A LONGITUDINAL EXAMINATION OF SELF-EFFICACY IN THE TRANSITION TO MOTHERHOOD

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2021

A LONGITUDINAL EXAMINATION OF SELF-EFFICACY IN THE TRANSITION TO MOTHERHOOD

Thesis submitted to the

Institute for Graduate Studies in Social Sciences

in partial fulfillment of the requirements for the degree of

Master of Arts

in

Guidance and Psychological Counseling

by

Sedanur Sorgun

Boğaziçi University

2021

DECLARATION OF ORIGINALITY

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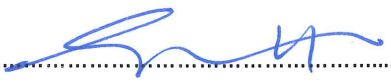
Signature 

Date 05.03.2021

ABSTRACT

A Longitudinal Examination of Self-Efficacy in the Transition to Motherhood

Previous research consistently revealed that self-efficacy (SE) in the parenting role is critical for parenting skills and child adjustment (Jones & Prinz, 2005). The present study investigated the predictors of SE in the transition to motherhood in a sample of 113 first-time expectant mothers who were at the last trimester of their pregnancy. One hundred of them participated to the follow-up assessment at 4 months postpartum. Participating mothers reported their SE beliefs in the parenting role and depressive symptoms through questionnaires both prenatally and postnatally. Information about their perceived social support and pregnancy-specific distress in the prenatal period and infant characteristics (sex and temperament) was also obtained through self-report. The findings showed that prenatal efficacy expectations were predicted by depressive symptoms, pregnancy-specific distress and social support, specifically support from family. Likewise, social support and SE beliefs during pregnancy as well as depressive symptoms postpartum uniquely predicted postnatal maternal efficacy beliefs while infant sex and temperament did not significantly contribute to this outcome. Furthermore, the sense of SE increased from pregnancy to the postnatal period and pre-post changes in depressive symptoms predicted this increase in maternal SE. Infant temperament did not moderate the relation between depressive symptoms and parenting self-efficacy in the postnatal period. Overall, the results point out the importance of mood and social support in shaping SE beliefs of primiparous mothers. Theoretical and practical implications of the findings are discussed in the context of psychological counseling in detail.

ÖZET

Anneliğe Geçiş Döneminde Öz-Yeterliğin Boylamsal Olarak İncelenmesi

Geçmiş araştırmalar ebeveynlik rolünde öz-yeterliğin (ÖY) ebeveynlik becerileri ve çocuğun uyumu için kritik olduğunu tutarlı bir biçimde göstermektedir (Jones & Prinz, 2005). Bu çalışma anneliğe geçiş döneminde ÖY algısının ne gibi faktörler tarafından yordandığını ilk kez anne olacak olan, gebeliğinin son üç aylık dönemindeki 113 hamile kadından oluşan bir örneklemde incelemektedir. Katılımcılardan 100'ü doğumdan sonraki dördüncü ayda takip değerlendirmesine de katılmıştır. Katılımcı anneler doğum öncesi ve sonrasında ÖY inançlarını ve depresif belirtilerini ölçekler aracılığıyla bildirmişlerdir. Ayrıca doğum öncesi dönemde algılanan sosyal destek ve hamilelikle ilişkili stres ile bebeğin özellikleri (cinsiyet ve mizaç) hakkında bilgi edinilmiştir. Çalışmanın bulguları, doğum öncesi ebeveyn ÖY'nin annelerin depresif semptomları, stress düzeyi ve hamilelikte alınan sosyal destek ile yordandığını göstermiştir. Benzer şekilde, annelerin doğum öncesi stres düzeyleri, hamilelikte aldıkları sosyal destek ve ÖY algıları ile doğum sonrasındaki depresif belirtileri doğum sonrası ÖY algılarını yordamaktadır; öte yandan bebeğin cinsiyeti ve mizacı sonuç değişkenine anlamlı bir katkı sağlamamaktadır. Ek olarak, annelerin ÖY algısı doğum öncesinden sonrasına artış göstermiştir ve bu artışı depresif belirtilerdeki değişim yordamaktadır. Bebeğin mizacı doğum sonrası depresyon ile ÖY algısı arasındaki ilişkiyi etkilememektedir. Bulgular, ilk kez anne olmuş kadınların ÖY algılarını şekillendiren duygudurum ve sosyal desteğin önemine işaret etmektedir. Sonuçların teorik ve uygulamaya dair anlamları psikolojik danışmanlık bağlamında detaylıca tartışılmaktadır.

ACKNOWLEDGEMENTS

I would like to express my deep and sincere gratitude to my thesis advisor, Assist. Prof. Nihal Yeniad. Thank you for not only your constant guidance and feedback throughout the formation of my thesis, but also for your understanding, encouragement and emotional containment that I needed many times during this process. Your contributions on my personal and academic development have been invaluable for me. I would like to thank my thesis co-advisor, Assoc. Prof. Bengü Börkan, for her patience and enriching suggestions during our nightfall discussions. Her statistics knowledge and skills made my data analysis process easier.

I would like to acknowledge my thesis committee members, Assoc. Prof. Z. Hande Sart, Assist. Prof. Elif Akdağ-Göçek and Assist. Prof. Gizem Arıkan, for their positive attitudes and generously sparing time to my study. Their insightful comments made this thesis definitely much better. I am also grateful to Assist. Prof. Sibel Akmehmet-Şekerler and Prof. Fatoş Erkman for their constant care and support throughout my graduate years and thesis process.

I want to thank the members of our great research team, Büşra Ünverdi, Melike Hacıoğlu and Elifnur Asılkefeli, without whom I could not have such a fun within many challenges of research project. I would also like to extend my thanks to my dear colleagues, Ömer Anlatan and Hüseyin Yüksel for their encouragements and support.

I owe special thanks to my beloved friend, Sümeyye Koşkulu, for always being there whenever I need. Despite long distances between us, her kindness, wise advices and emotional support made this tough process all the easier. A very huge thank goes to my dear friend Şule Nur Tümöz and my lovely niece Neda, for being

one of the very first participants of the research project. I would also like to thank my dear friends Aslı Körpe, Betül Dilek, Betül Durgut, Firdevs Hatice Peker, Kübra Acı and Rabia Kutlu for their constant support.

I am so grateful to my parents, Canan and Yusuf Ziya, whose unconditional love and prayers have been always with me throughout my life; to my lovely sister, Esra, who has been always a guide in my career and an immediate supporter in times that I felt failed in writing my thesis; and to my little brother, Emirhan, for his sweet companion.

Last but not least, I want to express my deepest gratitude to my beloved husband, Mehmet, as a close witness of my ups and downs during the formation of this study. I am thankful for your patience and soothing presence in the challenges of graduate years and life. Whenever I am about to give up, every time you know how to make me move on with your wisdom and gentle words. Thank you for always reminding the shining parts of me, my dear. I feel so lucky to have you in my life to shine brighter together.

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CHAPTER 1

INTRODUCTION

The transition to parenthood is a unique experience starting with pregnancy to the first child (Entsieh & Hallström, 2016) which restructures one's sense of self. A fertilized egg develops inside the uterus and becomes a baby after about forty weeks (Boyd & Bee, 2015) during which expectant mothers experience not only bodily changes and physical challenges but also they go through some emotional (e.g., changing mood states), social/relational (e.g., getting new identity or quality of relationship with the partner) and, cognitive (e.g., emergence of parenting self-efficacy beliefs) changes (Belsky,1984; Belsky & Rovine,1990; Kunseler, Willemen, Oosterman & Schuengel, 2014; Mercer, 2004; Stern & Bruschweiler-Stern, 1998). After birth of the baby, mothers continue to experience such changes in early months of parenting, perhaps even until two years of infant age (Cowan & Cowan, 1988). Despite the fact that becoming a mother is often considered as a source of happiness, excitement and joy (Lazarus & Rossouw, 2015), it is also associated with negative mood states during pregnancy and in the postnatal period (e.g., depression and distress) (Faisal-Cury, 2020; Heron, O'Connor, Evans, Golding, Glover & ALSPAC Study Team, 2004; Özcan, Boyacıoğlu & Dinç, 2017).

Among many challenges they may face during this time course, Jay Belsky (1986) underlines four types of concerns that might be experienced by new parents during this time course as: Physical costs of caring the baby, possible tension in couple relationship, personal confinement and emotional burden regarding the responsibilities of parenting and uncertainty over parenting competence (Belsky, 1986). Most of expectant mothers find themselves asking whether they will be

capable of nurturing the baby during pregnancy, perhaps even earlier than pregnancy. Such questions constitute their parenting self-efficacy beliefs in the prenatal period and continue to be shaped after birth of the baby with the real parenting experiences in the postnatal period (Porter & Hsu, 2003).

Parenting self-efficacy is originally based on Albert Bandura's theory of self-efficacy (Bandura, 1997) and it refers to the mothers' beliefs on their capabilities of parenting the child effectively and competently (Teti & Gelfand, 1991). As an important cognitive aspect, self-efficacy in the parenting context has been related to maternal adaptation, parenting behaviors; therefore, positive child outcomes (Albanese et al., 2019; Coleman & Karraker, 1997; Jones & Prinz, 2005). While a strong sense of self-efficacy in parenting is an important factor for smooth transition to motherhood and better adaptation, lowered level of efficacy may bring poorer adjustment and disrupted maternal functioning (Fathi, Mohammad-Alizadeh-Charandabi & Mirghafourvand, 2018). According to the Barkin Index of Maternal Functioning (BIMF) which was developed for understanding maternal functional status in the first 12 months after birth of the baby, maternal sense of efficacy in infant-care (e.g., feeding the baby), interaction with the baby (e.g., understanding the baby) psychological well-being (e.g., physical and mental health), mothers' self-care (e.g., taking time for herself), social support (e.g., getting help/support from other people), management (e.g., the level of responsibilities) and adjustment (e.g., getting better in motherhood) are defined as critical components of the maternal functioning (Barkin, Wisner, Bromberger, Beach, Terry & Wisniewski, 2010) which is an important factor in determining overall well-being of mother and infant in the first year of postpartum (Santos Jr, Kossakowski, Schwartz, Beeber & Fried, 2018).

As previous research suggested, parenting self-efficacy as a cognitive aspect has a crucial role in facilitating the mothers' adjustment to parenthood and shaping their parenting behaviors. Evidence from empirical studies, which are described detail in Literature Review section, have demonstrated that maternal self-efficacy is predicted by various maternal (e.g., depressive symptoms, age, breastfeeding) and child characteristics (e.g., temperament, sex) and environmental factors (e.g., social support).

1.1 Purpose of the study

In light of the literature, the research questions of the current study are as follow:

(1) To what extent, do prenatal depressive symptoms, distress and perceived social support predict parenting self-efficacy in the prenatal period?

(2) To what extent, do postnatal depressive symptoms, prenatal perceived social support and child characteristics (sex and temperament) predict parenting self-efficacy in the postnatal period controlling for prenatal PSE and depressive symptoms?

(3) To what extent, perceived social support and child characteristics (sex and temperament) and changes in depressive symptoms predict possible changes in parenting self-efficacy from pregnancy to the postnatal period?

(4) Does infant temperament moderate the relation between postnatal depressive symptoms and postnatal parenting self-efficacy?

1.2 Significance of the study

There is a considerable amount of evidence demonstrating that parenting self-efficacy is a critical predictor of better adjustment to parenthood, parenting behavior and child outcomes (Coleman & Karraker, 1997; Jones & Prinz, 2005). Yet it seems studies with a Turkish sample focusing on self-efficacy beliefs during the transition to parenthood are scarce (Sayil, Güre & Uçanok, 2007). Most of the existing research on parenting self-efficacy was conducted in the United States although there are some findings suggesting cultural differences in this construct (Suzuki, Holloway, Yamamoto & Mindnich, 2009). For instance, Suzuki and colleagues (2009) revealed that Japanese mothers with preschoolers showed lower levels of self-efficacy in the parenting role than American mothers who had children of same age even when the impact of social support was controlled. Further studies with nonwestern samples may provide a better understanding of the construct.

Some of the existing research in Turkey examines expectations regarding self-efficacy in the parenting role during the prenatal period (Yıldırım & Erci, 2018; Yıldız-Inanıcı, Akgün & Karataş, 2019) or some put forth the effects of an intervention program on parenting self-efficacy beliefs from the nursing perspective (Sari & Altay, 2020). A study by Sayil and her colleagues (2007) examined psychological well-being of first-time mothers in relation to a number of factors including parenting self-efficacy during the transition to parenthood. However, their assessment tool captures a global sense of self-efficacy rather than self-efficacy in the parenting role (Sayil et al., 2007).

Therefore, to my knowledge, this is the first longitudinal study that aims to examine self-efficacy beliefs in the nurturing role during the transition to parenthood in a Turkish sample of first-time mothers. A longitudinal examination of maternal

self-efficacy and related factors such as psychological well-being (e.g., depressive symptoms) will provide understanding about how cognition and affect unfolds from pregnancy to 4-month postpartum in primiparous mothers. Additionally, studying the topic from a psychological counseling perspective and facilitating development of interventions can contribute psychological well-being of new mothers and can enhance their sense of self-efficacy parenting role.

Furthermore, unlike most of the previous studies in which more conventional measures of well-being were used (e.g., Dunning & Giallo, 2012; Law, Dimmock, Guelfi, Nguyen, Gucciardi & Jackson, 2019), pregnancy-specific distress was assessed in addition to depressive symptoms in the present study. Although there are some findings showing the relation between stress and depressive symptoms or anxiety in the prenatal and postnatal period (Hartman, Eilertsen, Ystrom, Belsky & Gjerde, 2020), these studies did not investigate this relation with pregnancy-specific distress and depressive symptoms; therefore, the present study will make contribution to the literature by presenting the relation between pregnancy-specific distress and depressive symptoms. Interestingly, there is no previous research revealed the relations between pregnancy-specific distress and parenting self-efficacy, except one by Razurel and colleagues (2017). In this study, the researchers set forth the relation between two and point out the short-coming of the literature in which previous studies frequently used general stress measures rather than situation-specific measure of distress and its relation to parenting self-efficacy (Razurel, Kaiser, Antonietti, Epiney & Sellenet, 2017) So, by examining distress related to pregnancy and its possible effect on maternal self-efficacy over depressive symptoms will fill the gap in the literature.

CHAPTER 2

LITERATURE REVIEW

In this section of the present study, the theoretical framework of parenting self-efficacy was presented based on Bandura's theory of self-efficacy. Through previous empirical studies, the development of parenting self-efficacy and its predictors in both prenatal (during pregnancy) and postnatal (after birth) period were examined. Also, changes in maternal self-efficacy beliefs were investigated.

2.1 Definition of self-efficacy

The term "self-efficacy" refers to judgements of an individual about his/her capabilities to carry out a given task successfully (Bandura, 1977, 1997). Based on Bandura's work on Social Learning Theory, self-efficacy belief determines whether or not an individual attempt to do something in a specific situation, how much effort he/she will put to succeed, and how long he/she will persist on a task to reach expected outcomes (Bandura, 1995).

Self-efficacy is considered as a key element of human agency, which provides people with intentional actions and having control over what they do (Bandura, 1982). In this respect, if people believe in having power to reach successful and desired results, which actually means having stronger self-efficacy beliefs; then, they will anticipate positive performance outcomes and they will attempt to make things happen. Bandura (1986) further asserted that people are not just products of things happening around them but also producers of their own lives through striving to control events that may affect them. As the Social Cognitive Theory accepts, personal, behavioral and environmental determinants work

reciprocally in determining perceived self-efficacy of an individual and its interplay between his/her actions (Bandura, 2012). Therefore, personal efficacy beliefs cannot be considered as a constant characteristic but a dynamic trait that may change as a result of transactional interactions among environmental (e.g., task), behavioral (e.g., performance), and individual (e.g., motivation, cognition, and affect) factors.

In his book *Self-Efficacy: The Exercise of Control*, Bandura (1997) specified three dimensions of self-efficacy as magnitude, strength and generality. The first one of those; magnitude, refers to individual's prediction of how difficult the task is to perform. That is, a perceived level of task difficulty may influence the sense of self-efficacy and the amount of effort that individual put into the task. For example, in the domain of parenting, a mother who considers her baby as temperamentally difficult (e.g., hard to soothe) may show less effort. The second one of those dimensions is strength which indicates how confident an individual feels himself/herself to successfully perform a given task. Lastly, the extent to which an individual generalizes successful performance across situations is named as generality of self-efficacy. All these dimensions operated by cognitive interpretation processes of individual help to construction of self-efficacy beliefs; therefore, they determine how the behaviors will be shaped and how the consequences of actions take place.

Taken together, as Bandura (1997) defined, perceived self-efficacy is interested in what an individual believes he/she can do in various circumstances, not with the number of skills an individual has. Hence, competent individuals' judgements on their capabilities let them to perform with anticipation of positive outcomes, being motivated to persist on a task, setting reasonable goals and making required effort to succeed. Individuals with a lower sense of self-efficacy, on the other hand, may expect negative outcomes of their performance, can be less

motivated or discouraged to perform on a task which they consider required skills that they do not have, and they are more prone to easily give up in the face of obstacles. Just as stated in the definition of perceived self-efficacy, even if an individual has sufficient skills or knowledge on a specific task, his/her self-doubt may hinder him/her to perform successfully.

2.1.1 Sources of self-efficacy

According to Bandura's Social Learning Theory (1986), self-efficacy depends on four sources of information, which are namely enactive mastery experiences, vicarious experiences, verbal persuasion and emotional states. The first and most influential one of these sources is enactive mastery experiences, which refers to one's interpretation of his/her own performance by considering the result of his/her effort as success or failure. While previous accomplishments and successful performances enhance the sense of self-efficacy, failures are likely to undermine it. Therefore, consequences of previous experiences in a specific situation and on a task become reference point of individual for anticipated success or failure on present and future attempts.

The second one of these sources is vicarious experiences, which refers to judging one's own sense of self-efficacy by observing others performing a similar task. In case of success of others, namely social models, one who observes them creates a strong sense of self-efficacy (Bandura, 1977). Likewise, if they see that others fail despite their high effort on a task, observer's judgements on their own capabilities may worsen.

The third source of strengthening the sense of self-efficacy is verbal persuasion which is being told by other people that he/she has capabilities to carry

out a specific task and succeed it. When people are socially persuaded, especially from ones, who are significant in their lives and who has knowledge or experience on a particular behavior, they try to put more effort on a given task and do not give up easily (Bandura, 1997). Therefore, while positive verbal persuasions such as encouragement and praise strengthen the sense of self-efficacy, negative ones like criticism may weaken it. In the domain of parenting, for instance, social support that mother receives from others can be considered as a good example of social persuasion.

Emotional or physiological state of a person also affects his/her efficacy beliefs through providing him/her information with a person about probability of their success or failure on a task. With regard to emotional state, anxiety, nervous or depressed mood generally are connected with negative outcomes while happiness and faith are associated with positive ones. In a similar vein, people are generally inclined to relate their bodily reactions (e.g., ache, tense) with performances they expect to fail. Therefore, their perceptions of these physiological responses may make a detrimental effect on their self -efficacy beliefs (Bandura, 1997).

2.2 Parenting self-efficacy

The concept of parenting self-efficacy, defined as "beliefs or judgements a parent holds of their capabilities to organize and execute a set of tasks related to parenting a child" (de Montigny & Lacharité, 2005, p. 390), has been derived from Bandura's Social Cognitive Theory as a domain-specific type of self-efficacy (Bandura, 1997). A substantial body of literature, in which parenting self-efficacy has been examined both conceptually and empirically, has been revealed that parenting self-efficacy is a key predictor of parenting behavior, adjustment to the parenting role, and the

development of the child (Coleman & Karraker, 1997; Jones & Prinz, 2005; Teti & Gelfand, 1991). In line with Bandura's (1997) framework of self-efficacy, mothers who feel highly efficacious in their role as a parent can be sure of themselves in carrying out parenting tasks, can respond to the child's needs more promptly and appropriately or they may put more effort in finding solutions in difficult and challenging situations. Therefore, the likelihood of an efficacious mother to show more sensitive parental practices is higher (Teti & Gelfand, 1991). On the other hand, mothers who perceive themselves inefficacious in their nurturing role may consider their parenting strategies as ineffective, they may strive less on performances required higher effort and feel less competent; accordingly, mothers with lower self-efficacy beliefs expect failures after their performances (Coleman & Karraker, 1997).

Previous research on the sense of self-efficacy in parenting context goes back to the development of Parenting Sense of Competence Scale (PSOC) by Gibaud-Wallston and Wandersman (1978; cited in Johnston & Mash, 1989). However, as it can be recognized from how the PSOC scale was named, there is inconsistency in concepts used while studying parenting self-efficacy in the literature. Although the terms like parental self-esteem, parental confidence, and parental competence are related but not the same of parenting self-efficacy, they have been used interchangeably in previous studies. Furthermore, these terms are also based on the Bandurian framework of self-efficacy as a theoretical background. So, it seems crucial to examine what the differences between these constructs are in order to understand the inconsistency in terminology and to have a sound base to study the concept of parenting self-efficacy in the present study.

In the concept analysis of de Montigny and Lacharité (2005), parental confidence has been explicitly distinguished from the sense of parenting self-efficacy in a way that the former contains strength of beliefs about success while the latter one is interested both in strength of beliefs and capabilities a parent has. Instead of this difference between two concepts, in the research by Leahy-Warren (2005) exploring first-time mothers' confidence in infant care, the word "efficacy" has just been replaced with "confidence" while defining parental confidence based on Bandura's theory of self-efficacy. In addition to this, parental confidence is described as stable over time (Glidewell & Livert, 1992) whereas parenting self-efficacy is situation-dependent and it may change according to the context, a task or developmental stage of the child, thus it is a dynamic trait.

Another term has been frequently associated with parenting self-efficacy is parental self-esteem which refers to one's "judgements of self-worth" (Bandura, 1997, p. 11) as a parent. That is, while a mother's sense of self-efficacy shapes her evaluations about her capabilities in the parenting role; her self-esteem reflects her feelings about herself and the value she assigns to herself as a mother (Spielman, 2009). In this sense, self-esteem includes emotional elements, as well.

Parenting self-efficacy should also be differentiated from parental competence which refers to some abilities (e.g., solving the problems related to parenting easily) one has to execute actions successfully; therefore, in a parenting context, it includes a number of skills a parent has to care his or her child (Chavis, 2016; Johnston & Mash, 1989; Teti & Gelfand, 1991). Parenting self-efficacy, on the other hand, does not refer to the number of skills the parent has, but with what he or she believes he/she can do with those skills or abilities under a variety of situations (Bandura, 1997). Additionally, de Montigny and Lacharité (2005) further suggested

that parental competence is about judgements of others on one's parenting abilities whereas parenting self-efficacy is about personal judgements and beliefs.

In the current study, I focus on the concept of 'parenting self-efficacy', which emphasizes more on maternal subjectivity via its relation to personal judgements and beliefs regarding the parenting a child rather than more global or other-oriented estimations.

2.2.1 The varying roles of parenting self-efficacy

As discussed above, parenting self-efficacy is a noteworthy construct, which predicts better adjustment to the parenting role and better child outcomes in terms of health and development (Albanese, Russo & Geller, 2019; Harwood, McLean & Durkin, 2007; Mihelic, Filus & Morawaska, 2016). Besides this antecedent role of parenting self-efficacy, it has also been regarded as being in the role of "a consequence, a mediator, and a transactional variable" (Jones & Prinz, 2005, p. 342). That is to say, parenting self-efficacy might be both a predictor (antecedent) and a result of (consequence) other variables; also, it can take place in the pathway of one variable to the other and may determine the consequence (mediator).

