AN INTERPRETATIVE PHENOMENOLOGICAL ANALYSIS OF MEANING-MAKING OF INFERTILITY AMONG INFERTILE TURKISH WOMEN: DEVELOPING AND TESTING THE EFFECTIVENESS OF AN ONLINE INTERVENTION PROGRAM IN MEANING-MAKING

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Approval of the Graduate School of Social Sciences

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ABSTRACT

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Infertility stands as a stressful life event affecting many individuals. The current study adopts a mixed-method design including a qualitative study followed by a quantitative study. The first study aimed to understand the subjective meaning of infertility and meaning making among infertile Turkish women by conducting an interpretative phenomenological analysis. Four themes were identified including 'The sense of ideal woman: Self-sacrificing mother', 'The sense of infertility: The incomplete woman', 'Efforts on meaning making' and finally 'Overcompensation of Incompleteness: Self-sacrificing 'mother-to-be'. The themes were used in developing an online intervention for women with infertility based on the principals of Meaning-Centered Therapy by Wong (2010). An 8-weeks online group intervention program focusing on improving the positive meaning making was implemented to 27 infertile women. Their results on Presence of and Searching for Meaning, Post-Traumatic Growth, Stress Appraisal Measure (measuring Threat, Challenge, Controllable by Self, Controllable by Others, and Uncontrollable by Anyone in a specific stressful event) as well as depression,

anxiety, hopelessness, positive and negative affect and finally infertility self-efficacy were compared with 24 women in the control group. In the pre-test post-test control group study, as expected, the online intervention was found to be effective in increasing presence of meaning and the tendency to evaluate infertility as a challenge, controllable by self and controllable by others in infertile women. The other results as well as the impact and implications of the study were discussed.

Keywords: Infertility meaning, women, meaning-making model, online interventions

ÖZ

İNFERTİL TÜRK KADINLARINDA ANLAM YARATMANIN YORUMLAYICI FENOMENOLOJİK ANALİZİ: ANLAM YARATMAK İÇİN İNTERNET ÜZERİNDEN UYGULANAN BİR MÜDAHALE PROGRAMININ GELİŞTİRİLMESİ VE ETKİNLİĞİ

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İnfertilite pek çok bireyi etkileyen stresli bir yaşam olayıdır. Bu çalışma çoklu analiz desenini benimsemiş, nitel bir analizi takip eden nicel bir analiz ile beraber iki çalışmadan oluşmuştur. İlk çalışma, infertil Türk kadınlarında infertilitenin öznel anlamını ve anlam yaratmanın nasıl gerçekleştiğini anlamayı amaçlamaktadır. Bu doğrultuda kullanılan yorumlayıcı fenomenolojik analiz yöntemi 4 tema ortaya çıkarmıştır. Bu temalar: 'İdeal kadın algısı: Kendini feda eden anne', 'İnfertilite algısı: Eksik kadın', 'Anlam yaratma çabaları' ve son olarak, 'Eksikliğin aşırı telafisi: Anne olmak için kendini feda etmek'tir. Bu temalardan ve Anlam-Odaklı Terapiler (Wong, 2010) prensiplerinden faydalanılarak internet üzerinden uygulanacak bir müdahale geliştirilmiştir. Sekiz haftalık, internet üzerinden uygulanan bir grup müdahalesi ile infertilitenin olumlu anlamının artırılması amaçlanmıştır. Bu amaçla, deney grubunda yer alan 27 kadın ile kontrol grubunda yer alan 24 kadının Anlama Sahip Olma, Anlam Arama, Travma Sonrası Büyüme, Stres Değerlendirme Ölçeği, ve aynı zamanda

depresyon, kaygı, umutsuzluk, pozitif ve negatif duygulanım ile son olarak infertilite öz-yeterlilik puanları karşılaştırılmıştır. Uygulanan ön-test son-test kontrol gruplu desende, tahmin edildiği gibi, internet üzerinden gerçekleştirilen grup müdahalesi anlama sahip olma skorlarını artırmada ve ayrıca infertilitenin kişinin kendisi ve başkaları tarafından kontrol edilebilir bir mücadele olarak değerlendirmesinde etkili bulunmuştur. Diğer sonuçlar ile çalışmanın etki ve implikasyonları tartışılmıştır.

Anahtar kelimeler: İnfertilitede anlam, kadınlar, anlam yaratma modeli, internet üzerinden uygulanan müdahaleler

To my son Mete…

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CHAPTER 1

GENERAL INTRODUCTION

"Sometimes in tragedy we find out life's purpose.The eye sheds a tear to find its focus."
— Robert Brault

Fertility has very strong ties with human's well-known desire to survive and reproduce (Sear, 2015). The desire for human beings for reproduction has been observed since the first stories or myths related to earth and humans. Since the ancient times, women have most of the times been mentioned with a fertile role. In their review, Behjati-Ardakani, Akhondi, Mahmoodzadeh, and Hosseini (2016) mentioned the myths of different civilizations on fertility and motherhood. If you scrutinize The Greek, Persian, Mesopotamian, Indian, Egyptian and Chinese ancient mythology, it is possible to come up with tens of gods and goddess of fertility. Demeter, in ancient Greek for example, is known as one of the Goddess of harvest and fertility. She was also the goddess of life and death cycle. According to the myth, Persephone, the daughter of Demeter (and also Zeus) was abducted by Hades, who is the god of the underworld. Demeter searched for her daughter desperately and all living things became infertile and began to die on earth because of Demeter's grief. In order to prevent the death of living on earth, Hermes was sent to underworld by Zeus to bring Persephone back (Powell, 2001). Thus, it can be inferred from the myth that infertility was a punishment to earth (or to women) from an angry Goddess, Demeter. Today, the perception of infertility is not so different than that of ancient times. Actually, the concept of motherhood does not seem to get into a

substantial change in centuries. The below excerpt is from a book titled as "Understanding women in distress":

> A woman's capacity to create, bear and nurture a child is the very essence of her womanhood, her unique and special capacity—prized, feared, envied, protected, and celebrated. Birth is the only defense against the inevitability of death, an intimation of our immortality, of our new hope for the future. When a woman has a child, she confirms for herself and for others that she is a complete woman, fertile and capable of the biological task of creating and perpetuating life. She rivals her own mother by becoming a mother of a child in her turn, and completes the reproductive cycle that began with her own conception in her mother's womb (Ashurst & Hall, 1989, p. 97).

In this extract, motherhood is portrayed as a confirmation of becoming oneself, becoming a whole complete human being. Being fertile is defined as a biological task of women that has to be accomplished. This view of fertility and motherhood really complicates the situation of infertility and creates a lot of distress especially among women (Greil, 1997). While societies are reluctant to change their perception of fertility and motherhood, individuals who experience involuntary childlessness usually get into a struggle to re-define their condition, identity and goals in life (Daniluk, 2001). Despite the fact that infertility holds social and cultural meanings, and all of which contribute to the appraised meanings of infertility for individuals, it has long been treated as a medical condition with negative psychological effects. But recently, the literature has been calling for more research on examining the psychosocial and cultural aspects as well as the subjective experiences in infertility that is now more likely to be seen as a socially constructed phenomenon (Greil, Slauson-Blevins, & McQuillan, 2010). Moreover, in order to better deal with the negative consequences of infertility process, infertile women are suggested to get psychological help (Peterson et al., 2012), which is actually not widely provided and extensively used (Read et al., 2014).

The current dissertation adopted a mixed method design including a qualitative study followed by a quantitative study, namely a pre-test / post-test control group design; first to better understand the meaning making processes, and second to develop an easily accessible intervention (i.e., an online intervention) to enhance the positive meaning in infertility. In the first study, I tried to explore the meanings given to infertility by Turkish women suffering from infertility in consideration of cultural elements. I aimed to find out how they do create those meanings or what the story is behind in meanings made. In further, by taking the results of the first study into account, I sought to develop an online intervention to challenge the appraised meanings of infertility and facilitate the positive meaning making. Depending on these aims, the current dissertation contains four chapters. The first chapter is devoted to present a general introduction with a historical perspective regarding fertility / infertility issues. The second chapter provides the first study of the present dissertation containing introduction, method, results, and discussion sections. Similarly, the third chapter includes the second study of the current dissertation with its essential sub-sections. In the fourth chapter, a general discussion aiming to combine the results of the two studies as well as limitations, strengths, and clinical implications of the dissertation are provided.

CHAPTER 2

FIRST STUDY: UNDERSTANDING THE MEANING MAKING OF INFERTILITY AMONG INFERTILE TURKISH WOMEN: AN INTERPRETATIVE PHENOMENOLOGICAL ANALYSIS

"We are not the ones who are incomplete; the sound of our home, the sweet rush is incomplete. We can live neither for ourselves nor for others…" (A participant)
"Eksik olan biz değiliz aslında; evimizdeki ses eksik, tatlı telaş eksik. Ne kendimiz için yaşayabiliyoruz, ne de başkası için..."

2.1 Introduction

2.1.1. Infertility: Definition and Psychological Effects

Infertility is defined as a reproductive system disease which is characterized by an inability to get clinically pregnant although the couple has unprotected sex for 12 months or more (Zegers-Hochschild et al. for World Health Organization, 2009). While this definition of WHO corresponds to primary infertility, there are also cases of secondary infertility in which the woman has an inability to get pregnant after one live birth (Centers for Disease Control and Prevention, 2014). Infertility affects roughly one of every six couples. Studies from different countries show that the lifetime prevalence of infertility ranges from 6.6% to 26.4% worldwide (Boivin, Bunting, Collins, & Nygren, 2007).

Until the 1980s, before technological developments took place in medical settings, childlessness was mainly attributed to psychological factors (i.e.,

psychogenic hypothesis). Psychodynamic paradigm was well accepted in explaining the inability to conceive; it was seen as a result of ambivalent emotions of women regarding motherhood (Stanton & Dunkel-Schetter, 1991). With the biomedical technology developments, the psychogenic hypothesis has been discarded and more precise diagnosis of infertility in women as well as in men could become possible. Among the cases of infertility, about 35-40% of them are caused by a problem in the man, about 35-40% of them are caused by a problem in the woman while about 20% to 30% of the cases are caused by problems in both the man and woman (Jungwirth et al., 2012). The major reasons for infertility contain the effects of the reproductive system disorders, diseases related to hormones, low ovarian reserve, age, consumption of alcohol, smoking, immune system problems, heavy use of cell phone, sexual violence, stress, obesity, diet, and any chronic disorder leading to failure in conceiving as well as unknown factors (see Deyhoul, Mohamaddoost, & Hosseini, 2017 for a review).

Fertility problems are not without treatment opportunities. Centers for Disease Control and Prevention of US identified the most common methods of fertility treatment as hormonal therapies aiming to raise the egg production, intrauterine insemination (IUI) in which sperms are put inside of a woman's uterus, and finally Assisted Reproductive Technologies (ART) which mainly relies on the techniques of In Vitro Fertilization (IVF). In IVF, the eggs are removed from woman’s ovaries surgically and then combined with the sperms to have embryos, which are then implanted to woman’s uterus (CDC, 2017). These complicated treatment processes and infertility experience in general touch various aspects of a couple’s life. Many of these individuals suffer from psychological distress related to infertility (Greil, 1997; Morrow, Thoreson, & Penney, 1995). Anxiety and depression are so common especially among infertile women that they even show similar levels of anxiety and depression with women who have heart disease, cancer and HIV positive (Domar et al., 2000). Aside from the feelings of distress, or depression and anxiety, the unsuccessful trials to achieve a pregnancy

cause a loss of control, social withdrawal and a sense of stigma among women and couples (Greil, Slauson-Blevins, & McQuillan, 2010).

It would not be wrong to say that women initiate infertility treatment regardless of which partner is clinically infertile (Throsby & Gill, 2004). In accordance with this, women step forward as they feel more distress, anxiety, stigma (Greil, 1997), shame, have feelings of guilt (Galhardo, Pinto-Gouveia, Cunha, & Matos, 2013) and lowered self-esteem (Ying, Wu, & Loke, 2015) as compared to men. Actually, women get frustrated concerning their husbands' relatively insensitive reactions to both their distress and infertility itself (Greil, Leitko, & Porter, 1988). Regardless of age, years of infertility or financial burden of the infertility treatments, women experience considerable levels of depression and grief before, during and after the treatments (Lukse & Vacc, 1999). Infertility has relatively more adverse effects on both quality of life and health-related quality of life of women (Chachamovich et al., 2010). They perceive infertility as a threat to their femininity or sexual attractiveness (Syme, 1997 as cited in Hart, 2002). Therefore, infertility becomes an issue impairing self-esteem especially for women (Downey & McKinney, 1992). Interestingly, women who could get pregnant after infertility have same levels of self-esteem with women who conceived naturally (Cox, Glazebrook, Sheard, Ndukwe, & Oates, 2006). Thus, psychological problems seem to group around infertility. Accordingly, women tend to put more emphasis on becoming a parent; so they are more likely to seek treatment than men (Anderson, Sharpe, Rattray, & Irvine, 2003; Pasch & Christensen, 2000). The reason behind this tendency is generally explained in a socio-cultural context that women are referred as more closely linked to bear a child (Parry, 2005).

2.1.2. The Psycho-Social and Cultural Aspects in Infertility

Infertility is defined and treated as a medical condition as it was previously mentioned. However, it presents many different characteristics than any other health conditions. First, infertility does not become a health problem unless the

couple develops a desire to have a baby. Secondly, it does not affect one person, rather it affects the couple no matter which partner has been diagnosed with infertility. Thirdly, infertility presents itself not with pathological symptoms but the failure to reach a desired state. Finally, in case of infertility, medical treatment is just one of the many options including voluntarily childlessness, adoption, fostering or finding another partner (Greil, Slauson-Blevins, & McQuillan, 2010). However, women's choices about reproducing or broadly dealing with infertility do not depend solely on them. They make their preferences by themselves but under the inevitable influences of society or culture (Petchesky, 1980).

In many cultures, women and men are expected first to get married at certain ages and then they are expected to make a role transition from partnerhood to parenthood again at certain ages (Busfield, 1987 as cited in Earle & Letherby, 2007). Diagnosis of infertility prevents this widely expected normative role transition (Korpatnick, Daniluk, & Pattinson, 1993). While motherhood is stated as one of the central roles of women (Abbey, Andrews, & Halman, 1991), most of the women believe they gain an identity and status in society by becoming a mother (Morell, 1994). Actually, society has a role here in making them believe that their identity can be completed only if they achieve 'successful' pregnancies and become mothers (Oakley, McPherson, & Roberts, 1990). Along with this, becoming parents can only confirm the meaning of their marriage and being a couple (Matthews & Matthews, 1986). Having children is generally seen as a bond between couples, a way of displaying their love to their partners, the final stage of development of their relationship, and a unique commonality of theirs (Ulrich & Weatherall, 2000). Infertility, on the other hand, threatens the identity of the women, the meaning of marriage, and the goal of becoming parents. A large body of studies shows that infertility is an overwhelming life experience for sufferers no matter the culture they live in (Greil, Slauson-Blevins, & McQuillan, 2010). But some cultures, especially the ones which provide women little room for personal development or fulfillment outside the family, display more disadvantages (Peddie & Porter, 2007).

Religious and cultural pressures on couples to become parents are referred to as pronatalism, which includes the attitudes that praise motherhood (and becoming parents in general) and encourages women and men to have children. Pronatalism can be seen in almost all of the institutions in society, such as religious institutions, schools, media, law, medicine, and definitely families. It is the pronatalism that asks the question of "When are you going to start your family?" after marriage (National Alliance of Optional Parenthood USA as cited in Monach, 1993). The literature presents conflicting findings about the effects of culture on infertility reactions. In a recent study, researchers investigated different societies including Germany and Hungary as Western, individualistic cultures and Jordan as a pronatalist, collectivist culture. They found minor differences between infertile couples of Germany, Hungary, and Jordan in terms of quality of life specific to infertility (Sexty et al., 2016). However, another study yielded different reactions of British and Pakistani women to infertility; while British women experienced more anxiety, sleeping problems and social difficulties, women from Pakistan showed more depressive and somatic symptoms (Batool & de Visser, 2014). Yet, there are studies indicating that in societies where pronatalist traditions are common, infertility experience can become more stressful, especially for women (Obeisat, Gharaibeh, Oweis, & Gharaibeh, 2012). In a study comparing Turkish migrants living in Germany and Germans suffering from infertility, it was found that Turkish migrants experience more adverse effects than Germans do (Vanderlinden, 2009). This difference was attributed to the Turkish people's way of seeing fertility as necessary for social status that, for them, voluntary childlessness could never be an option. Similarly, a study comparing two different communities of Nigeria found varied meanings attached to infertility, and thus, varied influences of it (Hollos, Larsen, Obono, & Whitehouse, 2009). According to this study, the culture where the line of descent traced through the paternal side of the family, infertility found to be more problematic, created more distress and led to lower adaptability as compared to the culture in which the line of descent traced through both the maternal and paternal side of the family.

When we look at the picture in Turkey, studies point out higher distress in female partner, since she is largely blamed in case of infertility. Alongside the infertility itself, the blaming reactions of the husband and society in general are in effect. The women in Turkey are mostly threatened with divorce in these circumstances (Guz, Ozkan, Sarısoy, Yanık, & Yanık, 2003). According to a descriptive study comparing infertile and fertile women in Turkey, infertile women were more likely to be exposed to marital violence including economic, sexual, and emotional violence (Akyuz, Seven, Şahiner, & Bakır, 2013). It was found in another study that infertile women in Turkey describe themselves as different from "other/normal/fertile" women and eventually, they see infertility as a threat to their femininity (Boz & Okumuş, 2017). Therefore, cultural issues seem to be effective in perceiving infertility in certain ways, and so bringing about adverse psychological effects on sufferers.

There are countries where couples are intensively encouraged to have children. Among these pronatal countries, Israel offers limitless trials of IVF to infertile women regardless of their marital status or sexual orientation (Birenbaum-Carmeli & Dirnfeld, 2008). In Turkey, voluntary childlessness is not common; only 4.1% of the married women (including the infertility cases) between the ages of 45-49 are without children (Turkey Demographic and Health Survey, 2013). All social security institutions, including the Social Security Institution, The Retirement Fund, and Bağ-kur, which are used by different types of workers, offer funding for IVF treatment only up to three trials (Turkish Official Gazette no. 27012, 2008). In Turkey, with spreading IVF clinics and governmental discourse emphasizing 'families should have at least three children', infertility has become a medical case that need to be treated rather than only a stressful life experience (Gürtin, 2016). Therefore, in Turkey, which recently has become even a stronger pronatalist country, infertile women may perceive, live and adjust to infertility in different ways than that of more Western cultures. In this context, the specific experiences of Turkish women suffering from infertility deserve to attract the attention of social science researchers including psychologists.

2.1.3. Adjustment to Infertility

Infertility adjustment is a complicated process in the sense that it creates both acute and chronic stress. Acute stress appears due to various treatment phases, each of which create a considerable amount of stress on individuals with infertility. Chronic stress is seen basically because infertility is a chronic health condition (Darwiche et al., 2013). Accordingly, the current literature presents conflicting results regarding women's ability to adjust infertility. In their review of 25 years of research, Verhaak et al. (2007) concluded that although women experience depressive symptoms and anxiety while they are still in the infertility treatment, most women show good performance in adjusting to the process. Thus, emotional problems remain for only a small group of women. Another study indicated that it takes almost two years for infertile to adjust to being childlessness, but they can adjust eventually (Daniluk, 2001). Nonetheless, getting adjusted requires a slow and painful process of finding solutions. On the other hand, a great amount of literature has taken infertility as a developmental and situational crisis that should be overcome (e.g., Butler & Koraleski, 1990; Greil, 1997; Greil, Slauson-Blevins, & McQuillan, 2010). Otherwise, the effects remain. For example, Hammarberg, Astbury, and Baker (2001) studied with 126 women 2-3 years after their unsuccessful infertility treatments and found lower levels of life satisfaction among these women. Similar effects were seen even after 20 years from unsuccessful trials to get pregnant. Wirtberg, Moller, Hogström, Tronstad, and Lalos (2007) found strong feelings of inferiority and lack of self-esteem as well as social isolation among infertile women between the ages of 48 and 60, since women at their age begin to have grandchildren. Similarly, in a qualitative study, childless women aging between 46 and 59 described their pain as never disappearing (Ferland & Caron, 2013). Interestingly, this pain seems to exist for women who stayed childless in a marriage; never-married and so childless women exhibited better mental health and well-being (Graham, 2015).

Infertility does not create the same effects on everyone. The coping strategies and adjustment levels vary to a large extent (Lee, Blyth, & Chan, 2012). The socio-demographic characteristics are one group of indicators of infertile individuals' adjustment levels. For instance, in terms of age, younger women showed remarkable adjustment to infertility on dimensions of sexuality, communication, marital satisfaction, and functioning as a family; but not on dimensions such as emotional intimacy, social network and autonomy. Higher education and employment led to higher adjustment, as well (Ferreira, Antunes, Duarte, & Chaves, 2015). In addition to these, higher marital satisfaction also contributed to the better adjustment of couples (Darwiche et al., 2013). Mahajan et al. (2009) found infertile women with avoidant attachment style as disadvantaged in adjusting to infertility. However, among them who were intrinsically religious, sexually satisfied and supported by their family were better at adjusting to the situation. On the other hand, Moura-Ramos, Gameiro, Canavarro, Soares, and Almeida-Santos (2016) found that infertility history of couples influences their level of adjustment to the process but in complicated ways. For example, the number of previous treatments caused lower adjustment in men than in women unless the perception of parenthood had not been changed. Also, as the infertility duration increased, the importance of becoming parents showed a tendency to increase, which had adverse influences on adjustment among both men and women (Moura-Ramos et al., 2016).

In case of a health related threat, such as infertility, individuals usually get into a relatively intensive dynamic process of self-regulation, in which they try to evaluate their current situation by motivating themselves to their goals and collecting information in relation to these goals. All of these contribute to coping efforts (Benyamini, 2009). The qualities of those efforts or the way they cope designate the level of adjustment (Lord & Robertson, 2005). Traditional stress and coping theory suggested that when we are in stress, we begin to review the threat and our resources to cope with it. Thus, in cases of higher stress and poor coping, individuals' well-being tends to be open to the negative influences (Lazarus & Folkman, 1984). In accordance with the stress and coping theory,

self-blame and avoidance coping were found as important predictors of lack of adjustment, and thus psychological distress among infertile women and men (Morrow, Thoreson, & Penney, 1995). Focusing on just infertility and thinking about it all the time while catastrophizing the situation worsen the depression and anxiety. For example, in a study it was seen that as women perceived infertility as having longer timeline with more serious consequences and as they found it less controllable, stress became more evident and well-being decreased (Benyamini, Gozlan, & Kokia, 2004).

Adjustment tends to rise with the use of problem-focused coping along with processing the situation in an emotional manner and expressing oneself (Berghuis & Stanton, 2002). On the other hand, increasing evidence has suggested that stressful or traumatic events may lead to positive changes rather than negative ones among general population. Tedeschi and Calhoun (2004) introduced this tendency referred to post-traumatic growth (PTG). According to them, PTG contains greater appreciation of life, warmer (or improved) relationships with other people, a greater personal strength, identification of new possibilities in life and finally developments in spiritual sense. It appears when the individual shows an effort in dealing with stressful life experiences. Schmidt, Holstein, Chistensen, and Boivin (2005) provided clinical evidence for PTG in infertility that they found most couples believed infertility improved their marital relationship. In another study, the researchers found infertility as causing developments in identification of new possibilities in life and spirituality (Paul et al., 2010). However, PTG is not automatically experienced. Yu et al. (2014) revealed that although infertile individuals with higher resiliency and social support were more likely to experience posttraumatic growth, it was mediated by positive coping. A more recent study reported a similar trend that satisfaction of psychological needs, appraisal of challenge, higher emotional expression, acceptance, and finally, positive reappraisal of the traumatic situation were related to the development of PTG (Yeung, Lu, Wong, & Huynh, 2016). Thus, in case of infertility, reappraisal of the stressful event, refocusing on it in a more positive way and rearranging the goals, all of which can be referred to as positive

coping, might help in diminishing depression and anxiety (Kraaıj, Garnefski, Schroevers, Jmer, & Helmerhorst, 2010). Similarly, being aware of the emotional reality of infertility and gaining a shared meaning of infertility experience as a couple increases the adjustment to the situation (Darwiche et al., 2013). At this point, it is important to understand the concept of meaning and its relation to infertility.

2.1.4. The Meaning Phenomenon and Meaning Making Model

The meaning phenomenon entered the psychology literature with Frankl, especially after his experience in concentration camps during World War II, in Auschwitz. In his book "Man's Search for Meaning", as a prisoner in concentration camp, Frankl referred to his experiences and identified his psychotherapeutic method (i.e. logotherapy) that contains finding a purpose in life to feel favorably about. According to him, meaning has a crucial role in a human's life (Frankl, 1963). What makes us human beings is that we attribute some meanings to our experiences, even to the most devastating ones. Searching for and finding or forming a meaning are basic motivations of us. Moreover, we have the freedom to find meanings in whatever we do, we live, or we basically face (Marshall & Marshall, 2012). According to Frankl (1963), the meanings formed are prone to change from person to person and day to day. In other words, the meanings found or created are subjective and not fixed. Meaning construction is a dynamic process in which humans create their own realities out of the meanings they give to them. While experiences help in generating meanings, meanings direct the experiences. We make meanings only for the things, which are about us or related to us (Chen, 2001) and they are crucial to preserve our psychological health (Debats, van der Lubbe, & Wezeman, 1993). Therefore, people are in an endless struggle to make and explore meaning (Sullivan, 1984).

In general, lack of meaning was suggested to be related to psychopathology (Yalom, 1981). It has also been argued in the literature that difficulties in creating meaning are associated with substance abuse and suicidal thoughts (Harlow, Newcomb, & Bentler, 1986). Frankl (1963) emphasized that creating meaning is essential in a specific moment rather than trying to find a general meaning in life. While people have a common potential in finding meanings, health problems seriously interrupt the given potential, since they prevent individuals from functioning fully (Wong, Wong, & Scott, 2006). Thus, stressful life events, health problems in particular, stand as those moments that need to be attributed some meanings. A study investigating two dimensions of meaning in life; namely *presence of meaning* and *search for meaning*, found out four different profiles with specific patterns of psychological well-being and acceptance in chronically ill patients (Dezutter et al., 2013). Presence of meaning was defined as perceiving one's life 'significant, purposeful and valuable' (p. 334), while search for meaning was defined as the effort to establish or enhance the meaning in life. The profiles identified were *high presence of meaning-high search for meaning*, *high presence of meaning-low search for meaning*, *low presence of meaning-high search for meaning*, and *low presence of meaning-low search for meaning*. It has been seen that as chronically ill individuals shift from searching for meaning to presence of meaning, their well-being, acceptance and optimism increase accordingly. In terms of profiles, the most adaptive one was stated as high presence of and high search for meaning, while the least adaptive profile was low presence of and high search for meaning.

Recent research had put strong emphasis on adjustment to a stressful life event (e.g., Boehmer, Luszczynska, & Schwarzer, 2007; Christie, Meyerowitz, Giedzinska-Simons, Gross, & Angus, 2009; Davis & Morgan, 2008) including infertility (e.g., Berghuis & Stanton, 2002; Daniluk & Tench, 2007; Gameiro et al., 2016). Park and Folkman (1997) reviewed research on assessing meaning through the adjustment to a stressful life event process. They concluded that positive reevaluation of the event, finding answers to the question of "why that event happened?" or "why me?", knowing in which ways the stressful life event

changes one's life, and being aware of how much one has found meaning in the event indicate the extent of individuals' adjustment during the experience of a stressful life event. Making substantial changes in philosophical, religious or existential terms correspond to process of meaning making. This process of meaning making has been evaluated as a way of coping in stressful conditions (Park & Folkman, 1997). The way we mean things shapes our responses in coping, and accordingly, contributes to or deteriorates our health status (Antonovsky, 1990). In case of serious diseases, not only the adjustment but also the course of the disease is positively influenced by finding meaning in the event. A study conducted with HIV positive men suggested that while cognitive processing lead to meaning discovery, those meanings are related to better psychological and immunological health outcomes (Bower, Kemeny, Taylor, & Fahey, 1998).

