elaboration and complexity scores require a capacity to produce an organized narrative that contributes to the coherence of thought. Thus, depending on the findings of the current study, it can be argued that mothers with more socioeconomic resources can give a more detailed picture including the positive and negative aspects of the baby and future parenting.

Furthermore, the results also showed that high-income mothers displayed more concern in their narration, which was unexpected. It is possible that high-income mothers would have more perfectionist attitudes toward the baby and their future parenting, which may have led to an increase in their level of concern. The

results are consistent with those that were reported by Sümer and his colleagues (2016) which showed that highly educated mothers showed a heightened level of anxiety and guilt about their parenting behaviors. They argued that highly educated parents might have higher standards for their baby and future parenting which might make them more worried/anxious. It is important to note that the researcher's observations during the interviews with the mothers gave her an impression that most of the mothers with more socioeconomic resources made more anxious/worried statements about the future schooling of their children by mentioning the problems regarding the current education system (e.g., testing, school selection). Although this is a speculation, it might be the case that wealthier families might have higher aspirations about the future of their children which may have colored the affective tone of their narrations.

Although it may sound contrary to the argument above, it was also surprising that the mothers with higher-income were found to be less focused on the baby during their speech compared to the lower-income mothers based on the regression findings. It is likely that their heightened level of worry may inhibit mothers' capacity to keep focused on and hold the baby as a focal subject during narration. Given the negative association between maternal focus and concern in the FMSS, a tentative implication might be that higher-income mothers' minds might be filled up with different kinds of worries that limit their mental space for the mutual relationship with their babies. It is important to note once again that there is no association between family income and depression and prenatal distress. In other words, mothers with higher levels of income were not more depressed or stressed compared to those with lower levels of income. Yet they were more worried and had more difficulty in keeping their attention on their unborn baby and their relationship

while they were asked to express their thoughts and feelings about raising the baby

compared to those with lower levels of income. Possible causes of their concern that

inhibit their capacity to focus on the child can be better understood by using

qualitative methods and content analysis in future research.

5.1.4 Maternal depression and distress and the FMSS scores

The third hypothesis of the study was that more depressed and distressed mothers

would receive lower FMSS scores (except for concern) and it was expected that the

concern scores would show an increase as prenatal stress and depression scores

increase. The hypothesis was partially supported by the current findings. A glance at

the bivariate associations showed that more depressed mothers (not distressed ones)

were less focused (on the baby) and accepting of possible challenges about parenting.

Moreover, narratives of depressed (and distressed) mothers were found to be more

concerned. Regression findings seem in line with this. Accordingly, maternal

depression made a unique prediction to the FMSS focus and acceptance when the

impact of maternal age and family income were controlled, which indicates that less

depressed mothers were more likely to make the baby the focal subject during their

narration and they were less likely to have statements including critical judgments,

derogation or rejection of the baby. These findings are consistent with Barnes and his

colleagues' results (2007) which show that maternal depression and criticism about

the baby were positively related. Critical comments were negatively related to the

accepting stance of the mother. Furthermore, Ahlqvist-Bjorkroth and colleagues

(2016) found that depressed mothers were more likely to have distorted

representations about the baby (i.e., inability to stay focused on the child during

narration and to have integrated positive and negative features of the child with a

warm and accepting manner (Zeanah et al., 1994)). A high level of depression may result in a defensive exclusion of feelings about the child and having an idealized or rejected perception of the child. Mothers might be overwhelmed by their own feelings and have difficulty in keeping their focus on the child.

Bivariate correlations of the current study also showed that prenatal distress and depression were positively correlated. In addition, regression analyses demonstrated that depression (but not prenatal stress) explained variance in some of the FMSS scores (i.e., focus, acceptance). Based on these results, it might be argued that prenatal distress and depression measures overlap to some extent. The difference between prenatal distress and depression is that prenatal distress refers to participants' worries and concerns about the fetus and body and mood changes related to the pregnancy (i.e., feeling tired and having low energy, changes in weight and body shape during pregnancy, whether the baby might come too early) (Yali & Lobel, 1999), whereas depression refers to negative affectivity, somatic symptoms, and difficulties in interpersonal relationships (Radloff, 1977). Thus, depression may not be temporary as prenatal distress is. Participants were asked to report their answers considering the last two weeks on both measures. It is likely that, however, participants may have a tendency toward negative affectivity as a trait rather than situational (pregnancy-related) stress. Thus, it can be concluded that mothers' mood, but not pregnancy-related anxieties can be a better predictor for some aspects of the representations including focus and acceptance.

5.2 Limitations of the study and recommendations for future research

The study had three major limitations. First, convenience sampling method was used to reach participants and most of the participants were highly educated (i.e., those

who had bachelor's and graduate degrees comprised 80.6% of the sample), which limited the generalizability of the findings. Although hospitals in which low SES individuals get service were visited to reach a representative sample, most individuals with low SES were reluctant to participate in the study.

The second limitation was that the scores on some of the subdimensions (i.e., concern, separateness) were highly skewed, which made inferential analyses impossible. Specifically more than 70% of the narratives were coded 7 on separateness (i.e., the caregiver perceives the baby as possessing an independent identity), and about 64% of them were coded 1 or 2 on concern (i.e., the caregiver expresses no or minimum worry about parenthood with confidence about handling the future obstacles). Sher-Cencor and her colleagues only used the global rating of narrative coherence (not six subscales) in their analyses (Sher-Cencor et al., 2013, 2017; Sher-Censor & Yates, 2015). This method may be followed; otherwise, there would be problems with variance in the subdimensions. Thus, it can be said that the FMSS may not be valid enough to assess some aspects of maternal representations in the current sample. For further research, it might be recommended that other measures can be added to the assessment battery to establish convergent validity of the FMSS and better understand these aspects of the representations. In further studies, the Working Model of the Child Interview (WMCI; Zeanah et.al., 1994) that were recently adapted to Turkish in a sample of first-time mothers and their preschoolers could be used in addition to the FMSS.

Thirdly, although there is a growing number of studies show that the coherence of the mother's narrative is a crucial predictor for future mother-child interaction (Sher-Cencor et al., 2013) in terms of the mother's ability to respond to the infant's signals sensitively, provide him/her with appropriate scaffolding, and

communicating emotional experiences, which are related to the child's cognitive development (Lucassen et al., 2015; Roebers, 2017), all of the data in this study has been received during the prenatal period and the above associations were not evaluated after birth. Mothers' representations can be used as a predictor factor in understanding mother-child interaction. As was described in the Methods section, this study was a part of the large longitudinal project, which aims to investigate parental predictors of infants' attention skills at four months. It could be better to examine organization of postnatal maternal representation and other factors including mother and child outcomes (i.e., sensitivity, child temperament) after birth. However, project data about mother-child interaction in 4th month has not been coded yet.

Additionally, fathers were not included in the study. However, recent studies showed that couple satisfaction and social support would affect mothers' depression and stress levels (Foley, Branger, Alink, Lindberg, & Hughes, 2019). For further research, it is recommended that factors related to fathers and the relationship quality between couples can be examined to better understand the prenatal representations and their correlated factors. Overall, the findings of the current study may be limited, but more detailed results can be found in future studies.

5.3 Conclusion and implications

Narrative production is one of the fundamental ways to assess mental representations. Content-free evaluation enabled to examine the organization of thoughts, rather than affective content. Accumulated evidence shows that assessment of parental representations is crucial since it is a predictor for later parent-child relationship (Benoit et al., 1997a; 1997b; Sher-Censor & Yates, 2015; Sher-Censor et al., 2013, 2016). Qualitative methods have been used in previous studies (Buldur,

2009; Ilıcalı & Fişek, 2004), however the use of the FMSS as an assessment tool of mental representations in the prenatal period is relatively recent (Sher-Cencor, 2015; Rea et al., 2020; Westan et al., 2017). This study attempted to examine if this instrument captures individual differences in mental representations about the unborn baby in a Turkish sample of primiparous women. The results showed that there was variability in some scores such as focus, elaboration, acceptance, complexity, and coherence, but it seems the instrument did not work in terms of assessing separateness and concern as the majority of the scores were either in very high or low categories. Thus, as Sher-Censor and her colleagues (Sher-Censor & Yates, 2015; Sher-Cencor et al., 2013) did, it might be better to rely only on coherence scores rather than using all sub-dimensions one by one.

Furthermore, it appears that family income and mothers' moods should be considered in the assessment of mental representations in this group. In line with some previous findings in Turkey, mothers with higher levels of income expressed more concern while they spoke about their unborn babies and their future relationship compared to those with lower levels of income, although they were not more depressed or distressed about pregnancy-related issues. A content analysis may provide better insight into what made the more resourceful group more worried about future parenting. Although the FMSS is a brief instrument, there is a need to establish its convergent validity with other instruments that were adapted to Turkey (e.g., Working Model of Child Interview; Sümer et al., 2016).

In addition, the results demonstrated that mothers with higher levels of income had more difficulties in focusing on the baby. Families with low SES has been a target population for most of the preventive studies. However, regulating and containing the concerns of financially resourced primiparous women to improve the

quality of their maternal experiences can be an important point in prenatal intervention through the counseling perspective. In addition, it is more likely that older expectant mothers would have higher concern. In this study, information about fertility was not obtained; however, it is possible that mothers, especially older ones, would get medical support for fertilization which might increase their concern level. That is why, intervention groups may be defined regarding these factors.