In its antecedent role, parenting self-efficacy predicts parenting competence, referring that a mother with a higher level of self-efficacy is likely to show more effective parenting, whereas an inefficacious mother has difficulty to do so. For instance, mothers whose self-efficacy beliefs are lower show harsher discipline towards their children (e.g., inflicting punishment); while efficacious mothers execute more positive parenting (e.g., being responsive and promotive) and consistent discipline strategies (Albanese et al., 2019; Coleman & Karraker, 1997; Hamovitch, Acri & Bornheimer, 2019; Sanders & Woolley, 2005). Furthermore, an

efficacious mother is prone to be more sensitive in the interactions with her baby, which means that she is more able to get signals from the baby, interpret them correctly and respond appropriately (Teti & Candelaria, 2002). Other empirical studies seem to support the predictor role of parenting self-efficacy for prenatal maternal subjective well-being (Miri, Yaira & Osnat, 2016) and parental satisfaction (Coleman & Karraker, 2000; Dunning & Giallo, 2012; Elek, Hudson, & Bouffard, 2003); inverse effect on postpartum depression (Gross & Marcussen, 2017) and parental stress (Lavenda & Kestler-Peleg, 2017; Law, Dimmock, Guelfi, Nguyen, Gucciardi & Jackson, 2019). In addition to the effects of parenting self-efficacy on mothers, it predicts some infant and child variables, as well. A great number of studies showed the fact that mother's self-efficacy belief might be a key determinant of child development, health, and behavioral adjustment. Two remarkable studies, one by Jones and Prinz (2005) and the other by Weaver, Shaw, Dishion and Wilson (2008) showed that a lower level of parenting self-efficacy is associated with behavioral problems in children in varying ages (e.g., ages between 2 and 8). Moreover, in respect to infancy, a very recent study conducted by Turkish researchers put forth that the mothers, who participated in a web-based education program for infant care demonstrated better parenting self-efficacy; accordingly, their breastfeeding rates were higher and their babies seemed to be better in terms of development and health compared to control group (Sari & Altay, 2020). Similarly, another study conducted in Turkey also demonstrated how parenting self-efficacy beliefs predict toddlers' healthy socio-emotional development (Büyüktaşkapu, 2012). In this study, the researchers concluded that there was a positive correlation between the sense of self-efficacy beliefs of mothers in nurturing their toddlers and their one to three-year-old toddlers' social skills and self-care abilities (Büyüktaşkapu, 2012).

Additionally, studies with school-aged children showed that parenting self-efficacy was related to better school adjustment and academic performances in children and adolescents through mediation of positive parenting behaviors of efficacious parents (Albanese et al., 2019; Phillipson & McFarland, 2016).

Besides its antecedent role, a plenty of empirical evidence show how parenting self-efficacy functions as a mediating variable, as well. A longitudinal study involving first-time mothers revealed that social support (parental support) and depressive symptoms are mediated by self-efficacy beliefs; meaning that parental support reduces depressive symptoms in mothers during the postnatal period through enhancement of maternal parenting self-efficacy (Haslam, Pakenham & Smith, 2006). A previously conducted research which has found the same relation between social support and depression with the mediator role of parenting self-efficacy also revealed that mothers' feeling of self-efficacy in parenting role mediates the relationship between infant temperament and level of postpartum depression in the mothers of 3-month-olds (Cutrona & Troutman, 1986). Similarly, the findings of another study suggested that participants' self-efficacy beliefs fully mediated the association between psychosocial factors (e.g., depression and social-marital support) and mothers' behavioral competence in their first-year experience of motherhood (Teti and Gelfand, 1991). Even in the pregnancy period, expectant mothers' self-efficacy beliefs explained the relationship between confidence and realistic expectation for parenting (Mihelic et al., 2016). Other than these studies that were carried out with mothers whose children were in early childhood period, a growing body of evidence shows the mediator role of parenting self-efficacy in mothers of children in diverse age groups. The variables take place in these mediation models, in which parenting self-efficacy stands as a mediating variable,

can be stated as follows: Parental fatigue and hostility towards a child (Chau & Giallo, 2015), parental well-being and involvement to child's activities (Giallo, Treyvaud, Cooklin & Wade, 2013), social support and nurturance role (Mathew, Zhai & Gao, 2017), family socio-economic status and academic achievement of a child (Holloway, Campbell, Nagase, Kim, Suzuki, Wang, Iwatate & Baak, 2016), depressive symptoms of a mother and school adjustment of a pre-schooler (Jackson, Choi & Bentler, 2009).

In this part of the chapter, it was fundamentally aimed to underline the significance of the parenting self-efficacy by examining its different functions as Jones and Prinz (2005) described. In sum, parenting self-efficacy as a predictor and mediator brings out changes in both parenting and child outcomes, which are ultimately determine well-being of both. As being suitable for the purpose of the present study, the predictors of parenting self-efficacy, which means investigating it as "a consequence", will be discussed thoroughly in the following parts. Before this, it would be wise to understand developmental course of parenting self-efficacy in the next part.

2.2.2 Sources and development of parenting self-efficacy

As postulated by Bandura (1997), the four basic sources of information; enactive mastery experiences, emotional states, vicarious experiences and verbal persuasion, on which self-efficacy beliefs depend; are also accepted as sources of self-efficacy in parenting domain. The latter two are clearly related to interaction with others by way of observations of and feedbacks from others. From this point of view, if a parent's sense of self-efficacy is shaped through relationships, it might be speculated that early year relationships and childhood experiences have a critical importance in

developing one's view of self. In the literature, this idea has been supported based on attachment theorists who accept the determinant role of early year relationships with significant others in shaping one's representations of relationships in adult life (Bowlby, 1988). According to the attachment theory, there are different types of relationship models (secure and insecure attachment style) that are originated from primary caregiver and infant relationship (Ainsworth, 1964). Children whose care-givers are available, sensitive and responsive are securely attached and they develop positive schemas of relationships that are brought together from childhood to adult life. Accordingly, a mother, who felt loved and accepted when she was a child is likely to have a positive sense of self, view herself as worthy and have a higher self-esteem that may later influence her parenting self-efficacy beliefs (Aksoy & Diken, 2009; Coleman & Karraker, 1997; Holloway & Bahrens, 2002). In line with the attachment theory, some longitudinal findings showed that mothers' recalled experiences with their own mothers/caregivers predicted their efficacy beliefs in nurturing their 6-months-old babies (Leerkes & Crockenberg, 2002). In addition, a recent study that was conducted with a sample of 280 mother of infants with postpartum depression has revealed that attachment trauma, which is defined as kind of a trauma stemming from threats on relationship with attachment figure, has an inverse relation with maternal self-efficacy through the mediator role of postpartum depression (Brazeau, Reisz, Jacobvitz & George, 2018). That is, a mother who has adverse childhood experiences in terms of attachment-caregiving relationship is at a higher risk of having a lower level of parenting self-efficacy, which in turn increases the likelihood of postpartum depression. Other studies also supported that negative childhood experiences resulting in attachment insecurity, abuse and neglect have a negative impact on mothers' sense of self-efficacy (Alvarez-Segura, Garcia-Esteve,

Torres, Plaza, Imaz, Hermida-Barros & Burtchen, 2014; Caldwell, Shaver, Li & Minzenberg, 2011; Kohlhoff & Barnett, 2013). A recent study in Turkey with a sample of 283 pregnant women revealed that expectant mothers who underwent abuse and neglect during their childhood showed lower parenting self-efficacy beliefs compared to the non-abused group (Yıldız Inanıcı et al., 2019).

Previous experiences and interactions with children like younger siblings, cousins or children of relatives are also considered as a potential source of parenting self-efficacy (Coleman & Karraker,1997), which seems to be consistent with Bandura's argument regarding the effects of previous accomplishments or vicarious experiences on perception of one's performance on ongoing task (Bandura, 1997). In addition, there are some findings showing that multiparous mothers report higher parenting self-efficacy compared to first-time mothers, which indicates the importance of mothers' previous positive experiences with older children on enhancing their sense of self-efficacy (Azmoude, Jafarnejade, & Mazlom, 2015; Bryanton, Gagnon, Hatem, & Johnston, 2008; Leahy-Warren & McCarthy, 2011; Shorey, Chan, Chong & He, 2013).

2.2.3 Measurement of parenting self-efficacy

Parenting self-efficacy is generally measured via self-report questionnaires, which seems a valid way of assessment given that parenting self-efficacy reflects parent's own beliefs and judgements about his/her ability to carry out tasks for nurturing and parenting a child (Wittkowski, Garrett, Calam & Weisberg, 2017). As such Bandura (1977) found congruent to name self-efficacy beliefs as "perceived self-efficacy" (p. 11), it is reasonable to obtain mother report to learn how efficacious she perceives herself in the parenting role instead of using any other method.

The existing instruments differ from each other in the way that how they approach the issue. Coleman and Karraker (2003) specified different formulations for measurement of parenting self-efficacy, namely domain-general, domain-specific, and task-specific measures. Firstly, the domain-general measure of parenting self-efficacy expects parents to evaluate themselves according to their overall performance and efficacy beliefs in parenting domain, without referring any specific task pertains to parenting (e.g., "I feel confident in my role as a parent;" Pedersen, Bryan, Huffman, Del Carmen, 1989). The scales comprising domain-general items seem appropriate to use in a broad array of child ages; yet, they are not considered good enough to detect issues and assess specific tasks a parent may encounter, while parenting a child in a particular age (Crncec, Barnett and Matthey, 2010). Secondly, the domain-specific type of measurement of parenting self-efficacy, also named as task-related, is much more related to daily duties of a parenting (e.g., "How good are you at soothing your baby when he/she is upset or distressed," "How good are you in understanding what your baby wants or needs;" Teti & Gelfand, 1991) compared to domain-general one. Lastly, the task-specific approach, also known as narrow-domain, to measuring parenting self-efficacy concerns with discrete task that a parent engages and they are better in predicting actual behavior of a parent like playing with or feeding the baby (e.g., "I am comfortable playing actively with my baby and getting him or her to smile at me"; Pedersen, Bryan, Huffman, Del Carmen, 1989; "I am confident feeding my baby;" Secco, 2002). This kind of measures is age-specific (Wittkowski, Garrett, Calam, & Weisberg, 2017); therefore, the content of the items varies according to the childhood period (e.g., Maternal Self-Efficacy Questionnaire for mothers with infants; Teti & Genfald, 1991; Toddler Care Questionnaire for mothers with toddlers; Gross & Rociassano,

1988; The Parenting Tasks Checklist for mothers with school-age children; Sanders & Woolley, 2005).

It seems that parenting self-efficacy is commonly measured through domain-general instruments. On the other hand, as Bandura suggested (1997), domain-specific measures are more proper due to their precision on predicting parental behavior with task-related items compared to more global assessment of parenting self-efficacy. The results of the study by Coleman and Karraker (2003) in which both domain-specific and domain-general measures of parenting self-efficacy were used, provide strong evidence for the importance of using domain-specific measures rather than latter ones. In this study, a domain-specific measure with different dimensions of parenting (e.g., nurturance, protection, discipline) was created by the researchers and the results revealed that parenting self-efficacy was strongly associated with actual parenting behaviors while the score of the domain-general assessment of self-efficacy was related neither to child nor parent behaviors.

2.3 Predictors of parenting self-efficacy

2.3.1 Psychological well-being of a mother

It is not uncommon for expectant mothers to worry about pregnancy-specific issues like physical, emotional and relational/social changes, fears about delivery or having unhealthy baby, and of course concerns on being an efficacious mother or not (Yali & Lobel, 1999). During the prenatal period, depression symptoms are prevalent among expectant mothers with the prevalence rates of 6-38% (Field, 2011; Heron et al., 2004; Lee, Lam, Lau, Chong, Chui & Fong, 2007; Takács, Smolík & Putnam, 2019). Numerous cross-sectional and longitudinal studies have consistently

demonstrated that depressive symptoms and parenting self-efficacy are inversely related both in the prenatal and postnatal periods. A possible explanation seems to be that negative mood state may color mothers' perception about their capability in parenting and make them anticipate potential failure scenarios, which may weaken their sense of self-efficacy (Bandura, 1997; Leerkes & Burney, 2007).

In a longitudinal study, Wernand, Kunseler, Oosterman, Beekman and Schuengel (2014) investigated the changes in prenatal parenting self-efficacy beliefs in relation to depressive and anxiety symptoms in first-time expectant mothers. Self-report questionnaires on parenting self-efficacy, depressive symptoms and anxiety were filled out by a group of 533 primiparous women in three different time points (12, 22 and 32 weeks) of pregnancy. The results of the study showed that there was a slight significant increase in parenting self-efficacy levels throughout pregnancy and higher levels of depressive and anxiety symptoms were associated with lower levels of parenting self-efficacy of mothers. Moreover, higher level of depressive symptoms and anxiety were related to lower level of parenting self-efficacy at all assessment points, including 32 weeks of pregnancy. The researcher also revealed that higher anxiety levels during the first trimester, but not depressive symptoms, predicted less positive change in mothers' self-efficacy beliefs during pregnancy.

Similarly, a research by Porter and Hsu (2003) supported the negative association between mood states (e.g., depression) and maternal self-efficacy beliefs. In this longitudinal study, sixty-one expectant mothers were recruited in their third trimester of gestation (32 and more) and fifty of them participated to the second and third waves of the study while their infants were 1 and 3 months-old. The results revealed that self-efficacy beliefs were negatively associated with anxiety and depressive symptoms both in pregnancy and 1-month postpartum; however, the

association disappeared at 3 months postpartum. This unexpected finding, finding that is the nonsignificant relation between self-efficacy and psychosocial variables at 3 months, is incompatible with the previous findings. The researchers argued that this finding might be due to the fact that the sample was relatively low-risk (e.g., high SES); so, the participating mothers showed high level of adaptability to the transition to motherhood. Another longitudinal study, which was conducted with a sample of 420 Chinese first-time mothers examined changes in depressive symptoms and maternal self-efficacy from 6 weeks to 12 weeks postpartum (Zheng, Morrell & Watts, 2018). The researchers showed that maternal self-efficacy beliefs were predicted by depressive symptoms in both time points; also, self-efficacy scores of mothers increased in time whereas depression scores decreased. In order to examine how depressive symptoms and parenting self-efficacy change together, Law and his colleagues (2019) recently conducted a study with 60 Australian first-time mothers who reported their self-efficacy and depression levels at every three weeks of postpartum for six months (3, 6, 9, 12, 15, 21, 24 weeks). The results indicated that depression scores peaked at 3 weeks, which was attributed to difficulties experienced this time period (e.g., lack of sleep) and fathers' return to work after two weeks; afterwards, showed a decline whereas maternal self-efficacy scores were lowest at 3 weeks and increased over time. Furthermore, a significant negative correlation between depression and parenting self-efficacy (r = -.48 to -.71; p <. 01) inferred that mothers with higher depressive symptoms have lower level of self-efficacy beliefs (Law et al., 2019).

Most of the previous research just put forth the fact that mood symptoms and parenting self-efficacy are bidirectionally (and negatively) related (e.g., Haslam et al., 2006; Sayil, Güre & Uçanok, 2007; Takács et al., 2019; Thomason, Flynn, Himle

& Volling, 2015). To clarify the direction between the two, Kunseler and colleagues (2014) examined whether parenting self-efficacy is a predictor or a consequence of depressive symptoms and anxiety in a group of 822 first-time mothers, who reported their parenting self-efficacy, depression and anxiety symptoms at 32 weeks of their pregnancy, 3 and 12 months postpartum. Their results do not reveal a predictor-outcome relation. These findings emphasize the importance of working on both factors, mood states and parenting self-efficacy, for improving the well-being of mothers in the transition period.

There are some findings showing that parenting (Biehle & Mickelson, 2011b; Coleman & Karraker, 1997; Dunning & Giallo, 2012; Law et al., 2019) or pregnancy-specific stress (e.g., physical burdens, fears about delivery or having an unhealthy baby) which is experienced by many women at least at a moderate level (Yüksel, Akın & Durna, 2014) also inversely related to the sense of self-efficacy. Some studies showed that pregnancy-specific stress was differentiated from general anxiety and stress in first-time expectant mothers (Huizink, Mulder, de Medina, Visser & Buitelaar, 2004). Furthermore, pregnancy-specific stress was found to be a better predictor of birth outcomes (e.g., low birth weight, preterm delivery) compared to general stress and anxiety in the prenatal period (Lobel, Cannella, Graham, DeVincent, Schneider & Meyer, 2008). So, it seems critical to examine unique contributions of pregnancy-specific distress and depressive/anxiety symptoms to parenting self-efficacy.

2.3.2 Social support

Social support is a significant contributor to parenting self-efficacy (Gao, Sun & Chan, 2014; Haslam et al., 2006; Leahy-Warren, 2005). Although pregnancy is an

anticipatory phase of parenting and characteristics in the prenatal period (e.g., psychological well-being, social support, prenatal self-efficacy beliefs) strongly predict postnatal experiences (Mercer, 2004), social support has been mostly investigated after childbirth.

By definition, social support is interpersonal exchange of social resources and it can appear in different forms such as emotional assistance (e.g., encouragements and expressions of care), informational support (e.g., giving advice, providing knowledge on infant care) and physical support (e.g., caring the baby, task division at home) (Collins, Dunkel-Schetter, Lobel & Scrimshaw, 1993; Tietjen & Bradley, 1985). Social support involves both instrumental availability of social support and individual's subjective perception about adequacy of these sources (Zimet, Dahlem, Zimet & Farley, 1988). In the context of parenting, social support mothers receive is a protective factor against the risk of depression in both prenatal and postnatal periods (Cutrona & Troutman, 1986; Haslam et al., 2006; Milgrom, Hirshler, Reece, Holt & Gemmill, 2019) and it promotes psychosocial adaptation in expectant mothers (Hui Choi, Lee, Chan, Cheung, Lee & Chan, 2012). Accordingly, mothers who receive more support from their family members, friends or partner report better adjustment to parenthood and enhanced self-efficacy (Mihelic et al., 2016). In terms of the relation between social support and maternal self-efficacy, a great number of studies supported the contribution of social support to self-efficacy beliefs during postpartum period, suggesting that higher the mothers' perceived social support, higher their maternal self-efficacy scores (Gao et al., 2014, Ngai & Chan, 2011; Shorey, Chan, Chong & He, 2015; Zheng, Morrell & Watts, 2018).

Aforementioned findings seem in line with Bandura's theory (1997) postulating that verbal persuasion is one of the sources of self-efficacy. In the context

of parenting, social support might be a kind of verbal persuasion for a mother receiving emotional or informational support from a partner, family, friends or significant other. However, as stated above, social support has predominantly been examined in the postpartum period (e.g., Shorey et al., 2015; Zheng et al., 2018) and it seems that there is a gap in the literature with regard to a longitudinal examination of maternal self-efficacy and its relation to perceived social support during pregnancy.

2.3.3 Infant temperament

Temperament is defined as biologically based differences in individuals in terms of reactivity and self-regulation (Rothbart, 1981) and it is assumed to be a constitute of personality later on via interactions, experiences and maturation (Gartstein & Rothbart, 2003; Rothbart, 1986, 2007; Thomas & Chess, 1977). In order to get better understanding of the nature of the temperament and its interplay with the environment in the formation of personality, Thomas and his colleagues (1970) conducted a research in which mothers and their two to three-month-old infants participated in. Through objective observations of infant behaviors and the way how mothers describe their infants' behaviors, nine components of temperament have been specified as activity level (e.g., motor activity), rhythmicity (e.g., the level of regularity in activities like sleeping and eating), approach/withdrawal (e.g., response to the stimuli), adaptability (e.g., adjustment to a new environment), sensitivity (e.g., the threshold to a new stimuli), the intensity of responses (e.g., energy level), child's general mood (e.g., being cheerful or crying), distractibility (e.g., the degree of getting distracted from what s/he is doing) and attention span (e.g., persistence on a task). These nine characteristics are clustered to three types of temperament as easy,

slow-to-warm-up and difficult temperament in children. Children with an easy temperament are generally in positive mood, they can easily adapt to new situations and they show regular sleeping or feeding routines. Slow-to-warm-up children are less active babies and their adaptation to a new situation is slow. On the other hand, difficult children are less predictable in their sleeping or feeding habits, they are generally in negative mood with intense reactions and it is hard for them to adjust changes (Thomas, Chess, & Birch, 1970).

Following Thomas' (1977) work, Rothbart's approach (1981) suggested that reactivity and self-regulation are core components of temperament. According to this model, reactivity refers to arousal level in the face of changes in stimulation whereas self-regulation is about how this reactivity is modulated by emotional, attentional and motor processes. Under these two broader dimensions of temperament, several temperament traits are clustered in three main sub-dimensions as surgency/extraversion (e.g., motor activity, impulsivity), negative affectivity (e.g., fear, distress to limitations, soothability, and sadness) and effortful control (e.g., attention and inhibitory control, perceptual sensitivity) (Gartstein & Rothbart, 2003). Thereby, investigating temperament through genetic and physiological components, in addition to behaviors, provided a more comprehensive understanding of it. Moreover, Mary Rothbart's theoretical formulation on temperament provided a basis for the development of a parent-report instrument, namely Infant Behavior Questionnaire, which was utilized to measure temperamental characteristics of 4-month-old infants in the current study. They set forth the fact that these temperament dimensions and measurement approach is suitable for using as early as infancy, starting from 3 months of age (Gartstein & Rothbart, 2003; Rothbart, 1986).

Numerous studies up to now have shown that temperamental characteristics of the infant is significantly associated with the sense of self-efficacy in parenting (e.g., Bryanton et al., 2008; Cutrona & Troutman, 1986; Leerkes & Burney, 2007; Lipscomb, Leve, Harold, Neiderhiser, Shaw, Ge & Reiss, 2011; Porter & Hsu, 2003; Teti & Gelfand, 1991) in a way that parents of temperamentally difficult infants (e.g., distress easily, hard to soothe) reported lower levels of parenting self-efficacy (Solmeyer & Feinberg, 2011). This relation between infant temperament and parenting self-efficacy might be explained with Bandura's assumption of "perceived task-difficulty" (1997) relevant to prediction of failure or success in the parenting role.

In relation to parenting self-efficacy, a previous study investigating the effects of infant temperament and social support on depression with the mediating role of maternal self-efficacy suggested that difficult infant temperament considered as a risk factor for self-efficacy beliefs (Cutrona & Troutman, 1986). The study was carried out with a sample of 55 first-time and second-time mothers and their 3 months-old infants in two time-points, pregnancy and 3 months postpartum. Infant temperament was measured through multi-method approach including observation of the infants, records of infant crying duration and a mother-reported questionnaire. As a result, the findings revealed a significant negative relation between mothers' sense of self-efficacy beliefs and infants' difficulty level (e.g., irritability) (Cutrona & Troutman, 1986). Similarly, Porter and Hsu (2003) found a negative association between parenting self-efficacy and mother-reported infant temperament, indicating that mothers, whose infants were temperamentally easy, perceived themselves more efficacious in caregiving abilities than mothers with temperamentally difficult babies at both 1-month and 3-months postpartum. In addition, the results of the same study

revealed that mothers' sense of self-efficacy beliefs increased from 1 to 3 months while perceived infant negativity (e.g., fussiness, crying) decreased in this time period (Porter and Hsu, 2003). This finding is supported by the results of a more recent study which specifically examined negative infant emotionality (e.g., distress easily) as a predictor of parenting self-efficacy (Troutman, Moran, Arndt, Johnson & Chmielewski, 2012). In this research, the researchers compared maternal self-efficacy in mothers of two different groups of infants as irritable and non-irritable based on the observer assessment of negative emotionality at 8 and 16 weeks postpartum. While the results replicated previous findings regarding lowered self-efficacy beliefs in mothers of irritable infants compared to other group, it also supported the fact that increasing maternal self-efficacy over postnatal period even in the group of mothers of difficult infants, which have normally been expected to show decrease in sense-of self-efficacy (Troutman et al., 2012).