Meaning is not an easy phenomenon to describe (Park, 2010). Baumeister (1991) made one of the best descriptions of it; he conceptualized meaning as an element connecting things, events and relationships to each other. Thus, for certain conditions, we create meanings that we know and/or we feel, but it can be very difficult to explicitly identify. Park and Folkman (1997) suggested a Meaning Making Model, in which they distinguished two levels of meaning; global meaning and situational meaning. In broad terms, global meaning corresponds to general orienting systems and view of various situations of people. Individuals' assumptions, expectations as well as beliefs regarding themselves and the world in general constitute their global meaning. Generally, people tend to have a positive illusion about themselves (Taylor & Brown, 1988); they believe in a just world where their current life and future are under their own control, good people experience good things, and God is there for them to protect (Baumeister, 1991). Stressful life events challenge this positive illusion of human beings and so global meaning they created (Park & Al, 2006). On the other hand, situational meaning represents meaning concerning a specific situation (Park, 2013). This appraised or situational meaning determines the feelings one experiences during the stressful circumstances (Park & Folkman, 1997). Park (2013) defined

Meaning Making Model as a discrepancy based model indicating that as the difference between individuals' meaning giving to a particular situation and their global meaning increases, individuals begin to feel more distress. Therefore, in case of stressful conditions, individuals may need to change either their general orienting systems (i.e., global meaning) or their view of that specific instance (i.e., situational meaning) (Park & Al, 2006). Meaning making is an intrapsychic process (e.g., Creamer, Burgess, & Pattison, 1992), where one tries to make changes in global and situational meanings to lessen the discrepancy between those two (Park, 2010). Therefore, it would not be wrong to say that meaning-making is an automatic process, in which the new stressful life event is integrated into already existing cognitive structure (Park & Al, 2006), but at the same time it needs an effort to be achieved (e.g., Boehmer et al., 2007). This effort can be made by using a meaning-focused coping strategy in dealing with stressful conditions (Park & Folkman, 1997). Meaning-focused coping strategy includes searching for, and finally, reaching a positive meaning of the specific stressful event (Folkman, 1997). If the condition is a low-control condition such as trauma, loss, chronic disease (or in this case infertility), meaning making is more adaptive as compared to other coping strategies, such as problem-focused coping (Park, Folkman, & Bostrom, 2001).

2.1.5. Meaning of Infertility and Meaning Making in (case of) Infertility

In order to understand the meaning of infertility, one needs to explore the meaning of motherhood or having children. For many women, becoming a mother is a natural instinct they follow unintentionally (Ulrich & Weatherall, 2000). Having children stand as a defense mechanism in case of mortality salience. Women and men desire to have offspring when they are reminded of death (Wisman & Goldenberg, 2005). The desire for having offspring represents an existential purpose (Lee, Neimeyer, & Chan, 2012). In a qualitative study done with women in Ghana, participants stated children as meaning of their life. They believed they suffer in this world for their offspring, as it is the only way to continue their lineage (Tabong & Adongo, 2013). This perspective of women

was also seen in other studies suggesting that women believe a child means fulfillment of a filial role and so a reason for pride (Lee et al., 2012). Especially for Eastern cultures, having children is a necessity for filial piety. It is believed a child can bring a higher status to women's life, so that a more satisfied and happy life could be possible (Moura-Ramos, Gameiro, Canavarro, Soares, & Almeida-Santos, 2012). Thus, women think they are driven to have children both biologically and socially (Ulrich & Weatherall, 2000). The study of Cousineau, Seibring, and Barnard (2006) revealed the effects of meaning making of infertility experience on both one's identity and worldview. They identified infertility as a profound existential issue and a challenge to one's personal belief system. Similarly, Yalom (1980) stated that absence of children leads to a meaninglessness, which is evaluated as an existential anxiety. Thus, if not having children creates a meaningless state, does infertility hold any specific meanings? Actually, it does not always have an explicit meaning for infertile individuals. For some women, it refers to a medical or physical problem (Rowland, 1992). Nevertheless, social and psychological meanings of infertility appear to be more distinctive. As it was widely mentioned, infertility mostly means a threat (Boz & Okumuş, 2017), a failure (Ulrich & Weatherall, 2000), or a life grief (Johansson & Berg, 2005).

The meaninglessness and the negative meanings attributed to infertility are quite prevalent, and they both create a profound distress. However, women benefit from meaning-based coping strategies in managing individual stress (Peterson, Pirritano, Block, & Schmidt, 2011). In both personal and marital domains, meaning based coping strategies facilitate adjustment to infertility (Schmidt et al., 2005). The experiences of individuals direct them to develop meaning, which is closely related to their well-being. There are people focusing on the positive consequences of events and construct positive meanings; and definitely, there are others who concentrate on the negative aspects and create negative meanings (Lilgendahl & McAdams, 2011). As a low control condition, re-interpreting infertility and attaching infertility experience a positive meaning while using emotional approach methods containing self-nurturing lead to better adjustment

(Benyamini et al., 2008). There is a considerable number of studies looking at the effects of meaning making on the adjustment of cancer known as a very stressful chronic health condition (e.g., Park, Edmondson, Fenster, & Blank, 2008; Pinquart, Silbereisen, & Froehlich, 2009; Sherman & Simonton, 2012).These researches largely agreed on the idea that better adjustment could be achieved by the help of forming adaptive meanings out of experiences with cancer (Park et al., 2008). Yet, research on meaning making in case of infertility is lacking despite its complexity with emotional, social, cultural and medical consequences (Latifnejad-Roudsari, Allan, & Smith, 2007). To our knowledge, only a very recent 10-year prospective study done with infertile women looked at the effects of negative meaning making on present depressive symptoms and trait anxiety (Thomsen et al., 2016). The researchers of the study identified meaning making as either positive or negative. They found that women who attributed a negative meaning to their infertility experience show higher depressive symptoms and trait anxiety in 10-years follow-up.

A qualitative study examining the meaning of fertility problems among couples revealed that having a biological child was a common goal among those people. In addition, when that goal was threatened by infertility, they showed a tendency to make changes in their life goals and commitments they had, especially about the idea of parenthood and the relationship they had (Glover, McLellan, & Weaver, 2009). Thus, it would not be wrong to say infertile individuals get in to a meaning making process in order to overcome the appraised meaning of infertility (Boz & Okumuş, 2017) as well as the parenthood. Individuals, who revise their view on parenthood and their future goals in case of infertility persistence, show better adjustment (Moura-Ramos et al., 2016). On the other hand, while the positive effects of changing the appraised meaning of infertility are obvious, women tend to use emotion-focused coping strategies without really getting engaged in the emotional reality of infertility (Karaca & Ünsal, 2015). In a study done with Serbian IVF patients, it was found that women who could get pregnant with IVF treatments begin to use meaning based coping strategies while non-pregnant ones continue to use active confronting or avoiding coping styles

(Kitanovic, Tulic, & Soldatovic, 2016). These women usually refuse to make any connections with unpleasant thoughts or bodily sensations (Cunha, Galhardo, & Pinto-Gouveia, 2016). Likewise, they are reluctant to adopt an open and non-judgmental approach to their painful feelings, thoughts, and memories (Hayes & Smith, 2005). In addition, self-compassion is substantially low among them (Pinto-Gouveia, Galhardo, Cunha, & Matos, 2012), which may prevent them to create a positive meaning out of their infertility process. Also, a study by Thomsen et al. (2016) found that women with high trait anxiety created more negative meaning of infertility after 10 years as compared to women with low trait anxiety; and state anxiety is known to be prevalent among women with infertility (Verhaak, Smeenk, vanMinnen, Kremer, & Kraaimaat, 2005b). When we consider all of these findings, it can be suggested that in cases of infertility positive meaning making is beneficial but (paradoxically) seems to be avoided and obviously not easy to be achieved. On the other hand, lack of meaning in life and positive reappraisal of certain stressful conditions have long been associated with greater need for psychotherapy (Steger, Frazier, Oishi, & Kaler, 2006). Thus, facilitating a positive meaning making becomes necessary for psychological interventions. In order to offer women suffering from infertility with an opportunity of positive meaning making, at first, it is necessary to investigate the meanings attached to infertility and meaning making in infertility as a process.

2.1.6. The Aim of the First Study

The aim of the present researcher in this study is to explore what infertility does mean to infertile women of Turkey and how the meaning making process of infertility takes place for them. It was aimed to find out what these women do infer from their infertility experience outside the context of an infertility clinic. Therefore, a qualitative study using interpretative phenomenological analysis as methodology aimed to examine the subjective experience of infertility, specifically how Turkish infertile women make meaning of this stressful

condition. The culture-specific meaning making elements were aimed to be evaluated with the detailed analyses of each case.

2.2. Methodology

2.2.1. Why is it Important to Study Meaning of Infertility with a Qualitative Method?

Meaning making is a dynamic process which is affected by internal (e.g., psychological functioning) and external (e.g., culture) factors. Nevertheless, individuals construct meanings mostly depending on their experiences. On the other hand, subjectivity or phenomenological world of an individual creates the core of the meaning attributed to a specific experience (Chen, 2001). Qualitative research allows researchers to understand the phenomenological world of an individual with different elements in play during the process of meaning making and provides rich insights into various factors at the individual and cultural levels (Manning & Kunkel, 2014). Thus, according to qualitative researchers, a phenomenon can be better understood when it is evaluated in its context. Rather than approaching with a fixed measurement, they prefer to let the questions emerge and develop as familiarity with the research content increase (Krauss, 2005). According to Kvale (1996), when the issue in point is meaning making, it can be best understood if it is described by the person who lives it (as cited in Daniluk, 2001).

Quantitative designs contribute a lot to the literature related to psychological states of women with various health issues; however, they remain limited in providing rich understanding on these women's real experiences and needs (Lawson & Marsh, 2017). In this manner, a qualitative design, with its constructivist nature, can promote social researchers'understanding of women's infertility related experiences. Despite being limited, researchers have been using qualitative methods to explore infertility for years (e.g., Batool & de Visser, 2016; Benasutti, 2003; Daniluk, 2001; Ferland & Caron, 2013; Johannson &

Berg, 2005). Some of these studies were conducted with women who were still getting treatments on and off (e.g., Batool & de Visser, 2016; Boz & Okumuş, 2017), some others included women diagnosed with infertility who stopped treatments and remained childless (e.g., Daniluk, 2001), still others examined women who were once infertile but presently with a child (or children). Women's personal experiences related to infertility received attention of these researchers and they made substantial contribution to the investigation of infertility experience.

The literature stated the prevalent characteristics of an infertile woman as socially isolated, having lower self-esteem, having a sense of social stigma, and losing the sense of security and hope (Greil, 1997). Infertility makes them silent in the fertile world (Ceballo, Graham, & Hart, 2015). While all of these pile up and create a relatively sensitive group of individuals, infertility becomes a tough subject to discuss with them (Neff, 1994). Therefore, studying meaning with such a sensitive group can be more effective with a qualitative design, which enables participants to freely express themselves and expands our knowledge on women's infertility experience.

2.2.2. The Reasons behind Choosing Interpretative Phenomenological Analysis as the Method of Qualitative Investigation for This Study

Infertility was examined with a qualitative design in different studies from different cultures including Turkey (e.g., Friese, Becker, & Nachtigall, 2006; Karaca & Unsal, 2015). However, only a few of them used an interpretative methodology to approach data (e.g., Daniluk, 2001; Benasutti, 2003; Boz & Okumuş, 2017).

Phenomenology corresponds to a human capacity to understand beyond whatever has been explicitly said or whatever has been meant by the speaker. Heidegger (1962), who introduced the existential elements in phenomenology to be able to understand the existence, explained our understanding of someone or

something depends on our situated position in this world. Therefore, we understand things from certain viewpoints of ourselves from which subjectivity is inevitable. We see things as they appear to us, which means that a phenomenon does not apparently show itself but instead it makes itself known, or announces itself without really revealing itself. Finding a meaning, thus, constantly contains elements of interpretation (Smith et al., 2009). Accordingly, in the current study, with keeping the subjectivity of the researcher in sight as possible, it was aimed to detect the subjective meanings of infertility that could be read between the lines. In this manner, IPA is distinguished as an 'idiographic, inductive and interrogative' way of dealing with data (Smith, 2004). Idiographic means dealing with the particular rather than the general. In IPA, the researcher commits to the particular and tries to understand it in detail. Accordingly, IPA does not aim to reach larger sample sizes. IPA is inductive in the sense that it aims to generate research questions instead of verifying hypotheses. Moreover, it is more flexible and open to any emerging question and theme which corresponds to interrogative characteristic of IPA. Therefore, as a qualitative methodology, IPA aims to go beyond the descriptive analysis and put a great emphasis on the interpretative aspect of the analysis (Larkin, Watts, & Cliffton, 2006). Furthermore, it accepts the effect of the researcher's subjectivity. IPA includes seeing the data in a more speculative way and trying to understand the meaning of what has been expressed by the participant (Smith & Osborn, 2003). In this respect, I followed a similar aim in which I tried to understand what infertility really means for Turkish women who suffer from infertility. In order to understand the meaning of infertility for Turkish women, this study considered social and cultural effects that are taken into account in IPA methodology (Smith & Osborn, 2003).

2.2.3. Participants and Sampling Method

In the current study, a purposive sampling process was implemented in accordance with IPA guidelines (Smith & Osborne, 2003). A homogeneous sample was achieved. The participants were women, diagnosed with primary

infertility indicating absence of a live birth, trying to get conceived for more than a year, experiencing infertility due to female factor or both female and male factors, and living in Turkey. The age range was between 22 and 35. The participants were recruited via an online infertility group including more than 5000 members. An online announcement was made and volunteers were contacted through instant messaging.

Twenty women responded to the announcement for being a volunteer participant. The ones who could not get conceived because of only male infertility were excluded while both male and female infertility cases were kept. After the volunteers were informed about the research process, 10 of them agreed on participating. Interviews with the first two participants out of 10 were pilot interviews and not included in the main analyses while the remaining 8 participants were included. The characteristics of the participants were listed in Table 1. The sample size was consistent with IPA guidelines (Smith & Osborne, 2003). Because IPA contains an intensive and detailed analysis of cases, small sample sizes such as between 2-10 people are preferred.

Table 1. Participants' characteristics

Anonymized name	Age	Education	The reason for not being able to conceive	Years of Infertility
Ayşe	30	High School	Female Infertility	8
Narin	28	University	Female Infertility	2
Sezin	32	High School	Female & Male Infertility	13
Elif	27	High School	Female & Male Infertility	3
Damla	25	High School	Female & Male Infertility	4
Merve	31	University	Female Infertility	5
Burcu	35	High School	Female Infertility	3
Gamze	23	High School	Female & Male Infertility	4

2.2.4. Procedure

After ethical approval was provided from Ethical Board of Middle East Technical University, the participants were presented consent and information forms through e-mail. They were informed about the study and ensured that the participation was voluntary and they could leave the study any time they wanted (see Appendix A). Semi-structured interviews were done to collect data. The main questions of the interview were previously determined (see Appendix B); however, any emerging subjects related to meaning of infertility were encouraged. They were informed about the study and ensured that the participation was voluntary and they could leave the study any time they wanted. The interviews were held online using a videoconference program (see Mann & Stewart, 2002 for a handbook for researching online). All of the participants attended the interviews from their home. Before the interviews, they were asked to arrange an environment where they could be alone and relaxed. The interviewer and interviewees were able see and listen to each other simultaneously. No problems were encountered related to videoconferencing. The interviews were tape-recorded with the permission of the participants. Each participant was interviewed for once by me. The interviews lasted 50 to 90 minutes, with the mean of 55 minutes. Different names were assigned to the participants for anonymity.

2.2.5. Data Analysis

First of all, before and during the analysis process, I paid attention to not to read any of the literature related to the main topic of the current study (i.e., meaning making of infertility). All interviews were tape recorded and transcribed. I analyzed the first case in detail; by reading it couple of times, and taking notes on the left margin. I took notes after each interview regarding the general observations of mine. By considering the notes taken, the themes for the first case were formed and noted aside. These were the sub-ordinate themes. The super-ordinate themes were created after grouping the associated themes

together. The same process was repeated for the remaining cases. Cross-case comparisons were done for all cases; each emerging theme was checked against all cases. The repeated and prominent themes were identified for the eight cases being analyzed. The final list of themes was formed including four super-ordinate themes which were as follows: *1. The sense of ideal woman: Self-sacrificing mother, 2. The sense of infertility: The incomplete woman, 3. Efforts on meaning making,* and *4. Overcompensation of Incompleteness: Self-sacrificing 'mother-to-be'.* The themes and corresponding excerpts were first prepared in Turkish and then translated from Turkish to English, all by me while writing the final report. The 'Results' section includes both English and Turkish versions of the extracts.

2.2.6. Trustworthiness of the Study

Quantitative research comes from a positivistic epistemology and deals with observable and measurable phenomena, so uses reliability and validity as its tools (Creswell, 2003). Qualitative research, on the other hand, adopts a constructivist epistemology, which does not look for 'an objective reality', but takes the subjective point of view of the researcher into account (Lythcott & Duschl, 1990). Multiple realities rather than a single reality perspective have been adopted (Trochim, 2000). Thus, the researcher uses reflexivity as an approach to understand the inevitable effects of his/her perspective on data (Patton, 2002). Reflexivity contains creating an awareness of researcher regarding his / her own assumptions, experiences and predispositions; and dealing with the data with this awareness in hand that refers to bracketing (Fischer, 2009). I used a reflexive diary to be aware of my thoughts and emotions and bracket them. Besides, to ensure the trustworthiness of the study, the analyses of the cases were evaluated by a qualitative research team as suggested by Elliot, Fischer, and Rennie (1999). The team was composed of five clinical psychologists who are doctoral candidates experienced in qualitative research. Each peer group member read at least three of the transcriptions with noted themes and updated super-ordinate and sub-ordinate themes table. Peer

group discussions were held to improve the super-ordinate and sub-ordinate themes based on the transcriptions. I listened to the tape-recorded peer group discussions while working on the themes. Finally, I studied with my supervisor in finalizing the super-ordinate and subordinate themes table.

At this point, in accordance with the reflexivity principle, I want to mention about my experience with infertility which gave me the inspiration to study this subject. We (me and my husband) began to make plans about having a baby right after my Ph.D. Qualification Exam (before studying on a Ph.D. thesis, topic of which was different back then) since that was 'the perfect time to get pregnant'. Therefore, for the first time in my life, when I was 28 years old, I decided to visit a gynecologist. I had not visited a gynecologist before, because I was thinking everything was so 'normal' with me. There was no need to see a gynecologist since my periods were regular, or I was not living so much pelvic pain. Besides, there was a myth running in our family saying all women in our family are so fertile that they can get pregnant anytime they want. My mother gave birth to me when she was 40 years old. However, obviously, I was not one of those fertile women. At the first medical examination, I was diagnosed with endometriosis, which is a disorder affecting females due to its estrogen-dependent nature and may cause substantial morbidity, serious pelvic pain, numerous operations, and infertility (Giudice & Kao, 2004). Thus, a period of several medical examinations and emotional turmoil had begun for me. I had (still have) a very low ovarian reserve that was caused by endometriosis according to my gynecologist. And me and my husband were directed to an infertility clinic even before trying to conceive naturally. I remember my feelings of inadequacy. I was feeling less 'woman', since I had fewer eggs. I was comparing myself with other women who could become mothers and envying their fertility. I went online to find people with similar conditions and became a member of an online infertility support group. Doctor visits were so stressful and each blood or sperm test was a pressure on us, as if we were personally responsible for the results. Eventually, while visiting one doctor after another and waiting for the IVF treatment to begin, I got pregnant naturally. Unfortunately, it ended up with a miscarriage.

However, I had a limited time for mourning because we had to decide about the next step. Time was passing and ovarian reserve was getting lessened. Still, natural pregnancy experience was very encouraging for us. Therefore, we decided to set the IVF option aside and got back to our regular life. In the following year we were with our baby son. Otherwise, I believe, it would be really tough to write such a dissertation. Endometriosis is still a challenge for me that while I am writing these sentences, I am getting prepared for an operation due to growing cysts and chronic pelvic pain.

2.3. Results

The interpretative phenomenological analysis of the eight cases revealed four themes; the first theme was *the sense of ideal woman: self-sacrificing mother*, the second theme was *the sense of infertility: the incomplete woman*, the third theme was *efforts on meaning making*, and the final theme was *overcompensation of incompleteness: self-sacrificing 'mother-to-be'*. The superordinate themes as well as their subordinates are presented in Table 2.

Table 2. Themes of interpretative phenomenological analysis of meaning-making in women with infertility

1. The sense of ideal woman: Self-sacrificing mother
1.1. Idealization of life with a child
1.2. The expectations about being "a better mom"
1.3. Devoting herself to the imagined child
2. The sense of infertility: The incomplete woman (who couldn't be a self-sacrificing mother)
2.1. The lack of control over infertility
2.2. Mothers make feel like incomplete
2.3. The emotional effects of "The incomplete woman"

Table 2. (continued)

3. Efforts on meaning making
3.1. Running from infertility (No effort on meaning making or Pre-meaning making)
3.2. "Infertility is my test"
3.3. Feeling gratitude
4. Overcompensation of Incompleteness: Self-sacrificing 'mother-to-be'
4.1. The search for power/ The wish for being strong
4.2. Self-sacrifice
4.2.1. Directing the whole emotional and material resources to infertility treatment
4.2.2. Trivializing everything but having a child
4.3. The cycle of control (hope) and no control (disappointment)
4.3.1. To initiate a new treatment: The major area of control (hope)
4.3.2. Treatments: "I have the control, no I don't…" (possible disappointment)

2.3.1. The Sense of Ideal Woman: Self-sacrificing Mother

The first theme emerged in the qualitative analysis was 'The sense of ideal woman: self-sacrificing mother.' This theme explains the underlying motivation of the participants in their meaning making processes. The participants of the present study generally defined being a woman as equal to being a mother. Being a mother makes a woman's life meaningful for them. "What is the meaning of life without being a mother?" was a commonly asked question. Not only being a mother but also being a self-sacrificing mother was observed to be idealized by these women. There seemed to be an idealization of life with a child as well. Taking care of their babies was widely emphasized as their only desire. Thus, the motivation of reaching the ideal woman became apparent. "All I want is getting pregnant with twins. I want to forget myself while taking care of them" *("İkiz*

bebeklere hamile kalmak tek dileğim. Onlarla ilgilenirken kendimi unutayım istiyorum"). These sentences belonged to a 35-year-old woman, Burcu, who had lost her both tubes in a surgical operation after she claimed she got infected by her husband's sperms and IVF was seen to be the only option for her to get pregnant. She had been trying to conceive for 3 years. The below extract is from her.

> If I have a child...Yes, now me and my husband are a family, but there is a missing piece in the puzzle. It will be completed. It is like everything will be much better. At home, OK, we are comfortable but after a certain point it gets boring. I have a turtle and a bird. We wrap them up in cotton wool. Think, there will be a child... He will be our whole life. He will be our freshness. He will be our joy. He will be our beauty. Yeah.
>
> *Çocuk sahibi olursam... Evet şu anda eşimle ikimiz bir aileyiz ama tamamlanmayan bir puzzle parçası var. O tamamlanacak. Her şey daha güzel olacak gibi. Çünkü evde, tamam, rahatlığına rahatız ama bir yerden sonra insan sıkılıyor. Kaplumbağam var bir tane, kuşum var. Onların üzerine titreyip duruyoruz. Düşünsenize bir çocuğun olduğunu... Bütün hayatımız o olacak. Bir yenilik olacak. Bir neşe olacak. Bir güzellik olacak. Öyle.*

Ayşe, a 30 years old housewife, was similarly uncomfortable with her childless life. I felt her sadness during the interview. When she was asked about her thoughts on what a child could bring to her life, she answered the question whimperingly.

> Everything... (ready to cry). A child could bring my life everything. My life would be much different with a child, much beautiful. There would be something that I would have fun with at home… I will do cleaning... Umm not being able to do cleaning while taking care of him… I don't know how to say, not being able to cook. Saying that I cannot do it because I deal with him... Very simple things, but here it is, you cannot do it. Plus, I devote myself to cleaning. I became obsessed with cleaning. As I said, I wish I could have a child and could not do these simple things. A child brings lots of things into my life, simple things. I am telling you I want him to restrain me.

Her şey… (ağlamaklı). Hayatıma her şey katar ya. Daha farklı olur hayatım, daha güzel olur çocuk olunca. Eğleneceğim bir şey olur evde. Temizlik yapıcam... Iıı temizlik yapamamak mesela çocuk varken. Onunla uğraşırken, temizlik yapamamak. Yani, nasıl diyim, yemek yapamamak. Çocukla uğraşıyorum diye yapamıyorum demek. Çok basit şeyler bunlar. Ama bunları işte yapamıyorsun. Ya bir de ben kendimi çok temizliğe verdim. Temizlik hastası oldum. Ya diyorum ya çocuk olsa da şu basit işleri yapamasam. Hayatıma çok şey katar, basit şeyler… Diyorum ya engellesin beni.

Along with the idealization of life with a child, it has been observed that these women expect from themselves to be better mothers as compared to the others who could achieve motherhood. Thus, it could be possible for them to be ideal mothers. Narin, a 28 years-old teacher, emphasized during the interview smilingly: "If I can become a mother, different from others, I'll smooth the way for my child in everything. (Laughingly) Let it be my oath" *("Ama sahip olursam da birçok kişiye göre daha fazla kıyak geçeceğim çocuğuma. (Gülerek) Öyle de bir ahdım var").*

Burcu was critical about her friends who were mothers. She found her friends 'inadequate' in dealing with their children. I felt the anger of the participant towards her friends. Underneath the anger, a feeling of being wronged was perceived. Her friends could become mothers but they did not devote themselves to their children.

Well... Their (children of her friends) mothers cannot be thoughtful unlike me. For example, their mothers do not want to get in a child movie. They want to spend time on their own while children are in amovie. I grumble to my friends all times. I even watch the movie with the kids.

Ya da anneleri bazen benim kadar düşünceli olmayabiliyorlar. Mesela çocuklarla sinemaya girmek istemiyorlar. Çocuklar sinemadayken onlar kendileri vakit geçirmek istiyorlar. Ama ben her seferinde onlarla söyleniyorum, hatta ben giriyorum onlarla sinemaya.

Elif found her older sister ‘inadequate’about taking care of her newborn baby. An aunt is called as a half-mother in Turkish culture; however, Elif was seeing herself beyond a half-mother, because she was more careful andmore devoted.Thus, she believed she deserved to be more than a half-mother.

> By the way, I became an aunt. I became an aunt right after I got married. An aunt is a half-mother. I am still curious about how I can feel like this for my nephew. I mean, I would feel the same way if he was mine, so I am not a half-mother indeed. I see it like if I could have a child first, and then I could be a half-mother for my nephew. Since I first became an aunt, you know... I was worried about whether my sister could take care of him. I spent sleepless nights at my house. Can she take care of him, what if something sticks in his throat, what if he chokes...I was calling my sister in the middle of the night. I had awakened her and said her not to sleep, deal with the baby…
>
> *Ee bu arada teyze oldum. Yani evlendikten çok kısa süre sonra teyze oldum. Ee teyze anne yarısıymış. Ben yeğenime nasıl öyle bir duygu beslediğimi hala merak ediyorum yani benim çocuğum olsa da aynı duyguyu hissedeceğim aslında, anne yarısı filan değil. Hani o konuda da şöyle bakıyorum; önce benim çocuğum olmuş olsaydı anne yarısı olabilirdim. Ama önce teyze olduğum için, hani yani ablam o çocuğa bakabilecek mi endişesini yaşayıp gecelerce kendi evimde uykusuz kaldım. Bakabilecek mi, yok aman boğazına bir şey takılırsa, boğulursa. Gecenin bir yarısı ablamı arayıp uyandırıyordum. Bak uyuma, çocuğa bak filan...*

On the other hand, devoting themselves to their children was seen as the way to become better mothers by the participants. Because they had not have children, they showed a tendency to devote themselves to their ‘imagined children’. In other words, they adopted a language where commitment to their imagined children was commonly observed. Gamze was thinking a child of her own would be the sole reason of her happiness. She gave utterance to the following sentences “I can grow up again with him; I can re-learn everything from the beginning. He makes me peaceful, god willing!” *(“Onunla yeniden büyüyebilirim, onunla yeniden her şeyi öğrenebilirim. Huzur verir diye düşünüyorum inşallah”).*

Merve was a 31 years old accountant who was interested in traveling, learning new languages, and meeting new people. She had been trying to conceive for 5 years. She had chromosomal aberrations meaning that she could get pregnant but ended up with miscarriages. She suffered from five miscarriages in five years. At the time of the interview, she was preparing another treatment demanding very expensive genetic tests. Merve was working so hard to save money for the tests. In addition, she was planning to continue working even harder if she could give a birth to a baby. I felt the exhaustion in her voice because of that marathon. However, she had never had (or given) a chance to stop. She gave the below answer when she was asked what a child could bring to her life.