Overall, despite shortcomings, this study contributes to the theoretical background of mental representations and implications of FMSS procedures in Turkey as it is the first time that the FMSS was used to assess mental representations in a Turkish sample. The findings have meaningful theoretical and practical implications for early intervention in counseling programs.

INFORMED CONSENT FORM

PARTICIPANT INFORMED CONSENT FORM

Name of the institution: Boğaziçi University Faculty of Education
Department of Educational Sciences Psychological Counseling and Guidance
Program

Title of the research: Origins of Early Individual Differences
in Infant Attention: A Multi-Method Study Involving Families of Twins
and Singletons

Project director: Dr. Nihal Yeniad

Master students: Melike Hacıoğlu, Sedanur Sorgun, Büşra Ünverdi

E-mail: nihal.yeniad@boun.edu.tr   **Phone Number:**02123596574

The main goal of our study is to investigate individual differences in infant attention
skills in the context of early environmental factors.
If you
- are pregnant,
- completed 32nd week of your pregnancy,
- will become a mother for the first time,

We invite you to participate in our project to help us in this research.

If you accept to participate in this research,

1. We will kindly request you to fill out a questionnaire that includes questions
about your general health status, mood, social support and family life and to
tell us your expectations about your baby while we record your voice for 5
minutes on a digital voice recorder approximately 1 month before your
estimated date of delivery. **This interview will take approximately 20
minutes.**

2. We will visit you 4 months after delivery at a convenient time for you and

   - we will play 2 different games with your baby for 10 minutes and
     videotape his/her reactions while we smile at him/her and show
     him/her puppets.

   - we will kindly request you to spend free time with your baby for 5
     minutes and to interact with him/her with different facial expressions
     for 5 minutes subsequently. For example, you play with him/her as
     you would normally do for 2 minutes, look at him/her with a still face

for 1 minute, and to play with him/her as you would normally do for 2 minutes. The interaction between you and your baby will be videotaped.

- We will kindly request you to tell us your emotions, thoughts and expectations about your baby while we record your voice on a digital voice recorder for 5 minutes.

- We will kindly request you to fill out the questionnaire that takes approximately 15 minutes via computer during or after our visit. **Our visit will take approximately 45 minutes.**

We will have small gifts for your baby in each of our interviews to thank you for your participation.

Your participation in this study is completely voluntary. You may withdraw from the study in any time without stating a reason. In the case of withdrawal of consent, your samples will be destroyed, and your personal data will be deleted.

This research is conducted for scientific purposes in consideration of preserving confidentiality of personal information. An identification number is used instead of names of the participants in surveys, videos and voice records. Hard disks in which records are protected will be kept in a locked file cabinet and will be wiped when the research is completed. In case you give written permission, these records may be used for education of our students or in scientific presentations without stating personal information of you or your baby.

If you agree to participate in this research, please sign this form, place it into the envelope and return it to us.

If you have any questions, please ask them before signing.

The nature and purpose of this research have been sufficiently explained to me and I agree to participate in this study with my baby/babies.

Name-Surname: ……………………………………..
Date (dd/mm/yyyy): ..../............/...............
Signature: ……………………………………………………

INFORMED CONSENT FORM

(TURKISH)

KATILIMCI BİLGİ ve ONAM FORMU

Araştırmayı destekleyen kurum: Boğaziçi Üniversitesi Eğitim Fakültesi Eğitim Bilimleri Bölümü Rehberlik ve Psikolojik Danışmanlık Anabilim Dalı

Araştırmanın adı: Erken DönemDikkat Becerisindeki Bireysel Farklılıkların Araştırılması: Tek ve İkiz Bebekli Ailelerle Çoklu Yöntemli bir Çalışma

Proje yürütücüsü: Dr. Öğretim Üyesi Nihal Yeniad
Yüksek lisans öğrencileri: Melike Hacıoğlu, Sedanur Sorgun, Büşra Ünverdi

E-posta adresi: nihal.yeniad@boun.edu.tr   **Telefonu:** 0212 359 6574

Araştırmamızın amacı, bireylerin kendi düşünce ve davranışlarını düzenleyebilmeleri için gerekli olan dikkat becerisinin erken dönemde çevresel faktörler bağlamında incelenmesidir.

- Bebek bekliyorsanız,
- Hamileliğinizde 32 haftayı tamamladıysanız,
- İlk defa anne olacaksanız,

Bu araştırmada bize yardımcı olmanız için sizi projemize katılmaya davet ediyoruz.

Katılmayı kabul ettiğiniz takdirde,

1) Beklenen doğum tarihinden yaklaşık bir ay önce sizden genel sağlık ve duygu durumunuz, sosyal desteğiniz ile aile yaşamınız hakkında sorular içeren bir anketi doldurmanızı ve bebeğiniz hakkındaki beklentilerinizi bir ses kayıt cihazıyla kaydederken 5 dakika boyunca anlatmanızı rica edeceğiz. **Bu görüşmemiz yaklaşık 20 dakika sürecektir.**

2) Doğumdan 4 ay sonra sizin için uygun bir zamanda ziyarete gelerek
   - Önce bebeğinizle toplam 10 dakika süren iki ayrı oyun oynayacağız. Biz gülümserken ve kuklalar gösterirken ne tür tepkiler verdiğini kamerayla kaydedeceğiz.
   - Daha sonra sizden bebeğinizle önce 5 dakika serbest vakit geçirmenizi; sonrasında ise bir 5 dakika da farklı yüz ifadeleri ile onunla iletişime geçmenizi isteyeceğiz. Örneğin 2 dakika onunla her

zaman oynadığınız gibi oynamanızı, bunun ardından 1 dakika ona ifadesiz bir yüzle bakmanızı ve sonra 2 dakika tekrar normal şekilde oynamanızı isteyeceğiz. Yani toplam 10 dakika boyunca bebeğinizin ve sizin etkileşiminizi kameraya alacağız.

- 5 dakika boyunca bebeğiniz hakkında duygu, düşünce ve beklentilerinizi ses kayıt cihazı kaydederken anlatmanızı rica edeceğiz.
- Yaklaşık 15 dakikalık anketi ziyaret sırasında veya sonrasında bilgisayar üstünden doldurmanızı isteyeceğiz. **Bu görüşmemiz yaklaşık 45 dakika sürecektir.**

Katılımınız için teşekkür etmek amacıyla her görüşmemizde ufak hediyelerimiz olacak.

Bu araştırmaya katılmak tamamen isteğe bağlıdır.Katıldığınız takdirde çalışmanın herhangi bir aşamasında herhangi bir sebep göstermeden onayınızı çekme hakkına sahipsiniz. Bu durumda sizden toplanan verilerin hepsi hiçbir şekilde kullanılmadan imha edilecektir.

Bu araştırma bilimsel bir amaçla katılımcı bilgilerinin gizliliği esas tutularak yapılmaktadır. Anketlerde, video ve ses kayıtlarında katılımcıların ismi/soyismi yerine bir numara kullanılır. Kayıtların saklandığı harddiskler, araştırma projemiz süresince kilitli bir dolapta muhafaza edilip araştırma sona erdiğinde temizlenecektir. Yazılı izin verdiğiniz takdirde bu kayıtlar sizin ya da bebeğinizin kimliği belirtilmeden bölüm öğrencilerimizin eğitiminde veya bilimsel nitelikteki sunumlarda kullanılabilir.

Katılmak isterseniz lütfen bu formu imzalayıp ekteki zarfın içine koyarak bize ulaştırınız.
İmzalamadan önce sorularınız varsa lütfen sorun.

Bana anlatılanları ve yukarıda yazılanları anladım. Araştırmaya bebeğim/bebeklerimle birlikte katılmayı kabul ediyorum.

Katılımcı Adı-Soyadı:…………………………………..
Tarih (gün/ay/yıl):........./.........../..............
İmzası: ……………………………………………

INTAKE QUESTIONS FORM (DEMOGRAPHICS)

Katılımcı numarası: ……………........
(Participant ID)
Anketin doldurulduğu tarih: ….../….../………
(Filling date of the form)
Araştırmacı:………………………..
(Researcher)

KATILIMCI ÖNGÖRÜŞME SORULARI (Doğum Öncesi)
(PARTICIPANT INTAKE QUESTIONS (PRENATAL))

S1 Projemizden nasıl haberdar oldunuz? _____
(How did you know about our project?)

S2 Hamileliğinizin kaçıncı haftasındasınız?_____
(Which week of your pregnancy are you at?)

S3 Bebeğinizin beklenen doğum tarihi (gün/ay/yıl):_____
(The expected birthdate of your baby (day/month/year))

S4 Sizin doğum tarihiniz:_____
(Your date of birth)

S5 Eşinizin doğum tarihi: _____
(Your partner's date of birth)

S6 En son mezun olduğunuz okul:
 (*Lastly you graduated from*)

1____ İlkokul *(Primary School)*
2____ Ortaokul *(Secondary School)*
3____ Lise *(High School)*
4____ Meslek Yüksek Okulu (2 yıllık) *(Vocational school of higher ed. (2 years))*
5____ Üniversite (4 yıllık) *(University (4 years))*
6____ Lisansüstü *(Master)*
7____ Başka (belirtiniz_____) *(Other (please specify _____))*

S7 Mesleğiniz: _____
(Your occupation)

S8 Şu an çalışıyor musunuz?
(Do you work currently?)