Despite the fact that numerous work supported the antecedent role of infant temperament in the level of self-efficacy beliefs in mothers (e.g., Troutman et al., 2012), some argued that self-efficacy beliefs in the nurturing role may shape the parent's perception of infant temperament. In order to demonstrate the direction of this association between two, Verhage, Oosterman and Schuengel (2013) studied with a Dutch sample of 616 first-time mothers longitudinally, starting from last trimester of pregnancy to infants ages of 3 and 12 months. In order to understand the effect of mothers' perception of infant temperament, the researchers used a mother-report instrument of temperament (Infant Behavior Questionnaire; IBQ). The results of a cross-lagged analysis through which the direction of causality between infant temperament and parenting self-efficacy was investigated, demonstrated that mothers' perception of infant temperament is shaped by their sense of self-efficacy

beliefs, not the other way around. This finding shows the importance of using multi-method measure (e.g., laboratory or observational measures), while trying to understand infant temperamental characteristics, rather than using one type of a measure (e.g., caregiver-report questionnaire).

2.3.4 Infant sex

Another factor which might be related to parenting self-efficacy is sex of a child. Among a limited number of studies on self-efficacy beliefs of a parent in relation to sex of a child during infancy, one by Froman and Owen (1990) argued that mothers' perception of efficacy in infant care was predicted by infant sex. The results of the study which was conducted with a sample of 200 new mothers including both primiparas and multiparas revealed that mothers of female infants showed slightly greater levels of self-efficacy compared to ones who had male infants. Consistent with these results, two more recent studies one by Azmoude and colleagues (2015) and the other by Kohlhoff and Barnett (2013) put forward the fact that having a male infant significantly predicts a lower level of self-efficacy in primiparous mothers. An explanation for these results is that mothers of male infants may experience reduced quality of life (e.g., general and mental health, physical functioning) stemming from temperamental difficulties of male infants compared to female babies (de Tychey et al., 2008; Sylvén, Papadopoulos, Mpazakidis, Ekselius, Sundström-Poromaa & Skalkidou, 2011; Weinberg, Tronick, Cohn & Olson, 1999).

On the other hand, some studies which showed no differences in parenting self-efficacy with respect to infant sex seems incompatible with the findings of Azmoude and colleagues (2015), Froman and Owen (1990), and Kohlhoff and Barnett (2013). For instance, the findings in a sample of first-time parents at 4

months postpartum demonstrated no relation of infant sex with parenting self-efficacy neither in mother nor fathers (Hudson, Elek & Fleck, 2001). A follow-up study conducted with the same sample, with a reduced number of 32 dyads, investigated the same variables at 12 months postpartum. The results showed that fathers of male infants have a greater sense of self-efficacy and a higher level of satisfaction compared to fathers of girls at 12 months of postpartum whereas there is not such a difference for mothers (Elek et al., 2003). Similarly, other studies carried out with samples of mother-father dyads in different countries like Austria and Finland did not support the predictor role of infant sex on parenting self-efficacy (Rogers & Matthews, 2004; Salonen, Kaunonen, Åstedt-Kurki, Järvenpää, Isoaho & Tarkka, 2009). Consequently, the existing findings regarding the effects of infant sex on maternal self-efficacy beliefs seem inconsistent.

2.3.5 Maternal age

The existing findings regarding the association between maternal age and parenting self-efficacy seems inconclusive. Bryanton and colleagues (2008) recruited 652 new mothers immediately after birth in hospital settings and they were interviewed at 12 to 48 hours after birth and at one month postpartum. The participants were expected to fill out self-report questionnaires (e.g., demographics, parenting self-efficacy, and social support) during their stay on hospital and at 1 month after birth during home visits. The results of the study indicated that there is an inverse relationship between maternal age and self-efficacy beliefs, indicating that younger mothers had a higher level of parenting self-efficacy compared to older ones. This finding seems to be in line with the results of the study by Coleman and Karraker (2003), which revealed a negative relation between maternal age and self-efficacy beliefs of mothers of

toddlers (r = -.37, p <. 01). A recent study from Turkey supported earlier findings showing that older mothers report lower self-efficacy beliefs (Yıldırım & Erci, 2018).

Contrary to the findings above, a previous study on a sample of 200 mothers of infants reported that maternal age and mothers' scores on Infant Care Scale, which was used to measure parenting self-efficacy, were positively related (Froman & Owen, 1990). Similar findings were obtained from the study by Shorey and colleagues (2013) with a sample of 204 mothers who were interviewed within three days after birth. The results of this study showed that there was a positive relation between parenting self-efficacy and age of a mother (r = .22, p <. 05) referring that older the mother, higher the maternal self-efficacy beliefs.

On the other hand, there are some studies showing no relation between maternal age and self-efficacy beliefs in primiparous mothers of infants from different countries like Australia, Finland, Iran, Japan, and US and changing infant ages between 0 to 12 months (Azmoude et al., 2015; Eaton, 2007; Kohlhoff & Barnett, 2013; Maehara et al., 2016; Tarkka, 2003). Based on the existing empirical findings above, it is clear that there is no consensus about the issue. It seems that being younger or older mother do not accurately make difference on maternal self-efficacy. The current study examines whether Turkish mothers' efficacy beliefs increase with getting older which brings along some characteristics acquired with ages such as maturity; therefore, a better adaptation to motherhood.

2.4 Parenting self-efficacy in the transition to motherhood

In the literature, there are numerous studies showing that efficacy expectations are inclined to be optimistic in general and they are mostly confirmed with postnatal

parenting experiences and self-efficacy beliefs (Harwood et al., 2007; Leerkes & Burney, 2007). In order to examine changes in maternal self-efficacy during the transition period, noteworthy longitudinal works have been done up to now. One of those studies was conducted by Porter and Hsu (2003) with a sample of 61 first-time mothers and their findings revealed that self-efficacy expectations increased from last trimester of pregnancy to one month postpartum and from 1 month postpartum to 3 months postpartum. A significant change in maternal self-efficacy from the prenatal period to postpartum has also been supported by another study conducted in two time points (pregnancy and 4 months after birth) with a sample of 71 first-time mothers whose self-efficacy expectations were exceeded by their postnatal experiences (Harwood et al., 2007). Prior to Porter and Hsu's study (2003), change in maternal self-efficacy during the postnatal period uncovered by other researchers in a longitudinal study carried out with first-time mothers and fathers in four different time points (4, 8, 12 and 16 weeks after birth) and it was concluded that mothers' self-efficacy beliefs increased from first assessment to time-point three (Hudson et al., 2001). These changes in maternal self-efficacy in a positive direction were explained as a consequence of mothers' everyday childcare routines and adjustment to parenting role in time.

On the other hand, some longitudinal studies demonstrated fluctuations in maternal self-efficacy from last trimester of pregnancy to early months. That is, while self-efficacy scores showed a decrease from prenatal period to 6-week postpartum, they revealed a rise from 6-week to 3-month postpartum and exceeds efficacy expectations (Gao et al., 2014). These findings are supported by the results of another study that was conducted in a sample of 150 first-time mothers who participated in a three-wave assessment. Accordingly, self-efficacy expectations did

not match at 1-month but exceeded at 4-month postpartum and this fluctuation was explained by depression scores of mothers, which were higher at1-month postpartum and decreased towards 4 months (Gross & Marcussen, 2017).

Based on the previous findings and literature review, the aim of the current study is to investigate the predictors of parenting self-efficacy in the transition to motherhood in a sample of first-time mothers. Therefore, it is hypothesized that (1) prenatal depressive symptoms and distress negatively predict parenting self-efficacy while perceived social support positively predicts it in the prenatal period; (2) depressive symptoms postpartum, infant temperamental difficulty and infant sex negatively predict parenting self-efficacy while social support during pregnancy positively predicts postnatal parenting self-efficacy; (3) parenting self-efficacy increases from pregnancy to postnatal period and social support, child characteristics (sex and temperament) and changes in depressive symptoms predict this increase; (4) infant temperament moderates the relation between depressive symptoms and parenting self-efficacy in the postnatal period.

CHAPTER 3

METHOD

3.1 Participants

For the present study, the data was obtained from ongoing longitudinal research, which is named as "Origins of early individual differences in infant attention: A multi-method study involving primiparous mothers of twins and singletons" which has been funded by Boğaziçi University in Turkey and carried out with an international collaboration of Leiden University in the Netherlands. The researcher of the current study actively participated in data collection of the project as a research assistant.

The sample of the present study is first-time expectant mothers. Participants were selected through convenience sampling method and snowball technique (Creswell, 2015), through which participants of the study identified others matching the inclusion criteria below:

- living in İstanbul, Turkey,
- being completed 20th week of gestation at a time of recruitment,
- being at least 32nd week of gestation at a time of assessment,
- becoming a mother for the first-time.

The participants consisted of 113 pregnant women in the prenatal period and 100 of them continued in the postnatal follow-up assessment, when their infants were 4 months of age. The mean age of mothers was 29.25 (*N = 113, SD = 4.41*) years with a range between 21 and 42 years. Regarding the mothers educational level, around 87% of them had vocational degree and above. Approximately 70% of the

sample has household income more than 5.000 Turkish liras. The demographic information about the fathers and the babies were received from mothers. The descriptive characteristics of the mothers, fathers and infants were presented in detail in Table 1 and Table 2.

Table 1. Descriptive Characteristics of the Mothers and Fathers

Descriptive Variable (*N = 113*)	*M*	*SD*	*Min.*	*Max.*
MOTHER AGE (years)	29.25	4.41	21	42
GESTATIONAL AGE (weeks)	34.36	1.89	32	38
Descriptive Variable				
MOTHER EDUCATION LEVEL			*n*	%
Secondary School			1	0.9
High School			12	10.6
Vocational Higher Ed.			8	7.1
Bachelor Degree			64	56.6
Graduate Ed.			27	23.9
Illiterate			1	0.9
FATHER EDUCATION LEVEL			*n*	%
Secondary School			2	1.8
High School			17	15.0
Vocational Higher Ed.			8	7.1
Bachelor Degree			69	61.1
Graduate Ed.			17	15.0
FAMILY INCOME (TL)			*n*	%
1.000-3.000			11	9.8
3.001-5.000			20	17.9
5.001-7.000			23	20.5
7.001-9.000			15	13.4
9.001-11.000			10	8.9
11.001-13.000			10	8.9
13.001-15.000			6	5.4
> 15.001			17	15.2
WORKING STATUS OF MOTHER (In the prenatal assessment)			*n*	%
Employed			33	29.2
Unemployed			80	70.8
WORKING STATUS OF MOTHER (In the postnatal assessment)			*n*	%
Employed			14	14.1
Unemployed			55	55.6
Maternity leave			9	9.1
Unpaid leave			21	21.2
GENERAL HEALTH PROBLEM			*n*	%
Yes			21	18.6
No			92	81.4

Table 2. Descriptive Characteristics of the Infants

Descriptive Variable (*N = 100*)	*M*	*SD*	*Min.*	*Max.*
INFANT AGE (months)	4.4	0.62	4	6
INFANT AGE AT BIRTH (weeks)	39.21	1.31	36	42
WEIGHT AT BIRTH (g)	3346.59	434.03	1900	4370
HEIGHT AT BIRTH (cm)	50.71	2.03	46	55
HEAD CIRCUMFERENCE AT BIRTH (cm)	35.40	1.77	32	40
Descriptive Variable				
SEX			*n*	%
Boy			45	45.0
Girl			55	55.0
DELIVERY TYPE			*n*	%
C-section			53	53.0
Vaginal			47	47.0
DELIVERY COMPLICATION			*n*	%
Yes			12	12.0
No			88	88.0
HOSPITALIZATION AFTER BIRTH			*n*	%
Yes			12	12.1
No			87	87.9
WEIGHT AT BIRTH (g)			*n*	%
≤ 2500			4	3.5
2501-3000			12	10.6
3001-3500			53	43.8
3501-4000			24	22.2
≥ 4001			6	5.4
HEIGHT AT BIRTH (cm)			*n*	%
≤ 48			9	7.7
49-52			56	48.8
≥ 53			13	11.1

3.2 Instruments

In the present study, the researcher utilized six self-report measures, namely, Demographic Information Forms (for mothers and infants), the Self-Efficacy in the Nurturing Role Questionnaire (with prenatal and postnatal versions), the Prenatal Distress Questionnaire, the Center for Epidemiologic Studies Depression Scale

(CES-D), the Multidimensional Scale of Perceived Social Support and the Infant Behavior Questionnaire-Revised Short Form. The administration time of the instruments are specified in Table 3.

Table 3. Administration Time of the Instruments

Instruments	Prenatal Period	Postnatal Period
Demographic Information Form	✓	✓
Self-Efficacy in the Nurturing Role Questionnaire	✓	✓
Prenatal Distress Questionnaire	✓	
Center for Epidemiologic Studies-Depression Scale	✓	✓
Multidimensional Scale of Perceived Social Support	✓	
Infant Behavior Questionnaire-Revised Short Form		✓

3.2.1 Demographic information forms

Participants were asked to report demographic information in order to get better understanding about the sample profile. The prenatal demographic form includes the items concerning week of pregnancy, estimated birth date of the baby, mothers' and fathers' ages, level of education, occupational and working status, monthly income of household and health issues pertain to mother and baby. During postnatal interview, mothers were expected to answer questions regarding delivery, development, health, feeding and sleep of their babies in the Baby Section of the form. They also reported information about birth experience, working status, health and sleep of themselves in the Mother Section of the form. In both time-point, intake questions were directed to mothers and their answers were written down by a researcher while the rest of the questions were filled out by participants. The demographic information forms were presented in Appendix A and B (prenatal version) and Appendix C and D (postnatal version).

3.2.2 Self-Efficacy in the Nurturing Role Questionnaire

In order to measure sense of self-efficacy beliefs in mothers, Self-Efficacy in the Nurturing Role Questionnaire (SENR) which was developed by Pedersen and colleagues (1989) based on Parenting Sense of Competence Scale (PSOC) by Gibaud-Wallston and Wandersman (1978) was used. The questionnaire consists of 16 items which hold statements about mothers' perception of their capabilities on infant care skills (e.g., "I am comfortable playing actively with my baby and getting him or her to smile at me," "I feel confident in my role as a parent," "Touching, holding, and being affectionate with my baby is comfortable and pleasurable for me"; see Appendix E and F for Turkish and English version, respectively). Respondents are expected to rate each item on a 7-points Likert scale ranging from 1 (*not at all representative of me*) to 7 (*strongly representative of me*). In order to reach total score of parenting self-efficacy, individual items are summed and the total score is anticipated to be in the range of 16 and 112, with higher scores showing greater sense of self-efficacy. As the scale contains reverse items (item numbers are 3, 4, 6, 10, 11, 13, 16), it is necessary to recode these item before summing the scores.

Because there is no Turkish version of the SENR questionnaire available, the original scale was translated into Turkish by a native speaker in target language who has a Master's degree in Guidance and Psychological Counseling Program in Boğaziçi University; afterwards, the scale was back translated to English by a Turkish student doing her doctorate in Foreign Language Education. To test the clarity of the Turkish statements, as a pilot study, three mothers of infants at 4 months of age answered the questionnaire and they were expected to notify unclear items in order to be revised again. Based on the feedbacks from participants in the

pilot study, researchers made necessary modifications. Additionally, prenatal version of the SENR questionnaire was obtained with a slight modification through rewording the items in a future tense to state how a mother expects to do in her parenting role before her baby's birth (e.g., "Touching, holding, and being affectionate with my baby will be comfortable and pleasurable for me," "I expect to be comfortable playing actively with my baby and getting him or her to smile at me"; see Appendix G and H). Previous studies found that SENR questionnaire is a reliable instrument with internal consistency of .91 for the prenatal version and .78 for the postnatal version (Porter & Hsu, 2003); also, the scale has content validity (Crncec et al., 2010). In the current study, Cronbach's alpha coefficient of the prenatal and postnatal versions of questionnaire were found as .82 and .77, respectively.

Considering the issue of measurement approach discussed in the literature review part, the SENR questionnaire predominantly includes task-related items (Crncec et al., 2010) referring that statements reflect situations or tasks a mother will probably faces while nurturing her baby. Although the scale also contains some general/global items (e.g., "I feel confident in my role as a parent"), mainly it corresponds to domain-specific approach of measurement which Bandura (1997) indicated as the most convenient type of self-efficacy measure while working with parents of an offspring in a particular age.

3.2.3 Prenatal Distress Questionnaire

Mothers' distress originating from pregnancy specific issues was measured with the revised version of the Prenatal Distress Questionnaire (PDQ; Yali and Lobel, 1999), which is originally consisted of 12 items. After revision of the questionnaire, it took its final form as 17 items with 3-point Likert scale ranging from 0 (*not at all*) to 2

(*very much*) (Lobel et al., 2008). This self-report measure asks expectant mothers to what extent they feel worried about the issues pertaining to pregnancy such as health of the baby and the mother, delivery, social/physical changes and financial issues (e.g., "Changes in your weight and body shape during pregnancy," "Whether you might have an unhealthy baby"; see Appendix I). The total score, ranging between 0 to 34, of the questionnaire is calculated by summing the item scores and higher scores show greater distress during pregnancy. As a result of psychometric analyses, high internal consistency ($\alpha = .81$) was reported for the questionnaire (Yali and Lobel, 1999).

The translation and adaptation studies of the Turkish version of the questionnaire (Appendix J) were conducted by Yüksel, Akın and Durna (2011) and psychometric properties were examined. Test-retest reliability analyses of Turkish version of the PDQ was carried out on 233 pregnant women with 2-4 weeks intervals. Internal consistency and construct validity of the instrument, on the other hand, examined on a total of 522 pregnant women. As a result of psychometric analyses, high internal consistency was reported with .85 Cronbach's alpha coefficient while test-retest reliability coefficient was reported as .79. Also, exploratory factor analysis revealed that the questionnaire has a very good construct validity (Yüksel et al., 2011). These analyses showed that the PDQ is a valid and reliable instrument. In the current study, Cronbach's alpha value was found as .82.

3.2.4 The Center for Epidemiologic Studies Depression Scale

The Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977) is a self-report measure which has been designed to assess depressive symptoms in community samples. The scale consists of 20 items including the basic components

of depressive symptomatology such as negative mood, feeling sad and lonely, sleep problems, hopelessness and loss of appetite (e.g., "I felt sad," "People were unfriendly," "My sleep was restless," "I did not feel like eating; my appetite was poor"). Respondents are expected to rate how often they have felt or behaved in a particular way during last week on a 4-point Likert-type scale ranging from 0 (*Rarely or none of the time [less than 1 day]*) to 3 (*Most or all of the time [5-7 days]*). Four items in the scale are reverse items (4, 8, 12, 16) expressing positive affect (e.g., being happy) and they have to been recoded before calculating sum score. A total score of CES-D which is in the range of 0 and 60 indicating that higher the score, higher the respondents' current level of depressive symptoms. In this study, the scale was used both prenatal and postnatal period in order to assess depressive symptoms of expectant and first-time mothers. (see Appendix K and L for English and Turkish versions, respectively).

Tatar and Saltukoğlu (2010) adapted the scale into Turkish and made extensive examination of psychometric properties (reliability and validity studies) of the CES-D with a sample of 1143 Turkish undergraduate students and adults. The internal consistency coefficient, split-half coefficient and test-retest coefficient values were calculated for the reliability analyses. The Cronbach's alpha value was between .75 and .90. For the subscales (depressive symptoms, positive emotional state, somatic symptoms and interpersonal relations), internal consistency coefficients were between .36 and .86 while the whole scale internal consistency was reported as .89. The split-half reliability of the scale was calculated as .80, as well. For test-retest reliability check, the Turkish version of the CES-D Scale was conducted on 54 people by two-week intervals and reliability coefficient of the scale was found as .69.

For construct validity examination, explanatory and confirmatory factor analyses were performed and Goodness of Fit Index was reported as .84 indicating that the CES-D items are relevant to explain the variable of interest (depression). As a result of criterion-related validity analysis, positive correlation was found between CES-D and Beck Depression Inventory ($r = .77$; $p < .001$). Further analyses also revealed that the scale has a good discriminative validity. In the present study, the internal consistency of the scale was found as .91 for prenatal assessment and .92 for postnatal assessment.

3.2.5 Multidimensional Scale of Perceived Social Support

The Multidimensional Scale of Perceived Social Support (MSPSS; Zimet, Dahlem, Zimet & Farley, 1988) is a 12-item brief self-report questionnaire that assesses perceived social support from three different sources: family, friends and a significant other. Participants are expected to report the availability of social support on a 7-point Likert scale which ranges from 1 (*very strongly disagree*) to 7 (*very strongly agree*). Example items from the MSPSS are as follow: "My family really tries to help me," "I can talk about my problems with my friends" and "There is a special person who is around when I am in need." (see Appendix M). For each subscale, there are four items numbered as 3, 4, 8 and 11 for family; 6, 7, 9, and 12 for friends; and 1, 2, 5 and 10 for a special person. For more clarification of the items in the current study, family was specified as "mother, father, siblings and spouse" and a special person was exemplified as "relatives, neighbours, doctor" (see Appendix N for Turkish version). A total score of the scale is obtained by summing the item scores and higher score indicates the high level of perceived social support.

Reliability analyses which were conducted on 275 undergraduate students revealed that the scale has a very good internal consistency with the Cronbach's alpha coefficients of .88 for the whole scale and .87, .85, .91 for the family, friends and special person subscales, respectively. (Zimet et al., 1988). The test-retest reliability analyses obtained from 69 undergraduate students by 2-3 months intervals indicated that this measure is adequately stable over time based on the reliability coefficient values for family, friends and significant other subscales and for the whole scale as .85, .75, .72, .85, respectively. In compatible with these results, further analyses supported that the MSPSS is a reliable measure with variety of samples including pregnant women, university students and adolescents (Zimet, Powell, Farley, Werkman, & Berkoff, 1990). The coefficient alpha values ranged between as follow for the family, friends and significant other subscales, respectively: .81 and .90; .90 and .94; .83 and .98. The full-scale value was reported as ranging between .84 and .92.

In order to assess construct validity, correlation between the MSPSS and two subscales (depression and anxiety) of the Hopkins Symptom Checklist were calculated and statistically significant inverse correlation (r = -.25, p < .01) was found, as expected, for the whole scale. Perceived social support score obtained from family subscale was negatively correlated with depression (r = -.24, p < .01) and anxiety (r = -.18, p < .01); friends and special person subscales were only inversely related to depression (r = -.24, p < .01; r = -.13, p < .01, respectively) but not to anxiety. Therefore, it was reported that the MSPSS has a moderate construct validity.