> I believe I will regain my passion to work, because I'll work harder to prepare him a good future. Hmm, yeah that'll give me happiness, too. I'll live a much happier life. We'll have a more organized life. Now, we travel a lot. We'll have a domestic life then. A baby will contribute these to our life. There'll be a feeling of responsibility... I'll be much ambitious. (Exhales the air breathed) I will work for him.
>
> *Yine eski hırslarıma kavuşurum diye düşünüyorum. Çünkü ona iyi bir gelecek vermek için daha çok çalışırım. Ι tabii ki bana da mutluluk verir. Daha mutlu bir hayat yaşarım. Daha düzenli bir hayatımız olur. Biz sürekli geziyoruz. Belki o olunca ev hayatını yaşarız. Bunları katar. Yani sorumluluk duygusu olur. Daha hırslı olurum. (Derin bir nefes vererek) Onun için çalışırım.*

2.3.2. The Sense of Infertility: The Incomplete Woman (Who couldn't be a Self-sacrificing Mother)

The second theme, which is 'The sense of infertility: the incomplete woman (who couldn't be a self-sacrificing mother)' is built on the first theme, 'The sense of ideal woman: self-sacrificing mother'. The common answer given to the question "What is the meaning of infertility for you?" was a single word, *incompleteness*. For example, Narin defined infertility for her: "Incompleteness. It means that one part of you is lacking. And unfortunately, you cannot cover it with money or anything" (*"Eksiklik. Bir tarafınızın eksik olması demek. O*

eksikliği parayla pulla hiçbir şeyle dolduramıyorsunuz maalesef").
Incompleteness as the meaning of infertility was manifested due to the failure they had been experiencing in not being able to sacrifice themselves for a baby.

The lack of control over infertility was one of the aspects that underlie the sense of incompleteness. The participants failed to fulfill their desire to have children and they thought that they lack the power to change this situation. While not being able to control the infertility process, a feeling of helplessness was mostly appeared in their sentences. As Sezin says: "It means that... It is the rule of the world and life. Everybody will give birth, will get pregnant, and I will not be able to do anything about it" *("Hani bu demek ki... Dünyanın, hayatın kanunu bu yani... Herkes doğuracak, hamile kalacak ve benim elimden bir şey gelmeyecek").* On the other hand, Gamze put it: "I used to think that everything is in my power. Whatever I want happens, whenever I want… But, in the case of infertility, there is no such thing" (*"Her şeyin benim elimde olduğunu sanıyordum. Ben ne istersem olur, ne zaman istersem olur. Ama konu infertilite olunca öyle bir şey yokmuş").*

Merve defined how infertility changed her. Not being able to control one thing in her life, which was having a baby, affected her self-worth in a negative way. She had lost the sense of wholeness in her life and expressed it as follows: "Hmm... How I was before... I was so strong, indeed. So ambitious... I had got what I wanted until this time. I had been feeling so powerful, and helping other people. Now...It is as if I fell apart…" ("*Imm, ben nasıldım, çok güçlüydüm aslında. Çok hırslıydım. İstediklerimi, istediğim her şeyi şimdiye kadar hepsini elde edebildim. Kendimi çok güçlü hissediyordum, insanlara çok yardım ediyordum. E şu anda…Kolum kanadım kırılmış gibi…").*

Damla, a 25 years old woman who had been dealing with infertility for 4 years, was seen so shameful during the interview. She was a full-time baby-sitter to a baby girl who was calling Damla as "Mama". Damla was fired from her job a few days before the interview was held. She was missing that baby girl a lot

while reminding herself she was not hers. She was waiting for a baby to look after. She was in need of having some responsibilities to become an individual; but for her, responsibilities should be felt to a baby. In other words, she believed she would be able to develop a sense of self only if she had been taking care of a baby. The below extract is from her.

> Having a baby will change me in many ways. Now I like people, but a baby will connect me more... What I am saying is that just seeing the double lines will make me happy. I don't know…I will take care of myself carefully. I am headed for a fall right now; I am not doing any make-up or such... In other case, I will say to myself that "I am a mother now. I should take good care of myself". I am an individual; I don't feel like one at the moment. I do not have any responsibilities; I mean there is no child running after me.
>
> *Çok yönde değiştirecek beni. Şu an insanları seviyorum ama daha da çok beni bağlayacak… Ben diyorum ki, çift çizgiyi bile görmem beni mutlu edecek. Hani böyle ne bileyim, kendime özenle bakacağım. Şu an saldım kendimi, hani makyajdır şeydir hiç yapmıyorum. Öteki türlü olduğu zaman "Ben bir anneyim, kendime bakmam gerekiyor" diyeceğim. Ben bir bireyim, şu an bir birey olduğumu anlayamıyorum. Sorumluluğum yok, peşimde koşan bir çocuk yok.*

Ayşe was feeling the same and she could not understand why all of this was happening to her. She did not have the power to change anything and that made her 'incompetent' as different from other women who hold the power and could achieve the motherhood. She expressed her feelings related to her infertility as follows.

> (Laughingly) (Silence) As a woman... It is very... Really, it is a very bad thing… I feel like infertile, I mean useless, incomplete. When infertility is pronounced... I say why other women are not like this. Why me? I feel as if something like not capable to give birth, infertile, good for nothing. I mean (silence)… I feel it that way.
>
> *(Gülüyor) (Sessizlik) Kadın olarak… Çok, çok kötü bir şey ya… Kötü bir şey gerçekten. Yani böyle kendimi kısır gibi, işe yaramaz, eksik hissediyorum. İnfertil dendiği zaman… Diyorum*

ki yani neden diğer kadınlar böyle değil de ben böyleyim. Neden ben? Kendimi böyle çocuk yapamayan, kısır, beceriksiz bir şey hissediyorum. Açıkçası (sessizlik) öyle hissediyorum.

Along with taking infertility as being incomplete, they tended to identify themselves with individuals who they found incomplete in different ways. Interestingly, they intended they were feeling better near the incomplete (or more incomplete). Narin was working with children with disabilities and described her infertility through those kids.

> I am with kids all day long. Plus, I am with kids who are special. Taking care of them, is good for my psychological health. They have incompleteness of their own and I have mine. We are, in this manner, completing each other with special kids. They contribute to my well-being. And, I want to do something for their progress. That makes me happy.

> *Çocuklarla birlikteyim bütün gün, özel çocuklarla birlikteyim bir de. Onlarla ilgilenmek aslında benim psikolojime çok iyi geliyor, çocuklarla ilgilenmek. Onların da kendine göre eksiği var, benim de kendime göre eksiğim var. Biz birbirimizi tamamlıyoruz özel çocuklarla bu anlamda. Onlar benim psikolojime katkıda bulunuyor. Ben de onların ilerlemesi için bir şeyler yapmak istiyorum. Bu beni mutlu ediyor.*

A couple of interviews coincided before or after the Mother's day in May. The negative effects of the sense of infertility as incompleteness tended to increase in those days. Advertisements, photos of friends with their children on social media, shopping centers reminded them of the incompleteness more. Sezin told about her feelings regarding Mother's day in the following excerpt. She seemed to experience her anger through identifying herself with children who do not have mothers. I also felt her feelings of downtrodden.

> How I feel deep inside... In the simplest term, I did not want to watch advertisements... Did not want to watch TV on Mother's Day. I mean the advertisements for two days long, Mother's day this, Mother's day that... Mother's Day! I mean, I am waiting for a little bit of understanding. I am not saying it only for myself or people without kids. For example, when I think about it, I get angry by thinking of children in orphanages. Okay... I don't have

> children, but they don't have mothers. There is no figure around to call as mom. To whom do they buy gifts? To whom do they wish happy Mother's Day?
>
> *Ya içimiz nasıl, mesela en basiti ben anneler gününde ben reklamları, televizyon izlemekistemedim. Yani 2 gün anneler günü reklamı, anneler günü şöyle, anneler günü böyle, yani birazcık anlayış bekliyorum. Hani ben bunu tek kendi adıma söylemiyorum, sadece çocuğu olmayanlar için demiyorum. Mesela, ben bunu düşünürken yetimhanedeki çocukları düşünerek kızıyorum. Hani tamam, benim çocuğum yok ama, yetimhanedekilerin de anneleri yok. Anne diyecek bir vasıf yok ortada. Hani onlar kime hediye alıp götürecek? Onlar kimin anneler gününü kutlayacak?*

Participants seem to feel downtrodden especially when they get into interaction with other mothers. Women who are mothers led the participants live the incompleteness more deeply. In other words, mothers make them actually realize their incompleteness. For instance, Elif defined the meaning of infertility as incompleteness, but in a different way. The anger could be felt in her voice while telling about her experiences with her friends. She was clearly feeling as an outsider. In her situation, staying outside led her to create a meaning of infertility as incompleteness.

> It (infertility) is incompleteness... Hmm, but not because of giving birth, not being able to give birth… The places we go, families with kids... I mean our marriage... Our friends who got married in the same times with us... Our married friends... Most of them have two... They have at least one kid. When we get together, they deal with their kids. We have a group including families and we meet up. We go to different places, dinners and so... While they are taking care of their kids... Even my words hang in the air...I mean, when I begin to talk about something, that kid comes, and says 'mommy'. Or he wakes up crying... But my conversation is interrupted. Two of my friends… Both of them are with kids. People with kids talk about fevers, diapers, baby food, how to make soup... These are not the things I talk about. They do not ask me anyway, you know "I cook this soup, do you?" I am incomplete in this manner. It doesn't mean anything else, I am just incomplete.

Eksiklik. Ama doğumdan yana değil. Doğuramamaktan ötürü değil. Yani gittiğimiz ortamlarda çocuklu… Yani mesela bizim evlendiğimiz, aynı zamanda evlendiğimiz arkadaşlarımız... Evli olan arkadaşlarımız... Çoğunun iki tane… Çoğunun en azından bir tane çocuğu var. Gittiğim ortamlarda onlar çocuklarıyla ilgileniyor. Biz aile olarak ortamlar oluşturuyoruz ve görüşüyoruz. Bir yerlere gidiyoruz, yemekler vs. Hani onlar çocuklarıyla ilgilenirken aslında benim sohbetim bile havada kalıyor. Yani tam bir mevzu üzerine konuşurken mesela o çocuk geliyor, 'anne' diyor. Ya da uykudan uyanıyor, ağlıyor. Ama benim sohbetim bölünüyor. İki arkadaş, ikisi de çocuklu. Çocuklu insanların konuştuğu mevzular işte ateşlendi, işte "şu bezi kullanıyorum, şu mamayı veriyorum, şöyle çorba yapıyorum" bunlarken, benim konuşacağım şey bunlar değil. Zaten onlar da kaldırıp bana şunu demiyor "Aa bak ben şu çorbayı yapıyorum sen de yapıyor musun?" çünkü benim yok. Hani, eksiklik bu yönde eksiklik. Onun dışında başka bir şey ifade etmiyor, sadece eksiğim.

Sezin was taking the attitudes of mothers as more hostile. She expressed her anger towards mothers more directly. She raised her voice while uttering the below sentences.

For example, when someone gets pregnant from my family or friends…I used to get very angry when they told me about it. I was asking to my husband why they do call and tell me about it; don't they know that I don't have a child?! Why do they let me know?

Mesela, ailemden ya da arkadaşlarımdan biri hamile kaldığı zaman... Bana söyledikleri zaman ben çok kızıyordum. Yani eşime diyordum ki, neden arayıp bana söylüyorlar. Hani bilmiyorlar mı benim çocuğum yok?! Niye haber veriyorlar?

She was thinking mothers do it on purpose, to make them suffer: "When you enter a new environment, directly to you: Do you have a child? They hit you on… I mean they speak of, they ask you about your missing part". *(Bir ortama girdiğin an direk sana; çocuğun var mı? Hani direk eksik yanından seni vuruyor, hani direk eksik yanından söylüyorlar hani soruyorlar...").*

On the other side, Burcu was feeling her anger towards her friends in a more covert way. She was the most hopeful participant; she was always smiling during the interview. I felt that she wanted to be seen as coping very well with her infertility. Nevertheless, she told about 'suppressed feelings of motherhood' while speaking of how she enjoyed spending time with her friends and their children. When she was asked to give more details on the 'suppressed feelings of motherhood', she explained it and wanted to light a cigarette afterwards.

> Well...By saying suppressed feelings of motherhood, I mean the emotions that I suppress, since I can't have a chance to live them. At the end of the day, I did not do mothering before. I did not experience it. I think it that way anyhow; it should be different to hug your own child since I don't have one… My friends' kids, they are like... They are the perfectly suited to me. And all of my friends, they all have kids (laugh lightly). Sorry, but I will smoke…

> *Ya bastırılmış annelik duyguları yaşayamadığım için bastırdığım duygular oluyor. Sonuçta annelik daha önce hiç yapmadım. Hiç yaşamadım. Öyle olduğunu düşünüyorum herhalde. Öyle insanın kendi çocuğuna sarılması farklı bir şeydir ama olmadığı için de arkadaşlarımın çocukları gerçekten bu anlamda şeyler... Benim için biçilmiş kaftanlar. Ve hepsinin de var çocuğu (hafif gülerek). Sigara içeceğim kusura bakmayın...*

Aside from the feelings of shame, downtrodden and anger, the participants commonly shared the feelings of guilt. These emotions seemed to coexist and contribute to the interpretation of infertility as incompleteness. Ayşe expressed her feelings of guilt by asking, "What did I do wrong that I suffer for now?" *("Hangi yanlışımın acısını çekiyorum ben şimdi?).* According to her, her husband was so supportive. However, the way she was telling about her husband showing his support carries a meaning of blaming. Infertility was interpreted as a penalty by them, but they couldn't decide whose penalty it was.

> Indeed, I was even thinking about a divorce back then. I was going to say let's get divorced. I was saying "Do not stay childless because of me". He said 'How do you know, maybe it

> is because of me. Maybe we bear the penalty of mine. How do you know?' So it goes…
>
> *Ben o zamanlar boşanmayı bile düşünüyordum aslında. Boşanalım diyecektim. Benim yüzümden sen de çocuksuz kalma diyordum. O da 'nerden biliyorsun, belki benim yüzümdendir. Belki benim cezamı çekiyoruzdur' diyor. Nerden biliyorsun diyor. İşte öyle…*

Elif was telling about the pressure she felt from her 3-years old nephew. The answer she gave to him on why she was not pregnant after the IVF trial was striking. She appraised herself as not a beloved person and deserved to be abandoned.

> He is the kid, the person who put the most pressure on me. In our second IVF trial, he wanted to come with us to the transfer. His mama told him about the transfer operation, she told him that doctors will put baby to his aunt's tummy and we will get back home with them. I got out from the transfer; he ran to me and hugged my legs. He asked where the babies were (excitedly). I said they are in my tummy. Then, I had got the negative result and a long time passed on it. He remembered, came and asked me where the babies were. I told him they are not there anymore. Hmm how could I explain it to a three-year-old? I said, they did not love me and they left...
>
> *Bana en büyük psikolojik baskıyı yapan çocuk o. Kişi o. İkinci tüp bebekte transfere gittiğimiz zaman gelmek istedi. Annesi ona şey olarak anlattı; teyzenin karnına bebek koyacaklar biz onunla geri döneceğiz diye. Ben transfer işleminden çıktım, bu hemen koştu bacaklarıma sarıldı, 'teyze bebekler nerde' (heyecanla) diye soruyor. Karnımda dedim. Sonra ben negatif sonucu almışım, üzerinden geçmiş baya bunun aklına geldi 'teyze bebekler nerde' dedi. Teyzecim bebekler yok artık dedim. Ee yani üç yaşındaki çocuğa da onu nasıl açıklayabilirsin ki olmadığını? İşte beni sevmediler ve gittiler...*

2.3.3. Efforts on Meaning Making

The meaning of incompleteness given to infertility accompanies a lot of emotions which were explained under the previous super-ordinate theme. 'Efforts on meaning making' was the third theme that was reflecting how the

participants interpret their situation, and by this way, cope with those emotions. As they were able to create some meanings of what they had been experiencing, it became easier to cope with the negative effects of infertility. On the other hand, when there was no effort available to make meaning, the intense negative feelings were more prevalent. For example, suppression and avoidance were commonly seen among the participants, and so, they were put under *'running from infertility*' sub-ordinate theme which can be interpreted as a no meaning making or pre-meaning making phase.

Burcu, as mentioned before, seemed so optimistic and peaceful. Nevertheless, I felt that she was actually trying to control her feelings. She was reluctant talking about infertility, its meaning or related emotions. Interestingly, she said she was avoiding infertility not only for herself but also for people she was close to. By not letting herself to cry, she believed she was protecting both herself and others. In fact, here a self-sacrificing pattern manifests itself again. The below extract is from her.

> We, Turkish women, try to stay resilient no matter what. I think it is always as it is. I do not only think of myself. I think of people in my close circle. Yes, I might feel sorry but did I cry? No, I did not even when I was alone…
>
> *Biz Türk kadınları her zaman daha metanetli olmaya çalışıyoruz. Her zaman için bu böyle diye düşünüyorum. Sadece kendimi düşünmüyorum, çevremdekileri de düşünüyorum. Evet, üzüldüm ama ağladım mı? Tekken bile ağlamadım herhalde.*

Running away from the reality of infertility and related emotions accompanies more negative feelings. For example, Narin was so aware of her vicious circle that began with suppression of feelings linked to infertility, and ended up with questioning the situation in tears. She had been trying to find answers to the question of "Why me?" However, as she could not find any answer or she could not find a meaning of what she had been going through (i.e., infertility process), the cycle ended up with a crying jag that was triggered repeatedly.

> Now, it works like this... For a few months, I try to look strong. I try to suppress superfluously, do not reflect anything to anyone. But it becomes like, these suppressed emotions wear you out after a certain point. They all come out. They turn to a crying jag. You ask yourself "Why me?" and you start all over again.
>
> *Şimdi şöyle oluyor, birkaç ay güçlü görünmeye çalışıyorum, bol bol bastırmaya çalışıyorum, insanlara yansıtmamaya çalışıyorum. Fakat öyle bir hal alıyor ki, bu bastırılan duygular bir süre sonra tekrar seni yıpratıyor. Tekrar gün yüzüne çıkıyor. Bir ağlama krizine dönüşüyor. "Neden ben?" diyorsunuz, sonra tekrar başa dönüyorsunuz.*

Elif was feeling similar. I felt she became aware of suppressed emotions during the interview. She was not seen so strong at the end of the interview as compared to the beginning. Sharing her emotions might have helped her to realize how she was suppressing her feelings. She gave the below answer when she was asked in what ways the treatments affected her.

> Oh... There is nothing like emotionally preparing myself for the IVF treatment or that I will have breakdown... I do not have any breakdowns so that there is no need to recover. All of the negative results, the things I have heard from doctors... I don't know whether this is going to turn into a psychological disease in the future but I always suppress. It did not happen; I didn't live such a thing. It is going to be alright. Now I might get a negative but it will turn to positive… Well I cover up the bad with the good…
>
> *Tüp bebek tedavisi için kendimi duygusal anlamda hazırlayacağım ya da manevi anlamda yıkılacağım…Ya yıkımım yok ki kurtulayım yani. Bir yıkım yaşamıyorum çünkü. Negatif sonuçların tamamı, doktordan duyduklarımın tamamı hani belki bilmiyorum bu bir psikolojik hastalığa mı dönüşecek ilerde onu da bilemiyorum ama hep bastırıyorum. Böyle bir şey olmadı, ben böyle bir şey yaşamadım. Bunlar hep düzelecek. Ben negatif bir sonuç almış olabilirim ama bu pozitife dönecek… Hep kötüyü iyiyle kapatıyorum…*

Most of the participants admitted that they actually do not want to talk about anything related to infertility. Thus, they seemed to take the risk of a social isolation rather than facing their infertility. Merve was one of them who tended

to use avoidance for not being reminded of her infertility. However, the shaking voice of her made me think how it was difficult for her to avoid.

> I do not talk. I get away from people asking questions. I close my doors to people who talk about this. I mean... My relationships are gradually getting broken. As I said, in my neighborhood, I try not to attend meetings. Now the holiday is coming. I think I will not attend any family meetings. I run away from them. I mean... I run away from everyone. I prefer to go far away trips instead (with a shaky voice).
>
> *Konuşmuyorum. Soru soran herkesten uzaklaşıyorum. Bu konuyla ilgili konuşan herkese kapımı kapatıyorum. Yani çevredeki ilişkiler de yavaş yavaş kopuyor. Kendi çevremde de işte dediğim gibi bir ortama girmemeye çalışıyorum. Şimdi bayram yaklaşıyor. Bayramda da pek aile ortamına girmeyeceğim diye düşünüyorum. Kaçıyorum onlardan. Herkesten kaçıyorum. Daha çok işte tatile gitmeyi tercih ediyorum (Sesi titriyor).*

Even a simple question like 'How are you?' might create a negative effect on participants. The below extract is from Sezin. She was complaining about people who got curious about how she was doing. Actually, at some point during the interview, I felt she was not comfortable answering my questions. On the other hand, she gave very detailed answers to the interview questions. I understood that Sezin wanted to share her story and needed to be listened without an interruption. Any comment regarding her general condition, emotional state or even an advice would be enough to turn her off.

> Even talking is disturbing. I mean, talking about these... Not only with you, do not get me wrong... The people, who knew what I have been through, they now come to for... You know, to ask 'How are you? Are you alright?' I am alright. Or rather, I am like you see. How do you see me? Do you see me good? Do you see me bad? Even talking about all of these hurts me...
>
> *Konuşmak bile rahatsız ediyor beni, yani bunları konuşmak bile. Yani yalnızca sizinle değil yanlış anlamayın. Benim o zamanlar yaşadığımı bilenler şimdi bana gelip şey soruyor; 'Nasılsın? İyi misin'? diyor mesela. İyiyim, gördüğün gibiyim daha doğrusu.*

Nasıl görüyorsun? İyi mi görüyorsun, kötü mü görüyorsun? Ve bunları konuşmak bile zarar veriyor…

They do not always run away from the reality of infertility and related emotions. When the times they face it, a common coping mechanism, religious coping, emerges.They tended to believe everything, including the good and the bad, comes from God. In this regard, they explained the meaning of infertility process as a test from God. Gamze was looking for a good cause in not having a baby. At the same time, she believed that she would have a baby, sooner or later.

Hmm... Actually, there are people who experiencemany problems when they have one (a child). There are people with kids, living very big problems. It'll happen when the time comes (with a shaky voice). Infertility is my test (while crying). God is definitely the one who will give it. It happens when the time comes or that's what I hope… So, yeah... Hope for the best.

Haa... Hani olduğunda çok büyük problemler yaşayan insanlar var. Çocuğu olup çok çok sorunlu olan insanlar var. Vakti, saati vardır diye düşünüyorum (sesi titriyor). Benim sınavım diye düşünüyorum (ağlıyor). Verecek olan tabi ki de Allah. Ya vakti, saati var, ya da ben öyle ümit ediyorum. Öyle. Yani hayrı o.

Elif was relieving herself by attributing infertility to fate. Instead of dealing with infertility itself, she was trying to handle the effects of infertility which she comprehended as a test from God. She was experiencing the negative emotional effects of infertility more because of her friends' and relatives' negative attitudes. She could not get the understanding she needed but she interpreted it as of their test this time.

By the help of infertility, indeed, I have understood something very well. We do not obtain; it is endowed to us. If it is a reward, I mean it becomes something endowed to us. Actually, I mean... The things presented to us may sometimes turn to tests. I mean… This was my test, but the ways people around approach to me were their test.

Bu kısırlık sebebiyle benim çok iyi algıladığım bir şey var aslında biz elde etmiyoruz, bize sunuluyor. Eğer bu bir ödülse,

bu mükafatsa bize sunulan bir şey. Aslında sunulan şeyler bazen de sınava dönüşen olaylar. Yani bu benim sınavımdı ama ben bunu yaşarken, çevremin bana nasıl yaklaştığı da onların sınavıdır.

Ayşe was also seeing infertility as a test. However, she believed that since it was givenby God, infertility was something that she had to suffer. The below extract is from her.

When I ask to myself 'Why me?'... I answer that may be this is my test. I mean, I am saying this is my test (Silence-crying). It means that this is your test I say to myself, it means you are going to suffer and you have to.

Neden ben dediğim zaman… Belki bu benim imtihanım diyorum. İmtihanım diyorum yani (Sessizlik-ağlıyor). Demek ki bu senin imtihanın diyorum kendi kendime, demek ki çekeceğin var, çekeceksin diyorum.

Similarly, Merve was restraining herself by accepting infertility as a test. Because she could not get angry with God, she was directing her anger towards doctors who were not able to find a cure to her problem.

Well, I think like it can happen to anyone. I think I am being tested by this way. So, I have never, like "Why me?" I think that would be a rebellion. I am trying not to be rebellious. I just think why there is no solution. I mean, why no solution with all these developments. I get angry with people who cannot find any solution…

Ya her insanın başına gelebilir diye düşünüyorum. Yani ben bu şekilde sınanıyorum diye düşünüyorum. Yani "Neden ben?" diye hiç… Bu isyan diye düşünüyorum. İsyan etmemeye çalışıyorum. Sadece neden bir çözümü yok diye düşünüyorum. Ya bu kadar gelişmişliğin içerisinde bu durumun neden çözümü yok diye düşünüyorum. Kızıyorum yani buna çözüm bulamayanlara…

While they believed they are being tested with infertility, it became a cause for gratitude. By this way, infertility was carrying a meaning of appreciation for whatever good they had in their lives. The participants expressed that they cope better by the help of gratitude. It helped them to relieve the emotional pain.

Gamze was telling about her former emotional state which she remembered as a lot worse. She said she was feeling much better at the time of the interview. When she was asked how such a change could be possible, she gave the below explanation.

> Well... I don't know exactly but by being grateful to God, I guess. The biggest thing, from God... I mean, by consenting to whatever he gives and he doesn't. If he does not give it, by looking for the good in it. By praying… I think all these helped me...
>
> *Onu ben de bilmiyorum ama sanırım Allah'a şükretmek. En büyük şeyi, Allah'tan, yani verdiğine de vermediğine de razı olmak. Vermediğinde de bir hayır aramak. Dua. Bunlar sayesinde olduğunu düşünüyorum.*

Aside from looking for the good in bad, Damla was feeling so special, since God tested her with such a hardship. She even aggrandized her condition by comparing herself with the Prophet. In this manner, she could better cope with infertility and related emotions. The below is extract is from her.

> One of my friends asked me how I could cope with it. I mean, I have neither a mom nor a dad, I have siblings and longing for a child... God ordained it to me. Just like testing our Prophet, he is testing us. Not everyone can handle it, I said... I am not rising up against God. I am grateful. He could have given something different...
>
> *Bir arkadaşım sordu, nasıl baş ediyorsun diye. Hani hem anne yok, hem baba yok, hem kardeşlerin var, hem evlat hasreti... Allah bana bunu nasip etti. Rabbim peygamberi sınadığı gibi bizi de sınıyor, bunu herkes yapamaz, dedim. Allah'a isyan koşmuyorum, Allah'a şükürler olsun. Rabbim başka şey de verebilir…*

Participants were feeling gratitude mostly for being healthy (except for infertility). Along with it, they were feeling gratitude when their husband was indulgent and attitudes of family, friends and relatives were nonjudgmental.

Burcu was one of those participants who were grateful for not being judged because of her infertility.