  ☐ Evet *(Yes)*
  ☐ Hayır *(No)*

S9 Eğer evetse, haftada ortalama kaç çalışıyorsunuz ? _____
(If yes, how many hours a week do you work on average?)

S10Eşinizin en son mezun olduğu okul:
(*Lastly your partner graduated from)*
1____ İlkokul *(Primary School)*
2____ Ortaokul *(Secondary School)*
3____ Lise *(High School)*
4____ Meslek Yüksek Okulu (2 yıllık) *(Vocational school of higher ed. (2 years))*
5____ Üniversite (4 yıllık) *(University (4 years))*
6____ Lisansüstü *(Master)*
7____ Başka (belirtiniz_____) *(Other (please specify _____))*

S11 Eşinizin mesleği: _____
(Your partner's occupation)

S12 Eşiniz şu an çalışıyor mu?
(Does your partner work currently?)

☐ Evet *(Yes)*
☐ Hayır *(No)*

S13Eğer evetse, haftada ortalama kaç saat çalışıyor?
 (If yes, how many hours a week does your partner work on average?)

APPENDIX D

FIVE MINUTE SPEECH SAMPLE (FMSS) PROTOCOL

Record the FSMM on a digital voice recorder. Make sure again that all phones are turned off. Do not take notes while the parent is speaking; the attention of the mother should not be distracted during the interview. If the parent has to feed the baby, give them time and space to do so and do the FMSS afterwards. Make sure that the baby is not on the parent's lap.

Instructions:

"I would like to hear your thoughts and feelings about <name baby>, in your own words and without my interrupting with any questions or comments. When I ask you to begin I would like you to speak for 5 minutes, telling me what kind of person <name baby> is and how the two of you get along together. After you begin to speak, I prefer not to answer any questions until after the 5 minutes are over. Here I have an instruction card for you, so you can read the instructions again if you'd like. (Place the instruction card in front of the parent.) *Do you have any questions you would like to ask before we begin? Ok, I'll record some data and then you can start."*

Start the record by saying the ID, the date, assessment time (prenatal or postnatal).

Do <u>not</u> say anything while the parent is speaking, not even "*Mm-hmm*." Do <u>not</u> use leading prompts, such as "*Tell me a little bit more about that*."

<u>Possible questions asked by a parent before and during the speech sample:</u>
- "What exactly do you want me to tell you?"

Response: *"Whatever you think is important about <name baby> and how the two of you get along together."*
- "Am I doing okay?"

Response: Respond by either nodding your head or by saying "*fine*." The preference is to nod, because this is the least distracting.
- "How much time do I have left?"

Response: *"A couple more minutes,"* or *"About a minute."* Do not tell the parent the exact time remaining to avoid any potential anxiety.
- "Do you want me to go on and tell you about her illness?"

Response: *"Please tell me anything about <name baby> for a few more minutes."*

<u>Possible concerns during the speech sample:</u>
- The parent stops speaking before the 5 minutes have elapsed.

<u>Action:</u> Wait 30 seconds before prompting, if the parent does not continue talking, say*: "Please tell me anything about <name baby> for a few more minutes."* If the parent still does not speak, allow the full 5 minutes to elapse before stopping the recorder.

- The parent continues talking after the 5 minutes have elapsed.

Action: Stop recording when the 5 minutes have elapsed, but let the parent finish his/her story.

- The parent breaks down during the interview and begins to cry.

Action: If a parent becomes emotional during the home visit (e.g. clams up or starts crying), and wants to terminate the interview, we will first listen and try to comfort her. If the parent calms down, we can discuss with her/him if s/he is still willing to continue. We will leave the choice up to her/his if s/he wants to continue with the session or stop. If the parent is not able to calm down or needs more structural help, report this situation to the project coordinator after the interview and if required inform the mother about the centers where psychological support can be received.

FIVE MINUTE SPEECH SAMPLE PROTOCOL-ADAPTED

(TURKISH)

Beş Dakika Konuşma Örneği Protokolü (Doğum Öncesi Tek Bebek)

Yönerge:
"Doğacak bebeğiniz hakkındaki düşünce ve duygularınızı kendi cümlelerinizle, benim herhangi bir soru veya yorumla bölmediğim bir şekilde duymak istiyorum. Başlamanızı istediğimde 5 dakika boyunca doğacak bebeğinizin nasıl bir kişi olacağını ve ikinizin nasıl anlaşacağını anlatarak konuşmanızı rica ediyorum. Siz konuşmaya başladıktan sonra 5 dakika dolana kadar sorulara cevap vermemeyi tercih ediyorum. İşte burada sizin için bir yönerge kartı var (Yönerge kartını ebeveynin önüne yerleştirin), isterseniz yönergeleri tekrar okuyabilirsiniz. Başlamadan önce sormak istediğiniz herhangi bir soru var mı?
Tamam, bazı bilgiler kaydedeceğim, sonrasında başlayabilirsiniz."

Kayda **Anne ID, Bebek ID, görüşme tarihi, değerlendirme zamanını** (doğum öncesi ya da sonrası) söyleyerek başlayın.

Anne konuşurken hiçbir şey söylemeyin, 'Hmm' bile demeyin. ' *Bu konuyu biraz daha açabilir misiniz*?'' gibi yönlendirici ifadeler kullanmayın.

Anne tarafından sorulabilecek muhtemel sorular:
- "Tam olarak size ne anlatmamı istiyorsunuz?"
Cevap: **"Doğacak bebeğiniz hakkında önemli gördüklerinizi ve ikinizin nasıl anlaşacağını**"

- "İyi gidiyor muyum?"
Cevap: **Ya başınızı sallayarak ya da ''iyi'' diyerek cevap verin. Baş sallamak daha az dikkat dağıtacağı için tercih bu yöndedir.**

- "Ne kadar zamanım kaldı?"
Cevap: **"Bir kaç dakika daha,"** ya da **"Yaklaşık bir dakika."** Olası kaygıdan kaçınmak için geriye kalan süreyi tam olarak söylemeyin

- "Devam etmemi ve size onun hastalığından bahsetmemi ister misiniz?"
Cevap: **"Lütfen doğacak bebeğiniz hakkında birkaç dakika daha herhangi bir şeyden bahsedin.''**

Konuşma örneği süresince yaşanabilecek olası sorunlar:

- Ebeveyn 5 dakika dolmadan konuşmayı bırakırsa:
Eylem: Konuşmaya teşvik etmeden önce 30 saniye bekleyin, eğer konuşmaya devam etmezse, **"Lütfen doğacak bebeğiniz hakkında birkaç dakika daha herhangi bir**

şeyden bahsedin.'' deyin.Eğer ebeveyn hala konuşmazsa kayıt cihazını durdurmadan önce 5 dakikanın dolmasını bekleyiniz.

● 5 dakika dolduktan sonra ebeveyn konuşmaya devam ederse
Eylem: Kaydı 5 dakika dolduğunda durdurunuz ama ebeveynin hikayesini bitirmesine izin veriniz.

● Anne görüşme sırasında kendini kaybeder ve ağlamaya başlarsa;
Eylem: Anne duygusallaşırsa (örn., sessizliğe bürünürse ya da ağlamaya başlarsa) ve görüşmeyi sonlandırmak isterse, **ilk önce onu dinleyin ve konuşmaya devam etme ya da sonlandırma seçimini ona bırakın.** Eğer anne sakinleşemiyorsa ya da daha profesyonel yardıma ihtiyaç duyuyorsa, bu durumu görüşmeden hemen sonra proje yürütücüsüne bildirin ve gerekli gördüğünüz takdirde anneyi psikolojik yardım alabileceği merkezler hakkında bilgilendirin.

DEMOGRAPHICS

S1 Hane halkının aylık toplam geliri
   (Total monthly income of household)

1.000-3.000 TL	☐
3.001-5.000 TL	☐
5.001-7.000 TL	☐
7.001-9.000 TL	☐
9.001- 11.000 TL	☐
11.000-13.000 TL	☐
13.001- 15.000 TL	☐
15.001 TL ve üzeri	☐

(15.001 TL and above)

S2 Şu anda ailenizin ekonomik durumuyla ilgili ne kadar endişelisiniz?
(How much worried are you about the economic situation of your family?)

☐ Endişeli değilim.
   (I am not worried.)

☐ Çok az endişeliyim.
   (I am a little worried.)

☐ Bazen endişeliyim.
   (I am sometimes worried.)

☐ Orta derecede endişeliyim.
   (I am worried frequently.)

☐ Çok endişeliyim.
   (I am worried a lot.)

S3 Herhangi bir sağlık probleminiz bulunuyor mu?
   (Do you have any health problems?)

☐ Evet *(Yes)*   ☐ Hayır *(No)*

S4 Cevabınız evet ise problemin ismini yazınız: _____
(If yes, please write down the name of the problem)

S5 Düzenli bir şekilde herhangi bir ilaç ya da takviye (demir, vitanmin gibi) kullanıyor musunuz?
(Do you use any medication or supplement (iron, vitamin etc.) on a regular basis?)