The Turkish adaptation of the scale was conducted by Eker and Akar (1995) on 146 undergraduate students from Middle East Technical University and additional data obtained from a number of 200 hospital samples including students with

psychological/psychiatric problems, inpatients in psychiatry department, patients with medical problems and visitors without any health issues ($N = 50$, for each groups). Reliability analysis for the Turkish version of the MSPSS showed that the scale has a good internal consistency as indicated with the Cronbach's alpha values of the full-scale ranging between .77 and .88. for different sample groups. To test construct validity of the scale, the correlation between Beck Depression Inventory (BDI) and Stait-Trait Anxiety Inventory (STAI) were computed and significant negative correlations was found for both. The MSPSS was inversely related to the BDI with an $r = -.55$, $p < .001$ and $r = -.26$, $p < .05$ for different sample groups. The statistically significant correlation between the MSPSS and the STAI was demonstrated for stait anxiety with an $r = -.47$, $p < .001$ and $r = -.33$, $p < .001$ (Eker & Akar, 1995). In the present study, the internal consistency of the total scale was calculated as .92. The coefficient alpha values of the family, friends and significant other subscales were .94, .92 and .91, respectively.

3.2.6 Infant Behavior Questionnaire-Revised Short Form

The Infant Behavior Questionnaire (IBQ) was firstly created by Rothbart (1981) as a caregiver-report which attempts to measure infant temperamental characteristics in the age range between 3 to 12 months. A total of six subscales were developed for the IBQ which captures different temperament dimensions as follow: activity level, distress to limitations, duration of orienting, fear, smiling and laughter, and soothability. After revision of the scale (IBQ-R; Gartstein & Rothbart, 2003) eight more subscales were added (approach, cuddliness, falling reactivity, high and low intensity pleasure, perceptual sensitivity, sadness, vocal reactivity) and IBQ-R were constituted of 191 items with 14 subscales as a result. Afterwards, an abbreviated

version of the IBQ-R consisting of 91 items and 14 scales was developed, as well (Putnam, Helbig, Gartstein, Rothbart & Leerkes, 2014). In the short version of the measure, caregivers or parents are expected to rate each item on a 7-point Likert-type scale by considering the frequency of occurrence of stated infant behaviors in specific situations during the last week or the last two weeks. The possible item responses range between 1 (*never*) to 7 (*always*); however, there is an additional option 0 (*does not apply*) indicating that the baby has not been seen in the situation described. In terms of psychometric properties, the IBQ-R short form was found as a reliable instrument with a high level of internal consistency ($\alpha > .70$). (Putnam et al., 2014).

In the current study, a total of 19 items from three subscales (distress to limitations, duration of orienting, fear) were used in order to assess 4-month old babies' temperamental characteristics (e.g., "How often did your baby seem angry (crying and fussing) when you left him/her in the crib?"; see Appendix O and P for English and Turkish version, respectively). Distress to limitations refers to "fussing, crying or showing distress while, in a confining place or position, in caretaking activities or unable to perform a desired action," duration of orienting is baby's "attention to and/or interaction with a single object for extended periods of time," and fear is to "startle or distress to sudden changes in stimulation, novel physical objects or social stimuli; inhibited approach to novelty" (Gartstein & Rothbart, 2003, p. 72). Because there is no Turkish version of the IBQ-R short form available, the original scale was translated into Turkish by a native speaker in target language who has a Master's degree in Guidance and Psychological Counseling Program in Boğaziçi University; afterwards, the scale was back translated to English by a Turkish student doing her doctorate in Foreign Language Education. To test the

clarity of Turkish statements, as a pilot study, three mothers of infants at 4 months of age answered the questionnaire and they were expected to notify unclear items in order to be revised again. Based on the feedbacks from participants in the pilot study, researchers made necessary modifications.

The internal consistency coefficient of the total IBQ-R short form was found as .77 in the present study. The coefficient alpha values of the subscales (distress to limitations, duration of orienting, fear) were computed as .74, .76 and .84, respectively. Additionally, *Item-Total Correlations* of the three subscales were calculated in order to check to what extent each single item is measuring the same thing what the whole subscale measures. The correlation coefficient values ranged between .32 and .59 for the distress to limitations subscales, .33 and .69 for the duration of orienting subscale, and .23 and .83 for the fear subscale. All item-total correlation values were higher than the acceptable value of .3 (Pallant, 2016) except one item in the fear subscale. However, deleting this item from the data did not make remarkable change in Cronbach's alpha value of the total subscale; so, this item was not removed.

3.3 Procedure

Before the data collection procedure of the research project started, ethical permission was obtained from Boğaziçi University Institutional Review Board for Research with Human Subjects (see Appendix R). Following this, official approval has been received from Health Directorate of İstanbul in order to reach participants at gynecology and obstetrics polyclinics of state hospitals. The official approval form received from provincial directorate of health presented in Appendix S.

After getting ethical permission, pilot studies (three of them with first-time pregnant women while the other three with mothers of 4-months old infants) were conducted between December 2018 and January 2019 in order to examine how long the interviews take both in prenatal and postnatal period and to get feedback from participants about the procedure and clarity of self-report instruments. Data collection procedure of longitudinal study took place between January 2019 and May 2020. In order to reach participants, project brochures were shared with gynecologists, midwives, nurses and expectant mothers who were attending prenatal training groups and yoga classes. Besides the project was announced through personal networks, social media (e.g., Facebook and Instagram) accounts were used as well.

Women who accepted to participate in the research were fully informed about the nature of the study and the procedure through the Informed Consent Form (see Appendix T for English and Appendix U for Turkish), as well as their right to withdraw from the study at any time without stating any reason. In order to ensure confidentiality, an identification number was assigned to each participant at the beginning of the study. Data collection started when the expectant mothers were between 32 and 38 weeks of gestation, approximately one month before baby's expected birth date (*Time 1*). Data were collected through individual interviews at a quiet place such as home, cafe or workplace of the participants. During the prenatal interviews, the participants were asked to fill out the Prenatal Questionnaire Booklet and speak about their expectations, thoughts and feelings about their babies for five minutes. The sample consisted of an illiterate mother, to whom the questions were read by a research assistant. The instruments in the Prenatal Questionnaire Booklet were sequenced as follow: Demographic Information Form, the Prenatal Distress

Questionnaire, the Multidimensional Scale of Perceived Social Support, the Center for Epidemiologic Studies Depression Scale and the Self-Efficacy in the Nurturing Role Questionnaire. Time 1 assessment took roughly 30 minutes.

Participants who were willing to continue with the follow-up assessment were visited by the graduate students when their babies became 4 months of age (*Time 2*). Informed consent was obtained both from mothers and fathers at Time 2 (see Appendices V and W for the English and Turkish Participant Mother Informed Consent Form; Y and Z for the English and Turkish Father Consent Form). Home visits took about an hour and similar to Time 1 assessment, the mothers were asked to fill out the Postnatal Questionnaire Booklet. The instruments in the Postnatal Questionnaire Booklet were sequenced as follow: Demographic Information Form, the Infant Behavior Questionnaire-Revised Short Form, the Self-Efficacy in the Nurturing Role Questionnaire and the Center for Epidemiologic Studies Depression Scale. Additionally, participants received a pack of baby shampoo and cream as incentives after each time of assessment.

3.4 Data analysis

Data analyses were conducted through the Statistical Packages for Social Sciences (SPSS version 22). First, the means, standard deviations, minimum and maximum scores of the study variables were examined. Second, the Pearson Product-Moment Correlation Coefficient was used to understand the relations among variables of interest. Additionally, the group differences were explored using the Paired-Samples *t* Test. To demonstrate the reliability values of the questionnaires, Cronbach alpha values were calculated and reported in the related sections of the Methods section.

The Hierarchical Multiple Regression Analysis was utilized as a statistical technique to analyze research questions. In order to estimate the variance in parenting self-efficacy beliefs during the prenatal period as a concern of the first research question, prenatal depressive symptoms, prenatal distress and prenatal perceived social support were entered to the model. For the second research question, postnatal depressive symptoms, social support and infant characteristics (sex and temperament) were entered to estimate the variance in self-efficacy in the postnatal period after controlling for prenatal parenting self-efficacy and depressive symptoms. For the third research question, change scores of depressive symptoms, social support and infant characteristics (sex and temperament) were entered to estimate the variance in parenting self-efficacy change from the prenatal period to the postnatal one. For the last research question, concerning the moderator role of the infant temperament in the relation between postnatal depressive symptoms and postnatal efficacy beliefs, postnatal depressive symptoms, three characteristics of temperament and their interaction terms were entered to the model.

The change scores were computed by subtracting parenting self-efficacy scores in pregnancy from parenting self-efficacy scores at 4-months postpartum, which is a frequently-used method to examine change from one time-point to another (Gross & Marcussen, 2017; Kohlhoff & Barnett, 2013). A positive score indicates that mother's parenting self-efficacy beliefs after birth were more positive than efficacy expectations during pregnancy; while negative scores indicate a decrease in mother's efficacy beliefs from pregnancy to postpartum period. Likewise, a positive score in depressive symptoms indicates an increase in mother's depressive symptoms from pregnancy to 4-months postpartum.

Prior to conducting analyses to answer the research questions of the present study, the assumptions about outliers, multicollinearity and normality were checked to ensure that they were fulfilled by the data.

CHAPTER 4

RESULTS

4.1 Descriptive analyses of the study variables

Table 4 shows the means, standard deviations, minimum and maximum scores of the measures and subscales of the measures from two assessment time points. Additionally, descriptive characteristics pertaining to change scores of the mothers' parenting self-efficacy and depressive symptoms are presented. A higher score indicates a greater change in parenting self-efficacy and depressive symptoms while negative scores point out a decrease from *Time 1* (pregnancy) to *Time 2* (4-months postpartum).

Table 4. Means, Standard Deviations, and Minimum/Maximum Scores for the Study Variables

Measures	*M*	*SD*	*Min.*	*Max.*
Prenatal Assessment (n = 113)				
Depressive Symptoms	0.67	0.5	0	2.1
Prenatal Parenting Self-efficacy	5.4	0.7	3.4	6.9
Prenatal Distress	0.6	0.3	0	1.4
Social Support	5.9	1.1	1	7
Family Support	6.6	0.9	1	7
Friends Support	6.1	1.2	1	7
Significant Other Support	5.2	1.7	1	7
Postnatal Assessment (n = 100)				
Depressive Symptoms	0.74	0.5	0	2.3
Postnatal Parenting Self-efficacy	5.7	0.7	3.8	7
Temperament	3.3	0.7	1.8	5.4
Distress to Limitations	3.9	1.1	1.7	6
Duration of Orienting	3	1.1	1	6.5
Fear	2.9	1.2	1.1	6.1
Change Scores				
Parenting Self-Efficacy Change	0.2	0.7	-1.7	2.1
Depressive Symptoms Change	0.1	0.6	-1.7	1.9

4.2 Bivariate correlations among the study variables

The Pearson Product-Moment Correlation Coefficient was used to examine associations between study variables as illustrated in Table 5. Among the variables from prenatal assessment, parenting self-efficacy beliefs was negatively correlated with depressive symptoms (r = -.47, p < .05) and prenatal distress (r = -.42, p < .05), suggesting that mothers with higher depressive symptoms and distress at their last trimester of pregnancy have lower sense of self-efficacy. On the other hand, there was a positive correlation between prenatal parenting self-efficacy and total perceived social support (r = .29, p < .05). Additionally, each subscale of the social support showed single positive correlation with parenting self-efficacy; namely support from family (r = .21, p < .01), friends *(*r = .28, p < .05) and significant other (r = .24, p < .01) indicating that mothers who perceive getting more support from others, shows higher parenting self-efficacy in the prenatal period. Contrary to the expectations, pregnancy-specific distress was not related to social support while there was a significant negative correlation between depressive symptoms and social support in the prenatal period.

Maternal self-efficacy in the postnatal period was negatively correlated with depressive symptoms (r = -.56, p < .05), indicating that mothers with more depressive symptoms have a lower sense of self-efficacy in the 4-month postpartum. Postnatal self-efficacy was also negatively correlated with prenatal depressive symptoms (r = -.31, p < .05) and prenatal distress (r = -.41, p < .05). There was a positive correlation between postnatal self-efficacy and overall perceived social support (r = .29, p < .05), support from families (r = .26, p < .01), support from friends (r = .25, p < .01) and support from significant others (r = .22, p < .01), suggesting that mothers who perceive greater support during pregnancy feel more

efficacious as a mother in the postnatal period. Also, self-efficacy in the prenatal period was positively correlated with self-efficacy in the postnatal period ($r = .60$, $p < .05$). Maternal age, infant sex and infant temperament, including the subscales (distress to limitations, duration of orienting and fear), did not show any significant correlation with study variables.

Regarding the pre-post change scores, bivariate correlation results showed that prenatal depressive symptoms were positively correlated with the change in the sense of self-efficacy ($r = .21$, $p < .05$) suggesting that higher the depressive symptoms during pregnancy, higher the increase in parenting self-efficacy. On the other hand, the change in depressive symptoms was negatively correlated with postnatal parenting self-efficacy ($r = -.26$, $p < .05$) In addition, as shown in Table 5, the change scores (in parenting self-efficacy and depressive symptoms) were negatively correlated each other ($r = -.36$, $p < .01$).

Table 5. Bivariate Correlations Among the Study Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Prenatal PSE	1	.60**	-.47**	-.39**	-.42**	.29**	.21*	.28**	.24*	-.13	-.16	-.18	.05	-.16	-.02	-.49**	.07
2. Postnatal PSE		1	-.31**	-.56**	-.41**	.29**	.26*	.25*	.22*	-.08	-.14	-.10	.06	-.09	.10	.40**	-.26*
3. Prenatal DS			1	.45**	.51**	-.36**	-.27**	-.36**	-.29**	.14	.10	.07	.11	-.07	.14	.21*	-.49**
4. Postnatal DS				1	.44**	-.35**	-.23*	-.32**	-.30**	.18	.18	.10	.08	-.09	-.06	-.16	.56**
5. Prenatal stress					1	-.14	-.05	-.15	-.13	.17	.16	.07	.11	-.03	.11	.10	-.02
6. Social support						1	.74**	.88**	.89**	-.13	-.12	-.09	-.04	.07	-.04	.06	-.02
7. Family support							1	.62**	.44**	-.19	-.16	-.19	-.04	.09	-.12	.11	.05
8. Friends support								1	.63**	-.18	-.09	-.15	-.10	.01	-.04	.03	-.01
9. Other support									1	-.02	-.08	.02	.02	.09	-.02	.03	-.04
10. Temperament										1	.70**	.45**	.76**	-.15	-.03	.06	.03
11. Distress_lim											1	-.02	.42**	-.02	-14	.01	.09
12. Dur_orient												1	-.06	-.14	.10	.09	.02
13. Fear													1	-.13	.07	.01	-.04
14. Mother age														1	-15	.10	-.04
15. Infant sex															1	.14	-.18
16. PSE change																1	-.36**
17. DS change																	1

Note. PSE: Parenting self-efficacy. DS: Depressive symptoms. Distress_lim: Distress to limitations. Dur_orient: Duration of orienting. Other Support: Significant other's support. * $p < .05$ ** $p < .01$

4.3 Results regarding the research questions

Prior to conducting inferential analyses, assumptions of outliers, multicollinearity and normality were checked to ensure there are violated. Outliers were inspected through scatterplots. Besides descriptive statistics revealed no cases were detected above 3.3 or less than -3.3 (Tabachnick & Fidell, 2013) as an outlier. Normal probability plots were found to be almost in line showing that normality assumption was met. For multicollinearity test, tolerance and VIF values did not show any violation. The assumption check was conducted for every single regression model pertaining to each research question.

4.3.1 Predictors of parenting self-efficacy in the prenatal period

A hierarchical multiple regression analysis was used in order to assess the extent to which prenatal depressive symptoms, distress and social support predicts the outcome variable that is prenatal parenting self-efficacy. Maternal age was not included in the model because it was not correlated with any of the variables of interest as seen in the Table 5. The prenatal depressive symptoms was entered in Step 1 and explained 26% of the variance in parenting self-efficacy. The model was significant, F (1,101) = 35.17, $p < .001$. After entry of prenatal distress and total social support at Step 2, the total variance explained by the model as a whole was 36%, F (3, 99) = 18.24, $p < .001$. The prenatal distress and social support explained an additional 10% of the variance in outcome variable after controlling for depressive symptoms, $\Delta R^2 = .10$, ΔF (2, 99) = 7.51, $p < .05$. The summary of the hierarchical multiple regression analysis results is presented in Table 6.

As shown in Table 6, depressive symptoms was a significant predictor of the prenatal parenting self-efficacy ($\beta = -.51$, $p < .001$) in Step 1. Prenatal depressive

symptoms (β = -.28, p < .05), distress (β = -.26, p < .05) and social support (β = .25, p < .05) significantly predicted the outcome variable in Step 2.

Table 6. The Model Summary of Hierarchical Multiple Regression Analysis Predicting the Parenting Self-Efficacy in the Prenatal Period

Variable	*B*	*SEB*	β	R^2	ΔR^2
Step 1				.26	.26**
Prenatal depressive symptoms	-.79	.13	-.51**		
Step 2				.36	.10*
Prenatal depressive symptoms	-43	.16	-.28*		
Prenatal distress	-.79	.28	-.26*		
Social support	.20	.07	.25*		

Note. * p < .05 ** p < .001.

An additional analysis was conducted in order to see the unique contributions of the sources of social support (family support, friends support and significant other support). First step was identical with the previous analysis; yet in Step 2, family support, friends support and significant other support were entered to the model separately instead of the total social support as a whole scale. After entry of three types of social support at Step 2, the total variance explained by the model was 37%, F (5, 97) = 11.32, p < .001. This accounted for an additional 11% of the variance in outcome variable, ΔR^2 = .11, ΔF (4, 97) = 4.23, p < .05. However, as shown in the Table 7, none of the variables emerged as a significant predictor of the outcome variable in Step 2. Only family support seemed to be marginally significant (β = .18, p < .10).

Table 7. The Model Summary of Hierarchical Multiple Regression Analysis Predicting the Parenting Self-Efficacy in the Prenatal Period (with the Subscales of the Total Social Support)

Variable	*B*	*SEB*	*β*	R^2	ΔR^2
Step 1				.26	.26**
Prenatal depressive symptoms	-.79	.13	-.51**		
Step 2				.37	.11*
Prenatal depressive symptoms	-.42	.16	-.27*		
Prenatal distress	-.82	.29	-.27*		
Family support	.18	.10	.18†		
Friends support	.07	.09	.10		
Significant other support	.02	.05	.04		

Note. † $p < .10$ (marginally significant) * $p < .05$ ** $p < .001$

4.3.2 Predictors of parenting self-efficacy in the postnatal period

A three-step hierarchical multiple regression analysis was conducted for postnatal parenting self-efficacy as the dependent variable. Parenting self-efficacy and depressive symptoms, which were assessed in the prenatal period were entered to the model at Step 1 in order to control the effects of these variables for the prediction of postnatal parenting self-efficacy. This accounted for a significant 36% of the variance in the outcome variable, F (2, 88) = 24.20, $p < .001$. At step 2, postnatal depressive symptoms and the sources of social support (family, friends and significant other) were entered and the total variance significantly explained in the postnatal parenting self-efficacy by the Step 2 was computed as 55%; F (6, 84) = 17.14, $p < .001$. Depressive symptoms and perceived social support explained an additional 20% of the variance in the outcome variable, $\Delta R^2 = .20$, ΔF (4, 84) = 9.13, $p < .001$. After entry of infant characteristics (sex and temperament) in Step 3,

the total variance explained by the model as a whole was 56%, F (8, 82) = 13.15, p < .001. Child characteristics accounted for an additional 1% of the variance, but the model was insignificant, $\Delta R^2 = .01$, ΔF (2, 82) = 1.08, p > .05. The summary of the hierarchical multiple regression analysis results was presented in Table 8.

As presented in Table 8, only prenatal parenting self-efficacy was a significant predictor of postnatal parenting self-efficacy (β = .58, p < .001) in Step 1. Prenatal parenting self-efficacy (β = .44, p < .001), postnatal depressive symptoms (β = -.39, p < .001) and family support (β = .27, p < .05) significantly predicted the postnatal self-efficacy while friends support (β = .04, p > .05) and significant other support (β = -.06, p > .05) did not appear as significant predictors in Step 2. In the final step, prenatal parenting self-efficacy (β = .44, p < .001), postnatal depressive symptoms (β = -.38, p < .001) and family support (β = .28, p < .05) significant predictors of the outcome variable; however, neither infant sex (β = .10, p > .05) nor infant temperament (β = .05, p > .05) emerged as a significant predictor.

A further analysis was conducted in order to see the unique contributions of three characteristics of temperament (distress to limitations, duration of orienting and fear). First two steps were identical with the previous analysis; yet in the Step 3, distress to limitations, duration of orienting and fear were entered to the model separately instead of the temperament as a whole scale. The three characteristics of temperament accounted for an additional 1% of the variance, but the model was insignificant, $\Delta R^2 = .01$, ΔF (4, 80) = .59, p > .05.

Table 8. The Model Summary of Hierarchical Multiple Regression Analysis Predicting the Parenting Self-Efficacy in the Postnatal Period

Variable	*B*	*SEB*	*β*	R^2	ΔR^2
Step 1				.36	.36**
Prenatal parenting self-efficacy	.55	.09	.58**		
Prenatal depressive symptoms	-.05	.14	-.03		
Step 2				.55	.20**
Prenatal parenting self-efficacy	.42	.08	.44**		
Prenatal depressive symptoms	.25	.13	.18		
Postnatal depressive symptoms	-.53	.12	-.39**		
Family support	.37	.11	.27*		
Friends support	.03	.07	.04		
Significant other support	-.03	.04	-.06		
Step 3				.56	.01
Prenatal parenting self-efficacy	.42	.08	.44**		
Prenatal depressive symptoms	.22	.13	.15		
Postnatal depressive symptoms	-.52	.12	-.38**		
Family support	.38	.11	.28*		
Friends support	.04	.07	.05		
Significant other support	-.03	.04	-.07		
Infant sex	.15	.11	.10		
Infant temperament	.05	.08	.05		

Note. * $p < .05$ ** $p < .001$.

4.3.3 Predictors of the change in parenting self-efficacy

Before running the hierarchical multiple regression analysis with the change score in parenting self-efficacy as the dependent variable, a preliminary analysis was conducted to explore whether there is a significant change in parenting self-efficacy scores from pregnancy to the postnatal period.

The Paired-Samples *t* Test was conducted to compare mean scores of the prenatal and postnatal parenting self-efficacy. As presented in Table 9, mothers

showed slightly higher parenting self-efficacy beliefs in the postnatal period (M = 5.7, SD = 0.76) compared to the ones in the prenatal period (M = 5.4, SD = 0.79). The Paired-Samples t Test results showed a significant difference between two-time point, t (95) = -3.32, $p < .05$.

Table 9. The Paired-Samples t Test Results Comparing Prenatal and Postnatal Parenting Self-Efficacy Scores

	Prenatal		Postnatal		t (95)
	M	*SD*	*M*	*SD*	
Parenting Self-Efficacy	5.4	0.79	5.7	0.76	-3.32*

Note. * $p < .01$

A three-step hierarchical multiple regression analysis was conducted with the change in parenting self-efficacy as the outcome variable. Change in depressive symptoms was entered in Step 1 and explained 13% of the variance in parenting self-efficacy change, F (1, 89) = 12.80, $p < .05$, indicating that the change in depressive symptoms was a significant predictor of the change in parenting self-efficacy (β = -.36, $p < .05$). Figure 1 depicts the relation between the change in depressive symptoms and change in parenting self-efficacy. At Step 2, the sources of social support were entered and the total variance explained by the model was again 15%, but the model was insignificant, F (4, 86) = 3.802, $p > .05$. There was no contribution of the sources of the social support to the model, $\Delta R^2 = .03$, ΔF (3, 86) = .827, $p > .05$. At Step 3, infant sex and temperament were entered and the total variance explained by the model was 17%, F (6, 84) = 2.848, $p > .05$. This accounted for an additional 2% of the variance, but contribution of the infant characteristics was

not significant, $\Delta R^2 = .02$, $\Delta F\ (2, 84) = .950, p > .05$. However, family support seemed to be marginally significant ($\beta = .19, p < .10$). The summary of the hierarchical multiple regression analysis results was presented in Table 10.