> The thoughts that helped me feel relieved... I love to be grateful. I am grateful for being healthy. I am grateful, my life continues (while clearing her throat). I have a house that I can live in, I have a supporting husband. Now, there is nobody around constantly asking why I do not have a kid.
>
> *Beni rahatlatan düşünceler neler… Ben şükretmeyi çok seviyorum. Çok şükür sağlıklıyım. Çok şükür hayatım devam ediyor (boğazını temizleyerek). Yaşayabildiğim bir ev var, destek olan eşim var. Iıu şimdi sürekli çevremde niye çocuğun yok diye soran insanlar yok.*

2.3.4. Overcompensation of Incompleteness: Self-sacrificing 'Mother-to-be'

The fourth super-ordinate theme emerged from the qualitative analysis was 'Overcompensation of incompleteness: self-sacrificing 'mother-to-be'. While interpreting infertility as incompleteness, especially for not being able to sacrifice themselves for their children, these women exert themselves to get conceived. They were not able to live their life for their children; they were living it for having one instead. In other words, they were not able to sacrifice themselves for their children; they were sacrificing themselves to have one. In order to do that, they believed that they have to be strong. Thus, an infinite search for power was taken place in their lives. Elif, who had serious uterus operations, stayed in hospital for more than a month, tried IVF treatments three times and getting prepared for the fourth, conspicuously explained that search for power.

> I think like... As if you fall from 20th floor of a building, but not die. While feeling the pain, you stand up again. I used to see it that way. Sometimes I see myself like an undefeated warrior, because I tried IVF three times in a year. Like... As it did not come out positive, I tried over and over and over again. I had tried until I got into a terrible depression... Yeah that's how I see it. I fall from 20th floor but I do not die, I live with that pain

(while taking a deep breath) and despite all pain that I know I will feel, I climb the stairs again and I fall down again.

Ben mesela şey düşünüyorum. Atıyorum, 20. kattan aşağı düşüyorsunuz ama ölmüyorsunuz. O acıyla tekrar ayağa kalkıyorsunuz. Öyle görüyordum. Bazen kendimi böyle yenilmez bir savaşçı olarak görüyorum. Çünkü ben bir senede 3 kere tüp bebek denedim. Hani, olmadıkça, olumsuz sonuç aldıkça bir daha, bir daha, bir daha; ta ki depresyona girene kadar, yani ağır depresyon geçirene kadar... Ben öyle düşünüyorum. Hani 20. kattan atlıyorum ama ölmüyorum, o acıyla yaşıyorum (derin nefes alıyor) ve o acıyı çekeceğimi bile bile bir daha yukarı çıkıyorum, bir daha düşüyorum.

Once they got into treatment process, it became irreversible. These women tended to direct all of their emotional and material resources to the treatments. They had a tendency to wait for it, work for it, and plan all their lives according to it. For Narin, stopping treatments was never a choice. Even after the negative trials, she did not give a break. She was telling about her crying sessions in the restroom of the school she worked in. I felt the burn-out in Narin's tone of voice. The below extract is from her.

I had to go back to work and I worked like crazy but just to make money... So, as I said, I could start over for the second treatment. You know, it is not possible to live on one salary. We have other needs; actually, we have many other needs, not only treatments. When I meet the need of the treatments, my husband meets the need of our house. So, I said to myself, for my treatments, I have to begin to work, I have to stay strong.

İşe başladım, deli gibi çalışıyorum ama para kazanma amacıyla çalışıyorum çünkü para kazanırsam dediğim gibi ikinci tedaviyi başlatabileceğim. Çünkü biliyorsunuz evde tek bir maaşla zor oluyor. Evin ihtiyaçları, birçok ihtiyacımız var sadece tedavi değil de. Ben tedavi ihtiyaçlarını karşılarken eşim evin ihtiyaçlarını karşılıyor. Ben de bu amaçla tedavim için işe başlamalıyım, ayakta durmalıyım mantığı yürüttüm kendi içimde.

They were in need of a recovery after the negative trials; not exactly for the sake of their physical and psychological health, but to be able to try another treatment. Elif put it as follows: "My treatments, operations, IVF, all of these created devastating effects on us by right; that we are still trying to overcome so we can let another treatment begin", ("*Olduğum tedavi süreci, ameliyatlarım, tüp bebek, bunların hepsi haklı olarak da çok büyük bir yıkım bıraktı üzerimizde. Şu an hala onların toparlamasıyla uğraşıyoruz ki tekrardan tedaviye kalkışabilelim").*

Along with directing their emotional and material resources to the treatments, the participants tended to trivialize everything except for having a child. Thus, infertility had become the sole thing in their life. When she was telling about the effects of infertility in her life, Gamze gave the following response.

> It (infertility) was, indeed, the focus of my life. It still is, but I am trying to cover it up. What has it changed…I directly focused on it. There was nothing else in my life. Only thinking about it... I mean, in the center of everything... At the center of… I can say I don't get sad about other people's sadnesses. It may sound selfish but I could not get too much worry about things other than myself.
>
> *Aslında hayatımın odak noktası olmuştu o. Hala da öyle de ben üzerini kapatmaya çalışıyorum. Neler değiştirdi… Direk ona odaklandım. Başka hiçbir şey olmadı benim hayatımda. Sırf bunu düşünmek… Hayatın merkezinde o oldu yani. Ortasında... Başka hiç kimsenin üzüntülerine bile üzülmüyordum diyebilirim. Biraz bencillik olacak ama çok çok her şeye üzülemiyordum kendimden başka.*

The work life, social life, and even the psychological health of these women seemed to fall behind their infertility and related issues, especially IVF treatments. Merve was one of the participants who left her career plans aside and gave all of her attention to the infertility treatments. She was taking the risk of losing her psychological health by consecutive IVF cycles.

> You know… I was doing my job gladly. Now, my job... I do not want to work anymore. I mean, I don't want to do whatever I used to do. We begin to have problems with my husband. My

> husband told me about giving a break to treatments. But, I wanted to do... I told him let's try once more. He thinks like if we try one more time and fail again, I cannot take it. I mean, that's why he wants to give a break. It's not about the money. It can be fixed; we can borrow in some way and try once more. But if we see a negative again, I may not pull myself together, that's what he told me. So, he is right. Actually, when I think about it, fair enough… But I... I speed it up, can't wait. I want it to happen right away.
>
> *Yani işimi çok severek yapıyordum. Artık işten, çalışmak istemiyorum. Yani işte yapmak istediğim hiçbir şeyi yapmak istemiyorum. Eşimle problemlerimiz olmaya başladı. Eşim biraz ara vermek istediğini söyledi. Ben bir anca önce yap… Bir kez daha deneyelim dedim. Eşim de bir kez daha denersek ve olmazsa sen bu durumu kaldıramazsın diye… Aslında ara vermek istiyor eşim. Yani maddiyattan değil. Bir şekilde borç alırız bir kez daha deneriz ama, olmazsa olumsuzu yaşarsak sen kaldıramazsın, önce senin kafayı toparlaman lazım dedi. E haklı. Aslında mantıklı, düşündüğüm zaman. Doğru düşünüyor. Ama ben… Aceleci davranıyorum. Hani sabredemiyorum. Bir an önce olsun bitsin.*

To initiate a new treatment seemed to be the major area of control for these women. In this process, they could determine about almost nothing but their doctor and the time of the new treatment. Making a new start to the treatment was increasing their hope of getting pregnant but also triggering a cycle of control and no control, and so hope and disappointment. Narin expressed this cycle as follows.

> I wish I could give a shape to this process by myself. But, unfortunately, I don't have any power to do it. Nobody in this process does… The only thing one can do is trying. Trying repeatedly and accomplishing a result. One need to lean over backwards, that's all. That's all I understand and observe...
>
> *İsterdim ki bu süreci de ben kendi ellerimle şekillendirebileyim. Ama maalesef ne yazık ki şekillendirecek bir gücüm yok. Kimsenin yok gerçi bu sürece giren. Sadece deneyip, defalarca deneyip sonuç almaya çalışacaksınız. Ortaya bütün varınızı yoğunuzu koyacaksınız, hepsi bu. Anladığım ve gözlemlediğim…*

Damla was also waiting for the new treatment. She was describing the waiting period as a meaningless state. Meaning could be found only if she gave a start to a new treatment.

> Sometimes, I become happy even when I go to the doctor's office and make a new start. Now, we don't go the doctor's. I have no idea how to proceed, what we will do... But when I take a step to the doctor's, when I begin to a new challenge... Even that's enough to make me happy.
>
> *Yeri geliyor, doktora gittiğim zaman, bir başlangıç yaptığım zaman bile mutlu oluyorum. Mesela şu an doktora gitmiyoruz, nasıl olacak nasıl edecek hiç bilmiyorum. Ama bir doktora adım attığım zaman, bir mücadeleye başladığım zaman…O bile beni mutlu etmeye yetiyor.*

The possible disappointment was waiting at the end of the treatment processes. Thus, the feeling of control appeared to stay for a very short period of time and no control phase had taken the stance. Elif told about the effects of treatments in the below extract.

> Well... IVF process is not that hard. I mean, it was not a difficult process for me. Getting ready to it psychologically, that was not that hard, too. But, the negative results (with a shaky voice), it was terrible. I did not actually cry my eyes out... But all of my dreams, hopes, all of my prayers, as if they were for nothing (breathing out)... I prayed for nothing, I dreamed for nothing…
>
> *Yani, o kadar zor bir işlem değil tüp bebek. Yani beni o kadar zorlayan bir işlem olmadı. Psikolojik olarak da hazırlanması çok güç değil. Ama o negatif sonucu almak (sesi titriyor) çok kötüydü. Yani hüngür hüngür ağlamadım açıkçası. Ama onca kurduğun hayaller, onca ümidin, ettiğin duaların tamamı, sanki böyle boşaymış yani (nefesini vererek). Ben boşu boşuna dua ettim, ben boşu boşuna hayal kurdum…*

Finally, Sezin tried IVF for 10 times and stated that she could try 10 more times although she accepted the very overwhelming effects of the negative results. Each trial gave her hope, but her expectancies about having a baby appeared to be diminished in total.

> I had many negative things, results, which I mean in this IVF process. You see, I believe it will stay as a dream. Well, I had dreamed a lot. I went to each treatment with a dream. Now, I think like it will stay as it is. I guess like... You know…If it happens, it would be a miracle.
>
> *O kadar çok olumsuz şey aldım ki bu sonuç, yani tüp bebek süresince, hani bu hayalde kalacağına inanıyorum ya, hani ben çok hayal kurdum. Her tüp bebeğimde bir hayalle gittim, hani düşünüyorum ama bu da herhalde hayal kalacak gibi geliyor. Hani olsa mucize olur herhalde diyorum.*

To conclude, the phenomenological analysis revealed four superordinate themes with their sub-ordinates explaining the meaning and meaning making process of infertility for women suffering from infertility. The themes presented a story that began with the participants' desire to reach the ideal woman in their minds. The story continued with the interpretation of infertility as incompleteness due to the failure to achieve 'the ideal'. Efforts on meaning making, and finally, overcompansation of incompleteness were the completing components of the story ended with a recurrent cycle of hope and dissapointment.

2.4. Discussion

The present study aimed to understand the meaning and meaning making process in case of infertility among Turkish women suffering from infertility. Although there exist studies examining the infertility experience (e.g., Benasutti, 2003; Boz & Okumuş, 2017; Daniluk, 2001), there is a gap in the literature concerning research focusing specifically on the infertility meaning and meaning making among women with infertility. With its focus on meaning and meaning making of infertility, the semi-structured interviews conducted with 8 women suffering from primary infertility revealed four superordinate themes including (1) the sense of ideal woman: self-sacrificing mother, (2) the sense of infertility: the incomplete woman (who couldn't be a self-sacrificing mother), (3) efforts on meaning making, and finally, (4) overcompensation of incompleteness: self-sacrificing 'mother-to-be'.

2.4.1. The Sense of Ideal Woman: Self-sacrificing Mother

The first theme emerged in the current qualitative study was *the sense of ideal woman: self-sacrificing mother*. The women in this study presented a perspective in which they identified womanhood as equal to motherhood. The qualitative literature provided similar findings indicating the women's approach to womanhood as achieving the motherhood (e.g., Ceballo, Graham, & Hart, 2015; Letherby, 1999). While there are no such clear meanings of fatherhood for men, and men are rarely defined by their role as a father, women's primary identity is often 'a mother' (Purewal & van der Akker, 2009). Therefore, the ideal woman in most people's (and so women's) minds is a mother. Interestingly, in the current study, it was found that infertile women not only idealize mothers, but also aggrandize mothers who sacrificed themselves for their children. The concept of self-sacrificing mother coincides with Hays' (1996) intensive mothering ideology, which has been seen as the most common mothering ideology among various cultures. Intensive mothering refers to "a child-centered, expert-guided, emotionally absorbing, labor-intensive, financially expensive ideology" (p. 46), in which mothers are widely in charge of the caring of the sacred child whose needs always precedes over their mothers' individual needs; as one of our participants stated "I want to forget myself while taking care of my babies".

Similarly, in Turkish culture, motherhood has been represented as a blessed or holy, superhuman state (Duman, 2006). In accordance with this, 'good mothering' or 'the good mother' became a widely accepted concept in which mothers were described as raising 'successful' children without problems in relational, social, psychological, or achievement related manners (Sarı & Gençöz, 2015). Since women in this study did not have children, and thus, they did not have a chance to 'reach' the ideal women who sacrifice themselves for their children, they reflected their idealization by sublimating a life with a child. Furthermore, they often adopted expressions in which they devoted themselves to their imagined child. By comparing themselves with mothers, they had created

expectations for themselves to become better mothers. Accordingly, they showed a tendency to blame mothers who were not giving enough. This tendency of the participants is consistent with the literature suggesting that the mothers who positioned themselves away from unrealistic mothering standards became more open to blaming by others (Thurer, 1995). Similarly, women in the workforce, and thus, 'less devoted' to their children, were more confronted with the blaming attitudes of others (Hays, 2003). In this condition, the present participants appeared as 'others' who blame mothers for being 'less devoted' or 'less self-sacrificing'. They believed that they would become better mothers. In other words, they believed they deserved to become mothers.

2.4.2. The Sense of Infertility: The Incomplete Woman (Who couldn't be a Self-sacrificing Mother)

The second theme emerged in the phenomenological analysis was *the sense of infertility: the incomplete woman (who could not be a self-sacrificing mother)*. In the present study, the most commonly articulated meaning given to infertility was incompleteness. This meaning is parallel with the findings of the qualitative literature (e.g., Todorova & Kotzeva, 2006). Both women and society in general expect women to make a role transition first to wives and then to mothers (Busfield, 1987 as cited in Earle & Letherby, 2007). When this expectation of society cannot be satisfied by women, women begin to attribute meanings as incompleteness to their infertility. The women in this study were viewing infertility as incompleteness, but just like in the first theme, they tended to state it through not being able to mother a child of theirs for whom they could actually devote themselves. That is the reason why I added 'who could not be a self-sacrificing mother' in parentheses next to 'the sense of infertility: the incomplete woman'. More precisely, women suffering from infertility perceived infertility as incompleteness, because they had no child to sacrifice themselves for, and thus, they failed to reach 'the ideal woman'. Letherby (1999) implicated that this feeling of failure is persistent; women who could become mothers after infertility

(particularly the ones who became social rather than biological mothers) were still feeling that they did not achieve the ideal.

The participants in this study could not perceive any control over their infertility. Similarly, the literature provided findings of women feeling little or no control on the process of infertility and its treatments that women feel distressed about (Benyamini, Gozlan, & Kokia, 2009). Su, Chen, Chen, Yang, and Hung (2005) revealed that the sense of losing control in women was highest when female factor infertility was apparent. Thus, it was not only about the state of being childlessness but also about not being able to give birth physically. The lack of control over the infertility process seemed to contribute to the perception of incompleteness probably because the definite control over reproductivity is kind of a sign of maturity for many individuals (Earle & Letherby, 2007).

Along with the lack of control, mothers made the participants feel more incomplete. In other words, women who could become mothers reminded them of their incompleteness. This tendency also exists in the literature that infertile individuals tended to feel like 'others' when they were with mothers. Moreover, they had been living considerable difficulty in relating to women with children (Johansson & Berg, 2005). They showed a tendency to avoid any conversation concerning babies and they might even tell lies to not to get into uncomfortable dialogues with mothers (Remennick, 2000). Women with infertility were found reluctant in getting into contact with children and pregnant women (Berg, Wilson, & Weingartner, 1991). Letherby (1999) discussed the perceptions of non-mothers about being stigmatized by others (i.e., mothers) as less than a whole, piteous and helpless, although they usually do not feel the similar way themselves. On the other hand, a qualitative study analyzing an online forum's posts of infertile women implied that while infertile women felt to be stigmatized by fertile women, they themselves had stigmatized women with children by giving them names and so (Jansen & Onge, 2015). Therefore, stigmatization in fertile and infertile women seems mutual. On the other hand, I found in this study that while feeling incomplete near mothers; infertile women felt to be

understood better or basically felt better next to people who they also described as incomplete. I interpreted it as they identified themselves with 'the incomplete' such as children with disabilities and motherless children. This identification might be a way of expressing how deeply they feel the incompleteness. One of the participants mentioned how she was willing to help children with disabilities. She was probably trying to help herself by dealing with disabled children.

The sense of infertility as incompleteness created intense emotions for them. The ones I detected were the feelings of being downtrodden and so anger, as well as shame and guilt. Similar emotions were revealed for infertile women by various studies in the literature (e.g., Galhardo, Pinto-Gouveia, Cunha, & Matos, 2013; Handa et al., 2017; Menning, 1982; Greil, 1997; Ying, Wu, & Loke, 2015). For the feelings of guilt, Turkish culture seems to play an important role that in case of infertility, mostly the female partner is blamed (Guz et al., 2003). Marital violence was found to be more prevalent among infertile women as compared to fertile women (Akyuz et al., 2013). While questioning their femininity and feeling different from 'normal' women (Boz & Okumuş, 2017), Turkish women with infertility have widely been feeling lonely due to their infertility (Kavlak & Saruhan, 2002). Thus, the feelings of guilt and shame emerged in this study may have links to extensive blaming by others and marital violence in Turkey.

2.4.3. Efforts on Meaning Making

Perception of infertility as being incomplete and accompanying emotions seemed to trigger a meaning making process among the participants. Therefore, the third theme, which is *efforts on meaning making*, emerged. It is indeed important to mention that the meaning-making process the participants got into was not linear. They had times that they attributed no meaning to infertility, other times they seemed to struggle to find one and finally they had found or created meaning for their infertility. However, the first reactions they articulated were mostly running away from it by using avoidance and/or suppression, mostly put into words as "This is not happening to me". I called it no meaning-making or

pre-meaning making period. This tendency of the participants is parallel with the literature that especially at the early stages of infertility diagnosis and treatments, avoidance is widely observed, probably because of the desire to maintain the motivation for treatments and/or operations (Darwiche et al., 2013).

The meaningless state had adverse effects on the participants. As it was stated by Yalom (1980) that it probably provoked an existential anxiety and actually made finding meaning inevitable for them. According to the meaning making model suggested by Park and Folkman (1997), we have two levels of meaning including global (i.e., general goals) and situational (i.e., meaning given to specific condition) meanings. They implied that when there appears to be a discrepancy between the two, distress increases and individuals begin to search for meaning to eliminate the discrepancy. Therefore, the global meaning of the women in this study can be represented as 'reaching the ideal woman through becoming a self-sacrificing mother'. The situational meaning of infertility, on the other hand, was mostly 'incompleteness' as it has already been mentioned. In these conditions, a change in either global or situational meaningis expected (Park, 2010). In the current study, when participants began to question their condition as being infertile, efforts on meaning making became evident and made them interpret infertility as a test from God. They had shown acceptance to the test and it helped them feel gratitude for what they have had. This meaning-making process can be evaluated as a positive reappraisal of the stressful condition in a religious manner and seem to be beneficial for relieving the emotional pain in a sense. Trying to cope with infertility with religiosity is quite common in Turkey. For example, it is prevalent to visit shrines of religious leaders and to use amulets for fertility (Nazik, Apay, Ozdemir, & Nazik, 2015). On the other hand, this process, where participants seemed to find a meaning, and thus, felt better and stronger, also created inevitableness just as Ayşe stated: "It means that this is your test I said myself, it means you are going to suffer and you have to". Thus, while seeing infertility as a test opened a door into gratitude (since they mostly believed they could have been tested with worse), for at least some of our participants, it also appeared to cause distress. In that case, the

participants might have felt that they have to stay strong, be a good human being to God and pass the test. There is an extensive literature on the positive effects of positive religious coping in dealing with traumas and raising growth (e.g., Gerber, Boals, & Schuettler, 2011). In their review, Roudsari, Allan and Smith (2007) emphasized that some women prefer religious or spiritual coping to deal with the crisis called infertility. At times, religion comes to the help of the disrupted sense of self of the infertile individuals and helps them to create meaning and find acceptance. In a study looking at the direct effect of religion and spirituality in coping with infertility, positive effects of religion on psychological health of infertile women was found (Domar et al., 2005). On the other side, a trend similar to this study was seen among army soldiers in a very recent study that as their use of positive religious coping increased, their distress also tended to grow (Cornish, Lannin, Wade, & Martinez, 2017). Cornish et al. (2017) discussed their finding by considering people's possible desire to find comfort in their religion and feel more distress when they cannot find it. Daniluk (2001) indicated that infertile individuals got frustrated and questioned the fairness of God; anger toward God was common. However, it was not the case with the participants in the present study that they were feeling more special since God presented a very difficult test to them just as he did to prophets. Therefore, they were feeling gratitude, since they did not have the worse. Instead, they tended to direct their anger towards others such as doctors and people who did not relieve their emotional pain and help them to find a solution to their crisis.

Nevertheless, the efforts on meaning making could finally reach a point where participants mostly greeted infertility with gratitude. The literature has lack of studies about the prevalence and the role of gratitude specifically in case of infertility but there are studies showing the positive effects of gratitude in finding meaning and increasing optimism in chronic health conditions (e.g., Koenig et al., 2014; Tulbure, 2015). For the participants in this study, gratitude seemed to contribute to their strength for struggling more, and finally, to cope with the infertility.

2.4.4. Overcompensation of Incompleteness: Self-sacrificing 'Mother-to-be'

The fourth and final super-ordinate theme I revealed in the phenomenological analysis was *overcompensation of incompleteness: self-sacrificing mother to be'*. As it was mentioned before, women with infertility did not have a chance to sacrifice themselves for their children which prevented them to reach the ideal woman in their minds. Not being able to reach the ideal woman made them to feel incomplete. Therefore, they showed a tendency to sacrifice themselves to have a child by this way they would get a chance to compensate for the incompleteness. I figured out that these women were constantly searching for power to be or to stay strong, or even sometimes just to look strong, since they could not stop striving. I believe it was the overcompensation of incompleteness, which did not let them to give up, and thus, they constantly felt a need to continue to the treatments regardless of the difficulties. As Weinshel (1990) put it "The only thing that compensates for not having a child is to have a child" (p. 303). Ferber (1995) stated that infertility leads serious existential issues to arouse, such as lack of power, mortality, and unfairness of the world. While trying to deal with the existential anxiety created by infertility, women with infertility in Turkey had to be exposed to the pronatalist culture of Turkey with its spreading IVF clinics and governmental discourse about having at least three children (Gürtin, 2016). In addition to this, with increasing advancements in reproductive technologies, infertility has become a medical case that women need to (or sometimes forced to) make decisions (Gürtin, 2016; Throsby, 2002). Since the technology is available to be able to get pregnant, infertile women are suggested to use it, which indeed creates a subtle coercive force. It sounds like a choice, but not exactly a free choice. Furthermore, due to the social stigma linked to infertility and non-motherhood, many women feel that they have no choice other than seeking for medical intervention (Crowe, 1987).

It has been found that IVF is widely viewed as an opportunity to get rid of the incompleteness and achieve the feeling of wholeness back (Galvez, 2016). Similarly, women in this study tended to trivialize everything but having a child

and they directed all of their emotional and material resources to the treatments. Daniluk (2001) found that infertile individuals began to work on their past after they decided to stop treatments and stay childless. The participants in that study confessed that the treatments were just like automatic processes, which they got into without really thinking on them. They barely considered other options such as adoption. Consistent with the current findings, in the same study, it was observed that the participants begin to think about subjects other than infertility and its treatments such as hobbies, career, and education almost 20 months after they decided to stay childless and later on they could take steps.

It was seen in the qualitative analysis that with this self-sacrificing pattern during treatments, a cycle of control (hope) and no control (disappointment) emerges. At this point, starting a new treatment appeared to be a major area of control for women suffering from infertility. In other words, these women believed that they could regain the control over their lives by deciding to start a new treatment. It is important to mention that the control existed only at the decision-making; the rest of the process was again out of their control. Consistent with the current findings, a meta-analytic study conducted by Verhaak et al. (2007) concluded that IVF treatments create a feeling of control among infertile patients. Similarly, through phenomenological analysis done with Italian couples, Cipolletta and Faccio (2013) stated that their participants had a tendency to regain the sense of control by searching for treatment without thinking about the costs and they ignored their feelings of inadequacy at the time. Indeed, they were willing to carry the personal costs of the treatments since they had given a great value to the possible positive outcome. However, just starting a new treatment does not obviously guarantee the desired outcome. Therefore, Mielli (1999) called it ‘illusionary control’ (as cited in Simon, 2013). According to Centers for Disease Control and Prevention (2014), in United States, less than half of the infertile women (37%) under the age of 35 can achieve pregnancy with assisted reproductive technology (ART) treatments, and this rate decreases with increasing age. Thus, disappointment is quite possible. Moreover, previous research suggested that not giving intervals between treatments might inhibit the

necessary need for processing to make the cognitive, emotional and behavioral arrangements related to adjustment to ongoing childlessness (Glover, Hunter, Richards, Katz, & Abel, 1999). Despite all the factors such as economic burdens, loss of hope, psychological stress, drug side effects, and divorce, dropout rates after unsuccessful trials of IVF treatment was found to be relatively lower in Turkey as compared to cultures that are more Western as well as Iranian culture (Khalili, Kahraman, Ugur, Agha-Rahimi, & Tabibnejad, 2012). Thus, as parallel to the present findings, infertile women in Turkey often head towards treatments and they insistently hold on to those medical interventions.

2.4.5. Conclusions and Implications of the Current Study

The main goal of the present study was to understand the meaning and meaning-making processes in Turkish women suffering from infertility. Thus, this study has shown that for Turkish women with infertility, there appeared to be a story, which began with the idea of an ideal woman. This ideal woman was defined as a self-sacrificing mother and I think these women were trying to reach 'the ideal' in their minds. Since they did not have a child to sacrifice themselves for, they were feeling incomplete. This feeling seemed to stay as long as they face or realize that they were far from the ideal woman. Efforts on meaning making took place to cope with the feelings of incompleteness. On one side, they ran away from the cold reality of being infertile by avoiding or suppressing; on the other side, they were thinking it was like a test from God and feeling gratitude for whatever they had or achieved. Therefore, they created a meaning that can be verbalized as sacrificing oneself to reach the baby (or the ideal woman). I interpreted it as an overcompensation of incompleteness. They were not able to sacrifice themselves for their children, but they were "able to do it" for their imagined children. They were trying to feel stronger even if they were not. They did not allow themselves to stop treatments and take a rest. They did not let anything else (i.e., career plans, hobbies, travels etc.) to "interrupt" the treatments. This self-sacrificing pattern mainly resulted in a not easy-to overcome disappointment. Taken together, it would not be wrong to say that

these women were trying to fill a gap or fulfill an expectation of theirs or more of others. For them particularly, a child was someone who fills the deficiency of the mother, not someone who brings novelty. Thus, these results suggest that these women need to be supported in their meaning making processes of infertility. This support should highlight their struggle of having a child as something they want to have as a new beauty in their life rather than a gap that they have to fill. In other words, facilitating a meaning making in which a child is not seen as a way to reach 'the ideal' but someone they desire to add to their lives might change their view of childlessness. Such an interpretation of infertility might contribute to the development of self-compassion and self-acceptance or acceptance of infertility in general, all of which might, in turn, help them to better deal with their infertility. Thus, in order to promote the positive meaning making of infertility, it is necessary to encourage women with infertility about taking professional psychological help. Because infertility is not limited with the treatments, women with infertility should be offered professional psychological help not only during the medical treatment process but also out of the treatment context. In this manner, instead of just assisting them during the ART treatments or encouraging them to medical interventions, psychologists should understand the effects of infertility on infertile women's self-identity, the underlying emotions as well as the related needs. The results of this study suggested that there might be some unique interpretations of infertility and its meaning making among Turkish women suffering from infertility. Therefore, the psychological help should be sensitive to cultural influences. In other words, the relational effects of family, relatives, as well as socio-cultural atmosphere in general should be incorporated into psychotherapies or counseling processes. At this point, it is important to emphasize the remarkable psychological influences of general understanding of infertility in society. It will not be possible for women with infertility to achieve a healthy interpretation or positive meaning of infertility unless the society makes a positive interpretation of infertility or involuntary childlessness. Therefore, political leaders, opinion leaders and policy makers should avoid presenting statements that equalize womanhood to motherhood. In other words, they should adopt a conscientious

language about womanhood, motherhood, and fertility issues. Similarly, fertility doctors or infertility specialists should be more knowledgeable about the psychological aspects of infertility and should embrace a careful approach to the patients suffering from infertility. In addition, not only private hospitals or infertility clinics but also public hospitals should necessarily offer infertility counseling and/or psychotherapy for infertile patients. In accordance with it, psychologists should be more active in facilitating a positive meaning making of infertility in therapy rooms, clinics/hospitals as well as in society.