☐ Evet *(Yes)* ☐ Hayır *(No)*

S6 Cevabınız evet ise kullandığınız ilacın/takviyenin ismini yazınız: _____
(If yes, please write down the name of medication/supplement you use)

S7 Ne sıklıkta bu ilacı/taviyeyi kullanıyorsunuz? _____
(How often do you use this medication/supplement?)

S8 Ne zamandır bu ilacı/takviyeyi kullanıyorsunuz? _____
(How long have you been using this medication/supplement?)

S9 Sağlık kontrollerinde bebeğinizin gelişimi ile ilgili herhangi bir sorun belirtildi mi?
(Were any problems with your baby's development stated during health checks?)

☐ Evet *(Yes)*   ☐ Hayır *(No)*

S10 Cevabınız evet ise, problemin ismini yazınız. _____
(If yes, please write down the name of the problem)

CENTER FOR EPIDEMIOLOGIC STUDIES DEPRESSION SCALE (CES-D)

Center for Epidemiologic Studies Depression Scale (CES-D), NIMH

Below is a list of the ways you might have felt or behaved. Please tell me how often you have felt this way during the past week.

	During the Past Week			
	Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)
1. I was bothered by things that usually don't bother me.	☐	☐	☐	☐
2. I did not feel like eating; my appetite was poor.	☐	☐	☐	☐
3. I felt that I could not shake off the blues even with help from my family or friends.	☐	☐	☐	☐
4. I felt I was just as good as other people.	☐	☐	☐	☐
5. I had trouble keeping my mind on what I was doing.	☐	☐	☐	☐
6. I felt depressed.	☐	☐	☐	☐
7. I felt that everything I did was an effort.	☐	☐	☐	☐
8. I felt hopeful about the future.	☐	☐	☐	☐
9. I thought my life had been a failure.	☐	☐	☐	☐
10. I felt fearful.	☐	☐	☐	☐
11. My sleep was restless.	☐	☐	☐	☐
12. I was happy.	☐	☐	☐	☐
13. I talked less than usual.	☐	☐	☐	☐
14. I felt lonely.	☐	☐	☐	☐
15. People were unfriendly.	☐	☐	☐	☐
16. I enjoyed life.	☐	☐	☐	☐
17. I had crying spells.	☐	☐	☐	☐
18. I felt sad.	☐	☐	☐	☐
19. I felt that people dislike me.	☐	☐	☐	☐
20. I could not get "going."	☐	☐	☐	☐

SCORING: zero for answers in the first column, 1 for answers in the second column, 2 for answers in the third column, 3 for answers in the fourth column. The scoring of positive items is reversed. Possible range of scores is zero to 60, with the higher scores indicating the presence of more symptomatology.

CENTER FOR EPIDEMIOLOGIC STUDIES DEPRESSION SCALE (CES-D)

(TURKISH)

Duygularınız

S13 Aşağıda duygu ve davranışlarımızla ilgili ifadeler yer almaktadır. Lütfen **geçen hafta** boyunca aşağıdakileri ne sıklıkla hissettiğinizi veya yaşadığınızı uygun rakamı yuvarlak içine alarak belirtin.

	Hiçbir zaman/Nadiren (1	Biraz-Birkaç kez (1-2	Arada Sırada-Bazen (3-4	Çokça-Çoğu Zaman (5-7
1. Genellikle canımı sıkmayan şeyler canımı sıktı.	1	2	3	4
2. Açlık hissetmedim, iştahım yerinde değildi.	1	2	3	4
3. Arkadaşlarım veya ailemin yardımına rağmen kötü ruh halinden kurtulamadım.	1	2	3	4
4. Ruh halimin diğer insanlar kadar iyi olduğunu hissettim.	1	2	3	4
5. Yaptığım işe odaklanmakta zorlandım.	1	2	3	4
6. Kendimi depresyonda hissettim.	1	2	3	4
7. Her şeye çaba harcamam gerektiğini hissettim.	1	2	3	4
8. Gelecek için umutlu hissettim.	1	2	3	4
9. Hayatımın bir başarısızlık olduğunu düşündüm.	1	2	3	4
10. Korktuğumu hissettim.	1	2	3	4
11. Huzursuz uyudum.	1	2	3	4
12. Mutluydum.	1	2	3	4
13. Her zamankinden az konuştum.	1	2	3	4
14. Kendimi yalnız hissettim.	1	2	3	4
15. İnsanlar arkadaş canlısı değildi.	1	2	3	4
16. Yaşamdan zevk aldım.	1	2	3	4
17. Ağlama nöbetleri geçirdim.	1	2	3	4
18. Kendimi üzgün hissettim.	1	2	3	4
19. İnsanların benden hoşlanmadığını hissettim.	1	2	3	4
20. İşler yolunda gitmedi.	1	2	3	4

PRENATAL DISTRESS INVENTORY

Q11 Are you feeling bothered, upset, or worried at this point in your pregnancy about?
Please indicate how much you agree with each statement, circling the appropriate number.

	Not at all (0)	Some what (1)	Very Much (2)
1. Taking care of a newborn baby.			
2. Effect of ongoing health problems such as high blood pleasure or diabetes on your pregnancy.			
3. Feeling tired and having low energy during pregnancy.			
4. Pain during labor and delivery.			
5. Paying for your medical care during pregnancy.			
6. Changes in your weight and body shape during pregnancy.			
7. About whether the baby might come too early.			
8. Physical symptoms of pregnancy such as vomiting, swollen feet, or backaches. (If yes, which ones?....................)			
9. Quality of your medical care during pregnancy.			
10. Changes in your relationships with other people due to having a baby. (If yes, especially whom?..................)			
11. Whether you might have an unhealthy baby.			
12. What will happen during labor or delivery.			
13. Working or caring for your family during pregnancy.			
14. Paying for baby's clothes, food, or medical care.			
15. Working at a job after baby comes.			
16. Getting daycare, babysitters, or other help to watch the baby after it comes.			
17. Whether the baby might be affected by alcohol, cigarettes, or drugs that you have taken.			

Doğum Öncesi Duygu ve Düşünceleriniz

S11 Gebeliğinizin bu döneminde aşağıda belirtilen konularda kendinizi rahatsız, üzgün ya da endişeli hissediyor musunuz? Lütfen her bir ifadeye ne kadar katıldığınızı, uygun rakamı yuvarlak içine alarak belirtiniz.

	Hayır, hiç	Evet, biraz	Evet, çok fazla
1. Yeni doğan bebeğin bakımı	1	2	3
2. Yüksek tansiyon veya şeker hastalığı gibi devam eden sağlık sorunlarının gebeliğinize etkisi	1	2	3
3. Enerjinizin düşük olması ve kendinizi yorgun hissetmeniz	1	2	3
4. Doğum sırasında hissedeceğiniz ağrı/sancı	1	2	3
5. Aldığınız sağlık bakım hizmetleri için yaptığınız harcamalar	1	2	3
6. Kilonuzda ve vücudunuzun görünümünde oluşan değişiklikler	1	2	3
7. Bebeğin çok erken doğma olasılığı	1	2	3
8. Gebelikte ortaya çıkan kusma, ayaklarda şişlik veya bel ağrısı gibi bedensel şikâyetler (Evet ise; hangi şikayetler? ……………………………….)	1	2	3
9. Aldığınız tıbbi bakımın kalitesi	1	2	3
10. Bebeğin doğumu nedeniyle diğer insanlarla olan ilişkilerinizde yaşayacağınız değişiklikler (Evet ise; özellikle kim(ler)? …........................)	1	2	3
11. Sağlıksız bir bebeğinizin olabileceği	1	2	3
12. Doğum sırasında neler olacağı	1	2	3
13. Çalışma yaşamınız veya ailenizin bakımı	1	2	3
14. Bebeğin giysileri, beslenmesi ve sağlık bakımı için yapacağınız harcamalar	1	2	3
15. Bebeğin doğumundan sonra bir işte çalışmak	1	2	3
16. Bebeğin doğumundan sonra günlük bakımı	1	2	3
17. Kullandığınız sigara, alkol ya da ilaçlardan bebeğin etkilenmiş olup olmadığı	1	2	3

APPENDIX K

FMSS COHERENCE SCALES – CODING FORM

ID:

Project:		Wave:	
Rater:			
Coding date:			

	Notes	Score
1. Focus		
2. Elaboration		
3. Separateness		**Boundary Dissolution:** Caregiving 0 1 2 Peer 0 1 2 Partner 0 1 2 Controlling 0 1 2 **Separateness:**
4. Concern		
5. Acceptance		
6. Complexity		
COHERENCE		

Additional notes:

APPENDIX L

BOĞAZİÇİ UNIVERSITY ETHICS COMMITTEE

APPROVAL FOR SOCIAL SCIENCES

T.C. BOĞAZİÇİ ÜNİVERSİTESİ
Sosyal ve Beşeri Bilimler İnsan Araştırmaları Etik Kurulu (SBİNAREK)

30.11.2018

Dr. Öğretim Üyesi Nihal Yeniad Malkamak
Boğaziçi Üniversitesi,
Eğitim Fakültesi
Eğitim Bilimleri Bölümü
34342 Bebek / İstanbul
nihal.yeniad@boun.edu.tr

Sayın Araştırmacı,

"Erken Dönem Dikkat Becerisindeki Bireysel Farklılıkların Araştırılması: Tek ve İtiz Bebekli Ailelerle Çoklu Yöntemli bir Çalışma" başlıklı projeniz ile Boğaziçi Üniversitesi Sosyal ve Beşeri Bilimler İnsan Araştırmaları Etik Kurulu (SBİNAREK)'e yaptığınız 2018/12 kayıt numaralı başvuru 30.11.2018 tarihli ve 2018/03 sayılı kurul toplantısında incelenerek etik onay verilmesi uygun bulunmuştur.