Table 10. The Model Summary of Hierarchical Multiple Regression Analysis Predicting the Change in Parenting Self-Efficacy

Variable	*B*	*SEB*	β	R^2	ΔR^2
Step 1				.13	.13*
Change in depressive symptoms	-.35	.10	-.36*		
Step 2				.15	.03
Change in depressive symptoms	-.36	.10	-.37*		
Family support	3.38	2.15	.17		
Friends support	-.18	1.33	-.02		
Significant other support	-.37	.83	-.06		
Step 3				.17	.02
Change in depressive symptoms	-.35	.10	-.35*		
Family support	3.73	2.17	.19†		
Friends support	.01	1.35	.00		
Significant other support	-.50	.83	-.08		
Infant sex	2.3	2.2	.10		
Infant temperament	1.4	1.6	.09		

Note. † $p < .10$ (marginally significant) * $p < .05$ ** $p < .001$

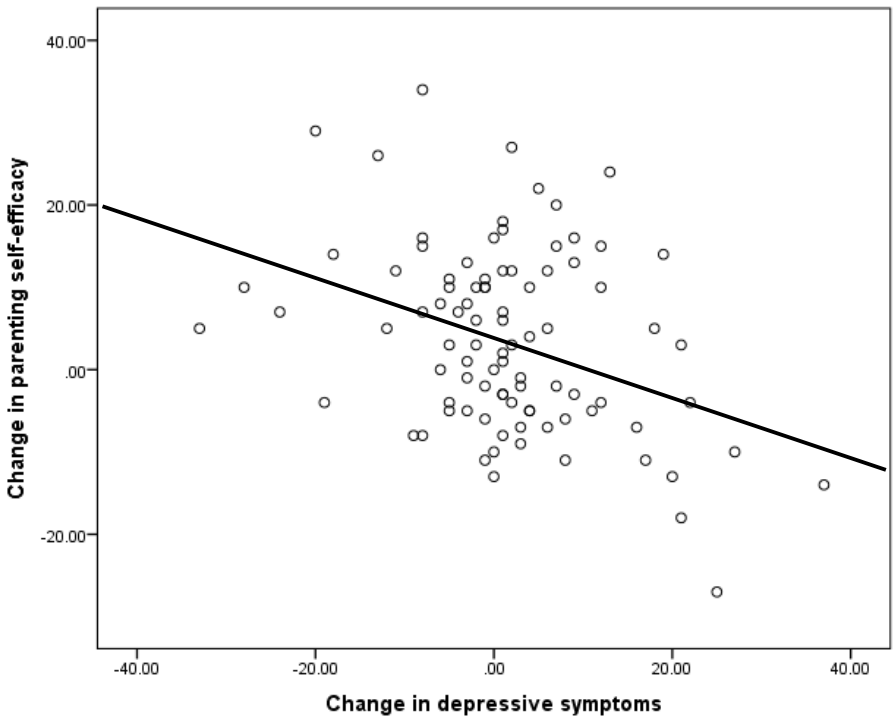

Figure 1. The relation between the change in depressive symptoms and the change in parenting self-efficacy. *Note: From left to the right on X axis, starting from point 0 (zero), indicates an increase in mother's depressive symptoms from pregnancy to postnatal period.*

A further inspection of the data revealed some descriptive findings regarding the change in depressive symptoms and parenting self-efficacy. Although there was not a statistically significant change in depressive symptoms, of the mothers 34.1% showed a decrease in depressive symptoms while 36.2% showed increase and 29.7% were stable over time. Despite the statistically significant increase in parenting self-efficacy, on the other hand, 33.7% of the mothers showed decrease in efficacy beliefs over time while 11.7% of them were stable.

4.3.4 Infant temperament as a moderator

A two-step hierarchical multiple regression analysis was conducted with the postnatal parenting self-efficacy as the dependent variable in order to test whether infant temperament moderate the relation between postnatal depressive symptoms

and postnatal parenting self-efficacy. Postnatal depressive symptoms and three characteristics of temperament were entered in Step 1 and explained 33% of the variance, F (4, 90) = 11.15, $p < .05$, with only a unique contribution of postnatal depressive symptoms as a significant predictor (β = -.54, $p < .05$). At step 2, the interaction terms between the characteristics of temperament and depression (distress to limitations x depressive symptoms, duration of orienting x depressive symptoms and fear x depressive symptoms) were entered to the model. This did not account for any significant variance, $\Delta R^2 = .01$, ΔF (3, 87) = .551, $p > .05$.

Table 11. The Model Summary of Hierarchical Multiple Regression Analysis Predicting the Parenting Self-Efficacy by Infant Temperament as a Moderator

Variable	*B*	*SEB*	β	R^2	ΔR^2
Step 1				.33	.33**
Depressive symptoms (DS)	-.74	.12	-.54**		
Distress to limitations	-.09	.07	-.12		
Duration of orienting	-.02	.06	-.03		
Fear	.09	.06	.14		
Step 2				.34	.01
Depressive symptoms (DS)	-.62	.60	-.45		
Distress to limitations	-.01	.23	-.02		
Duration of orienting	.14	.19	.21		
Fear	-.09	.19	-.14		
Distress to limitations x DS	-.04	.13	-.17		
Duration of orienting x DS	-.09	.10	-.32		
Fear x DS	.10	.11	.36		

Note. * $p < .05$ ** $p < .001$. DS refers to depressive symptoms in the postnatal period

CHAPTER 5

DISCUSSION

The main purpose of the current study was to examine the predictors of parenting self-efficacy in the prenatal and postnatal period in a sample of first-time mothers. Second, I investigated whether there was a change in mother's efficacy beliefs from pregnancy to 4-months postpartum and which of the factors predicted this change. Third, I examined the moderator role of infant temperament between depressive symptoms and parenting self-efficacy.

5.1 Discussion regarding the research questions

5.1.1 Predictors of parenting self-efficacy in the prenatal period

The first objective of this study was to investigate whether the mother's prenatal depressive symptoms, distress and perceived social support predict prenatal parenting self-efficacy. The results of the hierarchical multiple regression analysis revealed that mothers' prenatal depressive symptoms, pregnancy-specific distress and perceived social support uniquely contributed to maternal self-efficacy expectations during pregnancy.

Taking into account the importance of the depressive symptoms and distress in the theoretical framework on self-efficacy by Bandura (1997), the results seem to suggest that emotional state of an individual (e.g., being stressed or depressed) is risk factor for self-efficacy. This finding also supports previous results which consistently showed that mood during pregnancy predicts maternal self-efficacy (Gross & Marcussen, 2017; Kunseler et al., 2014; Leerkes & Burney, 2007; Porter & Hsu,

2003). As put forth by Wernand and colleagues (2014) in their study which specifically examined self-efficacy beliefs of mothers during the prenatal period, parenting self-efficacy was uniquely predicted by mood (e.g., anxiety and depression) over the course of pregnancy in first-time expectant mothers. The results of the current study support earlier ones and suggest that expectant mothers who feel in negative emotional state may develop self-representations as incapable of nurturing a baby or dealing with the situations pertaining to parenting, which in turn decreases the sense of self-efficacy.

The results of the hierarchical multiple regression analysis also demonstrated that pregnancy-specific distress significantly contributes to parenting self-efficacy even after controlling for depressive symptoms. This finding is noteworthy to mention because it underlines how important the pregnancy-specific stress (e.g., having an unhealthy baby, worries about delivery) in determining mothers' sense of self-efficacy during the prenatal period. As it was stated in the Introduction section, there seems to be a gap in the literature regarding the stress and its relation to parenting self-efficacy in the prenatal period with a domain-specific type of stress measure which is differentiated from general stress and reported as a better predictor (Huizink et al., 2004; Lobel et al., 2008). To my knowledge, only a recent study by Razurel and colleagues (2017) investigated the relation between prenatal distress that was measured by a pregnancy-specific measure of distress (The Antenatal Perceived Stress Inventory; APSI) and parenting self-efficacy in a sample of 235 primiparous women. Their results showed that prenatal distress was negatively correlated with parenting self-efficacy and it also predicted parenting self-efficacy (Razurel et al., 2017). Thus, the findings of the current study support the ones by Razurel and colleagues (2017) and provide considerable evidence underlying the importance of

taking pregnancy-specific issues into account as a predictor of self-efficacy in the nurturing role.

Moreover, the results of this study showed that perceived social support is a significant predictor of maternal self-efficacy in the prenatal period indicating that mothers who receive more support during pregnancy have enhanced self-efficacy before the birth of their babies. Based on the theory of self-efficacy and previously conducted empirical studies, this was an expected finding. Revisiting the theory of self-efficacy reminds us the contribution of verbal persuasion (e.g., encouragements, advice or emotional support) on enhancement of efficacy in individuals (Bandura, 1997). It seems that in the context of parenting, this result is consistent with the existing findings regarding the effects of social support on shaping parenting efficacy beliefs in the prenatal period (Gao et al., 2014; Shorey et al., 2015). Further analyses in which the contributions of support from family, friends and significant others to self-efficacy were examined separately showed that these sources did not contribute to the model significantly; except that family support seemed to marginally predict the sense of self efficacy. The question from what kind of a support mothers benefit most during pregnancy is an intriguing one. In a study which investigated mothers needs in the transition period, from the last trimester of the pregnancy to 3-4 months postpartum, participant mothers reported the most important sources of the social support as spouse/partner, family/parents, friends/colleagues and health care professionals (Deave, Johnson & Ingram, 2008); and the most outstanding types among these sources were the ones that were provided by the mothers' own mothers and female relatives. Also, similar to the study of Deave and colleagues (2008) and the social support scale which was used in the present study, sources of social support are defined in two dimensions: informal and formal support, while the

former includes family, friends and significant other, the latter refers to support from health care professionals (Leahy-Warren & McCarthy, 2011). In the same study, the researchers differentiated types of support which first-time mothers receive as emotional, instrumental, informational and appraisal support. Keeping in mind these categorizations, our results which indicated family support was prominent among others are in line with previous findings showing that marital support or parental support increased parenting self-efficacy (Haslam et al., 2006; Leahy-Warren & McCarthy, 2011; Porter & Hsu, 2003; Teti & Gelfand, 1991). However, it is important to note that because family support was specified as support from "mother, father, siblings and spouse" in the current study, we cannot exactly capture who the most influential supporters of the new mother are and what kind of a support (emotional or instrumental) these sources provide.

Although some of existing studies suggested that social support was a protective factor against the risk of depression and distress (Heh, Coombes & Bartlett, 2004; Ngai & Chan, 2011; Milgrom et al., 2019), bivariate correlations in this study showed that prenatal distress and perceived social support during pregnancy was not related. One possible explanation for this surprising finding might be the items of the Prenatal Distress Questionnaire which was designed to capture issues like worries about delivery of the baby or medical care during pregnancy to which "informal" support from others may not help mothers' relief. But, just as Leahy-Warren and McCarthy (2011) defined, "formal" support such as receiving necessary information from health-care professional like nurses, midwives and doctors may reduce the pregnancy-specific distress.

5.1.2 Predictors of parenting self-efficacy in the postnatal period

The second aim of this study was to investigate whether mother's postnatal depressive symptoms, social support received during pregnancy and infant characteristics (sex and temperament) predict postnatal parenting self-efficacy in the postnatal period. The results of the hierarchical multiple regression analysis revealed that mothers' prenatal parenting self-efficacy, postnatal depressive symptoms and family support uniquely predict postnatal maternal efficacy. Friends' and significant others' support and child characteristics, on the other hand, did not predict the mothers' sense of self-efficacy in nurturing at 4-months postpartum.

The results revealed that mothers' parenting self-efficacy expectations during pregnancy were found as a significant predictor of their postnatal self-efficacy beliefs, which seems consistent with previous findings showing that prenatal maternal self-efficacy accounted for a large amount of the variance in the parenting self-efficacy at 3-months postpartum (Biehle & Mickelson, 2011a; Porter & Hsu, 2003). It is very likely that mothers with higher self-efficacy beliefs during pregnancy tend to have more optimistic expectations about mothering a child; therefore, they develop an enhanced sense of efficacy after birth which may provide them with coping better with challenges of parenting. The protective role of "pre-parenthood positive sense of self" across the transition to parenthood was pointed out by some recent work (Chen, 2017; Chen, Tung & Enright, 2020). Very similar to the concept of self-efficacy, the sense of self is defined as consisting of two aspects which are the sense of mastery and self-esteem. While, the positive sense of self, as a broader concept, contributes to the individual's well-being and makes them stronger in life transitions; pre-parenthood sense of self/parenthood sense of self provides a smooth transition and better adjustment to the parenthood (Chen, 2017; Chen, Tung

& Enright, 2020). Keeping the concept of "pre-parenthood sense of self" in mind and revisiting our findings, we can state that a mother's positive sense of self regarding her anticipation of efficaciously nurturing the baby may contribute to her parenthood sense of self, accordingly her parenting self-efficacy after birth.

Postnatal depressive symptoms negatively predicted postnatal self- efficacy beliefs after controlling for prenatal depressive symptoms. This finding seems also consistent with the previous findings indicating that higher the mother's depressive symptoms at the postnatal period, lower the sense of self-efficacy (Gross & Marcussen, 2017; Haslam et al., 2006; Kunseler et al., 2014; Law et al., 2019; Zheng et al., 2018). In addition, the results of the same regression analysis also showed that family support received during pregnancy significantly predicted parenting self-efficacy after childbirth, which seems to be in line with the finding by Cutrona and Troutman (1986) showing that mothers who receive higher levels of social support during the prenatal period have higher levels of self-efficacy in the postnatal period. It is important to note that though the results demonstrated that while family support during pregnancy predicted prenatal parenting self-efficacy just marginally, it predicted postnatal parenting self-efficacy significantly and more strongly. This finding may appear confusing in the first glance; however, it is consistent with previous results indicating that mothers who receive greater social support during pregnancy experience less negative mood problems in the postnatal period (Heh et al., 2004; Morikawa et al., 2015; Stapleton et al., 2012). Therefore, it might be tentatively claimed that mothers who receive greater support during pregnancy may feel more efficacious in parenting in the postnatal period. It is also very likely that mothers who report high levels of social support during pregnancy may receive social support after birth. Regarding the challenges encountered by a new mother

during early months of postpartum such as caring the baby, sleep deprivation or changing roles and relations, social support would be much needed compared to the prenatal period, especially from partners and their mothers in infant care or in housework as a kind of instrumental support. Therefore, mothers may have more time to be engaged with their babies and feel more capable of nurturing them in the presence of family support. This explanation also partly answers the question why friends' and significant others' support did not appear as predictors of maternal self-efficacy while family support did in the postnatal period. As it was reported above, primary support givers to the mothers seem to be families while friends or others stay out of supplying necessary practical and instrumental support. Friends, for example, are available for having good time together which might be unpreferable for the new mother while whose primary concern and focus is her baby in early months of motherhood. So, the null findings from friends' and significant others' support seem reasonable. Additionally, it should be noted that the total and subscale scores on social support variable showed a restricted variance, inferring that participating mothers in this study mostly reported receiving high levels of support. A detailed inspection revealed that of the mothers, 62% responded 6 (*strongly agree)* or 7 (*very strongly agree*) in a 7-point scale for the total support they received. Percentages of participants who endorsed 6 or 7 points for the family, friends and significant other are 87%, 73% and 49%, respectively.

The results regarding the infant characteristics revealed that neither infant sex nor temperamental characteristics predicted maternal efficacy beliefs in the postnatal period. Existing results regarding the association between infant sex and maternal efficacy beliefs seem incompatible; while some reported higher maternal efficacy in mothers of female infants (Azmoude et al., 2015; Froman & Owen; 1990; Kohlhoff

& Barnett,2013) some studies showed no difference in maternal self-efficacy for mothers of male and female infants (Hudson et al., 2001; Salonen et al., 2009). The reason behind null findings, consistent with the finding of the current study, might be that having a male or female infant did not make a difference in mothers' perception of their babies at early months of ages (four months). As such reported in the study by Elek and colleagues (2003), infant sex may predict maternal self-efficacy when children are older ages (e.g., mothers of toddlers). Therefore, the finding of the current study is not surprising regarding the incompatible previous results and our sample which is consisting of mothers of infants with early ages, 4-months of age.

Regarding the link between infant temperament and maternal self-efficacy beliefs, the results of this study do not support earlier findings which showed that mothers of temperamentally difficult infants (e.g., distress easily, hard to soothe) have lowered levels of parenting self-efficacy (Cutrona & Troutman, 1986; Leerkes & Burney, 2007; Lipscomb et al., 2011; Porter & Hsu, 2003; Teti & Gelfand, 1991; Troutman et al., 2012). This contradictory result can be explained by different perspectives. First, our sample consisted of first-time mothers; who may not differentiate easy and difficult temperament because of their lack of experience about raising a baby. Perhaps they may perceive possible challenges stemming from infant difficulty to the external factors (e.g., generalizing infant fussiness and find it usual for all babies) rather than their own inefficaciousness as a mother. From this perspective, we may expect that some inner sources of mothers (e.g., being resilient) may prevent them from attributing failures to their incapabilities. In line with this hypothesis, a study conducted with a Dutch sample of first-time mothers revealed that mothers' perception of negative infant temperament is associated with lowered self-efficacy beliefs at 3 months postpartum if they show low resilience towards

negative performance feedback on a caregiving simulation, the Cry Response Task, which was designed to measure mothers' resilience in parenting self-efficacy during pregnancy (Verhage, Oosterman & Schuengel, 2015). The sample characteristics (e.g., highly educated mothers), procedure (e.g., assessment at 32 weeks of gestation and 3 months postpartum) and self-report measures (e.g., self-efficacy scale; the SENR, infant temperament scale; the IBQ) of the study by Verhage and colleagues (2015) seems pretty similar with the current study. Therefore, for the null findings regarding the relation between infant temperament and parenting self-efficacy we may make similar inference; that is, mothers which constitutes the sample of the current study highly resilient towards negative performance feedback.

Second, the measurement method of infant temperament which is a mother-report instrument may not reflect the actual temperamental characteristics of the infant under the possible bias of the mother while rating her baby. As set forth by Gartstein and Marmion (2008), mother-report measures of infant temperament are differentiated from laboratory or observational measures in the sense that the former one includes the perception of mothers which might be shaped by their sense of self-efficacy beliefs, rather than the other way around. Therefore, rather than using one type of a measure, multi-method measurement to capture temperamental characteristics of the infants may help just as used in other studies (Kohlhoff & Barnett, 2013; Teti & Gelfand, 1991; Troutman et al., 2012; Verhage et al., 2013). Third, infant colic and physical dysregulation (e.g., crying and sleep) of the infant may weaken mother's sense of self-efficacy as very real challenges rather than temperamental characteristics like fear or distress to limitations. Even if the IBQ scale is a reliable measure for infants with 4 months of age, it is possible that mothers cannot exactly capture whether their infants show distress or fear; however,

they can very likely to understand physical dysregulation like frequently and intensely crying of infants. Forth, null finding might be related to mentalization capacities of the mothers. Mentalization capacity helps a mother to perceive her baby as a subject and to differentiate his/her thoughts and feelings from her own, can interpret signals of the baby more accurately. In relation to parenting self-efficacy, a mother with a higher mentalization capacity will hold challenging situations of parenting or infant difficulty as a normal and expectable part of being a parent rather than blaming the baby as difficult or 'something' trying to annoy her. Thus, considering the previous findings which revealed that mentalization capacity is higher in mothers from high socioeconomic backgrounds (Álvarez, Cristi, Del Real & Farkas, 2019; Brophy-Herb, Stansbury, Bocknek & Horodynski, 2012), it can be tentatively claimed that relatively high SES sample of the current study was retained from diminished self-efficacy thanks to their mentalization capacities. Fifth, Leerkes and Burney (2007) put forward the fact that difficult infant temperament may not be related to maternal self-efficacy if the mother receives high social support. In the current study, even if we do not measure mothers perceived social support in the postnatal period, indeed social support received during pregnancy significantly predicted postnatal efficacy; so, we can anticipate that mothers still have adequate support and this support protect them from possible disruption of sense of self-efficacy. And lastly, our low-risk profile of sample might not be affected from negative infant temperament which is frequently was found as a risk factor for low socioeconomic and at-risk groups as it was reported in a meta-analytic review (Paulussen-Hoogeboom, Stams, Hermanns & Peetsma, 2007).

5.1.3 Predictors of the change in parenting self-efficacy

In a longitudinal examination of parenting self-efficacy as a concern of third research question, the results indicated that mothers' parenting self-efficacy beliefs slightly increase from pregnancy to postnatal period in consistent with the previous findings (Hudson et al., 2001; Gao et al., 2014; Gross & Marcussen, 2017; Law et al., 2019; Porter and Hsu; 2003). This expected finding supports the argument of Bandura (1997), which is mastery in a specific task and previous accomplishments enhance one's sense of self-efficacy. In relation to the finding of the current study, we can assert that first-time mothers do the child-care routines on a regular basis and get accustomed to these practices in the first months of the motherhood. Accordingly, they may feel more confident while nurturing the baby and their maternal efficacy beliefs increase in time. Another explanation might be that around 4 months of age, infants become more socially engaged and their interactions with their mothers (e.g., social smiles) deepen and diversify (McHale, Fivaz-Depeursinge, Dickstein, Robertson & Daley, 2008; Rothbart, 1968). So, the mothers start to enjoy motherhood and, as like as not, it makes them feel more efficacious in their mothering role. As suggested by Fulton and colleagues (2012), parenting self-efficacy belief is a transactional variable, which is not solely emerged by mother's perception of her caregiving capabilities but also it is shaped by the mother-infant interactions in which getting some responses from the infant matters substantially (Fulton, Mastergeorge & Hansen, 2012).

Regarding the predictors of the change in parenting self-efficacy, the hierarchical multiple regression analysis revealed that the change score in depressive symptoms uniquely predicted the change score in self-efficacy, indicating that the change in depressive symptoms accompany with the change in efficacy beliefs of

mothers in the transition period. In other words, as mothers' depressive symptoms increase, their self-efficacy lowers compared to the prenatal period and, as mothers' depressive symptoms decrease, their self-efficacy gets better compared to prenatal period. This finding appears to be supported by previous research in which parenting self-efficacy and depressive symptoms were longitudinally examined, from pregnancy to postpartum period and the relation between the changes in two was established (Haslam et al., 2006; Porter & Hsu, 2003; Teti & Gelfand, 1991). Several studies point out the fact that while there is a decrease in depressive symptoms of first-time mothers from pregnancy to 3-4 months postpartum, an increase in the parenting self-efficacy, inferring that enhanced efficacy beliefs after birth are linked to reduced depressive symptoms (Gross & Marcussen, 2017; Kunseler et al., 2014; Porter & Hsu, 2003; Verhage et al., 2013). However, the stability of depressive symptoms of the mothers in the present study seems intriguing as in contradiction with earlier findings showing a decrease in mothers' depressive symptoms over time. Given that our findings are based on a sample consisting of mothers from high socioeconomic backgrounds and they may have many resources (e.g., high social support, financial opportunities) to protect them from possible adversities, their depressive symptoms during the prenatal period seems normal/average level with a mean score of 13 out of 60, as a total scale score of CES-D. There is evidence to support this hypothesis that Goyal and colleagues (2010) investigated depressive symptoms specifically in two groups of first-time mothers, ones from low socioeconomic status (SES) and others from high SES starting from third trimester of pregnancy to 3 months postpartum. The researchers concluded that the mothers from low SES have significantly more depressive symptoms in the prenatal period compared to high SES group (Goyal, Gay & Lee, 2010). In the same study, the

researchers utilized the Center for Epidemiologic Studies Depression Scale (CES-D) for measuring mothers' depressive symptoms, just as in the present study, and they used a score of 16 as a cutoff for the risk of depression as suggested by Radloff (1977). Therefore, considering the high SES profile sample of our study, it seems reasonable not to observe a significant decline in depressive symptoms of the mothers who have already depressive symptoms at average level, just as a healthy individual who does not in a major life transition.