2.4.6. Strengths and Limitations

The present study is one of the limited number of qualitative studies investigating the meaning and meaning making of infertility among Turkish women with infertility. It could achieve a homogeneous sample by including women living in Turkey suffering from primary infertility due to female or female/male factor. To our knowledge, the current study is one of the first qualitative studies in Turkey using videoconferencing for research purposes. Videoconferencing as a way of collecting the qualitative data provided some advantages. First of all, it could be possible to reach many individuals over the internet and invite them to the study with an online announcement. Thus, the participants were found out of the infertility treatments context, which enabled us to better examine the infertility as a life experience rather than only a medical condition. Second, participants could attend the interviews in the comfort of their own homes. Evening or weekend interviews could be scheduled for the working participants. Third, the researcher could reach participants from different regions of Turkey including East and West, metropolis and villages.

A limitation of the current study is that, during the data collection, one time interviews were conducted with each participant. More than one interview with the same participant might enrich the findings. Another limitation is the different years of infertility diagnosis of the participants; the meaning of infertility in the first years of diagnosis and later on might be different. Thus, longitudinal studies

looking at the meanings of infertility in progress of time should be done. Furthermore, the current study included only women in accordance with its aims, however qualitative studies looking at the shared meaning of infertility among couples should also be done to broaden the understanding of the infertility experience. Finally, it is necessary to consider the fact that these participants were the ones who were searching for treatment and psychological support. It might be important to see how meaning making takes place for individuals who are not searching for treatments and continue their lives childless. Further studies may look at the meaning making processes among the participants who dropped out from or never got into the infertility treatments.

CHAPTER 3

SECOND STUDY: DEVELOPING AND TESTING THE EFFECTIVENESS OF AN ONLINE GROUP INTERVENTION PROGRAM IN MEANING-MAKING

3.1. Introduction

3.1.1. Psychotherapeutic Interventions in Dealing with Infertility

Individuals suffering from infertility tend to experience intense feelings of anxiety, depression, anger, guilt, loss of control and social isolation (Greil, Slauson-Blevins, & McQuillan, 2010) as well as intense distress due to infertility treatments (Levy, Brizendine, & Nachtigall, 2006). Infertility presents an ongoing crisis at personal and developmental levels both for the individual suffering from infertility and for the couple (Hart, 2002). Thus, in the literature, individuals with infertility were often suggested infertility counseling or psychotherapeutic help in order to better cope with their psychological burden (e.g., Peterson et al., 2012). Conversely, in actual fact, they were less likely to be directed to psychological treatments by their doctors (Pasch et al., 2016). Nonetheless, psycho-social counseling and psychotherapy were found be effective in diminishing negative affects among infertile patients (Wischmann, 2008). Mental health, pregnancy rates as well as marital satisfaction were positively affected by psycho-social interventions of infertility (Ying, Wu, & Loke, 2016).

Boivin and Kentenich (2002) reported that almost 15-20% of the infertile couples had been searching for psychological help because of infertility related distress. In countries such as U.K., infertility clinics have to offer counseling, some of them make it even mandatory for couples who get into treatments (Marcus, Marcus, Marcus, Appleton, & Marcus, 2007). Nevertheless, women rather than couples were found to seek professional psychological help more (Wischmann & Thorn, 2013). On the other hand, Greil and McQuillan (2004) showed only 8% of the 580 women with infertility in their study got psychotherapy or infertility counseling while 24% of them chose internet to obtain information, and 15% of them contacted an infertility support group. In a study done with 143 infertility patients, it was seen that patients with lower stress preferred to use their own resources in dealing with the difficulties of infertility, while patients with higher distress found it hard to initiate contact with a counselor or psychologist due to concerns such as not knowing where to apply and/or the cost of the counseling or psychotherapy (Boivin, Scanlan, &Walker, 1999). In addition to these, high dropout rates were observed in infertility counseling or psychotherapy (Boivin, 2003). In his review, Boivin (2003) discussed that perceiving the counseling or psychotherapeutic process as too intensive, invasive, or expensive compared to the expected benefits might be related to high attrition rates. Therefore, it seems necessary to develop and offer alternative ways of psychotherapeutic help for individuals with infertility.

There is an extensive literature on psychotherapeutic interventions of infertility (see Boivin, 2003 for a review). These interventions can be held individually or in a group, with different approaches such as cognitive behavioral therapies (e.g., Domar et al., 2000), psychodynamic therapies (e.g., Leon, 2010), infertility counseling (e.g., Holzle, Brandt, Lutkenhaus, & Wirtz, 2002) or educational programs (e.g., Stewart et al., 1992; Takefman, Brender, Boivin, & Tulandi, 1990). In general, the efficacy of psychological interventions was evaluated based on the mental health (e.g., depression and anxiety) and the rates of pregnancy (Hammerli, Znoj, & Barth, 2009). On the other side, studies presented mixed results regarding the efficacy of those interventions. For example, Boivin

(2003) recommended interventions that are held in group format as it enables individuals to share similar experiences and to raise their feelings of being understood. On the other hand, a meta-analysis by de Liz and Strauss (2005) reported positive effects of both individual and group psychotherapies on anxiety but not depression. Depressive symptoms of the participants were influenced largely by infertility duration with higher symptoms for longer durations. Positive effects on pregnancy rates were also reported in the same meta-analysis. Nevertheless, another meta-analysis conducted by Hammerli, Znoj, and Barth (2009) concluded that mental health was not significantly affected by interventions while pregnancy rates again were positively influenced. While the results of the previous research are promising, further studies focusing on the effectiveness of psychotherapeutic interventions in the context of infertility are still needed.

On the other side, there are some important points highlighted in the literature as necessary for psychotherapeutic interventions regarding infertility. First of all, these interventions generally aim to find the ways of living more satisfyingly and resourcefully when individuals suffer from infertility and related psychological impairments (Boivin & Kentenich, 2002). During counseling or psychotherapy, working with patients suffering from infertility requires sensitivity. Many studies emphasized the importance of a supportive, accepting and emphatic environment in interventions dealing with women suffering from infertility (e.g., Ferber, 1995; Van den Broeck, Emery, Wischmann, & Thorn, 2010). It has been stated as necessary to adopt an open communication with the infertile patients regarding their thoughts, expectations, and questions on counseling or psychotherapy (Van den Broeck et al., 2010). Accordingly, Galst (2017) suggested that therapists are mainly expected to comply with the infertile individuals' emotions, needs, and coping skills. A strengthened sense of self enables infertility to lose its intense effect over the patient's life and allow a more fully appreciated life (Galst, 2017).

In terms of the role of psychotherapists in infertility context, Jaffe (2017) recommended therapists to focus on the reproductive story of the patients during the sessions. Reviewing the reproductive story was used to enable an understanding among infertile patients that infertility was only one facet of them rather than the main part of their identity. By this way, Jaffe (2017) aimed to reach an acception where infertile patients could edit or rewrite their story and achieve a positive new meaning. Furthermore, realizing individual, relational, transgenerational and cultural motivations behind the desire to have a child was found to provide an insight into the intense feelings of wanting a child (Van den Broeck, D'Hooghe, Enzlin, & Demyttenaere, 2010). Apart from all these, therapists in the field of infertility have commonly been observed as having a reproductive story, too (Marrero, 2013). Thus, they have been suggested to be aware of their own conflicts and wounds to be able to use them for the benefit of her/his patients or clients (Jaffe, 2016).

3.1.2. Internet-based Interventions for Psychological Health

The terms such as e-therapy, internet therapy, cyber-therapy, computer-mediated psychotherapy, online counseling, as well as web counseling have long been appeared in the literature (Alleman, 2002). The idea of using computers and internet for counseling or psychotherapeutic purposes even goes back to 1970s when a computer program called ELIZA was created to conduct a non-directive therapy (Weizenbaum, 1976 as cited in Oravec, 2000). From those years to now, different modes of online mental health care were introduced including emails, group and family counseling, online support groups, and mobile phone applications in order to reach mental health care information (Oravec, 2000; Donker et al., 2013). Besides, the literature has indicated the need for more research on internet counseling since the 1990s (Childress & Asamen, 1998; Huang & Alessi, 1996). Thus, there exist studies comparing the effectiveness of online versus face-to-face therapies. For example, Day and Schneider (2002) compared face-to-face, videoconference and two-way audio modes of psychotherapies and found no difference on certain outcome measures (e.g.,

symptom checklist). On the other hand, in their study done with university students only, Mallen, Day, and Green (2003) were interested in the differences of the level of satisfaction, emotional understanding, self-disclosure and closeness between two strangers in face-to-face and chat-room conversations. The researchers reported face-to-face conversations as superior to online conversations in above-mentioned domains. Therefore, they concluded that chat-room conversations might need more time to provide an equal influence.

Researchers and clinical practitioners have begun to use internet for a while to implement treatments including especially cognitive behavioral interventions which have self-help and clinician-guided versions (see Andersson, Ljotsson, & Weise, 2011 for a review). Among the internet-based interventions, the ones with standardized treatment protocols (mainly cognitive behavioral) offering minimal therapist guidance and generally designed to be used by the patient alone are the most prevalent (De Graaf, Huibers, Riper, Gerhards, & Arntz, 2009). Currently, the literature presents therapy protocols for online and group-based treatments using videoconferencing (e.g., Sansom-Daly et al., 2012; Wakefield et al., 2015). It is possible to find studies examining the effectiveness of web-based interventions (e.g., Sexton et al., 2010), interventions including psychotherapeutic messaging (e.g., Pfeiffer, Henry, Ganoczy, & Piette, 2017), as well as self-help only (e.g., Klein, 2001) and self-help with therapist feedback (e.g., Andersson et al., 2006) interventions. These internet interventions were studied with different clinical disorders, most of which aimed to deal with depression, anxiety and chronic pain (Hedman, Ljótsson, & Lindefors, 2012). Recently, studies focusing on the effectiveness of internet-based Acceptance and Commitment Therapy for different psychological conditions such as trauma (e.g., Fiorillo, McLean, Pistorello, Hayes, & Follette, 2017), social phobia and panic disorder (e.g., Ivanova et al., 2016) have been increasing. On the other hand, to the best of our knowledge, the literature has limited number of studies looking at the effects of online interventions on the individuals suffering from infertility-related psychological problems, while infertile individuals have been increasingly using internet to obtain information and emotional support (Satir &

Kavlak, 2017). Moreover, the literature is scarce in terms of offering online interventions except for the ones adopting a cognitive behavioral approach.

The results of cognitive behavioral based internet interventions in terms of their effectiveness are promising. A meta-analytic study reported large effect sizes for internet interventions of depression, social phobia, panic disorder as well as serious health anxiety, irritable bowel syndrome, sexual dysfunction in females, eating disorders, substance use and pathological gambling (Hedman, Ljótsson, & Lindefors, 2012). Similarly, another meta-analytic study containing randomized control trials designed to treat depression and anxiety in youth provided efficacy for computer and internet-based cognitive behavioral interventions (Ebert et al., 2015). Internet-based therapeutic interventions delivered in a self-help format were also found effective in terms of relieving stress among adults with chronic health problems except for diabetes (Beatty & Lambert, 2013). Moreover, internet interventions were found to contribute to the usual treatment processes; internet interventions alongside the medication and/or psychotherapy increased the positive outcomes (Klein et al., 2016).

The internet has become a highly valued resource for getting social support specifically in the health-context (Wright & Bell, 2003). For example, in a study conducted in Turkey, it was found that in cases of infertility, perceived social support helped individuals with infertility to better deal with symptoms of depression (Erdem & Ejder-Apay, 2014). Thus, particularly for the individuals who believe that they cannot receive enough social support related to their health concerns from close friends and family, the internet appears as one of the best choices (Wright et al., 2010). In addition, due to various barriers including finding time and appropriate space aside from the feelings of isolation, individuals began to prefer the internet to reach social and emotional support they were in need of (Eysenbach et al., 2004).

The rise of the internet enabled the rise of the virtual communities, which refers to social networks created or facilitated via electronic media. The social

networks are mostly composed of peer-to-peer communities which have been constituded to deliver social support for a better mental health (Eysenbach, Powell, Englesakis, Rizo, & Stern, 2004). The use of online support for mental health has been increasing especially among women (Houston, Cooper, & Ford, 2002), youth (Ebert et al., 2015), and particularly cases with depression and serious psychological distress (DeAndrea & Anthony, 2013). In peer-to-peer interventions, individuals could provide benefit when they established intimacy, got validation for their experiences and raised hope (Davidson, Bellamy, & Miller, 2012). In the review of Repper and Carter (2011), it was also emphasized that peer-support was effective in raising hopefulness, self-esteem, self-efficacy, sociability, and coping skills. A study reported the positive effects of online depression peer support groups in reducing depressive symptoms (Houston, Cooper, & Ford, 2002). On the other hand, another study conducted by Iafusco, Ingenito, and Prisco (2000) included a psychologist in the chat-room interventions and looked at the effectiveness of them on adolescents with insulin-dependent diabetes. They found that it was effective in increasing the self-management among adolescents with type-1 diabetes. In this regard, the internet interventions with a psychotherapist support were found to be more effective as compared to self-help only interventions (Spek et al., 2007).

The new technology also led up to the extensive use of mobile device (e.g., cell phones, tablets) applications that offer psychological assessment (Ainsworth et al., 2013) and mental health care (Donker et al., 2013). The use of mobile technologies for health-related purposes is thought to have the potential to enhance the healthcare quality received, as well as to diminish stigma and raise treatment accessibility worldwide (Becker et al., 2014). Alongside the self-help applications, there exist applications offering direct communication with a mental health professional. These applications can also serve as a bridge between psychotherapy sessions and have the potential to enhance alliance to psychotherapeutic process (Proudfoot, 2013). On the other side, while mobile technology has increasingly been used in behavioral and physical health settings, the literature concerning their contribution in terms of assessment and

intervention of psychological health is still in its infancy (Harrison et al., 2011; Lui, Marcus, & Barry, 2017). Nevertheless, a rapidly growing literature presented studies looking at the effectiveness of those applications in dealing with depression (e.g., Ahmedani, Crotty, Abdulhak, & Ondersma, 2015), anxiety (e.g., Dennis & O'Toole, 2014), substance abuse (e.g., Dulin, Gonzalez, & Campbell, 2014), psychotic disorders (e.g., Ben-Zeev et al., 2014), and stress (e.g., Villani et al., 2012). In their meta-analytic study Donker et al., (2013) examined 5464 online mental health care related abstracts and found only seven studies eligible for inclusion in terms of testing the effectiveness of mental health care applications. Although the researchers emphasized the low quality of the study designs, they revealed that the applications were efficient in reducing the symptoms of depression, relieving stress, and diminishing substance use. Mobile phone applications (i.e., internet-based CBT with monitoring through text messages) for diminishing depressive symptoms were seen as effective when they were used along with the usual treatment process (Kok et al., 2015). Similarly, in a more recent review, Lui, Marcus, and Barry (2017) concluded that studies looking at the efficacy of mental health applications offer promising results; however, more research is needed to examine the effectiveness of mobile applications in psychotherapy context.

3.1.3. Online Interventions for Infertility-related Psychological Health

The internet has been used by infertile individuals to obtain information related to infertility and treatments around the world as well as in Turkey. Different studies reported the rate of internet use for infertility-related issues as ranging from 55.8% to 81% (e.g., Haagen et al., 2003; Rawal & Haddad, 2005). A very recent study conducted in Turkey showed that 74% of the women and 68.4% of the men used internet for a variety of reasons related to infertility (Satir & Kavlak, 2017). In the same study, these reasons were stated as obtaining information about causes of infertility, infertility test and treatments, fertility drugs, alternative medicine, and Assisted Reproductive Technologies (ART) as well as communicating with other people suffering from infertility.

There is an extensive literature on the role of social support in eliminating the negative effects of infertility on individuals (e.g., Abbey, Andrews, & Halman, 1995; Slade, O'Neill, Simpson, Lashen, 2007; Verhaak et al., 2007). While this is suggesting a seek for social support, it has been known that infertile individuals isolate themselves from the social world due to feelings of alienation and fears of stigmatization when they are together with fertile individuals (Mindes, Ingram, Kliewer, & James, 2003). In other words, infertile women are in need of social support but they are reluctant to find it in the fertile world. Actually, infertile women seem to get overwhelmed with any advice or information in forms of social support coming from their friends, family, and relatives (High & Steuber, 2014). In terms of professional support (i.e., counseling, psychotherapy etc.), it was found that infertile individuals need it but not really search for it. They usually feel as if there are not enough opportunities available for professional support (Read et al., 2014). On the other hand, internet has been increasingly used in terms of providing health-related information as well as social support (Wright, Rains, & Banas, 2010). A study done by Oh, Lauckner, Boehmer, Fewins-Bliss, and Li (2013) reported that people were more likely to look for health-related social support when they had high health-related concerns. Furthermore, as they got emotional support over the internet, their health self-efficacy significantly increased. Chung (2013) suggested that individuals, who had lower satisfaction in terms of the social support they received offline, primarily turn to online support groups for achieving better social support. In addition, the internet provided a shelf against the fear of stigmatization that individuals could use anonymous accounts when they wanted to share personal information (Wright & Bell, 2003). Individuals with infertility, who were known to be suffering from feelings of stigmatization (Greil, Slauson-Blevins, & McQuillan, 2010), might prefer to use internet not only for reaching information but also for finding emotional and social support as well as psychological help. Thus, they could achieve substantial changes in terms perceived knowledge on infertility, emotional well being, relationships and also self-efficacy by using internet resources (Zillien, Haake, Fröhlich, Bense, & Souren, 2011). Of the people who use the internet to communicate with other

people suffering from infertility, most of them posted psychosocial topics including personal disclosure, need of emotional support, growth promoting interactions, and forming supportive relationships (Wingert, Harvey, Duncan, & Berry, 2005). In addition, Wright and Miller (2006) reported four advantages of internet support as accessing to various viewpoints, having minimal risk, achieving objective feedback from others, and enabling decreased role obligations (as cited in Wright et al., 2010). On the other hand, potential problems were also reported in relation to the use of the internet to promote health, such as misinformation (Theodosiou & Green, 2003), connecting only to people with similar prejudices, creating an illusion of well-being and so not seeking for professional help (Parsell, 2008). A qualitative study found that while internet resources had helped infertile individuals in case of social isolation by providing anonymity, emotional support, reassurance and enabling a normalization process; it also had the potential of creating more isolation in terms of real world relationships (Hinton, Kurinczuk, & Ziebland, 2010). In addition, the literature presents conflicting findings regarding the more structured interventions. For instance, Sexton et al. (2010) examined the influences of a web-based intervention adopting a cognitive behavioral approach and found that it was effective in decreasing general distress but not infertility-related distress., Therefore, more research is needed examining the effects of online interventions for infertility. A more systematic online support with the guidance of a mental health professional can be more beneficial. To our knowledge, in infertility-context, there exist no studies in the literature examining the effectiveness of an online intervention guided by a psychologist. Besides, with infertile individuals, there is no study done looking at the effects of online interventions adopting approaches other cognitive behavioral approach.

3.1.4. Meaning-Centered Therapies

Meaninglessness in life has long been associated with psychopathology (Yalom, 1981). A lack of meaning has been known to cause depression and anxiety (e.g., Debats, van der Lubbe, & Wezeman, 1993) as well as suicidality and substance

abuse (e.g., Harlow, Newcomb, & Bentler, 1986). On the other hand, creating meaning contributes to hopefulness (Mascaro & Rosen, 2005) and happiness (Debats et al., 1993). Frankl (1963) believed that individuals have the potential to create meanings even during the life-threatening conditions, and meaning and happiness exist together. Accordingly, meaning was found to be effective in the prevention of depressive symptoms (Mascaro & Rosen, 2005). A study conducted by Debats, Drost, and Hansen (1995) reported that undergraduates who had experienced meaningless times in their lives were less satisfied with their lives and needed more psychological help as compared to the undergraduates who did not remember meaningless times in their lives. On the other hand, finding a meaning was found to increase the adjustment level of individuals, even in very stressful life conditions such as cancer (Park et al., 2008). Thus, meaninglessness can be a common issue particularly for indivuduals with health-related problems. In that case, while searching for and finding a meaning become inevitable, a meaning found or formed can protect the individual both physiologically (Bower et al., 1998) and psychologically (Jim, Richardson, Golden-Kreutz, & Anderson, 2006; Thomsen et al., 2016).

In order to better deal with adverse effects of meaninglessness, meaning-centered therapies were developed based on existential and humanistic theories that were integrated into psychodynamic, cognitive, behavioral, as well as transpersonal theories (Lukas, 2000 as cited in Dezelic, 2017). In meaning-centered therapies, both situational meaning (i.e., meaning given to a specific situation) and global meaning (i.e., general meaning in life or purpose in life) are addressed on individual or group basis by considering the biological, individual, social, relational and cultural aspects along with any particular life experiences (Dezelic, 2017). In other words, with its positive existential and integrative perspective, meaning-centered therapies aim to facilitate the human capacity to find and form meanings out of the raw and especially painful life conditions (Wong, 2010).

Wong (2010) identified the basic characteristics of the meaning-centered therapies as integrative/holistic, existential/spiritual, relational, positively oriented, multicultural, narrative and psycho-educational. As it was mentioned before, meaning centered therapies are integrative in the sense that they are open to integrate different theories and therapeutic techniques in the advantage of creating meanings. They are existential that meaning-centered therapies adopt the humanistic-existential approach, which focuses on the importance of dealing with existential anxieties (Yalom, 1980), and the humans' needs of forming meaning and authenticity (Schneider et al., 2001). Meaning-centered therapies emphasize the importance of relationship by saying "Meaning is all we need and relationship is all we have" (Wong, 2010, p.86). In the therapy, the necessity of relationship moves beyond the therapeutic alliance and becomes a central technique with active listening, reflecting, and empathy. Meaning-centered therapies are positively oriented and they imply that regardless of the challenging conditions, there can be found meaning which makes a life worth living (Wong, 2010). They are multicultural due to the fact that meanings are formed by social and cultural elements. Meaning-centered therapies use narrative strategies including story telling and re-authoring in accordance with the therapeutic goals. Finally, meaning-centered therapies adopt a psycho-educational approach by considering the advantages of explaining the process of change and possible tools and strategies to achieve it (Wong, 2010).

Meaning-centered therapies were widely implemented for cases with life-threatening diseases such as cancer (e.g., Breitbart et al., 2015; Thomas, Meier, & Irwin, 2014; van der Spek et al., 2014). The literature contains studies in which the effectiveness of individual and group meaning-centered therapies for cancer patients were investigated. For example, after examining individual meaning-centered psychotherapy on cancer patients (Breitbart et al., 2012), Breitbart et al. (2015) did also find meaning-centered group psychotherapy as effective in increasing psychological as well as spiritual well-being and decreasing distress among advanced and terminal cancer patients. In addition, meaning therapy for substance abuse was found to be effective in developing

self-definition, interpersonal connections, and inner motivation of the participants (Thompson, 2016). On the other hand, studies investigating the effects of interventions similar to meaning-centered therapies on infertility related psychological issues are limited but their results are promising. For example, a randomized clinical trial looking at the effectiveness of logotherapy (a form of meaning-centered therapy) on infertile patients' worry and perceived distress found significant reductions in those domains (Mosalanejad & Koolee, 2012). Seyedi-Asl et al. (2015) also found the positive effects of group-based positive psychotherapy in increasing infertile couples' life satisfaction but not their quality of life. According to another study, participants who read positive reappraisal sentences during the waiting period in IVF treatment showed significantly more positive affect as compared to controls. However, the levels of their depression and anxiety were not significantly differentiated from the participants in the control group (Ockhuijsen, van den Hoogen, Eijkemans, Macklon, & Boivin, 2014).

3.1.5. Meaning Making Online

In his paper "A Habermasian perspective on joint meaning making online: What does it offer and what are the difficulties?" based on theories of Habermas, Hammond (2015) suggested that if individuals get into a process of dialogue in which questioning their own beliefs, and actively talking and hearing about different perspectives are possible, a joint meaning making can be triggered. Thus, online platforms can provide opportunities to reinforce meaning-making of certain conditions. Koschmann (2002) also introduced the term "computer-supported collaborative learning (CSCL)" as a field mainly interested in meaning and meaning-making practices in the joint activity context as well as how these practices could be mediated via computers. Suthers (2006) suggested that meaning can be created by the individual herself rather than received from others. In further, he discussed a collaborative or inter-subjective learning in a group can make the meaning-making possible if several participants make contributions to the interpretations of specific conditions.

The literature contains studies in which expressive writing help in creating the meaning of stressful health conditions. For example, in a research done with patients suffering from chronic pain, one group of patients were encouraged to express their feelings of anger by writing a letter about it, while the control group was instructed to write about a regular day of theirs (Graham, Lobel, Glass, & Lokshina, 2008). An interview looking how much those patients tried to make meaning via anger expression showed that the intervention group displayed higher meaning making of their chronic pain. In accordance with this finding, researchers found higher control over the pain and lower depressed mood among chronic pain patients in the intervention group as compared to their counterparts in control group. Similarly, in a study conducted with people who had lost their pets and so had been experiencing a depressive life event, participants were asked to write excerpts about either on their emotions or their cognitive evaluations (or re-evaluations). A third group was asked to write on both to facilitate emotional processing and the cognitive processing of the depressive life event. The results of that study showed that the group who was asked to write on both their emotions and their cognitive re-evaluations had the fewest depressive symptoms (Hunt, Schloss, Moonat, Poulos, & Wieland, 2007). Thus, expressing oneself via writing, which allows emotional expression and cognitive reevaluation of the event, may help individuals in meaning making. For also cases with infertility, Matthiesen et al. (2011) found that expressive writing intervention diminish infertile individuals' infertility-related distress during the ART treatments. Furthermore, Lee, Blyth, and Chan (2012) revealed that articulation of the lived experiences trigger a positive meaning making and help infertile individuals to adjust infertility. In cases of infertility and pregnancy loss, Jaffe (2017) also offered a reproductive story perspective in psychotherapy where the individual identifies the meaning of her unique experience. For Jaffe (2017), finding a meaning enables patients to rewrite their story and move forward. In the light of these findings, it can be said that an online intervention conducted in a chat-room and guided by a psychologist may create positive effects on meaning-making processes and infertility-related psychological states

of individuals suffering from infertility through the activation of their emotional and cognitive mechanisms.

3.1.6. The Aim of the 2nd Study

The previous study of the present dissertation figured out the meaning (or situational meaning) of infertility mainly as incompleteness. The underlying mechanism of it was stated as the belief of ideal woman who was a self-sacrificing mother. In other words, the global meaning those women was maintaining was being an ideal woman. In order to achieve this and compensate for incompleteness, they tended to adopt a self-sacrificing pattern to reach the motherhood (i.e., the ideal woman). It was seen that this pattern usually triggered a cycle of hope and disappointment among the participants. For the hope, it would not be wrong to say was a burdened one. Therefore, they devastatingly experienced disappointment. At this point, we aimed to develop an intervention to make a contribution to facilitate meaning-making, specifically positive meaning-making in case of infertility.