Saygılarımızla bilgilerinizi rica ederiz.

Prof. Dr. Ayşecan Boduroğlu (Başkan)
Fen-Edebiyat Fakültesi
Psikoloji Bölümü
Boğaziçi Üniversitesi, İstanbul

Prof. Dr. Fatoş Gökşen (Üye)
Fen Edebiyat Fakültesi
Sosyoloji Bölümü
Koç Üniversitesi, İstanbul

Doç. Dr. Osman Sabri Kıratlı (Üye)
Uygulamalı Bilimler Yüksek Okulu
Uluslararası Ticaret Bölümü
Boğaziçi Üniversitesi, İstanbul

Dr. Öğr. Üyesi C. Taylan Acar (Üye)
Fen-Edebiyat Fakültesi
Sosyoloji Bölümü (Üye)
Boğaziçi Üniversitesi, İstanbul

Dr. Öğr. Üyesi Işıl Erduyan
Eğitim Fakültesi
Yabancı Diller Eğitimi Bölümü
Bölümü Boğaziçi Üniversitesi, İstanbul

Dr. Öğr. Üyesi Selcan Kaynak (Üye)
İktisadi ve İdari Bilimler Fakültesi
Siyaset Bilimi ve Uluslararası İlişkiler
Boğaziçi Üniversitesi, İstanbul

Dr. Öğr. Gör. Suzan Üsküdarlı (Üye)
Mühendislik Fakültesi
Bilgisayar Mühendisliği Bölümü
Boğaziçi Üniversitesi, İstanbul

APPENDIX M

BOĞAZİÇİ UNIVERSITY ETHICS COMMITTEE APPROVAL LETTER FOR CURRENT STUDY

Evrak Tarih ve Sayısı: 18/06/2020-41

T.C.
BOĞAZİÇİ ÜNİVERSİTESİ
SOSYAL VE BEŞERİ BİLİMLER YÜKSEK LİSANS VE DOKTORA TEZLERİ ETİK İNCELEME
KOMİSYONU
TOPLANTI TUTANAĞI

Toplantı Sayısı   : 05
Toplantı Tarihi   : 15/06/2020
Toplantı Saati   : 14:00
Toplantı Yeri   : Zoom sanal toplantı
Bulunanlar   : Prof. Dr. Feyza Çorapçı, Dr. Öğr. Üyesi Yasemin Sohtorik İlkmen, Prof. Dr. Özlem Hesapçı
                      Karaca, Doç. Dr. Ebru Kaya, Prof. Dr. Fatma Nevra Seggie
Bulunmayanlar   :

Melike Hacıoğlu
Eğitim Bilimleri Bölümü Psikolojik Danışmanlık ve Rehberlik

Sayın Araştırmacı

" Hamilelik döneminde anneliğe özgü temsiller: İlk kez anne olacak kadınlarla beş dakikalık konuşma örneği
çalışması" başlıklı projeniz ile ilgili olarak yaptığınız SBB-EAK 2020/32 sayılı başvurunuz komisyonumuz
tarafından 15 Haziran 2020 tarihli toplantıda incelenmiş ve uygun bulunmuştur.

Bu karar tüm üyelerin toplantıya çevrimiçi olarak katılımı ve oybirliği ile alınmıştır. COVID-19 önlemleri
kapsamında kurul üyelerinden ıslak imza alınamadığı için bu onam mektubu üye ve raportör olarak Fatma
Nevra Seggie tarafından bütün üyeler adına e-imzalanmıştır.

Saygılarımızla, bilgilerinizi rica ederiz.

Prof. Dr. Fatma Nevra SEGGIE
ÜYE

e-imzalıdır
Prof. Dr.Fatma Nevra SEGGIE
Raportör

SOBETİK 05 15/06/2020

APPENDIX N

APPROVAL OF THE TURKISH MINISTRY OF HEALTH

Boğaziçi Üniversitesi Evrak Tarih ve Sayısı: 23/08/2019-4453

T.C.
İSTANBUL VALİLİĞİ
İl Sağlık Müdürlüğü

Sayı : 16867222-604.01.01
Konu : Nihal YENİAD MALKAMAK'ın
Araştırma Projesi İzin Başvurusu Hk.

BOĞAZİÇİ ÜNİVERSİTESİ REKTÖRLÜĞÜNE
(34342 Bebek / İstanbul)

İlgi : a) 08/03/2019 tarihli ve 71211201-1765 sayılı yazı.
b) 11/03/2019 tarihli ve 71211201 sayılı yazı.
c) 26/04/2019 tarihli ve 16867222-604.01.01-1681 sayılı yazı.

İlgi a) sayılı yazınız ile Üniversiteniz Eğitim Fakültesi Eğitim Bilimleri Bölümü Rehberlik ve Psikolojik Danışmanlık Anabilim Dalında görevli **Dr. Öğretim Üyesi Nihal YENİAD MALKAMAK'ın** yürütücülüğünde, Yüksek Lisanss Öğrencileri; Melike HACIOĞLU, Sedanur SORGUN ve Büşra ÜNVERDİ'nin **"Erken Dönem Dikkat Becerisindeki Bireysel Farklılıkların Araştırılması: Tek ve İkiz Bebekli Ailelerle Çoklu Yöntemli Bir Çalışma"** başlıklı proje kapsamında *Bahçelievler DH, Başakşehir DH, Büyükçekmece Mimar Sinan DH, Esenler Kadın Doğum ve Çocuk Hastalıkları Hastanesi, Kağıthane DH, Marmara Üniversitesi Pendik EAH, Şişli Hamidiye Etfal EAH ve (Sarıyer), Okmeydanı EAH, Ümraniye EAH, Zeynep Kamil Kadın ve Çocuk Hastalıkları EAH, Haydarpaşa Numune EAH, Üsküdar DH ve İstanbul EAH (Süleymaniye Kadın Doğum ve Çocuk Hastalıkları Hastanesi)'nden* hizmet alan gebelerden veri toplama talebi Müdürlüğümüze iletilmiş olup, ilgi c) sayılı yazımız ile çalışmayı uygun gören hastane listesi kurumumuza gönderilmişti.

Söz konusu çalışmanın yapılabilmesi için ilgi c) sayılı yazımıza istinaden Müdürlüğümüz ve Rektörlüğünüz arasında imzalanan Araştırma İzinleri İş Birliği Protokolü'nün bir nüshası ekte gönderilmekte olup, konunun çalışmada adı geçen **Dr. Öğretim Üyesi Nihal YENİAD MALKAMAK'a** tebliği hususunda;

Gereğini bilgilerinize arz ederim.

e-imzalıdır.
Op. Dr. Kemal TEKEŞİN
Müdür a.
Başkan

EKLER:
1- İmzalı Protokol (2 Sayfa)

T.C.
İSTANBUL VALİLİĞİ
İl Sağlık Müdürlüğü

Sayı   : 16867222-604.01.01
Konu   : Nihal Yeniad MALKAMAK'ın
         Araştırma Projesi İzin Başvurusu Hk.

BOĞAZİÇİ ÜNİVERSİTESİ REKTÖRLÜĞÜNE
(Eğitim Fakültesi)
(34342 Bebek / İstanbul)

İlgi   : a) 11/03/2019 tarihli ve 71211201 sayılı yazı.
         b) 08/03/2019 tarihli ve 71211201-1765 sayılı yazı.
         c) 28/03/2019 tarihli ve 92302355-903.02.99-2672 sayılı yazı.
         d) 29/03/2019 tarihli ve 45203095-773.01-2237 sayılı yazı.
         e) 02/04/2019 tarihli ve 79341859-799-8501 sayılı yazı.
         f) 03/04/2019 tarihli ve 97010115-604.01.01-3239 sayılı yazı.
         g) 04/04/2019 tarihli ve 43766128-604.01.01-6670 sayılı yazı.
         h) 17/04/2019 tarihli ve 64376970-799-2035 sayılı yazı.
         i) 18/04/2019 tarihli ve 48670771-771-9404 sayılı yazı.
         j) 26/04/2019 tarihli ve 74839299-604.01.01-7050 sayılı yazı.
         k) 28/03/2019 tarihli ve 90785684-604.01.01-1438 sayılı yazı.
         l) 28/03/2019 tarihli ve 54132726-771-116 sayılı yazı.
         m) 29/03/2019 tarihli ve 44937362-604.01.01-16 sayılı yazı.
         n) 02/04/2019 tarihli ve 11391090-772.99-38 sayılı yazı.
         o) 04/04/2019 tarihli ve 62977267-772.99-103 sayılı yazı.