The results of the same regression analysis investigating the predictors of the change in self-efficacy also showed that family support received during pregnancy predict the increase in parenting self-efficacy at a marginally significance level. This finding can be interpreted by reminding the reader that the findings pertaining the previous research questions showed that family support makes a significant difference on both prenatal and postnatal efficacy beliefs of mothers. Accordingly, it is highly expected to see a significant contribution of family support on the change in parenting self-efficacy, as well. Indeed, it would be better if we could also analyze the pre-post changes in social support in order to capture how social support changes itself and how this change contributes to the change in efficacy.

On the other hand, infant temperament and sex were not found as significant contributors for the change in maternal efficacy. It is possible that the presence of the baby itself regardless of the temperamental characteristics or sex of him or her is too exhilarating, which may boost mothers' sense of self-efficacy. In addition, as mentioned above, as basic needs of the baby become more understandable and predictable to the mother over time may make the mother feel more adequate even if the baby has a difficult temperament. Considering the issue in the context of self-efficacy theory by Bandura (1997), successfully coming through a challenging

situation which requires high efforts (e.g., a difficult baby in parenting domain) is likely to induce enhancement of self-efficacy beliefs as a kind of positive performance outcome. So, explanation for the increase in parenting self-efficacy beliefs in mothers might be related to mothers' increased abilities to understand the signals from infant and to learn how to calm down the baby in time, as supposed by previous studies (e.g., Leerkes & Crockenberg, 2002; Leerkes & Burney, 2007).

5.1.4 Infant temperament as a moderator in the relation between depressive symptoms and postnatal parenting self-efficacy

Regarding the last research question, I examined if infant temperament (e.g., distress to limitations, duration of orienting and fear) moderates the relation between depressive symptoms and parenting self-efficacy in the postnatal period. The results showed that interaction between infant temperament and postnatal maternal depressive symptoms was not significant in predicting postnatal self-efficacy beliefs. Previous research examined the relation between maternal depression, infant temperament and parenting self-efficacy and they showed the relation between them; that is higher level of depressive symptoms and difficult temperamental characteristics of infants are associated with lowered level of parenting self-efficacy (Cutrona & Troutman, 1986; Bates, Salsberry, Justice, Dynia, Logan, Gugiu & Purtell, 2020; Gross, Conrad & Wothke, 1994; Takács et al., 2019). However, none of those studies used infant temperament/difficulty as a moderator variable in the relation between depressive symptoms and parenting self-efficacy. As discussed in the previous headings of the discussion section, this finding might be explained in the same way how the findings from second research question was justified. It is important to note that, again, rather than temperamental characteristics of the infant,

sleep and crying patterns of the baby or colic which seem to overlap with negative emotionality (Troutman et al., 2012) might be better predictors of maternal self-efficacy as a kind of real challenges.

5.2 Limitations of the study and recommendations for future research

There are a number of limitations of this study. First, we used the convenience sampling method in order to reach participants of the study; so, participating mothers were predominantly from a high socioeconomic status. Of the mothers, 87% has a vocational degree and above and approximately 70% of the participants reported household income of 5.000 TL and above. Considering this fact, our sample is not representative. It can be recommended to replicate the findings of this study with a more sample which is composed of individuals from diverse backgrounds.

The second limitation of the study is about some measurement approaches utilized. Perceived social support measure was used only in the prenatal period; therefore, using one-point assessment of social support restricted us from making inferences about how mothers perception of social support evolved in the transition to motherhood and how it contributed to the maternal self-efficacy longitudinally. Additionally, one of the sources of social support, family support was found as a marginal/significant predictor of pre-and post-efficacy beliefs of mothers; yet, we could not capture whom exactly provided this source, the parents of the mother or husband. It might be wise to use social support scale which gives a much clearer picture about this issue in the future studies. Also, infant temperamental characteristics were measured via mother-report questionnaire which might be effected by mother's perception and bias. Using multi-method approach like

observation, sleep and crying patterns of the infants in understanding temperamental characteristics of the infants may clear up the issue in the following research.

Third, in the present study, domain-specific (e.g., parenting) self-efficacy was measured. However, it is plausible to expect that mothers' global sense of self-efficacy provides a basis for domain-specific type of efficacy and these two go together. Some of the previous studies in which both types of efficacy measures exist in the literature; however, these studies do not capture the transition period (pregnancy to early months); rather they focus on general self-efficacy and parenting self-efficacy of the mother with children in older ages (Coleman & Karraker, 2000; Sanders & Woolley, 2005; Sevigny & Loutzenhiser, 2010). Therefore, we recommend for the future studies to measure general self-efficacy beliefs of new mothers in addition to parenting self-efficacy beliefs. This may provide a better understanding about parenting self-efficacy, the conceptualization of which is still based on Bandura's theory of self-efficacy as a more up-to-date and comprehensive conceptual model, with its parenting-specific components seems needed in literature.

Despite these limitations, the present study has many strengths. The longitudinal examination of maternal self-efficacy in the transition period provided us a better understanding of how efficacy beliefs of new mothers changed in relation to a number of factors. In contrast to many longitudinal studies which reported high dropout rates from one time-point to another in the transition to parenthood (e.g., Figueiredo et al., 2018; Fulton et al., 2012; Sockol, Epperson & Barber, 2014), we had a small number of dropouts thanks to our methodological strength that is the collection of the data via home visits in the postnatal period. Also, in order to reach participants, we visited several state and public hospitals or conducted the first assessment in a place (e.g., participants' home, workplace or cafe) that was

convenient for the pregnant women. Although commuting for home visits were really challenging in such a metropolitan like İstanbul, these visits provided us making alliance with the mothers, even the ones who hesitated to participate in the study at the beginning are eager to follow-up assessment at 4 months postpartum.

Second, a glance on the literature shows that most of the studies focusing on parenting self-efficacy in expectant or new mothers were conducted from a nursing and midwifery perspective (Leahy-Warren, McCarthy & Corcoran, 2012; Sari & Altay, 2020; Shorey et al., 2015), suggesting possible intervention and implications should be done by nurses or midwifes such as preparing expectant mothers to the physiology of pregnancy and birth in the prenatal period via antenatal educational programs, providing basic infant care skills (e.g., how to breastfeed) to the new mothers or providing instructional and instrumental support during hospital stays and after the discharge. With the present study, we make contribution to the studies who handled the issue from psychological perspective and we stress on the maternal subjectivity by psychological well-being of emerging mothers.

5.3 Implications and conclusion

In this study, I investigated how parenting self-efficacy unfolds from pregnancy to 4-months postpartum in relation to psychological well-being, social support they receive and infant characteristics in a sample of primiparous, middle-to-high educated mothers. As the findings of the study indicated, primiparous mothers experience pregnancy-specific distress and depressive symptoms across the transition to parenthood, which in turn influences their self-efficacy beliefs in the nurturing role negatively. So, it seems crucial that psychological counselors who work with expectant or new parents, with their advocacy-related role, should raise awareness

about the stability of cognitions and affect from pregnancy to new motherhood and the protective function of family support for positive sense of self and mood in the first months following childbirth, even in groups that can be considered 'advantaged' in terms of socioeconomic status. Although, prenatal trainings that are designed to inform expectant parents about delivery and care of the baby have become widespread in recent years and accessible in state hospitals or private settings, the content of these childbirth preparation education seems restricted with providing information about physiology of pregnancy and birth or infant-care practices (Esencan et al., 2018; Public Health Agency of Turkey, 2017). Thus, the main practical implication of this study could target policy-makers, the responsibility of whom is to promote parental well-being postpartum by making pertinent trainings and services accessible for everyone. Besides the benefits of these preparatory classes, mothers should feel mentally ready for being a mother; therefore, psychologists, psychological counselors can help mothers' mental preparation to the baby by working with the mothers in individual and group counseling sessions as a kind of informal support, which then will enhance the mothers' sense of self-efficacy in the nurturing role as well.

Because of the fact that mood states, social support and prenatal self-efficacy beliefs at pregnancy are strong predictors of postnatal efficacy beliefs and adjustment to parenthood; helping mothers starting from pregnancy as a kind of preventive intervention would ease their adjustment and transition to the motherhood. Just as the current study pointed out, social support form family during pregnancy plays a crucial role in well-being of the mother during pregnancy and after childbirth. Mental health professionals can design and implement some awareness programs to

which fathers and grandparents can also participate so that all members of the family could get prepared to welcome the baby in the best ways possible.

It seems that there is a great deal to do in terms of supporting expectant and new parents' well-being. It is also important to note that contextual factors should be taken into account while planning and delivering such programs. Collaboration with midwives, nurses and pediatricians at state hospitals, community workers (e.g., https://www.isper.istanbul/menu/kadin-ve-aile-sagligi-koruma-merkezleri) as well as non-governmental organizations (e.g., Turkish Association of Infant Mental Health, http://bebekruhsagligi.org.tr) should be considered to reach as many parents as possible, so that such services will not be limited to a small group of people who could afford private practice.

Lastly, a theoretical implication might be the investigation of self-efficacy of new mothers with the domain-specific type of measure, which is measuring parenting self-efficacy, and the general self-efficacy measure together in the transition to motherhood. Therefore, if these two seem to be differentiated in predicting mothers' experiences and practices in the future research, it would be a considerable contribution to the literature to provide a conceptual model specific to self-efficacy in parenting domain.

APPENDIX A

DEMOGRAPHIC INFORMATION FORM – PRENATAL

Participant ID: ……
Filling date of the form: …./…../….
Researcher: ……

MOTHER INTAKE QUESTIONS (Prenatal Interview)

S1 How did you hear about the project? _____
S2 Which week of your pregnancy are you at? _____
S3 The expected birthdate of your baby (day/month/year): _____
S4 Your date of birth: _____
S5 Your partner's date of birth: _____
S6 Lastly you graduated from:
1 ____ Primary school
2 ____ Secondary school
3 ____ High school
4 ____ Vocational school of higher ed. (2 years)
5 ____ University (4 years)
6 ____ Master
7 ____ Other (Please specify _____)
S7 Your occupation: _____
S8 Do you work currently?
☐ Yes
☐ No
S9 If yes, how many hours a week do you work on average? _____
S10 Lastly your partner graduated from:
1 ____ Primary school
2 ____ Secondary school
3 ____ High school
4 ____ Vocational school of higher ed. (2 years)
5 ____ University (4 years)
6 ____ Master
7 ____ Other (Please specify _____)
S11 Your partner's occupation: _____
S12 Does your partner work currently?
☐ Yes
☐ No
S13 If yes, how many hours a week does your partner work on average?
_____

General Information

Q1 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 and above

Q2 How much worried are you about the economic situation of your family?

- ☐ I am not worried.
- ☐ I am a little worried.
- ☐ I am sometimes worried.
- ☐ I am worried frequently.
- ☐ I am worried a lot.

Q3 Do you have any health problems?

☐ Yes ☐ No

Q4 If yes, please write down the name of the problem _____

Q5 Do you use any medication or supplement (iron, vitamin etc.) on a regular basis?

☐ Yes ☐ No

Q6 If yes, please write down the name of medication/supplement you use:

_____

Q7 How often do you use this medication/supplement? _____

Q8 How long have you been using this medication/supplement? _____

Q9 Were any problems with your baby's development stated during health checks?

☐ Yes ☐ No

Q10 If yes, please write down the name of the problem _____

APPENDIX B

DEMOGRAPHIC INFORMATION FORM – PRENATAL (TURKISH)

Katılımcı numarası: …….
Anketin doldurulduğu tarih: …../…../….
Araştırmacı: ……

ANNE ÖNGÖRÜŞME SORULARI (Doğum Öncesi)

S1 Projemizden nasıl haberdar oldunuz? _____
S2 Hamileliğinizin kaçıncı haftasındasınız? _____
S3 Bebeğinizin beklenen doğum tarihi (gün/ay/yıl): _____
S4 Sizin doğum tarihiniz: _____
S5 Eşinizin doğum tarihi: _____
S6 En son mezun olduğunuz okul:
1 ____ İlkokul
2 ____ Ortaokul
3 ____ Lise
4 ____ Meslek Yüksek Okulu (2 yıllık)
5 ____ Üniversite (4 yıllık)
6 ____ Lisansüstü
7 ____ Başka (belirtiniz_____)
S7 Mesleğiniz: _____
S8 Şu an çalışıyor musunuz?
☐ Evet
☐ Hayır
S9 Eğer evetse, haftada ortalama kaç saat çalışıyorsunuz? _____
S10 Eşinizin en son mezun olduğu okul:
1 ____ İlkokul
2 ____ Ortaokul
3 ____ Lise
4 ____ Meslek Yüksek Okulu (2 yıllık)
5 ____ Üniversite (4 yıllık)
6 ____ Lisansüstü
7 ____ Başka (belirtiniz_____)
S11 Eşinizin mesleği: _____
S12 Eşiniz şu an çalışıyor mu?
☐ Evet
☐ Hayır
S13 Eğer evetse, haftada ortalama kaç saat çalışıyor?
_____

Genel Bilgiler

Q1 Hane halkının aylık toplam geliri:

☐ 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 and above

Q2 Şu anda ailenizin ekonomik durumu ile ilgili ne kadar endişelisiniz?

☐ Endişeli değilim.
☐ Çok az endişeliyim.
☐ Bazen endişeliyim.
☐ Orta derecede endişeliyim.
☐ Çok endişeliyim.

Q3 Herhangi bir sağlık probleminiz bulunuyor mu?

☐ Evet ☐ Hayır

Q4 Cevabınız evet ise problemin ismini yazınız _____

Q5 Düzenli bir şekilde herhangi bir ilaç ya da takviye (demir, vitamin gibi) kullanıyor musunuz?

☐ Evet ☐ Hayır

Q6 Cevabınız evet ise, kullandığınız ilacın/takviyenin ismini yazınız: _____

Q7 Ne sıklıkta bu ilacı/takviyeyi kullanıyorsunuz? _____

Q8 Ne zamandır bu ilacı/takviyeyi kullanıyorsunuz? _____

Q9 Sağlık kontrollerinde bebeğinizin gelişimiyle ilgili herhangi bir sorun belirtildi mi?

☐ Evet ☐ Hayır

Q10 Cevabınız evet ise, sorunun ismini yazınız _____

APPENDIX C

DEMOGRAPHIC INFORMATION FORM – POSTNATAL

Participant ID: ……
Filling date of the form: …./…../….
Researcher: ……

MOTHER INTAKE QUESTIONS (Postnatal Interview)

Q1 Your baby's date of birth (day/month/year): _____

Q2 How many weeks was your baby when you gave birth? _____

Q3 Sex of your baby:

☐ Boy

☐ Girl

Q4 How much weight did your baby when you gave birth? _____

Q5 How many cm was your baby when you gave birth? _____

Q6 How many cm was your baby's head circumference? _____

Q7 Type of delivery:

☐ C-section

☐ Normal/vaginal delivery

Q8 Has any medical complication been experienced during delivery? (e.g. a cord around the neck, asphyxiation)

☐ Yes

☐ No

Q9 If yes, please specify what the complication was _____

MOTHER-INFANT SURVEY BOOKLET

SECTION 1: BABY FORM

Q1 Sex of your baby:

☐ Boy

☐ Girl

Q2 How much weight does your baby now? _____

Q3 How many cm is your baby now? _____

Q4 How many cm is your baby's head circumference now? _____

Q5 Does your baby take any medication?

Q6 If yes, please specify the name ıf medication: _____

Q7 Was there any situation that required your baby to stay in hospital after birth

☐ Yes

☐ No

Q8 If yes, what was the reason? _____

Q9 Does your child turn his/her head towards your voice or some noise?

☐ Yes

☐ No

☐ Don't know

Q10 When you talk to your child, does he/she smile, make noises, or move arms, legs or trunk in response?

☐ Yes

☐ No

☐ Don't know

Q11 Do you breastfeed your baby currently?

☐ Yes

☐ No

Q12 If your answer is no, how long did you breastfeed your baby?
_____ month(s) _____ week(s)

Q13 If yes, how many times do you breastfeed your baby in a day?
_____

Q14 Do you breastfeed your baby on a schedule or on demand?

☐Schedule

☐Feed on demand

☐Both of them

☐Don't know

Q15 How is the experience of breastfeeding your baby for you?

Always discomfortable										Always pleasurable
0	1	2	3	4	5	6	7	8	9	10

Q16 Do you use formula/follow on milk to feed your baby?

☐Yes

☐No

Q17 If your answer is yes, what are the reasons for using formula/follow on milk? (You can make multiple selections)

☐Medical advice

☐In this way, I know how much nourishment my baby gets

☐In order to be sure that my baby gets enough nourishment

☐It is easier than breastfeeding

☐I don't want to breastfeed during night feedings, it is so tiring

☐My baby needs to be fed very often

☐I am ill or I use drugs due to my illness

☐In this way, others can help me in baby-care

☐I don't like breastfeeding

☐Breastfeeding is discomfortable

☐Other: _____

Q18 In this period, sleep pattern of babies has not been steady yet. Sleep of your baby may also differ from one day to another. In spite of this, taking the last month into consideration, try to answer questions below to describe your baby's sleep habits in the best way.

How long does your baby sleep in a day (24 hours period)? _____ hour(s)

How many times does your baby have daytime sleep on average in a day? _____ times

How many hours does your baby sleep at a night (from 7 pm to 8 am)? _____ hour(s)

How many times does your baby wake up at a night (from 7 pm to 8 am)?_____times

SECTION 2: MOTHER FORM

Q1 How was your general birth experience?

Awful										Excellent
0	1	2	3	4	5	6	7	8	9	10

Q2 How many hours do you spend with your baby during the day (07.00-19.00)?

_____hour(s)

Q3 Is there anyone who helps in baby-care except you?

☐Yes
☐No

Q4 If yes, please specify who this/these person/people is/are?

_____

Q5 How much worried are you about the economic situation of your family?
☐I am not worried.
☐I am a little worried.
☐I am sometimes worried.
☐I am worried frequently.
☐I am worried a lot.

Q6 Do you work currently?
☐Yes
☐No
☐On paid leave
☐On non-paid leave

Q7 If yes, how many months was your baby when you have started to work?
_____ weeks.

Q8 If yes, how many days a week do you work? _____ days.

Q9 If you are on paid/non-paid leave, when do you plan to start to work?
_____ months

Q10 Did you leave your job when the baby was born, except on leave?

☐ Yes
☐ No

Q11 If yes, what was the reason? _____

Q12 Total number of people living in your household: _____

Q13 Is there any medication you have just started using since we first met? (Iron tablets, laxatives, vitamins, sleeping aids, aspirin, painkiller, and including herbal medicine)

☐ Yes

☐ No

Q14 If yes, please write name of the medication you use. _____

Q15 How satisfied/dissatisfied are you with your current sleep pattern?

Very dissatisfied	Dissatisfied	Moderately satisfied.	Satisfied	Very satisfied
0	1	2	3	4

Q16 Do you have any sleep problem?

☐ Yes

☐ No

Q17 If your answer is yes, to what extent do you consider your sleep problem to interfere with your daily functioning (e.g. daytime fatigue, mood, ability to at work/daily chores, concentration, memory etc.) currently?

Not at all interfering	A little	Somewhat	Much	Very much interfering
0	1	2	3	4

APPENDIX D

DEMOGRAPHIC INFORMATION FORM – POSTNATAL (TURKISH)

Katılımcı numarası: ……
Anketin doldurulduğu tarih: …../…../….
Araştırmacı: ……

ANNE ÖNGÖRÜŞME SORULARI (Doğum Sonrası)

S1 Bebeğinizin doğum tarihi (gün/ay/yıl): _____

S2 Bebeğiniz kaç haftalık doğdu? _____

S3 Bebeğinizin cinsiyeti:

☐ Erkek

☐ Kız

S4 Bebeğiniz kaç kilo doğdu? _____

S5 Bebeğinizin boyu doğduğunda kaç cm idi? _____

S6 Bebeğinizin baş çevresi doğduğunda kaç cm idi? _____

S7 Doğum tipi:

☐ Sezaryen

☐ Normal/vajinal doğum

S8 Doğum sırasında tıbbi bir komplikasyon yaşandı mı? (Örneğin; kordon dolanması, oksijensiz kalması)

☐ Evet

☐ Hayır

S9 (Cevabınız evet ise) komplikasyonun ne olduğunu söyleyiniz.

_____

BÖLÜM 1: BEBEK FORMU

S1 Bebeğinizin cinsiyeti:

☐ Erkek
☐ Kız

S2 Bebeğinizin boyu şu an kaç cm'dir? _____

S3 Bebeğiniz şu anda kaç kilodur? _____

S4 Bebeğinizin baş çevresi şu an kaç cm'dir? _____

S5 Bebeğiniz herhangi bir ilaç kullanıyor mu?

☐ Evet
☐ Hayır

S6 Cevabınız evetse, bebeğinizin kullandığı ilacın adını belirtiniz. _____

S7 Doğumdan sonra bebeğinizin hastanede kalmasını gerektiren bir durum oldu mu?

☐ Evet
☐ Hayır

S8 Cevabınız evetse, nedeni _____

S9 Bebeğiniz, sizin sesinize ya da başka seslere başını çevirir mi?

☐ Evet
☐ Hayır
☐ Bilmiyorum

S10 Bebeğinizle konuştuğunuzda karşılık olarak size gülümser, sesler çıkarır ya da kollarını, bacaklarını, gövdesini hareket ettirir mi?

☐ Evet
☐ Hayır
☐ Bilmiyorum

S11 Bebeğinizi emziriyor musunuz?

☐ Evet
☐ Hayır

S12 Cevabınız hayır ise, bebeğinizi ne kadar süre emzirdiniz?
_____ ay

S13 Cevabını evet ise, bebeğinizi günde ortalama kaç kez emziriyorsunuz?
_____

S14 Bebeğinizi bir plan doğrultusunda mı yoksa bebeğinizden gelen isteğe göre mi emziriyorsunuz?

☐Plan doğrultusunda

☐Bebeğimden gelen isteğe göre

☐Her ikisi de
☐Bilmiyorum

S15 Cevabını evet ise, bebeğinizi emzirmek sizin için nasıl bir deneyim? Lütfen uygun rakamı yuvarlak içine alınız.

Her seferinde rahatsız edici										Her seferinde keyifli
0	1	2	3	4	5	6	7	8	9	10

S16 Bebeğinizi beslemek için mama/devam sütü kullanıyor musunuz?