By following the above-mentioned aim, an online intervention program for meaning making, which was created based on the principles of Meaning-Centered Therapy (Wong, 2010) and the themes gathered from the first study, was developed. An 8-week intervention program was delivered online by using the advantages of reaching more women from different cities of Turkey, making the intervention convenient for the participants, as well as including participants outside the treatments context. Each session was organized in accordance with the main aim that contain raising the positive meaning-making as well as the psychological well being (i.e., anxiety, depression, hopelessness, positive-negative affect, and self-efficacy) of the participants suffering from infertility. To understand the change in meaning-making process of infertile women, a randomized pre-test / post-test control group design was implemented in which global meaning, as well as situational meaning of infertility, was measured with three scales: Meaning in Life Questionnaire (measuring presence of and

searching for Meaning) and Post-Traumatic Growth Inventory for global meaning; and Stress Appraisal Measure (measuring threat, challenge, controllable by self, controllable by others, and uncontrollable by anyone in a specific stressful event) for situational meaning. Along with these, the psychological well-being and ill-being of the participants were measured by using a set of scales containing Beck Depression Inventory, State-Trait Anxiety Scale-State, Beck Hopelessness Scale, Positive and Negative Affect Scale, and finally Infertility Self-Efficacy Scale.

Thus, it was hypothesized that;

1. Women undergoing an online intervention are expected to move from meaning making to meaning made, in other words from searching for meaning to the presence of meaning. Therefore, in the post-test;

a) The experimental group would have significantly lower scores on the search for meaning compared to control group.

b) The experimental group would score significantly higher on the presence of meaning as compared to control group,

c) In terms of post-traumatic growth, women in the experimental group would report significantly more growth than the control group.

2. A change in the appraised meaning of infertility is also expected that;

a) Infertile women in the experimental group would get significantly higher challenge scores as compared to the control group.

b) Infertile women in the experimental condition would evaluate infertility as more controllable by self as compared to control group.

c) Infertile women in the experimental condition would see infertility as more controllable by others than the control group.

d) Control group members would appraise infertility more as a threat as compared to the experimental group members.

e) Control group would evaluate infertility as more uncontrollable by anyone as compared to the experimental group.

3. Finally, the participants who underwent the online intervention are expected to have better psychological well-being that:

a) Experimental group would report significantly lower depression scores compared to control group,

b) Experimental group would report significantly lower anxiety scores as compared to control group,

c) Experimental group would report significantly lower in hopelessness measurements as compared to control group,

d) Experimental group would report significantly lower negative affect scores as compared to control group,

e) Experimental group would report significantly higher positive affect scores as compared to control group,

f) Experimental group would report significantly higher infertility self-efficacy scores as compared to control group.

3.2. Method

3.2.1. Participants

The women who were diagnosed with primary infertility (i.e., with no prior children) due to female, female and male or unknown factors, older than 18 years-old, without a psychological and/or physical diagnosis, living in Turkey and able to read and write in Turkish participated in the study. The participants were recruited from an online group of an association (i.e., *Çocuk İstiyorum Derneği*) composed of more than 5000 women, more than half of whom were active members. At the beginning, 112 women responded to the video inviting infertile women to the present study. Eight of them were excluded because of having only male factor as the reason for infertility. One hundred and four participants were provided online informed consent (see Appendix C). Twenty four of them did not reply after getting further information about the study. Eighty of them gave the online consent to participate in the study by filling out the assessment measures and attending the online weekly sessions. Participants were not restrained to engage in usual psychological treatments, but none of the participants reported about taking additional professional psychological help during the interventions. By using a computer-generated random table, 80 women were randomly assigned into two groups: experimental (n = 40) and waiting-list control (n = 40). Twenty seven participants from the experimental group completed the 8 weeks online group intervention program and filled out the pre-test/post-test assessments. In the control group, 24 participants filled-out the same assessments and were included in the analyses. Therefore, the final analyses included 51 participants (see Figure 1).

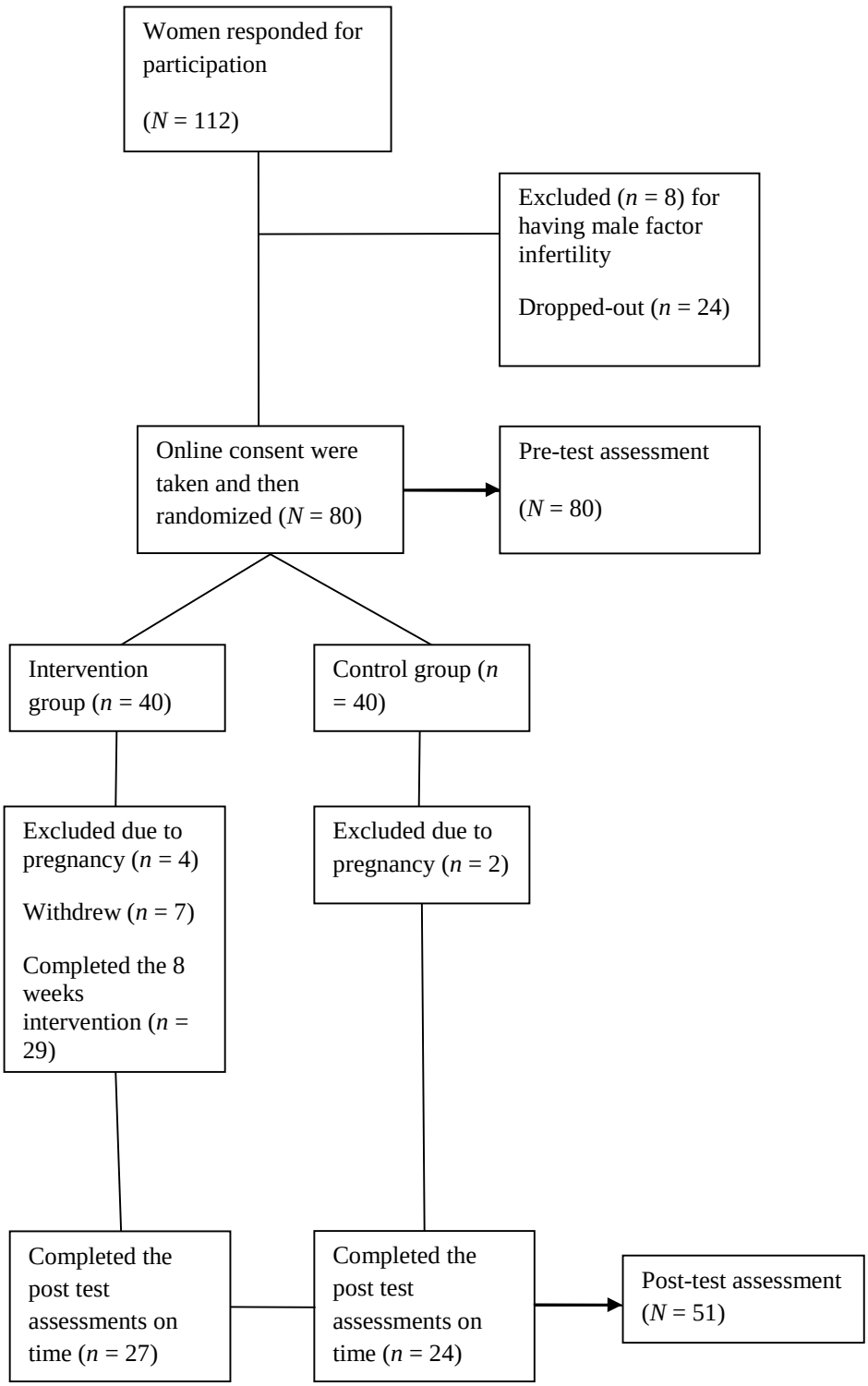

Figure 1. *Participation flow*

3.2.2. Instruments

3.2.2.1. Demographic Information Form

A demographic information form, consisting of questions such as age, education, working status, income and years of marriage, was distributed to the participants. The form also included infertility-related questions such as years of infertility, the reason of infertility, and the number of treatments as well as the current treatment condition. In addition, the relationship quality of the participants was asked (see Appendix D)**.**

3.2.2.2. Meaning in Life Questionnaire (MLQ)

Meaning in Life Questionnaire is a quite popular scale that has widely been used in meaning-making studies (see Fjelland, Barron, & Foxall, 2007; Park & George, 2013). In the present study, this scale was used to assess the global meaning in participants. It is a 10-item scale, developed by Stegner, Frazier, Oishi, and Kaler (2006) to measure the presence of meaning and search for meaning in life, which also consitute the two subscales of the questionnaire. The Turkish adaptation of the scale was done by Yarar (2015). Test-retest reliability shows .79 for presence of meaning and .66 for search for meaning subscales of Turkish MLQ. In terms of internal consistency among the items of Turkish MLQ, Cronbach's alpha coefficients were found as .90 and .91 for presence and search subscales, respectively. In terms of convergent validity, presence of meaning subscale of MLQ was found significantly correlated with life satisfaction (.44), extraversion (.29), conscientiousness (.37), agreeableness (.32), openness to experience (.35) and positive affect (.40),while search formeaning subscale was correlated with neuroticism (.12), negative affect (.16) and depression (.21). In terms of divergent validity, while presence of meaning was correlated with negative affect (-.23) and depression (-.40), search for meaning was correlated with life satisfaction (-.17), openness to experience (-.08) and positive affect (-.09). For the present sample, the Cronbach alpha

coefficient was measured .74 at the pre-test and .71 at the post-test for presence of meaning subscale; and .78 at the pre-test and .88 at the post-test for search for meaning subscale. The Turkish version of the scale used in the current study can be found in Appendix E.

3.2.2.3. Stress Appraisal Measure (SAM)

Participants filled out Stress Appraisal Measure (SAM), which has been a suggested measure for assessing situational (or appraised) meaning (see Park & George, 2013). In the current study, participants were asked to respond each statement of the scale by considering their infertility. The original scale was developed by Peacock and Wong (1990) as a 28-item measure, which aims to evaluate cognitive appraisals of stress. The subscales of this measure contain primary appraisals (threat and challenge), and secondary appraisals (controllable-by-self, controllable-by-others, and uncontrollable-by-anyone). For primary appraisals, threat corresponds to the items concerning 'serious implications' and 'negative effects' while challenge includes the items of 'positive effects' as well as 'excited about the possible outcomes'. In terms of secondary appraisals, Wong (1993) referred controllable by self as self-reliance or problem-focused coping and controllable by others as social support and dependence on others. Uncontrollable by anyone, on the other hand, corresponds to items of 'totally hopeless' and 'no control on the outcome'. Turkish adaptation of the scale was done by Durak and Senol-Durak in 2011. Cronbach's alpha values were found .88 for threat, .62 for challenge, .77 for controllable by self, .88 for controllable by others, and finally .65 for uncontrollable by anyone.In addition, Turkish adaptation of SAM provided good convergent validity with state anxiety (.40 with threat, -.09 with challenge, -.22 with controllable by self, -.19 with controllable by others, and .24 with uncontrollable by anyone) and good discriminant validity with social desirability (-.15 with threat, .08 with challenge, .16 with controllable by self, .05 with controllable by others, and -.14 with uncontrollable by anyone) (Durak & Senol-Durak, 2011). For the current sample, Cronbach's alpha values at the pre-test were .80 (pre-test) and .88 (post-test) for

threat, .55 (pre-test) and .66 (post-test) for challenge, .83 (pre-test) and .90 (post-test) for controllable by self, .90 (pre-test) and .81 (post-test) for controllable by others, and .72 (pre-test) and .76 (post-test) for uncontrollable by anyone. The scale is presented in Appendix F.

3.2.2.4. Post-Traumatic Growth Inventory (PTGI)

This scale was developed by Tedeschi and Calhoun (1996) to assess the positive developments among individuals after traumatic events. Good internal consistency reliability coefficients were reported for the original 21-item measure. The Turkish adaptation of the measure was done by Karancı and Dirik (2008). They found a good internal consistency for the total scale (α = .94). Cronbach alpha coefficients for the subscales of new possibilities, relating to others, personal strength, spiritual change, and appreciation for life were found .81, .84, .79, .63 and .83, respectively. In the Turkish adaptation of the PTGI, in terms of construct validity, researchers established significant negative correlations between the scores of PTGI and various psychopathology measures (Dirik & Karanci, 2008). In the current study, the participants were asked to respond each statement by taking their infertility into account in order to determine any changes in global meaning (see Park & George, 2013). In addition, total PTGI scores were used to assess the changes in terms of global meaning. The Cronbach alpha values of the total PTGI score were found as .94 (pre-test) and .95 (post-test) for the present sample. A copy of the scale can be found in Appendix G.

3.2.2.5. Beck Depression Inventory (BDI)

BDI was originally developed by Beck, Ward, Mock, and Erbaugh (1961) and is one of the widely used instruments to measure the severity of depression. Twenty-one item self-report scale was adapted to Turkish by Hisli (1989). Four response options are presented for each question in the scale and they are scored from 0 to 3; lower scores represent lower depression and higher scores represent

higher depression. Beck, Steer, and Garbin (1988) found the internal consistency ranging from .73 to .92. Cronbach alpha reliability of Turkish BDI was found .80 (Hisli, 1989). Concurrent validity of the Turkish BDI was established by looking at the correlations between BDI and Minnesota *M*ultiphasic Personality Inventory-Depression subscale, and it was reported as .50 (Hisli 1989). For the present sample, Cronbach's alpha realiability was found as .83 at the pre-test and .88 at the post-test. A Turkish copy of BDI is presented in Appendix H.

3.2.2.6. Beck Hopelessness Scale (BHS)

This scale was used to learn about participants' feelings about future, their motivations and expectations. BHS was originally developed by Beck, Weissman, Lester, and Trexler in 1974 in order to assess the negative attitudes related to future. This scale contains 20 true-false statements in which higher scores correspond to higher levels of hopelessness. This widely used scale was adapted to Turkish by Seber, Dilbaz, Kaptanoğlu, and Tekin (1993). The Cronbach's alpha reliability of the Turkish BHS was found as .86. Concurrent validity of the scale was calculated by computing the correlations between BHS and BDI (.65), as well as BHS and Rosenberg Self-esteem Scale (.56). For the present sample, Cronbach's alpha reliability coefficients were .59 (pre-test) and .60 (post-test). Appendix I provides an access to the copy of BHS.

3.2.2.7. State-Trait Anxiety Inventory-State (STAI-S)

The anxiety levels of the participants were measured by using state subscale of State-Trait Anxiety Inventory. The original scale was developed by Spielberger (1983). The STAI-State measures the current anxiety levels of the individuals with 20 items ranging from 1 to 4. Higher scores on this subscale indicate higher anxiety. The Turkish adaptation of the inventory was made by Öner and Le Compte (1983). Good reliability and validity were found for the Turkish STAI-S. Internal consistency of the scale was found between .94 and .96. Test re-test reliabilities for STAI-S were found between .26 and .68 (Öner & Le Compte,

1983). In terms of convergent validity, Öner and Le Compte found high correlations ranging from .52 and .80 between different scales measuring anxiety and state form of STAI. For the present sample, the Cronbach's alpha coefficients were .93 (pre-test) and .83 (post-test). Turkish STAI-S is presented in Appendix J.

3.2.2.8. The Positive and Negative Affect Schedule (PANAS)

The PANAS (Watson, Clark, & Tellegen, 1988) was developed to assess the positive and negative affect, consisting of two 10-item mood scales. Turkish adaption of the scale was carried out by Gençöz (2000). Two dimensions were found in Turkish PANAS as in the original form and internal consistency coefficients were .83 and .86 for positive and negative affect, respectively. Test-retest reliability results were .45 for positive affect and .54 for negative affect. Criterion-related validity was measured by looking at the relationship between the Beck Depression Scale and the Beck Anxiety Scale. The correlation coefficients were found as .48 and .22 for positive effect, .51 and .47 for negative affect, respectively for BDI and BAI. For the current sample, Cronbach's alpha coefficient were .88 (pre-test) and .86 (post-test) for positive affect; and .88 (pre-test) and .87 (post-test) for negative affect. Appendix K provides a copy of PANAS.

3.2.2.9. Infertility Self-Efficacy Scale

The Infertility Self-Efficacy Scale (ISE) was originally developed by Cousineau, Green, Corsini, Barnard, Seibring, and Domar (2006) in order to measure infertile women's perception concerning their ability to deal with a set of cognitive, emotional and behavioral skills corresponding to the treatment of infertility. The original scale is composed of 16 items on which higher scores indicate higher infertility self-efficacy. The Turkish adaptation of the scale was carried out by Arslan-Özkan, Okumuş, Lash, and Fırat (2014). Cronbach's alpha coefficient of Turkish Infertility Self-Efficacy Scale was found as .78 which

showed moderate reliability, while item-total correlations ranged from .30 to .54. In addition, the content validity of the scale was calculated by computing the evaluations of 12 experts and .48 concordance coefficient was reported. For the present sample, Cronbach's alpha reliability coefficients were found as .77 (pre-test) and .79 (post-test). Infertility self efficacy scale can be found in Appendix L.

3.2.3. Procedure

In order to invite women to participate in the present study, the present researcher recorded a video introducing herself and the study. The video was shared on the web-page of an infertility-related association (i.e. Çocuk İstiyorum Derneği). All respondents were contacted online and given detailed information regarding the online group intervention. Informed consents were also distributed online.

After the Demographic Information Form, all eligible participants were presented the baseline measures containing Meaning in Life Questionnaire (MLQ), Post-Traumatic Growth Inventory (PTGI), Stress Appraisal Measure (SAM), Beck Depression Inventory (BDI), Beck Hopelessness Scale (BHS), State-Trait Anxiety Inventory-State (STAI-S), The Positive and Negative Affect Schedule (PANAS) and Infertility Self-Efficacy Scale in a counterbalanced order. The participants were then randomly assigned to either intervention or waiting list control group. Both groups were composed of 40 participants. Control group filled out the scales 8 weeks after the first distribution while the intervention group was presented the same scales after the online intervention was completed, again 8 weeks after the beginning of the intervention. Due to ethical reasons, the control group had also been invited to attend the online sessions, which began with the completion of the post-test assessments.

The sessions of the intervention were held on an online instant-messaging program and in group format. Chat rooms were formed for five different groups

including eight participants in each group at the beginning. The participants expressed themselves by writing in the chat room. Before the first session, each participant was informed about the confidentiality issues and asked to create an anonymous profile to use during the sessions. For the experimental group, only 5 out of 40 participants were convinced to create an anonymous account, the rest wanted to attend with their original names. The participants were asked to be online at the same time and on the same day for 8 weeks. Each session lasted 90 minutes. The participants had to attend all 8 sessions from the first minute to the last. As a clinical psychologist, I was present in the chat room for every single session and I led each online group session of five different groups for 8 weeks. In the chat room, it was possible to see who was online and who did read the written messages. A reminder was sent to the participants on the day of the session every week.

3.2.4. Intervention and Control Conditions

3.2.4.1. Intervention Condition

The intervention (or experimental) group was offered an online group intervention as it was already mentioned. The online intervention program aimed to facilitate a meaning-making process in case of infertility. With the purpose of increasing positive meanings and eliminating the negative attributions of infertility, the sessions were formed based on the main principles of Meaning-Centered Therapy (Wong, 2010). Besides, the researcher benefited from the themes emerged in the first study of the current dissertation which, with a qualitative design, aimed to understand the meaning-making among Turkish women suffering from infertility. By taking the results of the first study into account, a perspective which aims to separate infertility from a self-sacrificing pattern was adopted as the main perspective during the intervention given in this study. In order to prevent the cycle of control (hope)/no control (disappointment), which was another theme appeared in the first study, it was also aimed to create an infertility perception in which participants see it as a

health problem they want to overcome rather than an incompleteness they have to cover. In the interpretative phenomenological analysis of the first study, it was found that women with infertility have a desire to be (or usually just to look) strong basically to be able to continue infertility treatments. Thus, during the sessions, their rights such as giving intervals between treatments, stop treatments, consider alternative ways (e.g., adoption), move on with their lives (i.e. education, career etc.) were strongly emphasized. Accordingly, raising self-empathy as well as self-compassion and achieving self-acceptance were aimed. Instead of avoiding or suppressing their feelings, they were encouraged to share them both during the sessions and in their daily life. Religious appraisals (e.g., seeing infertility as a test from God), which were common in the first study, were approached sensitively and related emotions were addressed carefully in the intervention. Therefore, by considering both the main principles of meaning-centered therapies and themes emerged in the first study, the aims, main themes, and questions, as well as the therapeutic techniques for each online session of the intervention were designated (see Table 3). Appendix M provides a short manual for the online intervention program.

Table 3. New intervention: Sessions of online intervention program aiming to increase meaning making of infertility

Sessions	Aim	Themes & Questions	Main Techniques
1st Week	Provide a safe and supportive environment Enhance the group interaction Creating a group cohesion Uncovering hidden feelings	Introduction Setting the rules Confidentiality issues Expectations (eliminating unrealistic ones) Let each participant to introduce herself Talking about infertility experience (When and how did they learn? What did they do about it? What are they doing about it right now?)	

Table 3. (continued)

2nd Week	Uncovering hidden feelings Raising self-empathy and self-compassion	The effects of infertility Their emotions related to infertility Normalizing the feelings Homework: Write a paragraph on what infertility does mean to you.	Unconditional positive regard Emphatic listening
3rd Week	Understanding infertility	What does infertility mean to them? What does it mean before&after their diagnosis? Making sense of situations they are going through	Socratic questioning Challenging unrealistic thoughts
4th Week	Acceptance Challenging the negative meaning-making of infertility	Acceptance of uncontrollable aspects of infertility Acceptance of possible negative outcomes of the treatments Acceptance of different solutions to being childless Exploring themselves other than being infertile Raising the self-acceptance	Empathy Active listening Reflecting Challenging unrealistic thoughts
5th Week	Identifying relational needs	How are they affected by people's perception of infertility? How do people surrounding them affect them? What do they expect from others? What do they infer from their relationships with others? How can they satisfy their relational needs?	Socratic questioning Challenging unrealistic thoughts
6th Week	Taking action Behavioral activation Preventing social isolation	When was the last time they did something just for themselves? What are the things they can actively do to make them feel better? How can they explain themselves to people to be better understood and get the support they need?	Goal-setting

Table 3. (continued)

7th Week	Strengthening the positive meaning making Seeing infertility in a different perspective	Their strengths? The things they do best during this period? What does infertility bring to their lives? What is it that really matter in life? In what ways they feel strong? What can they do with the power they have? Homework: Write a paragraph on infertility's meaning for you.	Clarifying values
8th Week	Evaluation	Reviewing of the homework. Evaluation: What has changed from Session 1 to now in terms of infertility meaning? How do they interpret infertility now? How do they feel about the intervention? What benefits did they get? How? Any life lessons they got? Any suggestions for improving the intervention?	

3.2.4.2. Control Condition

After the random assignment, there were 40 participants in the control group. The participants in the control condition waited for 8-weeks after completing the baseline assessments. After 8 weeks, they were asked to fill out the same assessments. While they were presented with the pre-test measurements, they were told about the time of their intervention as it would be held in 8 weeks. Twenty four participants in the waiting-list control group completed the post-test measurements. All participants who completed the post-test assessments were offered the same online intervention. Three different groups composed of 8 participants were created. The sessions were held again by the present

researcher. In total, 18 participants from the control group completed the 8 weeks online intervention.

3.2.4.3. The Therapist

As the researcher of the present study, I led each online group intervention session of the experimental and waiting-list control groups. I am a clinical psychologist with 5 years of clinical experience and currently working in private practice as well as in a university's counseling center. During my Ph.D. education, I had completed my clinical training in two years, and I had seen eight clients under the supervision of four different supervisors. I had been supervised with cognitive-behavioral, schema oriented, relational and psychodynamic psychotherapy principles. As part of our clinical program, I got training on supervising and I gave clinical supervision to clinical psychology Master's students for more than a year. In addition, I got trained in group psychotherapy and attended a group psychotherapy composed of clinical psychologists under training.

3.3. Result

3.3.1. Sample characteristics

Independent sample *t*-tests, chi square analyses, and one-way ANOVA's were implemented in order to ensure about the equality of groups in terms of sociodemographic, infertility-related, relationship quality and psychological status domains.

To begin with, two groups (i.e., intervention and control groups) were not found significantly different from each other in terms of age, years of marriage, education and income. In terms of infertility related characteristics, the two groups were not significantly differentiated from each other when years of infertility, the reason for infertility, current treatment status, and the number of

IVF treatments were taken into account. Moreover, the groups were not different from each other in their reports of relationship quality with their husbands (see Table 4).

Table 4. Baseline sociodemographic, infertility-related and relationship characteristics of intervention and control groups

	Group					
Variable	Intervention (*n* = 27)	Control (*n* = 24)	*t*	$\chi 2$	*F*	*p*
Sociodemographic Characteristics						
Age *M (SD)*	31.19 (5.44)	31.75 (5.74)	0.36			.72
Years of marriage *M (SD)*	7.36 (3.03)	5.83 (3.51)	1.52			.14
Education *n* (%)					0.07	.80
Elementary	8 (29.6)	8 (33.3)				
High School	7 (25.9)	5 (20.8)				
University	9 (33.3)	8 (33.3)				
Graduate	2 (7.4)	3 (12.5)				
Other	1 (3.7)	0 (0)				
Income *n* (%)					0.03	.87
Low	5 (18.5)	4 (16.7)				
Middle	22 (81.5)	20 (83.3)				
High	0 (0)	0 (0)				
Infertility-related characteristics						
Infertility in years *M (SD)*	5.22 (3.27)	3.92 (3.03)	1.47			.15
Reason of infertility *n* (%)					0.08	.78
Female factor	6 (22.2)	8 (33.3)				
Female & male factor	15 (55.6)	7 (29.2)				
Reason unknown	4 (14.8)	8 (33.3)				
Other	2 (7.4)	1 (4.2)				
Number of IVF trials **(*n*=34)** *M (SD)*	3.69 (3.36)	2.39 (2.52)	1.28			.21
Current treatment condition *n* (%)				2.91		.09
Yes	14 (51.9)	18 (75)				
No	13 (48.1)	6 (25)				

Table 4. (continued)

	Group					
Variable	Intervention (n = 27)	Control (n = 24)	t	$\chi 2$	F	p
Relationship characteristics						
Relationship with husband n (%)					1.18	.28
Moderate	4 (15.4)	6 (25)				
Good	11 (42.3)	11 (45.8)				
Pretty Good	11 (42.3)	7 (29.2)				

In the baseline assessments of psychological tests, independent sample *t*-tests did not yield any difference between the intervention and control groups in terms of their search for meaning, presence of meaning, threat, challenge, controllable by self, controllable by others, uncontrollable by anyone, post traumatic growth, depression, anxiety, hopelessness, positive affect, negative affect, and infertility self-efficacy scores (see Table 5).