İlgi a) ve b) sayılı yazılarınız ile Üniversiteniz Eğitim Fakültesi Eğitim Bilimleri Bölümü Rehberlik ve Psikolojik Danışmanlık Anabilim Dalı **Dr. Öğretim Üyesi Nihal Yeniad MALKAMAK**'ın yürütücülüğünde, Yüksek Lisans Öğrencileri; Melike HACIOĞLU, Sedanur SORGUN ve Büşra ÜNVERDİ'nin "**Erken Dönem Dikkat Becerisindeki Bireysel Farklılıkların Araştırılması: Tek ve İkiz Bebekli Ailelerle Çoklu Yöntemli Bir Çalışma**" başlıklı projesi kapsamında, *Bahçelievler DH, Başakşehir DH, Büyükçekmece Mimar Sinan DH, Esenler Kadın Doğum ve Çocuk Hastalıkları Hastanesi, Kağıthane DH, Marmara Üniversitesi Pendik EAH, Şişli Hamidiye Etfal EAH ve (Sarıyer), Okmeydanı EAH, Ümraniye EAH, Zeynep Kamil Kadın ve Çocuk Hastalıkları EAH, Haydarpaşa Numune EAH, Üsküdar DH ve İstanbul EAH (Süleymaniye Kadın Doğum ve Çocuk Hastalıkları Hastanesi)'nden* hizmet alan gebelerden veri toplaması talebi Müdürlüğümüze iletilmiştir.

Söz konusu araştırma, Bahçelievler DH, Başakşehir DH, Büyükçekmece Mimar Sinan DH, Esenler Kadın Doğum ve Çocuk Hastalıkları Hastanesi, Marmara Üniversitesi Pendik EAH, Şişli Hamidiye Etfal EAH ve (Sarıyer), Okmeydanı EAH ve İstanbul EAH (Süleymaniye Kadın Doğum ve Çocuk Hastalıkları Hastanesi)'nin ilgi c), d), e), f), g), h), i) ve j) sayılı yazısı ile uygun görülmüş ve Müdürlüğümüz tarafından onaylanmıştır.

Zeynep Kamil Kadın ve Çocuk Hastalıkları EAH, Üsküdar DH, Ümraniye EAH, Kağıthane DH, Haydarpaşa Numune EAH'nin ilgi k), l), m), n), o) sayılı yazısı ile uygun görülmemiştir. Çalışma ile ilgili ekte yer alan protokol örneğinin, Üniversiteniz ile Müdürlüğümüz arasında imzalanması (2 nüsha) halinde yapılabileceği ve konunun çalışmada adı geçen Dr. Öğretim Üyesi Nihal Yeniad MALKAMAK'a tebliği hususunda;

Gereğini bilgilerinize arz ederim.

e-imzalıdır.
Op. Dr. Kemal TEKEŞİN
Müdür a.
Başkan

EKLER:
1- Örnek Protokol (2 Sayfa)
2- Hastane Görüş Yazıları

T.C
İSTANBUL VALİLİĞİ
İL SAĞLIK MÜDÜRLÜĞÜ

ARAŞTIRMA İZİNLERİ İŞBİRLİĞİ PROTOKOLÜ

Madde 1. Taraflar

a) İş bu protokol **T.C. Sağlık Bakanlığı İstanbul İl Sağlık Müdürlüğü** ile
.... Boğazici ..... Universitesi ..... arasında düzenlenmiştir.

Madde 2. İkametgâh Adresleri ve Bildirimler

a) Bu protokole konu olan yazışma ve tebligatlarda Sağlık Bakanlığı İstanbul İl Sağlık Müdürlüğünün (bundan böyle İl Sağlık Müdürlüğü olarak anılacaktır) ikametgah adresi olarak Binbirdirek Mahallesi Peykhane Caddesi No:8 Çemberlitaş-Fatih, Boğazici Universitesi ....,'nin ikametgah adresi olarak Rektörlük ....34342 Bebek / istanbul.. geçerli olacaktır.

b) Taraflar adres değişikliklerinin en geç bir hafta içinde yazılı olarak bildirmek zorundadır olup, bildirmedikleri takdirde protokolde yazılı olan adrese yapılan tebligat geçerli olacaktır.

Madde 3. Konusu:

Bu protokol **T.C. Sağlık Bakanlığı İstanbul İl Sağlık Müdürlüğü'ne** bağlı verilen hizmetleri, sağlık hizmeti çalışmalarını ya da yapılan kayıtlar sonucu elde edilen istatistik verilerini içeren ve kurum personeli ve/veya kuruma başvuran kişilerle yapılacak anket çalışmalarını kurala bağlamak amacıyla düzenlenmiştir.

Madde 4. Araştırmanın Yürütülmesi:

a) Kurumlar arası yapılan protokol neticesinde çalışma yapacak kişiler bağlı oldukları Üniversite aracılığıyla üst yazıyla **İstanbul İl Sağlık Müdürlüğü'ne** başvuracaktır.

b) Yapılacak bilimsel çalışma proje aşamasında iken İstanbul İl Sağlık Müdürlüğü tarafından değerlendirilecektir.

c) Çalışma uygulanırken talep edilen araştırmanın kapsamı dışında hiçbir veri toplanmayacaktır.

d) Veri toplama sırasında Sağlık Bakanlığı personelinden de yararlanılacaksa ayrıca **İstanbul İl Sağlık Müdürlüğü'nden** onay alınacaktır.

e) Çalışmada veri toplanacak kurumlardan İl Sağlık Müdürlüğü ve bağlı kurumların rızası **İstanbul İl Sağlık Müdürlüğü** tarafından özel kurumlar ve kişilerin rızası çalışmacı tarafından alınacaktır.

f) Çalışma süresi Üniversite tarafından teklif edilecektir. Çalışma süresinin uzatılması araştırmacının veya Üniversitenin resmi talebi ile mümkün olacaktır.

g) Üniversitenin onay verdiği kişiler ile sahada çalışmayı yürütecek kişiler aynı kişiler olacaktır. Çalışmaya yeni kişilerin dahil edilmesi ancak **İstanbul İl Sağlık Müdürlüğü** onayı ile mümkün olacaktır. Aksi takdirde çalışma onayı iptal edilecektir.

F01/SH-SGB/00

T.C
İSTANBUL VALİLİĞİ
İL SAĞLIK MÜDÜRLÜĞÜ

T.C. SAĞLIK BAKANLIĞI
İSTA.SA.
İL SAĞ. MÜDÜRLÜĞÜ

b) Çalışmayı gerçekleştiren kişi/kişiler kurumda görevlendirilecekse ayrıca **İstanbul İl Sağlık Müdürlüğü'nden** onay alınacaktır.

i) Çalışma, Üniversite tarafından kabul edildikten sonra bir nüshası elektronik ortamda ve doküman halinde **İstanbul İl Sağlık Müdürlüğü'ne** teslim edilecektir. Çalışmacının çalışmasının bir nüshasını teslim etmediği durumlarda İl Sağlık Müdürlüğü yapılan bu çalışmanın bir örneğini Üniversiteden talep edebilecektir.

j) Şartlarda oluşabilecek değişikliklere bağlı olarak haklı sebep hallerinde İstanbul İl Sağlık Müdürlüğü ve Üniversite protokolü süre göz önünde bulundurulmaksızın daha önce de sonlandırabilecektir.

k) Araştırma verileri, sözel ya da yazılı olarak kullanıldığında ilgili kurum/kurumların (Hastane, Şube, Birim vs.) ismi zikredilmeyecektir.

l) 01.08.2014 tarihli Hasta Hakları Yönetmeliğinin Birinci Bölüm 5.madde d ve e fıkrası, Dördüncü Bölüm 21.maddesine kesinlikle riayet edilmesi gerekmektedir. Bu durum protokolün sonlanması sonrasında da geçerlidir.

Madde 5. Protokolün Süresi:

a) Bu protokol tarafların imzaladığı tarihten itibaren geçerli olup, geçerlilik süresi **2 (iki) yıldır.** Süre bitiminde tarafların onayı ile süre uzatılabilir. Uzatılması ancak yeni bir protokole bağlıdır.

b) **Başlangıç** ...09.06.2019... / **Bitiş** ...09.06.2021...

Madde 6. İhtilafların Çözümü:

Protokolün uygulanması ile ilgili çıkabilecek anlaşmazlıklar öncelikle tarafların yetkili temsilcileri tarafından görüşülerek çözülecektir. Bunun mümkün olmaması halinde ise ihtilafların çözümünde idari mahkemelerin hakem sıfatıyla yer itibariyle yetkili olduğu İdari Mahkemelerce çözümlenecektir.

Madde 7. Yürürlük:

İş bu protokol 7 (yedi) madde ve 2 (iki) sayfadan ibaret olup, hükümleri taraflarca okunmuş ve uygulanmak üzere 2 (iki) nüsha olarak tanzim ve imza edilmiş olup taraflarca imzalandığı tarihte yürürlüğe girer.

Taraflar

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T.C
İSTANBUL VALİLİĞİ
İL SAĞLIK MÜDÜRLÜĞÜ

T.C. SAĞLIK BAKANLIĞI
STUBA
İ. SAĞ. n n MÜ n n/Md.

ARAŞTIRMA İZİNLERİ İŞBİRLİĞİ PROTOKOLÜ

Madde 1. Taraflar

a) İş bu protokol T.C. Sağlık Bakanlığı İstanbul İl Sağlık Müdürlüğü ile .... *Boğaziçi Üniversitesi* ..... arasında düzenlenmiştir.