☐ Evet
☐ Hayır

S17 Cevabınız evet ise mama/devam sütü kullanmadaki sebepleriniz nelerdir?
(Birden fazla seçim yapabilirsiniz)

☐Doktor tavsiyesi

☐Böylece bebeğimin ne kadar besin aldığını biliyorum

☐Bebeğimin yeteri kadar besin aldığından emin olmak için

☐Emzirmekten daha kolay

☐Tüm gece beslemelerinde emzirmek istemiyorum, çok yorucu

☐Bebeğim çok sık beslenmeye ihtiyaç duyuyor

☐Hastayım ya da hasta olduğum için ilaç kullanıyorum

☐Böylece başkaları bebeğin bakımında bana yardım edebilir

☐Emzirmeyi sevmiyorum

☐Emzirmek rahatsız edici

☐Diğer: _____

S18 Bu dönemde bebeklerin uykusu genelde henüz bir düzene oturmamış olur. Sizin bebeğinizin uykusu da bir günden diğerine değişiklik gösteriyor olabilir. Yine de son bir ayı göz önüne alarak aşağıdaki soruları bebeğinizin uykusunu en iyi yansıtacak şekilde cevaplandırmaya çalışınız.

Bebeğiniz bir günde (24 saatlik süre içinde) toplam kaç saat uyuyor? _____ saat

Bebeğiniz bir günde ortalama kaç kez gündüz uykusu uyuyor? _____ kez

Bebeğiniz bir gecede (19.00 ile 08.00 arasında) toplam kaç saat uyuyor? ____ saat

Bebeğiniz bir gecede (19.00 ile 08.00 arasında) ortalama kaç kez uyanıyor? ___ kez

BÖLÜM 2: ANNE FORMU

S1 Genel doğum deneyiminiz nasıldı?

Çok kötü										Çok iyi
0	1	2	3	4	5	6	7	8	9	10

S2 Bebeğinizle gün içinde (07.00 ile 19.00 arasında) ne kadar vakit geçiriyorsunuz?
_____saat

S3 Sizin dışınızda bebeğinizin bakımına yardımcı olan biri var mı?

☐Evet
☐Hayır

S4 Cevabınız evetse, bu kişi veya kişilerin kimler olduğunu yazınız.

_____

S5 Şu anda ailenizin ekonomik durumu ile ilgili ne kadar endişelisiniz?
☐ Endişeli değilim.
☐ Çok az endişeliyim.
☐ Bazen endişeliyim.
☐ Orta derecede endişeliyim.
☐ Çok endişeliyim.

S6 Şu anda çalışıyor musunuz?

☐Evet
☐Hayır
☐Ücretli izindeyim
☐Ücretsiz izindeyim

S7 Cevabınız evet ise, bebeğiniz kaç aylıkken çalışmaya başladınız?
_____ aylıkken

S8 Cevabınız evet ise, haftada kaç gün çalışıyorsunuz? _____ gün

S9 Ücretli ya da ücretsiz izinde iseniz, bebeğiniz kaç aylıkken işe dönmeyi planlıyorsunuz? _____ aylıkken

S10 Bebek doğunca, izinler hariç, işten ayrıldınız mı?

S11 Cevabınız evet ise, bunun en önemli sebebi neydi?

S12 Evde yaşayan toplam kişi sayısı: _____

S13 İlk görüşmemizden bu yana kullanmaya yeni başladığınız bir ilaç ya da takviye var mı? (Demir tabletleri, kabız ilacı, vitaminler, uyku tabletleri, aspirin, ağrı kesiciler, bitkisel ilaçlar da dâhil olmak üzere)

☐ Evet
☐ Hayır

S14 Cevabınız evet ise, kullandığınız ilacı/takviyeyi belirtiniz. _____

S15 Son zamanlardaki uyku düzeninizden ne kadar memnunsunuz? Lütfen size en uygun olan ifadeye ait rakamı yuvarlak içine alınız.

Hiç memnun değilim.	Memnun değilim.	Biraz memnunum.	Memnunum.	Çok memnunum.
0	1	2	3	4

S16 Uyku probleminiz var mı?

☐ Evet
☐ Hayır

S17 Cevabınız evet ise uyku probleminizin gün içindeki işlevselliğinizi (örn. gün içinde tükenmişlik, işte /günlük uğraşlarda çalışma potansiyeli, konsantrasyon, hafıza, duygu durum, vb.) ne ölçüde engellediğini düşünüyorsunuz? Lütfen size en uygun olan ifadeye ait rakamı yuvarlak içine alınız.

Hiç engelleyici değil.	Çok az engelleyici.	Biraz engelleyici.	Oldukça engelleyici.	Çok fazla engelleyici.
0	1	2	3	4

APPENDIX E

SELF-EFFICACY IN THE NURTURING ROLE QUESTIONNAIRE

PRENATAL VERSION

During pregnancy, many expectant parents begin to think about themselves in their new stage of life with a child. Accompanying such thoughts may be a range of feelings that include pleasure and satisfaction as well as possibly some apprehension about one's new role as a parent. Using statements below, please tell us how you feel about becoming a parent. For each statement, circle the number (1-7) that most accurately reflects your current feelings.

1 Not at all representative of me.
3 Slightly representative of me.
5 Moderately representative of me.
7 Strongly representative of me.

1. I look forward to becoming a parent with confidence in my role as a parent.	1	2	3	4	5	6	7
2. I feel I can catch on quickly to the basic skills of caring for my child.	1	2	3	4	5	6	7
3. I think I will have difficulty interpreting my baby's cries, knowing whether he or she wants to be fed rather than played with or held.	1	2	3	4	5	6	7
4. I imagine myself getting uptight if my baby becomes fussy or irritable for longer than a few minutes.	1	2	3	4	5	6	7
5. I expect to be comfortable playing actively with my baby and getting him or her to smile at me.	1	2	3	4	5	6	7
6. I feel unprepared being a parent.	1	2	3	4	5	6	7
7. I imagine myself in most circumstances, even when I am tired, able to cope well with meeting my baby's needs.	1	2	3	4	5	6	7
8. Touching, holding, and being affectionate with my baby will be comfortable and pleasurable for me.	1	2	3	4	5	6	7
9. I think I will be able to trust my feelings and intuitions about taking care of my baby.	1	2	3	4	5	6	7
10. I wonder if I really can understand my baby's needs.	1	2	3	4	5	6	7
11. I am unsure just how much attention I should give my baby.	1	2	3	4	5	6	7
12. I expect to be able to soothe my baby easily when he or she is crying or fussing.	1	2	3	4	5	6	7
13. I am concerned that my patience with my baby may be limited.	1	2	3	4	5	6	7
14. I expect to feel comfortable and natural using baby-talk.	1	2	3	4	5	6	7
15. I find nothing unusually complicated or difficult about feeding, playing with, or providing day-to-day care for a child.	1	2	3	4	5	6	7
16.The thought of being solely responsible for my child is frightening.	1	2	3	4	5	6	7

APPENDIX F

SELF-EFFICACY IN THE NURTURING ROLE QUESTIONNAIRE

PRENATAL VERSION (TURKISH)

Hamilelik boyunca birçok anne adayı hayatlarının yeni, çocuklu evresindeki hallerini düşünmeye başlar. Bu düşüncelere kişinin annelik rolüyle ilgili keyif ve tatmin duygularının yanı sıra bazı endişeler de eşlik eder. Aşağıdaki ifadeleri kullanarak, lütfen anne olma konusunda neler hissettiğinizi bildirin. Her bir madde için, mevcut hislerinizi en doğru şekilde yansıtan rakamı (1-7) yuvarlak içine alın.

1 Beni hiç temsil etmiyor.
3 Beni çok az temsil ediyor.
5 Beni kısmen temsil ediyor.
7 Beni tam olarak temsil ediyor.

1. Anne olarak yeni rolümde kendime güveniyorum.	1	2	3	4	5	6	7
2. Çocuk bakımıyla ilgili temel becerileri çabucak kavrayabileceğimi düşünüyorum.	1	2	3	4	5	6	7
3. Bebeğimin ağlamalarını yorumlamakta, oyun oynamak ya da kucağa alınmak mı yoksa beslenmek mi istiyor anlamakta güçlük çekeceğimi düşünüyorum.	1	2	3	4	5	6	7
4. Bebeğim birkaç dakikadan daha uzun süre huysuz ve hırçın olursa gergin olurum diye düşünüyorum.	1	2	3	4	5	6	7
5. Bebeğimle rahatlıkla aktif olarak oynayabileceğimi ve bana gülümsemesini sağlayabileceğimi umuyorum.	1	2	3	4	5	6	7
6. Kendimi anne olmak için hazırlıksız hissediyorum.	1	2	3	4	5	6	7
7. Çoğu durumda, yorgun olduğumda bile, bebeğimin ihtiyaçlarını karşılamakla iyi başa çıkabileceğimi hayal ediyorum.	1	2	3	4	5	6	7
8. Bebeğime dokunmak, onu kucağıma almak ve ona olan sevgimi göstermek rahat hissettiğim ve keyif aldığım şeyler olacak.	1	2	3	4	5	6	7
9. Bebeğimin bakımında hislerime ve sezgilerime güvenebileceğimi düşünüyorum.	1	2	3	4	5	6	7
10. Bebeğimin ihtiyaçlarını gerçekten anlayabilecek miyim diye merak ediyorum.	1	2	3	4	5	6	7
11. Bebeğime ne kadar ilgi göstermem gerekeceği konusunda emin değilim.	1	2	3	4	5	6	7
12. Bebeğim ağladığında ya da huysuzlandığında onu kolayca sakinleştirebileceğimi düşünüyorum.	1	2	3	4	5	6	7
13. Bebeğime olan sabrım sınırlı olabilir, bu beni endişelendiriyor.	1	2	3	4	5	6	7
14. Bebek dili kullanırken kendimi rahat ve doğal hissedeceğimi düşünüyorum.	1	2	3	4	5	6	7
15. Anne olarak, bir çocuğu beslemeyi, onunla oyun oynamayı ya da onun günlük bakımını sağlamayı alışılmadık derecede karmaşık ya da zor **bulmuyorum**.	1	2	3	4	5	6	7
16. Çocuğumun tek sorumlusu olduğum düşüncesi korkutucu.	1	2	3	4	5	6	7

APPENDIX G

SELF-EFFICACY IN THE NURTURING ROLE QUESTIONNAIRE

POSTNATAL VERSION

Many new parents spend time thinking about their new role as a parent. Accompanying such thoughts are often feelings that include pleasure and satisfaction as well as possibly some apprehension about one's new role as a parent. Using the statements below, please tell us how you feel about being a parent. For each item, indicate the number (1-7) that most accurately reflects your current feelings.

1 Not at all representative of me.
3 Slightly representative of me.
5 Moderately representative of me.
7 Strongly representative of me.

1. I feel confident in my role as a parent.	1	2	3	4	5	6	7
2. I feel I have caught on quickly to the basic skills of caring for a child.	1	2	3	4	5	6	7
3. I have difficulty interpreting my baby's cries, knowing whether he or she wants to be fed rather than played with or held.	1	2	3	4	5	6	7
4. I get uptight if my baby becomes fussy or irritable for longer than a few minutes.	1	2	3	4	5	6	7
5. I am comfortable playing actively with my baby and getting him or her to smile at me.	1	2	3	4	5	6	7
6. I feel unprepared being a parent.	1	2	3	4	5	6	7
7. In most circumstances, even when I am tired, I am able to cope well with meeting my baby's needs.	1	2	3	4	5	6	7
8. Touching, holding, and being affectionate with my baby is comfortable and pleasurable for me.	1	2	3	4	5	6	7
9. I trust my feelings and intuitions about taking care of my baby.	1	2	3	4	5	6	7
10. I wonder if I really understand my baby's needs.	1	2	3	4	5	6	7
11. I am unsure just how much attention I should give my baby.	1	2	3	4	5	6	7
12. I am able to soothe my baby easily when he or she is crying or fussing.	1	2	3	4	5	6	7
13. I am concerned that my patience with my baby is limited.	1	2	3	4	5	6	7
14. I feel comfortable and natural using baby-talk.	1	2	3	4	5	6	7
15. For myself as a parent, I find nothing unusually complicated or difficult about feeding, playing with, or providing day-to-day care for a child.	1	2	3	4	5	6	7
16. The thought of being solely responsible for my child is frightening.	1	2	3	4	5	6	7

APPENDIX H

SELF-EFFICACY IN THE NURTURING ROLE QUESTIONNAIRE – POSTNATAL VERSION (TURKISH)

Birçok yeni anne, yeni rolleri olan annelik üzerine düşünerek zaman geçirir. Bu düşüncelere kişinin yeni annelik rolüyle ilgili keyif ve tatmin duygularının yanı sıra bazı endişeler de eşlik eder. Aşağıdaki ifadeleri kullanarak, lütfen anne olma konusunda neler hissettiğinizi bize bildirin. Her bir madde için, mevcut hislerinizi en doğru şekilde yansıtan rakamı (1-7) yuvarlak içine alın.

1 Beni hiç temsil etmiyor.
3 Beni çok az temsil ediyor.
5 Beni kısmen temsil ediyor.
7 Beni tam olarak temsil ediyor.

1. Anne olarak rolümde kendime güveniyorum.	1	2	3	4	5	6	7
2. Çocuk bakımıyla ilgili temel becerileri çabucak kavradığımı düşünüyorum.	1	2	3	4	5	6	7
3. Bebeğimin ağlamalarını yorumlamakta güçlük çekiyorum; oyun oynamak ya da kucağa alınmak mı yoksa beslenmek mi istiyor bilmiyorum.	1	2	3	4	5	6	7
4. Bebeğim birkaç dakikadan daha uzun süre huysuz ve hırçın olursa kendimi gergin hissediyorum.	1	2	3	4	5	6	7
5. Bebeğimle rahatlıkla aktif olarak oynayabiliyor ve bana gülümsemesini sağlayabiliyorum.	1	2	3	4	5	6	7
6. Kendimi anne olmak için hazırlıksız hissediyorum.	1	2	3	4	5	6	7
7. Çoğu durumda, yorgun olduğumda bile, bebeğimin ihtiyaçlarını karşılamakla iyi başa çıkıyorum.	1	2	3	4	5	6	7
8. Bebeğime dokunmak, onu kucağıma almak ve ona olan sevgimi göstermek rahat hissettiğim ve keyif aldığım şeyler.	1	2	3	4	5	6	7
9. Bebeğimin bakımında hislerime ve sezgilerime güveniyorum.	1	2	3	4	5	6	7
10. Bebeğimin ihtiyaçlarını gerçekten anlayıp anlamadığımı merak ediyorum.	1	2	3	4	5	6	7
11. Bebeğime ne kadar ilgi göstermem gerektiği konusunda emin değilim.	1	2	3	4	5	6	7
12. Bebeğim ağladığında ya da huysuzlandığında onu kolayca sakinleştirebiliyorum.	1	2	3	4	5	6	7
13. Bebeğime olan sabrım sınırlı olması beni endişelendiriyor.	1	2	3	4	5	6	7
14. Bebek dili kullanırken kendimi rahat ve doğal hissediyorum.	1	2	3	4	5	6	7
15. Anne olarak, bir çocuğu beslemeyi, onunla oyun oynamayı ya da onun günlük bakımını sağlamayı alışılmadık derecede karmaşık ya da zor **bulmuyorum**.	1	2	3	4	5	6	7
16. Çocuğumun tek sorumlusu olduğum düşüncesi korkutucu.	1	2	3	4	5	6	7

APPENDIX I

THE PRENATAL DISTRESS QUESTIONNAIRE - REVISED

Are you feeling bothered, upset, or worried at this point in your pregnancy about:			
	Not at all (0)	Somewhat (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.	❍	❍	❍

APPENDIX J

THE PRENATAL DISTRESS QUESTIONNAIRE - REVISED (TURKISH)

Gebeliğinizin bu döneminde aşağıda belirtilen konularda kendinizi rahatsız, üzgün ya da endişeli hissediyor musunuz? Lütfen her bir ifadeye ne kadar katıldığınızı belirtiniz.			
	Hayır, hiç (0)	Evet, biraz (1)	Evet, çok fazla (2)
1. Yeni doğan bebeğin bakımı	❍	❍	❍
2. Yüksek tansiyon veya şeker hastalığı gibi devam eden sağlık sorunların gebeliğinize etkisi	❍	❍	❍
3. Enerjinizin düşük olması ve kendinizi yorgun hissetmeniz	❍	❍	❍
4. Doğum sırasında hissedeceğiniz ağrı/sancı	❍	❍	❍
5. Aldığınız sağlık bakım hizmetleri için yaptığınız harcamalar	❍	❍	❍
6. Kilonuzda ve vücudunuzun görünümünde oluşan değişiklikler	❍	❍	❍
7. Bebeğin çok erken doğma olasılığı	❍	❍	❍
8. Gebelikte ortaya çıkan kusma, ayaklarda şişlik veya bel ağrısı gibi bedensel şikayetler (Evet ise; hangi şikayetler? .....)	❍	❍	❍
9. Aldığınız tıbbi bakımın kalitesi	❍	❍	❍
10. Bebeğin doğumu nedeniyle diğer insanlarla olan ilişkilerinizde yaşayacağınız değişiklikler (Evet ise; özellikle kim? .....)	❍	❍	❍
11. Sağlıksız bir bebeğinizin olabileceği	❍	❍	❍
12. Doğum sırasında neler olacağı	❍	❍	❍
13. Çalışma yaşamınız veya ailenizin bakımı	❍	❍	❍
14. Bebeğin giysileri, beslenmesi ve sağlık bakımı için yapacağınız harcamalar	❍	❍	❍
15. Bebeğin doğumundan sonra bir işte çalışmak	❍	❍	❍
16. Bebeğin doğumundan sonra günlük bakımı	❍	❍	❍
17. Kullandığınız sigara, alkol ya da ilaçlardan bebeğin etkilenmiş olup olmadığı	❍	❍	❍

APPENDIX K

CENTER FOR EPIDEMIOLOGIC STUDIES DEPRESSION SCALE

Below is a list of the ways you might have felt or behaved. Please tell us how often you have felt this way 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)
0	1	2	3

	0	1	2	3
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	❍	❍	❍	❍
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."	❍	❍	❍	❍

APPENDIX L

CENTER FOR EPIDEMIOLOGIC STUDIES DEPRESSION SCALE (TURKISH)

Aşağıda duygu ve davranışlarımızla ilgili ifadeler yer almaktadır. Lütfen geçen hafta boyunca aşağıdakileri ne sıklıkla hissettiğinizi veya yaşadığınızı belirtiniz.

Hiçbir zaman-Nadiren (1 günden daha az)	Biraz-Birkaç kez (1-2 gün)	Arada Sırada-Bazen (3-4 gün)	Çokça-Çoğu Zaman (5-7 gün)
0	1	2	3

	0	1	2	3
1. Genellikle canımı sıkmayan şeyler canımı sıktı.	❍	❍	❍	❍
2. Açlık hissetmedim, iştahım yerinde değildi.	❍	❍	❍	❍
3. Arkadaşlarım veya ailemin yardımına rağmen kötü ruh halinden kurtulamadım.	❍	❍	❍	❍
4. Ruh halimin diğer insanlar kadar iyi olduğunu hissettim.	❍	❍	❍	❍
5. Yaptığım işe odaklanmakta zorlandım.	❍	❍	❍	❍
6. Kendimi depresyonda hissettim.	❍	❍	❍	❍
7. Her şeye çaba harcamam gerektiğini hissettim.	❍	❍	❍	❍
8. Gelecek için umutlu hissettim.	❍	❍	❍	❍
9. Hayatımın bir başarısızlık olduğunu düşündüm.	❍	❍	❍	❍
10. Korktuğumu hissettim.	❍	❍	❍	❍
11. Huzursuz uyudum.	❍	❍	❍	❍
12. Mutluydum.	❍	❍	❍	❍
13. Her zamankinden az konuştum.	❍	❍	❍	❍
14. Kendimi yalnız hissettim.	❍	❍	❍	❍
15. İnsanlar arkadaş canlısı değildi.	❍	❍	❍	❍
16. Yaşamdan zevk aldım.	❍	❍	❍	❍
17. Ağlama nöbetleri geçirdim.	❍	❍	❍	❍
18. Kendimi üzgün hissettim.	❍	❍	❍	❍
19. İnsanların benden hoşlanmadığını hissettim.	❍	❍	❍	❍
20. İşler yolunda gitmedi.	❍	❍	❍	❍

APPENDIX M

MULTIDIMENSIONAL SCALE OF PERCEIVED SOCIAL SUPPORT

We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

1 Very Strongly Disagree
2 Strongly Disagree
3 Mildly Disagree
4 Neutral
5 Mildly Agree
6 Strongly Agree
7 Very Strongly Agree

	1	2	3	4	5	6	7
1. There is a special person who is around when I am in need.	❍	❍	❍	❍	❍	❍	❍
2. There is a special person with whom I can share my joys and sorrows.	❍	❍	❍	❍	❍	❍	❍
3. My family really tries to help me.	❍	❍	❍	❍	❍	❍	❍
4. I get the emotional help and support I need from my family.	❍	❍	❍	❍	❍	❍	❍
5. I have a special person who is a real source of comfort to me.	❍	❍	❍	❍	❍	❍	❍
6. My friends really try to help me.	❍	❍	❍	❍	❍	❍	❍
7. I can count on my friends when things go wrong.	❍	❍	❍	❍	❍	❍	❍
8. I can talk about my problems with my family.	❍	❍	❍	❍	❍	❍	❍
9. I have friends with whom I can share my joys and sorrows.	❍	❍	❍	❍	❍	❍	❍
10. There is a special person in my life who cares about my feelings.	❍	❍	❍	❍	❍	❍	❍
11. My family is willing to help me make decisions.	❍	❍	❍	❍	❍	❍	❍
12. I can talk about my problems with my friends.	❍	❍	❍	❍	❍	❍	❍

APPENDIX N

MULTIDIMENSIONAL SCALE OF PERCEIVED SOCIAL SUPPORT

(TURKISH)

Aşağıdaki her ifadenin sizin için ne kadar doğru olduğunu veya olmadığını belirtmeniz için 7 seçenek verilmiştir. Her ifade için sizce doğruya en yakın olan seçeneği yuvarlak içine alınız.

1 Kesinlikle katılmıyorum.
2 Katılmıyorum.
3 Pek katılmıyorum.
4 Ne katılıyorum ne katılmıyorum.
5 Biraz katılıyorum.
6 Katılıyorum.
7 Kesinlikle katılıyorum.