Table 5. Baseline measurements of psychological tests for intervention and control groups

	Intervention	Control		
Variable	*M (SD)*	*M (SD)*	*t*	*p*
MLQ				
Search for Meaning	4.61 (1.50)	4.89 (1.31)	0.70	.49
Presence of Meaning	4.48 (1.49)	4.65 (1.25)	0.46	.65
PTGI	3.08 (1.13)	2.81 (1.10)	0.83	.41
SAM				
Threat	3.93 (.87)	3.76 (.64)	0.78	.44
Challenge	3.02 (1.17)	3.38 (.94)	1.17	.25
Controllable by self	2.80 (1.01)	2.76 (.82)	0.13	.90
Controllable by others	2.01 (1.13)	1.90 (.82)	0.40	.69
Uncontrollable by anyone	3.48 (.91)	3.10 (.87)	1.51	.14

Note. MLQ = Meaning in Life Questionnaire, PTGI = Post-traumatic Stress Inventory, SAM = Stress Appraisal Measure, BDI = Beck Depression Inventory, BHS = Beck Hopelessness Scale, STAI-S = State Trait Anxiety Inventory-State, PANAS = Positive Affect and Negative Affect Scale

Table 5. (continued)

	Intervention	Control		
Variable	*M (SD)*	*M (SD)*	*t*	*p*
BDI	0.97 (.43)	1.10 (.36)	1.14	.26
BHS	0.48 (.16)	0.49 (.14)	0.24	.81
STAI-S	2.45 (.59)	2.49 (.60)	0.24	.81
PANAS				
Positive Affect	2.67 (.97)	2.54 (.76)	0.50	.62
Negative Affect	2.64 (.83)	2.61 (.93)	0.15	.88
Infertility Self-Efficacy	1.90 (.56)	1.94 (.57)	0.19	.85

Note. MLQ = Meaning in Life Questionnaire, PTGI = Post-traumatic Stress Inventory, SAM = Stress Appraisal Measure, BDI = Beck Depression Inventory, BHS = Beck Hopelessness Scale, STAI-S = State Trait Anxiety Inventory-State, PANAS = Positive Affect and Negative Affect Scale

3.3.2. Correlation Analyses

Correlational analyses were performed for pre-test and post-test scores of all scales as well as necessary sub-scales in order to examine the associations between the dependent variables of the current study. Out of the fourteen scales, including the sub-scales, strong associations were detected (see Table 6). Some of the prominent correlations were observed as follows: At the pre-test, one of the main dependent variables, namely presence of meaning was found to have significant positive correlations with seeing infertility as challenge (r =.45, p < .01), controllable by self (r =.47, p < .01), controllable by others (r =.31, p < .05), as well as positive affect (r =.45, p < .01), and infertility self-efficacy scores (r =.43, p < .01) and significant negative correlations with depression (r =-.50, p < .01), hopelessness (r =-.43, p < .01) and anxiety (r =-.43, p < .01) scores. When it comes to the post test, presence of meaning was signicantly associated with again challenge (r =.65, p < .01), controllable by self (r =.73, p < .01), controllable by others (r =.42, p < .01), positive affect (r =.51, p < .01); and negatively associated with depression (r =-.43, p < .01), hopelessness (r =-.36, p < .05) and this time with negative affect (r =-.36, p < .05) but it did not have any association with anxiety (r =.19, p > .05) and infertility self-efficacy (r =-.19, p >

.05). On the other side, at the pre-test, search for meaning was only associated with controllable by others scores (r =.33, p < .01). At the post test, search for meaning was not found to be associated with any other dependent variable. Please see Table 6 for all correlation coefficients.

Table 6. Bivariate Correlation Coefficients among the Dependent Variables

Variable	(1) T1	(2) T1	(3) T1	(4) T1	(5) T1	(6) T1	(7) T1	(8)T1	(9) T1	(10) T1	(11) T1	(12) T1	(13) T1	(14) T1
1. MLQ Search T1	1													
2. MLQ Presence T1	.20	1												
3. PTGI T1	.08	.21	1											
4. SAM Threat T1	-.05	.12	-.09	1										
5. SAM Challenge T1	.11	.45**	.37**	.01	1									
6. SAM Control. by Self T1	.19	.47**	.46**	-.04	.75**	1								
7. SAM Control. by Others T1	.33*	.31*	.25	-.07	.25	.40**	1							
8. SAM Control.by Anyone T1	-.05	.13	-.06	.64**	.04	.03	.25	1						
9. BDI T1	-.15	-.50**	-.43**	.08	-.47**	-.67**	-.49**	-.04	1					
10. BHS T1	-.06	-.43**	-.45**	.22	-.56**	-.68**	-.32*	.16	.61**	1				
11. STAI-S T1	.08	-.43**	-.31*	.21	-.51**	-.68**	-.30*	.02	.62**	.70**	1			
12. Positive Affect T1	.12	.45**	.38**	-.12	.54**	.72**	.30*	-.01	-.52**	-.71**	-.58**	1		
13. Negative Affect T1	.24	-.27	-.20	.37**	-.22	-.35*	-.22	.15	.54**	.49**	.68**	-.35*	1	
14. Infertility Self-Efficacy T1	.24	.43**	.37**	-.24	.41**	.67**	.42**	-.09	-.64**	-.62**	-.59**	.64**	-.48**	1

*Note 1.*MLQ = Meaning in Life Questionnaire, PTGI = Post-traumatic Stress Inventory, SAM = Stress Appraisal Measure, BDI = Beck Depression Inventory, BHS = Beck Hopelessness Scale, STAI-S = State Trait Anxiety Inventory-State, T1 = Pre-test, T2 = Post-test

Note 2. * Correlation is significant at the .05 level (2-tailed), ** Correlation is significant at the .01 level (2-tailed)

Table 6. (continued)

Variable	(1) T1	(2) T1	(3) T1	(4) T1	(5) T1	(6) T1	(7) T1	(8)T1	(9) T1	(10) T1	(11) T1	(12) T1	(13) T1	(14) T1
1. MLQ Search T2	.42**	-.05	.17	-.20	-.03	.01	.07	-.10	-.12	.14	.02	-.15	.06	.02
2. MLQ Presence T2	.06	.56**	.38**	.05	.34*	.50**	.24	.08	-.52**	-.43**	-.51**	.34*	-.29*	.40**
3. PTGI T2	.05	.23	.68**	-.05	.23	.24	.22	.06	-.34*	-.29*	-.15	.21	-.07	.31*
4. SAM Threat T2	.08	-.11	-.10	.38**	-.18	-.11	-.07	.34*	.11	.16	.11	-.10	.29*	-.10
5. SAM Challenge T2	.08	.35*	.40**	-.05	.37**	.47**	.08	.01	-.42**	-.36*	.35*	.27	-.03	.37**
6. SAM Control. by Self T2	.11	.47**	.53**	.01	.45**	.56**	.39**	.09	-.58**	-.48**	-.47**	.44**	-.23	.48**
7. SAM Control. by Others T2	.32*	.23	.36**	-.02	.14	.22	.56**	.08	-.43**	-.32*	-.14	.20	-.09	.27
8. SAM Control.by Anyone T2	-.15	-.19	-.08	.27	-.30*	-.30*	-.21	.39**	.31*	.32*	.21	-.22	.25	-.11
9. BDI T2	-.19	-.29*	-.25	.16	-.30*	-.35*	-.23	.06	.48**	.32*	.15	-.35*	.15	-.40**
10. BHS T2	-.16	-.15	-.29*	.16	-.11	-.34*	-.17	.10	.32*	.29*	.10	-.34*	.17	-.33*
11. STAI-S T2	.12	.04	.27	.08	.01	.13	.16	.15	-.19	-.08	.02	.14	.10	.17
12. Positive Affect T2	-.02	.31*	.29*	.04	.19	.33*	.13	.06	-.43**	-.25	-.27	.44**	-.22	.39**
13. Negative Affect T2	-.18	-.17	-.11	.34*	-.10	-.23	-.13	.17	.25	.33*	.33*	-.22	.31*	-.39**
14. Infertility Self-Efficacy T2	.10	.16	.07	-.18	.15	.31*	.15	-.19	-.31	-.16	-.09	.25	-.12	.42**

*Note 1.*MLQ = Meaning in Life Questionnaire, PTGI = Post-traumatic Stress Inventory, SAM = Stress Appraisal Measure, BDI = Beck Depression Inventory, BHS = Beck Hopelessness Scale, STAI-S = State Trait Anxiety Inventory-State, T1 = Pre-test, T2 = Post-test

Note 2. * Correlation is significant at the .05 level (2-tailed), ** Correlation is significant at the .01 level (2-tailed)

Table 6. (continued)

Variable	(1) T2	(2) T2	(3) T2	(4) T2	(5) T2	(6) T2	(7) T2	(8)T2	(9) T2	(10) T2	(11) T2	(12) T2	(13) T2	(14) T2
1. MLQ Search T2	1													
2. MLQ Presence T2	.27	1												
3. PTGI T2	.14	.26	1											
4. SAM Threat T2	.23	-.10	-.02	1										
5. SAM Challenge T2	.24	.65**	.48**	.12	1									
6. SAM Control. by Self T2	.12	.73**	.60**	-.11	.76**	1								
7. SAM Control. by Others T2	.17	.42**	.48**	.01	.37**	.64**	1							
8. SAM Control.by Anyone T2	.17	-.13	.08	.75**	.07	-.14	-.15	1						
9. BDI T2	-.07	-.43**	-.33*	.32*	-.42**	-.55**	-.39**	.32*	1					
10. BHS T2	-.01	-.36*	-.27	.32*	-.43**	-.47**	-.35*	.20	.69**	1				
11. STAI-S T2	.16	.19	.40**	.09	.29*	.41**	.41**	.20	-.32*	-.25	1			
12. Positive Affect T2	.07	.51**	.35*	-.09	.50**	.59**	.27	.02	-.41**	-.45**	.38**	1		
13. Negative Affect T2	-.21	-.36*	-.09	.27	-.33*	-.30*	-.16	.15	.49**	.47**	.08	-.00	1	
14. Infertility Self-Efficacy T2	-.06	.19	.23	-.23	.41**	.39**	.10	-.12	-.44**	-.59**	.25	.65**	-.15	1

Note 1.MLQ = Meaning in Life Questionnaire, PTGI = Post-traumatic Stress Inventory, SAM = Stress Appraisal Measure, BDI = Beck Depression Inventory, BHS = Beck Hopelessness Scale, STAI-S = State Trait Anxiety Inventory-State, T1 = Pre-test, T2 = Post-test
Note 2. * Correlation is significant at the .05 level (2-tailed), ** Correlation is significant at the .01 level (2-tailed)

3.3.3. Hypotheses Testing

A 2(Group: Experimental, Control) X 2(Time: Pre, Post) Mixed Design ANOVA with repeated measures on the last factor was implemented to examine the effects of online group intervention on measurements of infertility meaning making (i.e., Meaning in Life Questionnaire, Post-traumatic Growth Inventory and Stress Appraisal Measure) and also psychological well being and ill-being (i.e., Beck Depression Inventory, Beck Hopelessness Scale, State-Trait Anxiety Scale/State, Positive Affect, Negative Affect, and Infertility Self-efficacy).

3.3.3.1. The Findings on Meaning-Making after the Online Intervention

For the first group of hypotheses, ANOVA revealed no significant main effects of time $F(1, 49) = 1.02$, $p > .05$ and group $F(1, 49) = 0.10$, $p > .05$, as well as no interaction effect for search for meaning, $F(1, 49) = 3.29$, $p > .05$. In other words, search for meaning was not changed from pre-test to post-test, and intervention and control groups were not differentiated from each other in terms of search for meaning. Similarly, in terms of presence of meaning no main effects of time or group could be seen [$F(1, 49) = 0.36$, $p > .05$, $F(1, 49) = 0.43$, $p > .05$, respectively]. However, as hypothesized, an interaction effect was evident [$F(1, 49) = 5.39$, $p < .05$] indicating that after the intervention was held, the intervention group had significantly higher scores on presence of meaning ($m = 4.99$, $sd = 1.21$) as compared to the control group ($m = 4.36$, $sd = 1.44$) although there was no significant difference between the groups before the intervention (see Figure 2).

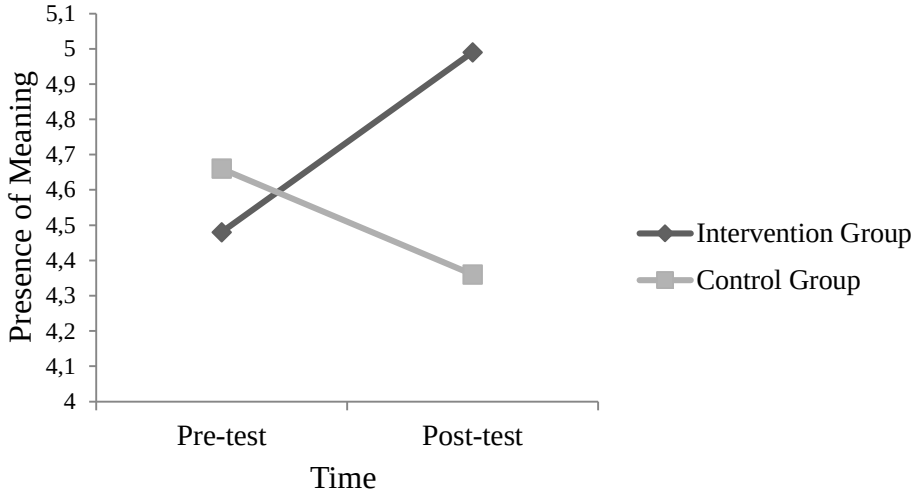

Figure 2. *Interaction effect of time and group on presence of meaning scores*

For PTG scores, ANOVA yielded significant main effect of time [$F(1, 49) = 8.75$, $p < .01$], but failed to yield a main effect of group or an interaction effect; $F(1, 49) = 1.20$, $p > .05$, $F(1, 49) = 0.24$, $p > .05$, respectively. Thus, both groups achieved post-traumatic growth from pre-test to post-test, but intervention was not found to be effective in terms of improving growth. Therefore, it can be concluded that while still searching for meaning and achieving post-traumatic growth with time, intervention group significantly increased their presence of meaning that posits a change in global meaning.

In terms of measures of situational meaning, as mentioned in the second group of hypotheses, separate ANOVAs were computed for the mean scores of subscales of Stress Appraisal Measure. A significant main effect of time [$F(1, 49) = 4.35$, $p < .05$] and more importantly an interaction effect [$F(1, 49) = 8.60$, $p < .05$] were found in terms of seeing infertility as a challenge indicating that from pre-test to post-test, online intervention created a significant change in the intervention group in evaluating infertility as a challenge. At the post-test, intervention group ($m = 3.77$, $sd = .80$) was more likely to see infertility as a challenge when it was compared to control group ($m = 3.25$, $sd = 0.98$) (see Figure 3). Moreover, a main effect of time [$F(1, 49) = 13.18$, $p < .05$] and an

interaction effect [$F(1, 49) = 6.17$, $p < .05$] was obtained in terms of seeing infertility as controllable by self. Thus, although there was no significant difference between the two groups before the intervention, at the post-test, infertile women in the intervention group ($m = 3.51$, $sd = .81$) evaluated infertility significantly more likely as controllable by self when it was compared with the control group ($m = 2.90$, $sd = .96$) (see Figure 4). For controllable by others scores, only a main effect of time could be achieved [$F(1, 49) = 15.48$, $p < .05$] showing that at the post-test controllable by others scores were significantly higher than pre-test. However, a main effect of group or an interaction could not be seen [$F(1, 49) = 0.68$, $p > .05$, $F(1, 49) = .49$, $p > .05$, respectively]. On the other hand, in terms of threat scores, intervention and control groups were not significantly differentiated from each other after the intervention. In other words, an interaction effect [$F(1, 49) = 0.14$, $p > .05$] could not be obtained. Moreover, ANOVA analyses could not yield main effects of time [$F(1, 49) = 3.04$, $p > .05$] and group [$F(1, 49) = 1.31$, $p > .05$] in terms of seeing infertility as a threat. Therefore, while evaluating infertility as a challenge as a result of the intervention, intervention group continued to see infertility as a threat even after the intervention. In parallel with the previous finding, ANOVA analyses failed to reveal any main effects of time and group or an interaction effect in terms of uncontrollable by anyone scores [$F(1, 48) = 0.11$, $p > .05$; $F(1, 48) = 3.13$, $p > .05$; $F(1, 48) = 0.00$, $p > .05$, respectively]. This result showed that appraising infertility as uncontrollable remains even though a feeling of controllability could be developed for the intervention group.

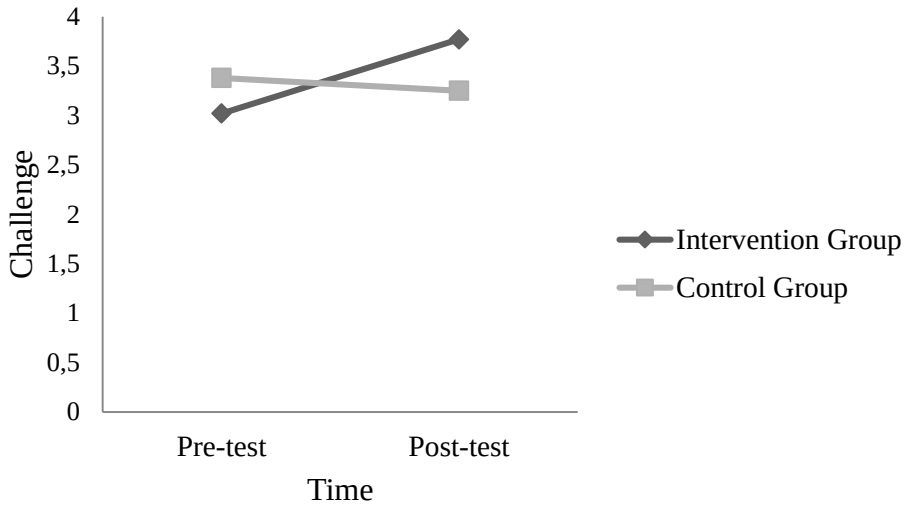

Figure 3. *Interaction effect of time and group on challenge scores*

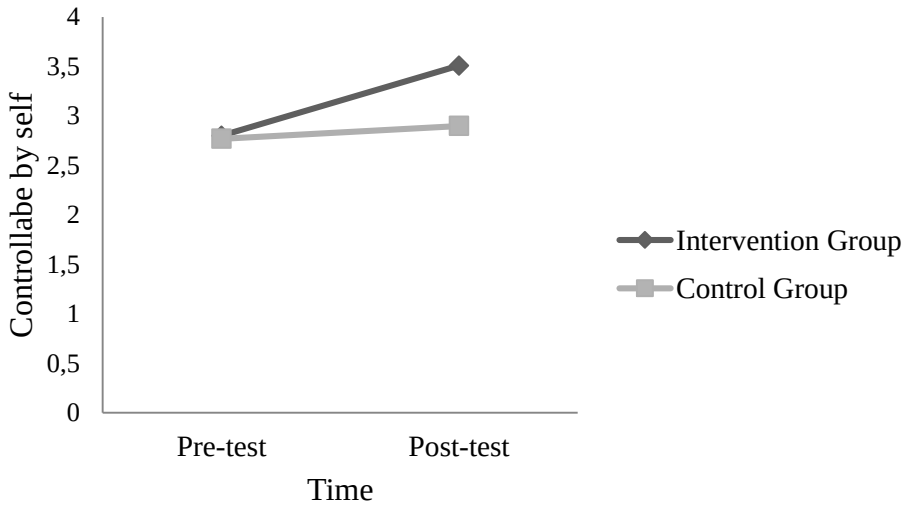

Figure 4. *Interaction effect of time and group on controllable by self scores*

Table 7. Analysis of variance results for main effects and interaction effects of group and time on presence of meaning, search for meaning, post-traumatic growth, threat, challenge, controllable by self, controllable by others, and uncontrollable by anyone scores

Variable	*df*	*MS*	*F*	η^2
Presence of Meaning				
Main Effect of Group	1	1.26	0.43	.01
Main Effect of Time	1	0.28	0.36	.01
Group X Time	1	4.06	5.39*	.09
Within-cells Error	49	0.75		
Search for Meaning				
Main Effect of Group	1	0.30	0.10	.00
Main Effect of Time	1	1.17	1.02	.02
Group X Time	1	3.77	3.29	.06
Within-cells Error	49	1.15		
Post-traumatic Growth				
Main Effect of Group	1	2.69	1.20	.02
Main Effect of Time	1	3.80	8.75**	.15
Group X Time	1	0.10	0.24	.00
Within-cells Error	49	0.43		
Threat				
Main Effect of Group	1	1.20	1.32	.03
Main Effect of Time	1	1.28	3.04	.06
Group X Time	1	0.06	0.14	.00
Within-cells Error	49	0.42		
Challenge				
Main Effect of Group	1	0.17	0.13	.00
Main Effect of Time	1	2.41	4.35*	.08
Group X Time	1	4.76	8.60**	.15
Within-cells Error	49	0.55		
Controllable by Self				
Main Effect of Group	1	2.63	2.02	.04
Main Effect of Time	1	4.53	13.18**	.21
Group X Time	1	2.12	6.17*	.11
Within-cells Error	49	0.34		
Controllable by Others				
Main Effect of Group	1	1.06	0.68	.01
Main Effect of Time	1	6.84	15.45**	.24
Group X Time	1	0.22	0.49	.01
Within-cells Error	49	0.44		
Uncontrollable by Anyone				
Main Effect of Group	1	3.61	3.13	.06
Main Effect of Time	1	0.06	0.11	.00
Group X Time	1	1.78	0.00	.00
Within-cells Error	48	0.54		

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

3.3.3.2. The findings on Psychological Well-being and Ill-being Indicators after the Online Intervention

For the third group of hypotheses expecting psychological well-being improvements and ill-being recoveries in the intervention group, an interaction effect could only be seen for infertility self-efficacy scores c Even though infertility self-efficiacy of the two groups were not significantly differentiated from each other before the intervention was held, after the intervention, the intervention group (m = 2.38, sd = 0.50) got significantly higher infertility self-efficacy scores as compared to the control group (m = 2.06, sd = 0.65) (see Figure 5). A main effect of time was also seen, $F(1, 49) = 12.25$, $p < .05$. For the depression [$F(1, 49) = 0.97$, $p > .05$], hopelessness[$F(1, 49) = 2.05$, $p > .05$], anxiety[$F(1, 49) = 1.37$, $p > .05$], positive affect [$F(1, 49) = 3.18$, $p > .05$] and negative affect [$F(1, 49) = 0.98$, $p > .05$] scores; an interaction effect could not be obtained. On the other hand, a main effect of time was obtained for each of the psychological well-being and ill-being measures [$F(1, 49) = 19.52$, $p < .01$; $F(1, 49) = 6.67$, $p < .05$; $F(1, 49) = 17.88$, $p < .01$; $F(1, 49) = 5.12$, $p < .05$; $F(1, 49) = 6.23$, $p < .05$, respectively], indicating an improvement among both groups with time in terms their of psychological well-being scores.

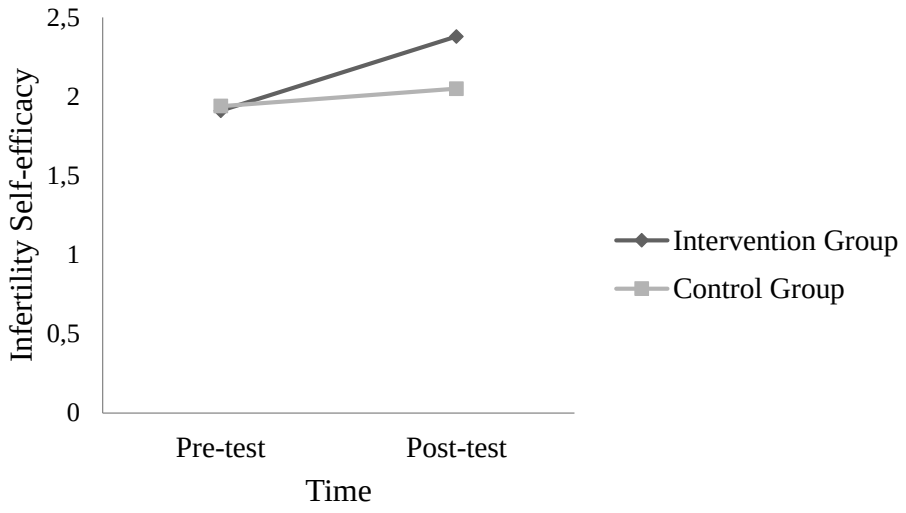

Figure 5. *Interaction effect of time and group on infertility self-efficacy scores*

Table 8. Analysis of variance results for main effects and interaction effects of group and time on depression, anxiety, hopelessness, positive affect, negative affect, and infertility self-efficacy scores

Variable	*df*	*MS*	*F*	η^2
Depression				
Main Effect of Group	1	0.91	3.42	.07
Main Effect of Time	1	1.93	19.52**	.29
Group X Time	1	0.10	0.97	.02
Within-cells Error	49	0.10		
Anxiety				
Main Effect of Group	1	0.14	0.59	.01
Main Effect of Time	1	3.98	17.87**	.27
Group X Time	1	0.31	1.37	.03
Within-cells Error	49	0.22		
Hopelessness				
Main Effect of Group	1	0.06	1.84	.04
Main Effect of Time	1	0.11	6.67*	.12
Group X Time	1	0.03	2.05	.04
Within-cells Error	49	0.02		
Positive Affect				
Main Effect of Group	1	2.96	3.08	.06
Main Effect of Time	1	1.94	5.12*	.10
Group X Time	1	1.21	3.18	.06
Within-cells Error	49	.38		
Negative Affect				
Main Effect of Group	1	0.26	0.27	.01
Main Effect of Time	1	3.01	6.23*	.11
Group X Time	1	0.48	0.98	.02
Within-cells Error	49	0.48		
Infertility Self-efficacy				
Main Effect of Group	1	0.54	1.16	.02
Main Effect of Time	1	2.23	12.25**	.20
Group X Time	1	0.79	4.34*	.08
Within-cells Error	49	0.18		

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

3.4. Discussion

Infertility affects many aspects of infertile individuals' life and, especially for women, overcoming the adverse effects of infertility can be challenging (Greil, Slauson-Blevins, & McQuillan, 2010). As a chronic health problem causing multiple effects in individuals' lives, infertility might change one's both identity and worldview. Cousineau, Seibring, and Barnard (2006) identified infertility as a profound existential issue and a challenge to one's personal belief system. The absence of children causes a meaningless state, which generates an existential anxiety (Yalom, 1980). Meaning-making phenomenon, on the other hand, corresponds to striving to restore meaning in life when it has been disrupted by a traumatic life event (in this case infertility). Thus, it involves making changes in both general worldview and appraised meaning of the traumatic event in order to regain a consistency (Park & Al, 2006). In accordance with these, patients with infertility are frequently suggested to get professional psychological help to be able to deal with the psychological burden of infertility (Peterson et al., 2012). However, both infertility therapy (or counseling) opportunities and request for psychological help from patients are limited due to various reasons such as high costs of psychotherapies or counseling services and insufficient time (Boivin, Scanlan, &Walker, 1999). On the other hand, with developing technology, internet and mobile applications get into the field of mental health and they have been increasingly used by individuals in need (Donker et al., 2013). Nevertheless, the literature is scarce in terms of studies examining the effectiveness of online interventions particularly on infertility-related issues. Besides, to our knowledge, the literature lacks of studies looking at the effects of meaning making or meaning therapies on individuals suffering from infertility. Therefore, the current study aimed to combine the online interventions technology and meaning therapies for individuals suffering from infertility and look at the effectiveness of a meaning-centered online group intervention on meaning-making and psychological well-being among women with infertility.

3.4.1. The Findings in terms of Global Meaning after the Online Intervention

The results of the present study yielded mixed support for the first group of hypotheses which were focusing on global meaning. First of all, it was expected that participants in the intervention group would have lower search for meaning scores as compared to control group after the online intervention. However, the ANOVA analyses failed to reveal a significant interaction effect for the search for meaning indicating that after the intervention, the intervention and control groups were not differentiated from each other in terms of their search for meaning scores. On the other hand, as expected, at the post-test, participants in the intervention group scored higher on the presence of meaning as compared to control group. This result was in line with the literature that people who had been living advanced cancer were found to benefit from meaning-centered group psychotherapy and could form meanings from their experiences (Greenstien, 2000). According to Jim et al. (2006), working on the strategies for finding meaning could reveal itself after two years. In line with this statement, Sullivan (1984) said that meaning-making or exploration of meaning is a never-ending process in individuals' lives. Thus, creating meaning appears to be an ongoing experience. In addition, even though a healthier adaptation to a stressful life event was seen to be possible as individuals shift from 'searching for meaning' to the 'presence of meaning', Dezutter et al. (2013) mentioned 'high presence of meaning and high search for meaning' profile was the most adaptive profile among chronically ill patients. On the other side, low presence of meaning and high search for meaning profile was found to be the least adaptive profile. Therefore, for the current study, it can be evaluated that while still searching for meaning as much as the control group, the intervention group was observed to create meaning after the online intervention. In other words, both groups were searching for meaning while only the intervention group could report the presence of meaning, which might be evaluated as more adaptive.