Madde 2. İkametgâh Adresleri ve Bildirimler

a) Bu protokole konu olan yazışma ve tebligatlarda Sağlık Bakanlığı İstanbul İl Sağlık Müdürlüğünün (bundan böyle İl Sağlık Müdürlüğü olarak anılacaktır) ikametgah adresi olarak Binbirdirek Mahallesi Peykhane Caddesi No:8 Çemberlitaş-Fatih, *Boğaziçi Üniversitesi* ....,'nin ikametgah adresi olarak *Rektörlük* .... *34342 Bebek / İstanbul* .. geçerli olacaktır.

b) Taraflar adres değişikliklerinin en geç bir hafta içinde yazılı olarak bildirmek zorundadır olup, bildirmedikleri takdirde protokolde yazılı olan adrese yapılan tebligat geçerli olacaktır.

Madde 3. Konusu:

Bu protokol T.C. Sağlık Bakanlığı İstanbul İl Sağlık Müdürlüğü'ne bağlı verilen hizmetleri, sağlık hizmeti çalışmalarını ya da yapılan kayıtlar sonucu elde edilen istatistik verilerini içeren ve kurum personeli ve/veya kuruma başvuran kişilerle yapılacak anket çalışmalarını kurala bağlamak amacıyla düzenlenmiştir.

Madde 4. Araştırmanın Yürütülmesi:

a) Kurumlar arası yapılan protokol neticesinde çalışma yapacak kişiler bağlı oldukları Üniversite aracılığıyla üst yazıyla İstanbul İl Sağlık Müdürlüğü'ne başvuracaktır.

b) Yapılacak bilimsel çalışma proje aşamasında iken İstanbul İl Sağlık Müdürlüğü tarafından değerlendirilecektir.

c) Çalışma uygulanırken talep edilen araştırmanın kapsamı dışında hiçbir veri toplanmayacaktır.

d) Veri toplama sırasında Sağlık Bakanlığı personelinden de yararlanılacaksa ayrıca İstanbul İl Sağlık Müdürlüğü'nden onay alınacaktır.

e) Çalışmada veri toplanacak kurumlardan İl Sağlık Müdürlüğü ve bağlı kurumların rızası İstanbul İl Sağlık Müdürlüğü tarafından özel kurumlar ve kişilerin rızası çalışmacı tarafından alınacaktır.

f) Çalışma süresi Üniversite tarafından teklif edilecektir. Çalışma süresinin uzatılması araştırmacının veya Üniversitenin resmi talebi ile mümkün olacaktır.

g) Üniversitenin onay verdiği kişiler ile sahada çalışmayı yürütecek kişiler aynı kişiler olacaktır. Çalışmaya yeni kişilerin dahil edilmesi ancak İstanbul İl Sağlık Müdürlüğü onayı ile mümkün olacaktır. Aksi takdirde çalışma onayı iptal edilecektir.

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h) Çalışmayı gerçekleştiren kişi/kişiler kurumda görevlendirilecekse ayrıca **İstanbul İl Sağlık Müdürlüğü'nden** onay alınacaktır.

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j) Şartlarda oluşabilecek değişikliklere bağlı olarak haklı sebep hallerinde İstanbul İl Sağlık Müdürlüğü ve Üniversite protokolü süre göz önünde bulundurulmaksızın daha önce de sonlandırabilecektir.

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Madde 5. Protokolün Süresi:

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b) Başlangıç ......09.06.2019......... / Bitiş .....09.06.2021........

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Protokolün uygulanması ile ilgili çıkabilecek anlaşmazlıklar öncelikle tarafların yetkili temsilcileri tarafından görüşülerek çözülecektir. Bunun mümkün olmaması halinde ise ihtilafların çözümünde idari mahkemelerin hakem sıfatıyla yer itibariyle yetkili olduğu İdari Mahkemelerce çözümlenecektir.

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REFERENCES

Ahlqvist-Bjorkroth, S., Korja, R., Junttila, N., Savonlahti, E., Pajulo, M., & Aromaa, H. R. (2016). Mothers' and fathers' prenatal representations in relation to marital distress and depressivesymptoms. *Infant Mental Health Journal, 37,* 388-400.

Ainsworth, M. D., Blehar, M. C., Waters, E., & Wall, S. N. (1978). *Patterns of attachment: A psychological study of the strange situation.* Oxford: Lawrence Erlbaum.

Ammaniti, M., Baumgartner, E., Candelori, C., Perucchini, P., Pola, M., Tambelli, R., et al. (1992). Representations and narratives during pregnancy. *Infant Mental Health Journal, 13* (2), 167-182.

Atasever, İ., & Sis Çelik, A. (2018). Prenatal stresin ana-çocuk sağlığına etkileri. *Anadolu Hemşirelik ve Sağlık Bilimleri Dergisi, 21* (1), 60-68.

Barnes, J., Ram, B., Leach, P., Altmann, L., Sylva, K., Malmberg, L. E., & Team, T. F. (2007). Factors associated with negative emotional expression: A study of mothers of young infants. *Journal of Reproductive and Infant Psychology*, 25(2), 122-138.

Benoit, D., Parker, K. C., & Zeanah, C. (1997a). Mothers' representations of their infants assessed prenatally: Stability and association with infants' attachment classifications. *Journal of Child Psychology and Psychiatry, 38* (3), 307-313.

Benoit, D., Zeanah, C. H., Parker, K. C., Nicholson, E., & Coolbear, J. (1997b). Working model of the child interview: Infant clinical status related to maternal perceptions. *Infant Mental Health Journal, 18* (1), 107–121.

Bowlby, J. (1969). *Attachment and loss.* New York: Basic Books.

Bretherton, I. (1993). From dialogue to internal working models: The co-construction of self in relationships. In C. A. Nelson, *Memory and affect in development: The Minnesota Symposia on Child Psychology.* Hillsdale, NJ: Erlbaum.

Bretherton, I., Oppenheim, D., Buchsbaum, H., & Robert Emde, T. M. (1990). *The MacArthur Story Stem Battery*. Unpublished manuscript. Department of Human Development and Family Studies University of Wisconsin-Madison, Madison.

Brown, G. W., & Rutter, M. (1966). The measurement of family activities and relationships: A methodological study. *Human Relations, 19*, 241–263.

Buldur, N. (2009). A qualitative investigation of maternal representations in pregnancy and early motherhood (Unpublished master's thesis), University of Boğaziçi, Istanbul.

Busby, D. M., Christensen, C., Crane, R., & Larson, J. (1995). A revision of the Dyadic Adjustment Scale for use with distressed and nondistressed couples: Construct and hierarchy and multidimensional scales. *Journal of Marital and Family Therapy, 21*, 289-308.

Coşkun, A. M., Okcu, G., & Arslan, S. (2019). Gebelikte distres durumunun prenatal bağlanmaya etkisi. *Perinatoloji Dergisi, 27* (2), 49-55.

Cox, J., Holden, J., & Sagovsky, R. (1987). Detection of postnatal depression. Development of the 10-item Edinburgh Postnatal Depression Scale. *British Journal of Psychiatry, 150*, 782–786.

Field, A. (2013). *Discovering statistics using IBM SPSS statistics 4th edition.* Canada: SAGE.

Foley, S., Branger, M., Alink, L., Lindberg, A., & Hughes, C. (2019). Thinking about you baby: Expectant parents' narratives suggest prenatal spillover for fathers. *Journal of Family Psychology, 33*(8), 905–915.

Fonagy, P., & Target, M. (2003). *Psychoanalytic theories: Perspectives from developmental psychopathology.* London: Whurr Publishers.

Gibson, F. L., Ungerer, J. A., Tennant, C. C., & Saunders, D.M. (2000). Parental adjustment and attitudes to parenting after in vitro fertilization. *Fertility and Sterility, 73*(3), 565-574.

Gooding, E. L. (2012). *Intrapsychic process and the social matrix during the transition to motherhood* (Doctoral Dissertation). California Institute of Integral Studies.

Gottschalk, L. A., & Gleser, G. C. (1969). *The measurement of psychological states through the content analysis of verbal behavior.* Berkeley: University of California Press.

Graignic-Philippe, R., Dayan, J., Chokron, S., Jacquet, A.-Y., & Tordjman, S. (2014). Effects of prenatal stress on fetal and child development: A critical literature review. *Neuroscience and Biobehavioral Reviews, 43*, 137–162.

Henry, J. D., & Crawford, J. R. (2005). The short-form version of the Depression Anxiety Stress Scales (DASS-21): Construct validity and normative data in a large non-clinical sample. *British Journal of Clinical Psychology, 44*, 227–239.

Hesse, E. (2008). The adult attachment interview: Protocol, method of analysis, and empirical studies. In J. Cassidy, & P. R. Shaver, *Handbook of attachment: Theory, research, and clinical applications* (pp. 552-598). New York: The Guilford Press.

Hopkins, J., Miller, J. L., Butler, K., Gibson, L., & Boyle, L. H. (2018). The relation between social support, anxiety and distress symptoms and maternal fetal attachment. *Journal of Reproductive and Infant Psychology, 36* (4), 381-392.