	1	2	3	4	5	6	7
1. Ailem ve arkadaşlarım dışında ihtiyacım olduğunda yanımda olan bir insan (örneğin; akraba, komşu, doktor) var.	❍	❍	❍	❍	❍	❍	❍
2. Ailem ve arkadaşlarım dışında sevinç ve kederlerimi paylaşabileceğim bir insan (örneğin; akraba, komşu, doktor) var.	❍	❍	❍	❍	❍	❍	❍
3. Ailem (örneğin; annem, babam, eşim, kardeşlerim) bana gerçekten yardımcı olmaya çalışır.	❍	❍	❍	❍	❍	❍	❍
4. İhtiyacım olan duygusal yardımı ve desteği ailemden (örneğin; annem, babam, eşim, kardeşlerim) alırım.	❍	❍	❍	❍	❍	❍	❍
5. Ailem ve arkadaşlarım dışında beni gerçekten rahatlatan bir insan (örneğin; akraba, komşu, doktor) var.	❍	❍	❍	❍	❍	❍	❍
6. Arkadaşlarım bana gerçekten yardımcı olmaya çalışır.	❍	❍	❍	❍	❍	❍	❍
7. İşler kötü gittiğinde arkadaşlarıma güvenebilirim.	❍	❍	❍	❍	❍	❍	❍
8. Sorunlarımı ailemle (örneğin; annem, babam, eşim, kardeşlerim) konuşabilirim.	❍	❍	❍	❍	❍	❍	❍
9. Sevinç ve kederlerimi paylaşabileceğim arkadaşlarım var.	❍	❍	❍	❍	❍	❍	❍
10. Ailem ve arkadaşlarım dışında olan ve duygularıma önem veren bir insan (örneğin; akraba, komşu, doktor) var.	❍	❍	❍	❍	❍	❍	❍
11. Kararlarımı vermede ailem (örneğin; annem, babam, eşim, kardeşlerim) bana yardımcı olmaya isteklidir.	❍	❍	❍	❍	❍	❍	❍
12. Sorunlarımı arkadaşlarımla konuşabilirim.	❍	❍	❍	❍	❍	❍	❍

APPENDIX O

THE INFANT BEHAVIOR QUESTIONNAIRE - REVISED SHORT FORM

Below is a list of behaviors your baby may or may not be showing. As you read each description of a baby's behavior below, please indicate how often your baby showed each behavior during **the last week (the past seven days)** by selecting one of the numbers.

0 Does not apply
1 Never
2 Very rarely
3 Less than half the time
4 About half the time
5 More than half the time
6 Almost always
7 Always

Note: The "Does Not Apply" option is used when you did not see the baby in the situation described during the last week. For example, if the situation mentions the baby having to wait for food or liquids and there was no time during the last week when the baby had to wait, indicate the "Does Not Apply" column. This option is different from "Never", which is used when you saw the baby in the situation but the baby never engaged in the behavior listed during the last week. For example, if the baby did have to wait for food or liquids at least once but never cried loudly while waiting, indicate the "Never" option.

	1	2	3	4	5	6	7	0
1. How often did your baby seem angry (crying and fussing) when you left him/her in the crib?	❍	❍	❍	❍	❍	❍	❍	❍
2. How often did your baby seem contented when left in the crib?	❍	❍	❍	❍	❍	❍	❍	❍
3. How often did your baby cry or fuss before going to sleep for naps?	❍	❍	❍	❍	❍	❍	❍	❍
4. How often during the last week did your baby look at pictures in books and/or magazines for 5 minutes or longer at a time?	❍	❍	❍	❍	❍	❍	❍	❍
5. How often during the last week did your baby stare at a mobile, crib bumper or picture for 5 minutes or longer?	❍	❍	❍	❍	❍	❍	❍	❍
6. How often during the last week did your baby play with one toy or object for 5 to 10 minutes?	❍	❍	❍	❍	❍	❍	❍	❍
7. How often during the last week did your baby play with one toy or object for 10 minutes or longer?	❍	❍	❍	❍	❍	❍	❍	❍

	1	2	3	4	5	6	7	0
8. How often during the last week did your baby repeat the same movement with an object for 2 minutes or longer (e.g., putting a block in a cup, kicking or hitting a mobile?	❍	❍	❍	❍	❍	❍	❍	❍
9. How often during the last week did your baby protest being placed in a confining place (infant seat, play pen, car seat etc.)?	❍	❍	❍	❍	❍	❍	❍	❍
10. How often during the last week did your baby startle at a sudden change in body position (e.g., when moved suddenly)?	❍	❍	❍	❍	❍	❍	❍	❍
11. How often during the last week did your baby watch adults performing household activities (e.g., cooking etc.) for more than 5 minutes?	❍	❍	❍	❍	❍	❍	❍	❍
12. When your baby wanted something, how often did s/he become upset when s/he could not get what s/he wanted?	❍	❍	❍	❍	❍	❍	❍	❍
13. When your baby wanted something, how often did s/he have tantrums (crying, screaming, red face, etc.) when s/he did not get what s/he wanted?	❍	❍	❍	❍	❍	❍	❍	❍
14. After sleeping, how often did the baby cry if someone doesn't come within a few minutes?	❍	❍	❍	❍	❍	❍	❍	❍

Please indicate how often your baby showed each behavior during **the last two weeks** by selecting one of the numbers.

	1	2	3	4	5	6	7	0
1. When introduced to an unfamiliar adult, how often did your baby cling to you/your partner?	❍	❍	❍	❍	❍	❍	❍	❍
2. When introduced to an unfamiliar adult, how often did your baby refuse to go to the unfamiliar person?	❍	❍	❍	❍	❍	❍	❍	❍
3. When introduced to an unfamiliar adult, how often did your baby never "warm up" to the unfamiliar adult?	❍	❍	❍	❍	❍	❍	❍	❍
4. When in the presence of several unfamiliar adults, how often did your baby continue to be upset for 10 minutes or longer?	❍	❍	❍	❍	❍	❍	❍	❍
5. When an unfamiliar person came to your home, how often did your baby cry when the visitor attempted to pick him/her up?	❍	❍	❍	❍	❍	❍	❍	❍

APPENDIX P

THE INFANT BEHAVIOR QUESTIONNAIRE - REVISED SHORT FORM

(TURKISH)

Aşağıda bebeğinizin gösterdiği ya da göstermediği davranışların listesi bulunmaktadır. Her bir bebek davranışıyla ilgili açıklamayı okuduktan sonra bebeğinizin **son bir hafta boyunca (son yedi gün)** belirtilen davranışı hangi sıklıkta gösterdiğini uygun rakamı yuvarlak içine alarak belirtiniz.

0 Durum mevcut değil
1 Hiçbir zaman
2 Çok nadir
3 Nadiren (Haftanın yarısından daha az)
4 Yaklaşık olarak haftanın yarısında
5 Çoğu zaman (Haftanın yarısından daha fazla süre)
6 Neredeyse her zaman
7 Her zaman

Not: Bebeğinizi son bir hafta içinde açıklaması yapılan durumda görmediyseniz 'Durum mevcut değil' seçeneğini işaretleyin. Örneğin, bebeğin yiyecek ve içecek beklemek zorunda kaldığını belirten durumda, eğer bebeğiniz hiç beklemek zorunda kalmadıysa 'Durum mevcut değil' seçeneğini işaretleyin. Bu seçenek, bebeğin mevcut durumu deneyimlediği ancak belirtilen davranışı göstermediğinde işaretlenmesi gereken 'Hiçbir zaman' seçeneğinden farklıdır. Örneğin, bebek en az bir kez yiyecek ya da içecek için beklediyse ancak beklerken hiç yüksek sesle ağlamadıysa 'Hiçbir zaman' seçeneğini işaretleyin.

	1	2	3	4	5	6	7	0
1. Bebeğinizi beşikte bıraktığınızda ne sıklıkta sinirli (ağlama ve huysuzlanma) göründü?	❍	❍	❍	❍	❍	❍	❍	❍
2. Bebeğinizi beşikte bıraktığınızda ne sıklıkta memnun göründü?	❍	❍	❍	❍	❍	❍	❍	❍
3.Bebeğiniz gündüz uykusuna dalmadan önce ne sıklıkta ağladı ve huysuzlandı?	❍	❍	❍	❍	❍	❍	❍	❍
4. Bebeğiniz geçen hafta boyunca ne sıklıkta, tek seferde 5 dakika ya da daha uzun süreliğine kitaplardaki ve / ya da dergilerdeki resimlere baktı?	❍	❍	❍	❍	❍	❍	❍	❍
5. Bebeğiniz geçen hafta boyunca ne sıklıkta, aralıksız şekilde 5 dakika ya da daha uzun süreliğine beşik dönencesine (mobil), beşik minderlerine ya da bir resme baktı?	❍	❍	❍	❍	❍	❍	❍	❍
6. Bebeğiniz geçen hafta boyunca ne sıklıkta, bir oyuncakla ya da nesneyle 5-10 dakika kadar oynadı?	❍	❍	❍	❍	❍	❍	❍	❍

	1	2	3	4	5	6	7	0
7.Bebeğiniz geçen hafta boyunca hangi sıklıkta, bir oyuncakla ya da nesneyle 10 dakika ya da daha uzun süreliğine oynadı?	❍	❍	❍	❍	❍	❍	❍	❍
8. Bebeğiniz geçen hafta boyunca ne sıklıkta bir objeyle iki dakika ya da daha uzun süre boyunca aynı hareketi yaptı (bir oyuncağı bir kutunun içine koymak, beşik dönencesine elleriyle vurmak ya da tekmelemek gibi)?	❍	❍	❍	❍	❍	❍	❍	❍
9. Bebeğiniz geçen hafta boyunca ne sıklıkta sınırlı bir alana yerleştirilmesine (bebek koltuğu, etrafı kapalı oyun alanı, araba koltuğu vb.) tepki gösterdi / itiraz etti / direnç gösterdi?	❍	❍	❍	❍	❍	❍	❍	❍
10. Bebeğiniz geçen hafta boyunca ne sıklıkta beden pozisyonunun aniden değiştirilmesinden dolayı ürktü (örn, aniden hareket ettirildiğinde)?	❍	❍	❍	❍	❍	❍	❍	❍
11. Bebeğiniz geçen hafta boyunca ne sıklıkta, 5 dakikadan daha uzun bir süre boyunca yetişkinleri ev işleri (yemek yapmak vb.) yaparken izledi?	❍	❍	❍	❍	❍	❍	❍	❍
12. Bebeğiniz ne sıklıkta bir şey istediğinde ve istediği şeyi elde edemediğinde mutsuz oldu / üzüldü?	❍	❍	❍	❍	❍	❍	❍	❍
13. Bebeğiniz hangi sıklıkta, bir şey istediğinde ve istediği şeyi elde edemediğinde öfke nöbeti (ağlama, çığlık atma, kızarma vb.) geçirdi?	❍	❍	❍	❍	❍	❍	❍	❍
14. Bebeğiniz hangi sıklıkta, uykudan uyandıktan hemen sonra yanına birkaç dakika içinde biri gelmediği için ağladı?	❍	❍	❍	❍	❍	❍	❍	❍

Lütfen bebeğinizin aşağıdaki davranışları **son iki hafta** içinde hangi sıklıkta gösterdiğini bir rakam seçerek belirtiniz.

	1	2	3	4	5	6	7	0
1. Bebeğiniz ne sıklıkta tanımadığı bir yetişkinle tanıştırıldığında size/eşinize sıkıca sarıldı?	❍	❍	❍	❍	❍	❍	❍	❍
2. Bebeğiniz ne sıklıkta, tanımadığı bir yetişkinle tanıştırıldığında o kişinin kucağına gitmeyi reddetti?	❍	❍	❍	❍	❍	❍	❍	❍
3. Bebeğiniz ne sıklıkta, tanımadığı bir yetişkinle tanıştırıldığında bu kişiye asla ısınmadı?	❍	❍	❍	❍	❍	❍	❍	❍
4.Bebeğiniz ne sıklıkta, tanımadığı birden fazla yetişkinin yanındayken 10 dakika ya da daha uzun süreliğine mutsuz oldu?	❍	❍	❍	❍	❍	❍	❍	❍
5. Bebeğiniz ne sıklıkta, tanımadığı biri evinize geldiğinde ve bebeğinizi kucağına almaya çalıştığında ağladı?	❍	❍	❍	❍	❍	❍	❍	❍

APPENDIX R

ETHICS COMMITTEE APPROVAL

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 İkiz 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

Evrak Tarih ve Sayısı: 18/06/2020-44

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	:	

Sedanur Hızır Sorgun
Eğitim Bilimleri Bölümü Psikolojik Danışmanlık ve Rehberlik

Sayın Araştırmacı

"A Longitudinal Examination of Maternal Self-Efficacy in the Transition to Parenthood" başlıklı projeniz ile ilgili olarak yaptığınız SBB-EAK 2020/35 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 S

PERMISSION FROM HEALTH DIRECTORATE OF İSTANBUL

Boğaziçi Üniversitesi Evrak Tarih ve Sayısı: 08/05/2019-2609

İSTANBUL İL SAĞLIK MÜDÜRLÜĞÜ - İSTANBUL
SAĞLIĞIN GELİŞTİRİLMESİ BİRİMİ
26/04/2019 16:56 - 16867222 - 604.01.01 - E.1681
00092432697

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 Lisasns 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.

Seyitnizam Mah. Mevlana Cd. No:85, 34015 Kat: 1 Oda No: 102 Zeytinburnu/İst.
Sağlığın Geliştirilmesi Birimi
Telefon: Faks No:
e-Posta:arzu.sarmusak@saglik.gov.tr İnt.Adresi: www.istanbulsaglik.gov.tr
Bilgi için:Arzu SARMUSAK
FİRMA
Telefon No:0212 638 33 99 - 3102

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

GÜVENLİ ELEKTRONİK İMZALI
ASLI İLE AYNIDIR
30/04/201..
Permin GÖRECEK
İstanbul Sağlık Müdürlüğü
Sağlığın Geliştirilmesi Şubesi
Birim Sorumlusu

Seyitnizam Mah. Mevlana Cd. No:85, 34015 Kat: 1 Oda No: 102 Zeytinburnu/İst.
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e-Posta:arzu.sarmusak@saglik.gov.tr İnt.Adresi: www.istanbulsaglik.gov.tr
Bilgi için:Arzu SARMUSAK
FİRMA
Telefon No:0212 638 33 99 - 3102

APPENDIX T

INFORMED CONSENT FORM – PRENATAL VERSION

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: 0212 359 6574

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 3 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
   1) 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.

   2) 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.

   3) 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.

   4) 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: ……

APPENDIX U

INFORMED CONSENT FORM – PRENATAL VERSION (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 Dönem Dikkat 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 bebeğimle birlikte katılmayı kabul ediyorum.

Katılımcı Adı-Soyadı:……..

Tarih (gün/ay/yıl):...../...../.....

İmzası:……

APPENDIX V

INFORMED CONSENT FORM FOR MOTHERS – POSTNATAL VERSION

PARTICIPANT MOTHER 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:** 0212 359 6574

First of all, thank you for continuing to contribute to our research project. Today

-We are going to play two different games with your baby for 10 minutes in total and record his or her reactions when we smile at him/her and show him/her puppets.

- We are going to kindly ask you to spend 5 minutes free time with your baby and communicate with him/her with different face expressions for 5 minutes. You are going to play with your baby for 2 minutes as you always play with him/her, then look at him/her with a still face for 1 minute and then play for 2 minutes again as you normally do. The interaction between you and him/her will be videotaped.

- We are going to ask you to describe your feelings and thoughts about your baby for 5 minutes. Your response will be audiotaped.

- We are going to ask you to fill out the Participant Survey Booklet online during or after the assessment.

This interview will take approximately 45 minutes. Like last time, for your participation we will have a gift basket for your baby.

Your participation in this study is completely voluntary. You have the right to withdraw your consent without any reason. In this case, all of your data will be destroyed without any use.

The confidentiality of participant information is essential. A identifaction number is used instead of names of the participants in surveys, videos and voice records. The hard disks in which the records are stored will be kept in locked cabinet during the research project and will be wiped when the project is completed.

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

If you have any question, please ask before signing.

I understand what is explained to me and what is written above. I agree to participate in the study.

Name-Surname: ……

Date (dd/mm/yyyy): ...../...../.....

Signature: ……

Please indicate your preferences for records by ticking the appropriate boxes below.

☐My and my baby's camera recordings can be used for the education of your department students or for scientific presentations while keeping the confidentiality of our identity information.

☐I do not want my and my baby's camera recordings to be used for the education of your department students or scientific presentations.

APPENDIX W

INFORMED CONSENT FORM FOR MOTHERS – POSTNATAL VERSION

(TURKISH)

KATILIMCI ANNE BİLGİ ve ONAM FORMU

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

Araştırmanın adı: Erken Dönem Dikkat 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

Öncelikle araştırma projemize katkı sağlamaya devam ettiğiniz için teşekkürler. Bu görüşmemizde

- 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.

Ziyaretimiz yaklaşık 45 dakika sürecektir. Katılımınız için geçen sefer olduğu gibi bu görüşmemizde de bebeğiniz için bir hediye sepetimiz olacak.

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

Katılımcı bilgilerinin gizliliği esastır. Anketler, kamera ve ses kayıtlarında katılımcıların ismi/soyismi yerine bir numara kullanılmaktadır. Kayıtların saklandığı harddiskler, araştırma projemiz süresince kilitli bir dolapta muhafaza edilip araştırma sona erdiğinde temizlenecektir.

Araştırmamıza katılımınızı devam ettirmeyi kabul ediyorsanız lütfen bu formu imzalayıp ekteki zarfın içine koyun.
İmzalamadan önce sorularınız varsa lütfen sorun.

Bana anlatılanları ve yukarıda yazılanları anladım. Çalışmaya katılmayı kabul ediyorum.

Katılımcı Adı-Soyadı:……..

Tarih (gün/ay/yıl):...../...../.....

İmzası: ……

Kayıtlarla ilgili tercihinizi aşağıdaki kutucuklardan sizin için uygun olanını işaretleyerek belirtiniz.

☐Ben ve bebeğime ait kamera kayıtları kimlik bilgilerimizin gizliliği korunarak bölüm öğrencilerinizin eğitiminde veya bilimsel nitelikteki sunumlarda kullanılabilir.

☐Ben ve bebeğime ait kamera kayıtlarının bölüm öğrencilerinizin eğitiminde veya bilimsel nitelikteki sunumlarda kullanılmasını istemiyorum.

APPENDIX Y

INFORMED CONSENT FORM FOR FATHERS

FATHER 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:** 0212 359 6574

Dear Father,

This document was prepared to inform you about the project we conduct with mothers and infants, and to get consent from you about the involvement of your infant to the project.

The main goal of our study is to investigate individual differences in infant attention skills in the context of early environmental factors. We collect data in a two-waves. In the first wave, we meet with expectant mothers approximately 1 month before their estimated dates of delivery and collect information about their general health status. mood. social support. family life and their expectations about motherhood. In the second wave. we visit homes to make assessment about infant attention and interaction between mothers and infants.

If you and your wife accept to participate in the study.

-We are going to play two different games with your baby for 10 minutes in total and record his or her reactions when we smile at him/her and show him/her puppets.

- We are going to kindly ask your wife (the mother) to spend 5 minutes free time with your baby and communicate with him/her with different face expressions for 5 minutes. They are going to play with your baby for 2 minutes as they always play. then look at him/her with a still face for 1 minute and then play for 2 minutes again as they normally do. The interaction between them will be videotaped.

This interview will take approximately 45 minutes. Like last time, for your participation we will have a gift basket for your baby.

Your participation in this study is completely voluntary. You have the right to withdraw your consent without any reason. In this case, all of the data collected from your baby and your wife will be destroyed without any use.

The confidentiality of participant information is essential. An identification number is used instead of names of the participants in surveys, videos and voice records. The hard disks in which the records are stored will be kept in locked cabinet during the research project and will be wiped when the project is completed.

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

If you have any question, please ask before signing. You can contact dr. Nihal Yeniad via e-mail address and telephone number above.

I understand what is explained to me and what is written above. I agree to the participation of my wife and my baby in the study.

Name-Surname: .....

Date (dd/mm/yyyy): ...../...../.....

Signature: .....

Please indicate your preferences for records by ticking the appropriate boxes below.

☐My wife's and my baby's camera recordings can be used for the education of your department students or for scientific presentations while keeping the confidentiality of our identity information.

☐I do not want my wife's and my baby's camera recordings to be used for the education of your department students or scientific presentations.

APPENDIX Z

INFORMED CONSENT FORM FOR FATHERS (TURKISH)

BABA BİLGİ ve ONAM FORMU

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

Araştırmanın adı: Erken Dönem Dikkat 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

Sayın baba,

Bu döküman, anne ve bebekleriyle yürüttüğümüz projemiz hakkında sizi bilgilendirmek ve uygun gördüğünüz takdirde bebeğinizin katılımı konusunda onayınızı almak için hazırlanmıştır.

Araştırmamızın amacı, bireylerin kendi düşünce ve davranışlarını düzenleyebilmeleri için gerekli olan dikkat becerisinin erken (bebeklik) dönemde çevresel faktörler bağlamında incelenmesidir. Projemiz için iki aşamada veri toplamaktayız. İlk aşamada bebeğin doğum tarihinden yaklaşık bir ay önce anne adaylarıyla birebir görüşerek genel sağlık ve duygu durumları, sosyal destekleri ile anneliğe dair beklentileri hakkında bilgi almaktayız. İkinci aşamada ise bebeklerin dikkat becerileri ve anne-bebek arasındaki etkileşimi değerlendirmek ev ziyaretleri yapmaktayız.

Eşiniz ve siz onay verdiğiniz takdirde bu görüşmemizde

- Önce bebeğinizle toplam 10 dakika süren iki ayrı oyun oynayacağız. Biz gülümserken ve kuklalar gösterirken bebeğinizin ne tür tepkiler verdiğini kamerayla kaydedeceğiz.
- Daha sonra eşinizin (annenin) bebeğinizle önce 5 dakika serbest vakit geçirmesini; sonrasında ise bir 5 dakika da farklı yüz ifadeleri ile onunla iletişime geçmesini isteyeceğiz. Örneğin 2 dakika onunla her zaman oynadığı gibi oynamasını, bunun ardından 1 dakika ona ifadesiz bir yüzle bakmasını ve sonra 2 dakika tekrar normal şekilde oynamasını isteyeceğiz. Yani toplam 10 dakika boyunca bebeğinizin ve eşinizin (annenin) etkileşimini kameraya alacağız.

Ziyaretimiz yaklaşık 45 dakika sürecektir. Teşekkür etmek amacıyla bebeğiniz için bir hediye sepetimiz olacak.

Bu araştırmaya katılmak tamamen isteğe bağlıdır. Herhangi bir sebep göstermeden onayınızı çekme hakkına sahipsiniz. Bu durumda eşiniz (anne) ve bebeğinizle toplanan verilerin hepsi hiçbir şekilde kullanılmadan imha edilecektir.

Katılımcı bilgilerinin gizliliği esastır. Anketler, kamera ve ses kayıtlarında katılımcıların ismi/soyismi yerine bir numara kullanılmaktadır. Kayıtların saklandığı harddiskler, araştırma projemiz süresince kilitli bir dolapta muhafaza edilip araştırma sona erdiğinde temizlenecektir.

Bebeğinizin araştırmamıza katılımını kabul ediyorsanız lütfen bu formu imzalayıp ekteki zarfın içine koyun.
İmzalamadan önce sorularınız varsa dr. öğretim üyesi Nihal Yeniad ile yukarıda belirtilen e-posta veya telefon numarası üzerinden iletişime geçebilirsiniz

Bana anlatılanları ve yukarıda yazılanları anladım. Bebeğimizin eşimle beraber çalışmanıza katılmasını kabul ediyorum.

Katılımcı Adı-Soyadı:……..

Tarih (gün/ay/yıl):...../...../.....

İmzası: ……

Kayıtlarla ilgili tercihinizi aşağıdaki kutucuklardan sizin için uygun olanını işaretleyerek belirtiniz.

☐Eşim ve bebeğimize ait kamera kayıtları kimlik bilgilerinin gizliliği korunarak bölüm öğrencilerinizin eğitiminde veya bilimsel nitelikteki sunumlarda kullanılabilir.

☐Eşim ve bebeğimize ait kamera kayıtlarının bölüm öğrencilerinizin eğitiminde veya bilimsel nitelikteki sunumlarda kullanılmasını istemiyorum.

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