Huizink, A. C., Medina, P. G., Mulder, E. J., Visser, G. H., & Buitelaar, J. K. (2004). Is pregnancy anxiety a relatively distinctive syndrome? *Early Human Development, 79* (2), 81-91.

Huth-Bocks, A. C., Theran, S. A., Levendosky, A. A., & Bogat, G. A. (2011). A social-contextual understanding of concordance and discordance between maternal prenatal representations of the infant and infant–mother attachment. *Infant Mental Health Journal, 32* (4), 405-426.

Ilıcalı, E. T., & Fişek, G. O. (2004). Maternal reresentations during pregnancy and early motherhood. *Infant Mental Health Journal, 25* (1), 16-27.

Innamorati, M., Sarracino, D., & Dazzi, N. (2010). Motherhood constellation and representational change in pregnancy. *Infant Mental Health Journal, 31* (4), 379–396.

Kaugars, A. S., Moodyb, E. J., Dennis, C., & Klinnert, M. D. (2007). Validity of the five minute speech sample in families with infants from low-income backgrounds. *Infant Behavior & Development, 30*, 690-696.

Korja, R., Ahlqvist-Björkroth, S., Savonlahti, E., Stolt, S., Haataja, L., Lapinleimu, H., Piha, J., Lehtonen, L. (2010). Relations between maternal attachment representations and the quality of mother–infant interaction in preterm and full-term infants. *Infant Behavior and Development, 33,* 330–336

Lambregtse-van den Berg, M., Lucassen, N., Kuipers-Nap, M., Dingemans, P. M., Jaddoe, V. W., Hofman, A., Verhulst, F., Tiemeier, H. (2013). Assessing expressed emotion during pregnancy. *Psychiatry Research, 205*, 285–288.

Lefkovics, E., Jr, J. R., Kovács, I., Talabér, J., Szita, B., Kecskeméti, A., et al. (2018). Effects of maternal depression and anxiety on mother's perception of child and the protective role of social support. *Journal of Reproductive and Infant Psychology, 36* (4), 434-448.

Lucassen, N., Kok, R., Bakermans-Kranenburg, M. J., Ijzendoorn, M. H., Jaddoe, V. W., Hofman, A., et al. (2015). Executive functions in early childhood: The role of maternal and paternal parenting practices. *British Journal of Developmental Psychology, 33*, 489–505.

Magana-Amato, A. B. (1993). *Manual for coding expressed emotion from the five minute speech sample: UCLA family project.* Los Angeles: University of California.

Main, M. (1991). Metacognitive knowledge, metacognitive monitoring, and singular (coherent) vs. multiple (incoherent) model of attachment. Findings and directions for future research. In C. M. Parkes, J. Stevenson-Hinde, & P. Marris, *Attachment Across the Life Cycle* (pp. 127-159). London: Routledge.

Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood, and adulthood: A move to the level of representation. *Monographs of the Society for Research in Child Development, 50* (1/2), 66-104.

Nelson, K. (1999). Event representations, narrative development and internal working models. *Attachment & Human Development, 1* (3), 239-252.

Oppenheim, D. (2006). Child, parent, and parent–child emotion narratives: Implications for developmental psychopathology. *Development and Psychopathology, 18*, 771–790.

Oppenheim, D., & Waters, H. S. (1995). Narrative processes and attachment representations: Issues of development and assessment. *Monographs of the Society for Research in Child Development, 6* (2/3), 197-215.

Oppenheim, D., Koren-Karie, N., & Sagi, A. (2001). Mothers' empathic understanding of their preschoolers' internal experience: Relations with early attachment. *International Journal of Behavioral Development* , 16-26.

Psychogiou, L., Netsi, E., Sethna, V., & Ramchandani, P. G. (2012). Expressed emotion as an assessment of family environment with mothers and fathers of 1-year-old children. *Child: Care, Health and Development, 39* (5), 703-709.

Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1* (3), 385-401.

Rea, H. M., Factor, R. S., Kao, W., & Shaffer, A. (2020). A meta-analytic review of the five minute speech sample as a measure of family emotional climate for youth: Relations with internalizing and externalizing symptomatology. *Child Psychiatry & Human Development* .

Robert-Tissot, C., Serpa-Rusconi, S., Bachmann, J., Besson, G., Cramer, B., Knauer, D., et al. (1989). L'Entretien-R. In S. M. Lebovici, *L'evaluation des interactions precoces entre le bebe et ces partenaires* (pp. 179–215). Paris:Eshel; Geneve: Medecine et Hygiene.

Roebers, C. M. (2017). Executive function and metacognition: Towards a unifyingframework of cognitive self-regulation. *Developmental Review, 45*, 31-51.

Schermerhorn, A. C., Cummings, E. M., & Davies, P. T. (2008). Children's representations of multiple family relationships: Organizational structure and development in early childhood. *Journal of Family Psychology, 22* (1), 89-101.

Sher-Cencor (2015). Five Minute Speech Sample in developmental research: A review. *Developmental Review, 36*, 127–155.

Sher-Cencor, E., & Yates, T. M. (2010). *Five minute speech sample narrative coherence coding manual.* Riverside: University of California.

Sher-Cencor, E., Grey, I., & Yates, T. M. (2013). The intergenerational congruence of mothers' and preschoolers' narrative affective content and narrative coherence. *International Journal of Behavioral Development, 37* (4), 340–348.

Sher-Censor, E., & Yates, T. M. (2015). Mothers' expressed emotion and narrative coherence: Associations with preschoolers' behavior problems in a multiethnic sample. *Journal of Child and Family Studies, 24*, 1392–1405.

Sher-Censor, E., Dolev, S., Said, M., Baransi, N., & Amara, K. (2017). Coherence of representations regarding the child, resolution of the child's diagnosis and emotional availability: A study of Arab-Israeli mothers of children with ASD. *Journal of Autism and Developmental Disorders, 47*, 3139–3149.

Sher-Censor, E., Khafi, I. Y., & Yates, T. M. (2016). Preschoolers' self-regulation moderates relations between mothers' representations and children's adjustment to school. *Developmental Psychology, 52* (11), 1793–1804.

Slade, A. (2005). Parental reflective functioning: An introduction. *Attachment & Human Development, 7* (3), 269-281.

Slade, A. (1999). Representation, symbolization, and affect regulation in the concomitant treatment of a mother and child: Attachment theory and child psychotherapy. *Psychoanalytic Inquiry, 19*, 797-830.

Stern, D. N. (1985). *The interpersonal world of infant: A view from psychoanalysis and developmental psychology.* New York: Basic Books.

Stern, D. N. (1991). Maternal representations: A clinical and subjective phenomenological view. *Infant Mental Health Journal, 12* (3), 174-185.

Stern, D. N. (1995). *The motherhood constellation.* NY: Harper Collin's Publishers Inc.

Stern, D. N., Bruschweiler-Stern, N., & Freeland, A. (1998). *The birth of a mother:How the motherhood experience changes you forever.* New York: Basic Books.

Sümer, N., Sakman, E., Harma, M., & Savaş, Ö. (2016). Turkish mothers' attachment orientations and mental representations of their children. *Journal of Reproductive and Infant Psychology, 34* (1), 49-63.

Tatar, A., & Saltukoğlu, G. (2010). The adaptation of the CES-depression scale into Turkish through the use of confirmatory factor analysis and item response theory and the examination of psychometric characteristics. *Klinik Psikofarmakoloji Bülteni-Bulletin of Clinical Psychopharmacology, 20* (3), 213-227.

Theran, S. A., Levendosky, A. A., Bogat, G. A., & Huth-Bocks, A. C. (2005). Stability and change in mothers' internal representations of their infants over time. *Attachment & Human Development, 7* (3), 253-268.

Vizziello, G. F., Antonioli, M. E., Cocci, V., & Invernizzi, R. (1993). From pregnancy to motherhood: The structure of representative and narrative change. *Infant Mental Health Journal, 14* (1), 4-16.

Weston, s., Hawes, D. J., & Pasalich, D. S. (2017). The five minute speech sample as a measure of parent– hild dynamics: Evidence from observational research. *Journal of Child and Family Studies, 26* (1), 118–136.

Yali, A. M., & Lobel, M. (1999). Coping and distress in pregnancy: An investigation of medically high risk women. *Journal of Psychosomatic Obstetrics & Gynecology, 20* (1), 39-52.

Yali, A., & Lobel, M. (2002). Stress-resistance resources and coping in pregnancy. *Anxiety, Stress & Coping: An International Journal, 15* (3), 289–309.

Yüksel, F., Akın, S., & Durna, Z. (2011). Prenatal distress in Turkish pregnant women and factors associated with maternal prenatal distress. *Journal of Education and Research in Nursing, 8* (3), 43-51.

Zeanah, C. H., & Anders, T. F. (1987). Subjectivity in parent-infant relationships: A discussion of internal working models. *Infant Mental Health Journal, 8* (3), 237-250.

Zeanah, C. H., & Barton, M. L. (1989). Introduction: Internal representations and parent-infant relationship. *Infant Mental Health Journal, 10* (3), 135-141.

Zeanah, C. H., Benoit, D., Hirshberg, L., Barton, M. L., & Regan, C. (1994). Mothers' representations of their infants are concordant with infant attachment classifications. *Developmental Issues in Psychiatry and Psychology, 1*, 9-18.