Along with these, this study could not obtain an interaction effect in terms of post-traumatic growth. In other words, after the online intervention the experimental and control groups were not differentiated from each other on post-traumatic growth scores. However, a time main effect was seen that both groups had increased their PTG scores with the effect of time. Paul et al. (2010) suggested that except for the cases with unexplained infertility, post-traumatic growth was widely experienced by infertile individuals. Therefore, both groups in the present study, which had a few participants suffering from unexplained infertility, might have lived post-traumatic growth in any case. On the other side, the literature found positive correlations between post-traumatic growth and distress that after the traumatic experience distress and growth were observed to increase together (Cadell, Regehr, & Hemsworth, 2003). The same tendency was seen in this study as well; a significant positive correlation was found between post-traumatic growth and state anxiety. Helgeson, Reynolds, and Tomich (2006) pointed out in their meta-analysis that only after a certain time from the traumatic experience, people with higher post-traumatic growth could show lower distress. Considering the fact that the participants of the current study were in a dynamic process of starting a new treatment, experiencing its difficulties and getting probable negative results, their experiences were constantly changing while traumatic experiences were actually repeating. That might limit the effect of the intervention on post-traumatic growth. Similarly, the literature could reveal only modest effects of psychological interventions in terms of improving post-traumatic growth, while interventions with longer duration were more favorable (Roepke, 2015). Thus, the relatively shorter duration of the present intervention, the immediate assessment after the intervention as well as the ever-changing nature of the infertility process might have prevented observing a growth among the participants in the intervention group.

3.4.2. The Findings in terms of Situational Meaning after the Online Intervention

The second group of hypotheses focusing on the changes in situational (or appraised) meaning in infertility was partially supported. Firstly, the results yielded an interaction effect for challenge and an interaction effect for controllable by self indicating that the meaning-centered online intervention was effective in terms of improving positive meaning of infertility among the participants in the intervention group. These results are consistent with the literature. For example, in the pilot study of Greenstein (2000), which was done with cancer survivors, meaning-centered therapy was found to be effective in terms of improving the sense of working more to well-adjust the cancer, being more compassionate and open as well as feeling more responsible for the present condition. Similarly, in their study "Reconstructing Meaning after Trauma", Frazier, Nguyen-Feng, and Baker (2017) identified three levels of control which were past control, present control and future control. They indicated that meanings made after a traumatic event can help the individual to develop a feeling of being in control on the recovery process which actually lead to reductions in distress.

Secondly, however, after the online intervention of the present study, the groups were not significantly differentiated from each other in terms of seeing infertility as a threat as well as evaluating it as controllable by others and uncontrollable by anyone. In other words, while intervention group improved on seeing infertility as a challenge and controllable by self; they did not abandon seeing it as a threat and uncontrollable by anyone. Besides, participants in the intervention group could not improve evaluating infertility as controllable by others. Even though the intervention was found to be effective in terms of improving positive meaning in infertility (i.e., significant increments in challenge and controllable by self scores), it could not be sufficient to make fundamental changes in terms of infertility meaning. Gourounti, Anagnostopoulos, and Vaslamatzis (2010b) conceptualized infertility as a stressor, which was creating a sense of loss and

threatening the major goals in life. In addition, as it was mentioned before, infertility negatively affects many aspects of individuals' lives including their view of self and the world in general (Cousineau et al., 2016). It is also important to consider the fact that while we were working on to challenge the already existing negative meanings of infertility in the meaning-centered online intervention, the social and cultural pressures were still influencing the participants, which might restrain positive meaning-making of infertility. The literature supports this claim. For example, Vanderlinden (2009) pointed out the relatively higher pressure on Turkish infertile couples as compared to German couples with infertility. The infertile women in Turkey were reported to live marital violence such as economic, emotional and sexual violence (Akyuz et al., 2013) and they were seen as widely threatened with divorce (Guz et al., 2003). In this regard, Turkish women were found to experience more blame-guilt when they were compared to women in more Western cultures (i.e., Dutch, Van Rooij, Van Balen, & Hermanns, 2007). Moreover, Turkish women believe that they are constantly exposed to stigmatization from fertile people including important others (Boz & Okumuş, 2017). Under these circumstances, changing the negative meanings of infertility and improving a positive meaning-making of the infertility process become more challenging. Therefore, Klock (2011) suggested psychologists to invite both women and men to the psychotherapy regardless of which partner was diagnosed with infertility. Furthermore, in online meaning making, participants might need more time to facilitate a change. In their study, Mallen, Day, and Green (2003) concluded that their participants in the chat-room conversations condition needed more time to obtain similar levels of satisfaction, emotional understanding, self-disclosure and closeness with a stranger as compared to participants in the face-to-face conversations condition. Thus, longer duration interventions, which include not only women but also men as couples, would be more effective in facilitating online meaning-making.

3.4.3. The Findings in terms of Psychological Well-being and Ill-being Indicators after The Online Intervention

The third group of hypotheses, expecting significant interaction effects of time and experimental condition on psychological well being and ill being indicators could not be supported. Although intervention group was expected to have significantly lower depression, anxiety, hopelessness, negative affect and significantly higher positive affect scores after the online intervention, the experimental and control groups were not different from each other just as before the intervention was held. On the other hand, a significant interaction effect of time and experimental condition on infertility self-efficacy scores could be achieved. In other words, after the online intervention, participants in the experimental group got significantly higher infertility self-efficacy scores as compared to participants in the control group even though the two groups were not different from each other before the online intervention. The literature presented similar findings that in the study of Oh et al. (2013), it was found that people's health-related self-efficacy tended to increase as they got emotional support over the internet. Another study done with breast or colorectal cancer patients found meaning-centered therapy efficient in increasing self-esteem, optimism, and self-efficacy during the treatments (Lee, Cohen, Edgar, Laizner, & Gagnon, 2006)

While there exist studies showing the contributions of interventions in terms psychological well-being improvements in cases of infertility (e.g., Boivin, 2003; de Liz & Strauss, 2005), some other studies found no significant effect of psychotherapeutic interventions (Hammerli et al., 2009). For example, a meta-analytic study investigating the effectiveness of various psychotherapeutic interventions (i.e., counseling, cognitive behavioral therapies, mind/body orientated relaxation, psychodynamic/-analytic, and mixed interventions) on decreasing depression and anxiety in infertility found no significant effects. However, interestingly, the same meta-analytic study obtained significantly higher pregnancy rates for infertile individuals who had taken psychotherapeutic

help (Hammerli, Znoj, & Barth, 2009). Yet, another review indicated more positive effects of psychological interventions in reducing anxiety as compared to depression while no effect was mentioned related to interpersonal functioning (Boivin, 2003). On the other hand, a clear positive effect was figured in respect to infertility-specific stress (Boivin, 2003), which seems to be consistent with our findings that infertility self-efficacy was developed after the online intervention as different from other psychological aspects. Furthermore, despite the improvements in terms of presence of meaning, participants in the intervention group were still searching for meaning, which might have negatively affected the depression, anxiety, hopelessness, as well as positive and negative affect scores. According to a study conducted by Cleiren (1993), among individuals in bereavement, distress (e.g., depression, avoidance and intrusions) was seen high while meaning making was still in progress. On the other side, a study conducted with older adults living in the nursing homes revealed that the use of meaning-based coping helped them in positive adaptation while their distress had remained (Danhauer, Carlson, & Andrykowski, 2005). Therefore, a higher distress does not always imply a negative adjustment, which might also be applied to the findings of the current study. In other words, while still experiencing distress, participants in the intervention group might have showed a better adjustment to the infertility process. This might also explain the significantly higher infertility self-efficacy scores of the participants in the intervention group.

Even though the ANOVAs could not reveal interaction effects of for group and time on depression, anxiety, hopelessness as well as positive and negative affect scores, which indicated ineffectiveness of online intervention, a significant main effect of time could be achieved for each. In other words, from pre-test to post-test, participants in both intervention and control groups got significantly lower scores on depression, anxiety, hopelessness and negative affect; and significantly higher scores on positive affect. After the online announcement was made on the web-page of the infertility-related association (i.e., *Çocuk İstiyorum Derneği*), volunteer women had contacted with the researcher of this study. The

vast majority of the volunteer participants mentioned that they were getting prepared for a new treatment and availability of a possible psychological support might have positive effects on their fertility. Their expectations of feeling better before their IVF treatments might have influenced the results of this study. In other words, participants in the control group might also begin to feel better while waiting for the online intervention. In the literature, infertility experience is generally described as a never-ending process like an emotional roller coaster with changing crises (Menning, 1980). Thus, different coping styles get into play according to the changing conditions related to infertility such as beginning to a new treatment or deciding for an adoption (Cunha et al., 2016). Morrow et al. (1995) suggested that different coping styles of infertile individuals create different levels of distress and psychological well-being. In addition to these, the phase of the infertility treatment (i.e., before, during or after the treatment) can change the level of adaptation to infertility that the highest adaptations were recorded before the treatment and after the treatment, but only if the positive result was seen (Holter, Anderheim, Bergh, & Möller, 2006). Therefore, the changing conditions related to infertility treatment or infertility process, in general, might have affected the participants in the control group who might have taken further steps in their infertility treatment process while waiting for the intervention (i.e., if they had already started a new treatment). On the other hand, it is not known whether control group participants' well-being was permanent or temporary. A meta-analytic study looking at the effectiveness of psychotherapy on diminishing the depression and anxiety symptoms in infertility found that in both individual/couple and group psychotherapy conditions, psychotherapy was effective but the highest symptom reduction was seen after 6 months (de Liz & Strauss, 2005). Similarly, Domar et al. (2000) looked at the effectiveness of group psychotherapy on infertile women just after 6 months and 12 months from the intervention. In terms of meaning-making, Graham et al. (2008) reported that, in cases of chronic pain, expressive writing of anger facilitated a meaning-making process which enabled greater control over the pain and lowered depressed mood. However, they observed the highest benefit at the 9 weeks follow-up rather than the 4 weeks follow-up which indicated that, after the

intervention, a positive effect of meaning-making built up over time. Thus, further research should make follow up assessments in order to see if there are any differences between the intervention and control group about the long-term effects of the online intervention. On the other hand, it is important to mention that the literature suggests infertility interventions as an option when the individual is not under medical treatment (Hammerli, Znoj, & Barth, 2009). In this study, infertile women were included regardless of their medical treatment condition. Further studies should prioritize being under medical treatment as an exclusion criterion.

3.4.4. Therapist's Experiences for The Online Group Intervention

After I formed the online intervention groups, I informed each participant individually about the exact day and time of her session. Majority of the participants were excited about the study they participated. The participants did not experience major difficulties in understanding and adapting to the general format of the sessions. They said that they were used to express themselves through writing in the infertility groups on the internet.

As the leader of the group, I had to be fully concentrated not to miss anything in the chat-room, and respond or get involved in the conversation at the right time in accordance with my aim in that specific session. I had taken notes after sessions for myself, and before each session I re-read both my notes and writings (or messages) of the participants from the previous session. There were participants who I knew doing the same before the sessions had started. On the other hand, there were participants who seemed to be reluctant to attend the online sessions. I observed that the drop-outs were mostly seen among those unwilling women, especially right after the first session. Not being ready to share their infertility-related experiences, having problems other than infertility (i.e., marital relationship, working environment etc.), and not having enough time for attending 90 minute online sessions were the most commonly stated reasons for drop-outs. The last four weeks of the sessions coincided with Ramadan. Most of

the participants were fasting and busy with welcoming guests for dinner or dealing with housework which also increased the number of drop-outs.

Some of the participants tried to get into contact individually with me between the sessions in order to either tell or ask about their current problems. I interpreted it as a wish for being special for the researcher (or the psychologist). I paid attention to be responsive but at the same time, I tried to encourage those participants to share their concerns during our meetings, in the chat-room. I can say it was a touchy group to study with. One should be careful while communicating with them, since they can easily withdraw themselves. For example, the Turkish word for being infertile "*kısır*" was commonly found offending by the participants. I paid attention to their sensitivity and did not use that word in any of my statements. In addition, religious coping was prevalent among the participants, which was reflected in their language. Prays and good wishes (e.g., Allah nasip ederse, inşallah, amin etc.) had commonly been used during the sessions and I had attended them. They were curious about me and why I was doing such a study. When I shared my story with them, they said that they felt even closer and wanted to share more about themselves faithfully.

When I asked regarding their expectations about the online intervention, almost all of the participants stated their need for expression and being understood. They were looking for decreasing their stress and getting relaxed in the sessions. Most of them believed getting relaxed might have helped them during the treatment process and positive results could be achieved. Being in a small group with infertile women and being led by a clinical psychologist in the group seemed to motivate them in attending the online sessions. On the other hand, they were indicating that they were grateful to me as I was not only collecting assessments but also suggesting psychological help which was easily accessible to them.

As I expected, for most of the participants, infertility was equal to being incomplete. Trying to increase positive meaning of infertility or being infertile was not easy at all. The messages we had given in the sessions were so different

from what they had been hearing for a long time. They always emphasized that the expressions of doctors, nurses, family members, relatives, neighbors and friends on infertility were not parallel to what we had been talking in the online meetings. Therefore, regardless of the session's main topic or theme, a considerable amount of time in the sessions was devoted to the effects of their relationships with important others in their lives.

At the end of the sessions, when I asked about their gains, the participants stated the following aspects as the most helpful for them: meeting infertile women, getting attention from other women and from a professional, expressing emotions, being listened without being criticized, thinking about the meaning of infertility, trying to see infertility from a different perspective, and finally becoming more aware of themselves. For some groups, I observed that the termination was really hard. They did not want me to delete messages and close the chat-room for at least a couple of more days to re-read the messages posted during the sessions. I still receive messages from the participants telling about the news on their treatments.

3.4.5. Conclusions and Implications for Future Research

The current study aimed to develop and test the effectiveness of an online intervention in the meaning making of infertility. By facilitating changes in the global and situational meaning of infertility through a meaning-centered online intervention, a better adaptation to the process of infertility was tried to be achieved among women suffering from infertility. To our knowledge, this study is the first in the literature which tested the effectiveness of an online intervention in making-making. Although there exist articles in the literature suggesting a joint meaning-making online and there appear studies looking at the effectiveness of expressive writing in creating meaning as well as increasing psychological well-being in various stressful conditions, the current study is the first pre-test/post-test control group design that assessed the effects of an online intervention held in a chat-room, in a group format and guided by a psychologist.

Furthermore, the current study is the first study in the literature aiming to look at the effects of a meaning-centered intervention on meaning-making processes and psychological well-being of women suffering from infertility.

For the first group of hypotheses of the present study focusing on the changes in global meaning, online intervention could yield promising results. The intervention was found effective in increasing presence of meaning but not post-traumatic growth. Besides, the intervention group was found to possess same levels of the search for meaning after the intervention was held. Therefore, it can be concluded that the effectiveness of the online intervention was limited in terms of facilitating a global meaning among women with infertility. In terms of situational meaning, which was tested in the second group of hypotheses, a similar tendency was seen. Even though the meaning-centered online intervention was found to be effective in facilitating a change in terms of seeing infertility as more likely a challenge and controllable by self, it could not be effective in decreasing the way of interpreting infertility as a threat and uncontrollable by anyone. The online nature of the intervention might have led to the limited changes in terms of meaning-making. Therefore, further studies should implement online interventions with longer durations. On the other hand, especially in cases of infertility which has longly been evaluated as an emotional roller coaster (Menning, 1980), online interventions can be applied in company with the usual psychotherapeutic treatments. In other words, online platforms can be used as part of usual psychotherapy treatments. In addition, with developing technology, further research should broaden the online interventions by adding group videoconferencing sessions.

As it was already mentioned, infertile women are a sensitive group (Greil, Leitko, & Porter, 1988), infertility is a multidimensional health problem affecting various aspects of infertile individuals' life (Greil, 1997) and it is a dynamic process including multiple treatments (Johannson & Berg, 2005). All of these might have created disadvantages in terms of obtaining significant results for the effectiveness of the online intervention on measures of depression,

anxiety, hopelessness as well as positive and negative affect. Therefore, more research is needed on online meaning-making which may create different levels of effectiveness especially in different stressful circumstances other than infertility. On the other hand, the online intervention of the present study could reveal significant results in terms of infertility self-efficacy, which shows its effectiveness in providing psychological support for individuals experiencing the difficulties of infertility process. Thus, the whole intervention or parts of it can be used by mental health professionals in order to provide psychological help for women with infertility. Especially for the women who do not have any access to professional psychological help, online interventions can be an option.

3.4.6. Strengths and Limitations

The current study included infertile women with primary infertility due to female or female/male factors. These women were reached out of the infertility treatment context which can be seen as a strength that most of the intervention studies in the literature were containing only women under IVF treatments. Thus, the participants were contacted via the internet and the intervention was also delivered online. The internet enabled us to reach infertile women from different parts of Turkey as well as from different socio-economic and educational backgrounds. These women could attend the online sessions in the comfort of their houses and during the evening times or weekends. Weekly meetings had become a routine for them for eight weeks. Most of the participants did not want to share any information with their family and friends regarding the psychological help they were taking as a part of a study. Chat-room conversations provided them privacy, by the help of which they could share freely.

In terms of the researcher, reaching such a group of women became a lot easier over the internet. Besides, as a single researcher, by the means of the internet, it could be possible to complete the intervention with five different groups and in eight weeks.

Although the current study presents important contributions, it has some limitations too. First of all, this study has a small sample size mainly due to high attrition rate. It is also important to mention that the online interventions were implemented by a single researcher, which automatically limited the number of participants invited to the study. Nevertheless, even if a large number of participants were reached at the beginning, drop-outs were seen after the random assignment had already been done. Some of the drop-outs were observed because of the unexpected pregnancies. Yet another group of participants could not adapt themselves to the regular, weekly, 90-minute meetings. A large number of participants in the waiting list control group did not reply after they had learned that their intervention would begin in 8 weeks. Again some of the participants in the control group got pregnant while waiting. Thus, in further studies especially in the ones conducted with infertile participants, researchers should have a larger sample size to eliminate the disadvantages of the possible drop-outs due to pregnancies and different treatments. Although implemention of the online sessions by only one psychologist enabled more standard applications, in further studies, having more than one psychologist may help to reach a larger sample size. Another important limitation of this study was that it did not have another experimental condition to compare the effectiveness of the meaning-centered online intervention with another intervention adopting a different approach. Therefore, further studies should include different experimental conditions as well as a control condition to reveal a better picture in terms of effectiveness of online interventions in the meaning making of infertility. As it was mentioned before, shorter duration of the intervention could be seen as another limitation since online meaning making might need more time to be actualized. Lack of follow-up assessments was a limitation in the present study, which did not let us make any interpretations about persistency of meanings made or improvements in meaning making a while after the online intervention. Therefore, further studies should add follow-up assessments to better understand the effects of the online intervention. Moreover, it would be important to consider the social desirability effect in terms of the answers given by the members of the intervention group. Further studies may include social

desirability as a control variable. Finally, future studies may add different measurement of stress to their studies such as observing cortisol levels and other hormonal changes to see the intervention's effect on participants. In relation to that, pregnancy rates of the participants in the experimental and control groups may be compared.

CHAPTER 4

GENERAL DISCUSSION

"When the world says, 'Give up,' Hope whispers, 'Try one more time.'"
— Anonymous

This chapter includes a general discussion combining the findings of the first and second studies of the current dissertation in the light of the literature. The importance and implications, as well as the limitations and directions for future research will be presented.

4.1. General Discussion

The main aim of the current doctoral thesis was to understand the meaning-making processes among Turkish women with infertility. In addition, it was aimed to develop an online intervention in meaning-making to facilitate a positive meaning of infertility among again Turkish women with infertility. Thus, this thesis adopted a mixed method design including a qualitative study followed by a quantitative study. In accordance with the aims of the current dissertation, the researcher benefited from the themes appeared in the first study while preparing the online intervention of the second study.

The first study of the current dissertation had a qualitative design which adopted a purpose of understanding the meaning making of infertility, specifically, how it was interpreted, where those interpretations came from, how the participants were feeling about those interpretations of infertility, and how they could cope with the feelings aroused due to the appraised meanings of infertility. A

culturally relevant framework was also aimed to be produced while examining the particular experiences of Turkish women suffering from infertility. The qualitative analyses revealed four main themes, which provided us with a storyline of how meaning-making of infertility takes place for the participants. Thus, it begins with the sense of the ideal woman who is a self-sacrificing mother. Women with infertility do not have a child to sacrifice themselves for; hence, they cannot reach 'the ideal woman' by giving birth to a child. Therefore, they sacrifice themselves to be able to get pregnant. The interpretation of infertility as incompleteness and subsequent emotions (i.e., anger, guilt, shame, downtrodden) are observed to be handled by mainly seeing infertility as a test and feeling gratitude for what they have. This meaning-making process seems to be responsible for the before-mentioned self-sacrificing pattern of the participants. In that case, repetitive IVF treatments appear to be as the main practice of the self-sacrificing pattern. The quotation presented at the beginning of this chapter was taken from an infertility support group web-page. It is possible to find hundreds of similar quotations on the internet suggesting women not to give up and continue regardless of the circumstances. It seems as a way to regain the control in their lives. This tendency of the participants was identified as "the cycle of control (hope) and no control (disappointment)" in this study. It was interesting to see their desire to have a child regardless of the compelling circumstances they had been experiencing. Simon (2013) suggested that the control produced through Assisted Reproductive Technologies (ART) is illusionary. In addition, repetitive treatments of infertility exacerbate the pain of infertility due to the repetitive failure. In a very recent diary analysis study conducted in Turkey by Boz and Okumuş (2017), it was found that infertile women actually feel a sense of losing control during the treatments alongside the prevalent pessimism and anger. In other words, they experience an intense feeling of losing control at the time they are trying to regain the control. On the other hand, feminist scholars widely discussed the medicalization of women's bodies through IVF treatments and they suggested that women decide to get into infertility treatments under social constraints (Earle & Letherby, 2007). Therefore, while meaning-making of this stressful health condition seems

inevitable and can be effective in some aspects (e.g., they feel gratitude) as meaning-making model suggested (Park, 2010), the meaning-making process in infertility is not safe from social pressure. In this regard, Turkey has known to be a strong pronatalist country which widely praises motherhood and encourage men and women to have a child (actually more than a child) after they get married (Gürtin, 2016). The interpretation of infertility as incompleteness and the self-sacrificing pattern, later on, is probably affected by the societal and cultural discourses adopting that pronatalist perspective. Under these circumstances, the ways of facilitating a healthier meaning-making process (i.e., positive meaning-making) should be considered by mental health professionals. The second study of the current dissertation is conducted in accordance with this requirement.

The second study of the current dissertation had a quantitative design which aimed to develop and test the effectiveness of an online intervention program in meaning-making of infertility. It has recently been found that infertile individuals widely use the internet to reach information and get support (Satir & Kavlak, 2017) and they have limited access to professional psychological help (Read et al., 2014). Online interventions can become alternative ways of providing professional help particularly for individuals who do not have access to infertility counseling or psychotherapy. By considering this aim, an online intervention was developed based on the principles of meaning-centered therapies (Wong, 2010) as well as the themes emerged in the first study. The findings of the second study revealed promising results in terms of online meaning-making in infertility that a change in presence of meaning could be achieved. In addition, positive meaning of infertility (i.e., seeing infertility as a challenge and controllable by self) could be facilitated. In conjunction with these findings, the online intervention could increase the infertility self-efficacy of the participants.

In general, the results of the two studies of the present dissertation provided support for meaning-making model (Park, 2010). The qualitative study showed how meaning-making takes place after infertility diagnosis which was identified

as incompleteness leading to emotions such as anger, guilt, shame and downtrodden. However, this meaning making-process, which seems to arise automatically, was observed to trigger a cycle of control (hope) and no control (disappointment). This cycle manifests itself through consecutive IVF trials. Therefore, the idea of facilitating positive meaning-making in infertility becomes more of an issue. In this regard, despite its limitations, the quantitative study showed that meaning making process can be supported to achieve a healthier meaning of infertility. In addition, it was seen that internet can be an alternative way to provide mental health support.

4.2. The Importance and Implications of the Current Dissertation

In the current dissertation, the internet was used as a relatively new technology for social research. In both Study 1 and 2, announcements were made, informed consents were taken and finally the data were collected online by implementing a variety of methods such as e-mails, videoconferencing, and chat-rooms. Therefore, both studies contribute to recently developing literature using internet in research settings. In addition, recently, various patient groups including infertile patients turn to online resources to look for information, suggestions and psychological support (Malik & Coulson, 2010). A study conducted in the United States found that infertile women prefer online support with respect to professional psychological services in case of infertility treatment (Cousineau et al., 2008). Recently, Turkey has also been following a similar trend (Satir & Kavlak, 2017). In parallel to that, online interventions are increasing (Andersson, Ljotsson, & Weise, 2011). Research on reducing infertility distress with online counseling is also expanding. Web-based cognitive behavioral therapy interventions and psycho-educational support groups for infertility are recently being studied in the literature (see Cousineasu et al., 2008; Sexton, Byrd, O'Donohue, & Jacobs, 2010). On the other hand, in the literature there is a lack of studies about online interventions on meaning-making of infertility, although the contribution of positive meaning-making in stressful events is widely accepted (Park, 2010). Firstly, to the best of our knowledge, the current

dissertation includes one of the first studies that aimed to understand the meaning-making of infertility among Turkish women with infertility. The results of the first study showed that it is important to be conscious of the self-sacrificing pattern which infertile women seem to get into especially during the IVF treatments period. Not only doctors, nurses and psychologists in IVF clinics, but also political leaders, opinion leaders, and policymakers should be sensitive about infertile women's psychological states. It is necessary to avoid presenting statements which equalize womanhood to motherhood. The results of our qualitative analyses revealed that these women usually tend to look strong even if they are not. Therefore, their need for psychological support should not be missed out. Thus, secondly, this dissertation also contains one of the first studies aiming to develop an online intervention to increase meaning making and look at the effectiveness of it. Furthermore, it is the first study in Turkey that looked at the effectiveness of an online intervention among infertile patients. The researcher of this dissertation benefited from the themes emerged in the first study while deciding the main aims as well as the content of each online session. Interpretation of infertility as incompleteness was found to create a self-sacrificing pattern among women suffering from infertility. They see infertility treatments as the major area of control and the cycle of hope and disappointment becomes more apparent. Thus, infertility counselors or psychotherapists should embrace a more positive interpretation of infertility in their sessions to prevent a self-sacrificing pattern excluding emotional and physical needs of the clients. Fundamentally, this perspective was adopted and applied in the intervention of the second study. In addition, the intervention was designed as to be delivered over the internet and in the group format. The results of the second study provided partial support for joint meaning-making online which was previously suggested by Hammond (2015). The intervention also presented promising findings for the concept of 'computer-supported collaborative learning' which is a relatively new field interested in joint meaning-making practices mediated through computers (Koschmann, 2002). If we consider infertile women, particularly the ones out of the treatment contexts, as hard to reach participants (Read et al., 2014), the psychologists working with infertile populations can

reach more patients and help them by using the convenience of the internet. The online intervention program of the current study can be improved with additional studies and be applied to different chronic health conditions. The people with limited access to psychological counseling services may benefit from online counseling services.

4.3. Limitations and Directions for Future Research

The studies presented in the current dissertation have some limitations. First of all, the qualitative analysis included only women and examined the meaning and meaning-making of infertility only at the time of the interview. In other words, the meaning-making process could not be studied in the long term. Meaning-making has known to be a dynamic process influenced by various internal and external factors (Chen, 2001). Therefore, changing meanings of infertility in course of time and under different circumstances should be studied with a longitudinal design to get a broader picture of infertility meaning-making. In the qualitative analysis, the researcher aimed to understand the cultural elements in the infertility meaning-making. Further studies may also include different cultures and make a comparative analysis of these cultures in terms of meaning-making of infertility. In the current dissertation, the researcher aimed not only to understand but also to create a change in the meaning of infertility among Turkish women suffering from infertility. In accordance with these aims, an online intervention was developed and its effectiveness was tested. Further studies should also investigate the effectiveness of face-to-face (individual or group) meaning-centered interventions in facilitating positive infertility meaning. A limitation of the second study was that it included only one intervention group. Thus, further studies should include more than one intervention group adopting different approaches. Another limitation was the lack of follow-up assessments after the online group intervention. Further studies should make follow-up assessments to examine the permanent or after effects of the online intervention in meaning-making. In this context, future researchers are suggested to recruit more participants at the beginning of the study by considering the possible drop-

outs. Thus, having more than one psychologist to lead the intervention groups would be advantageous. Finally, an online intervention which is held in chat-rooms provides a huge collection of the written conversations. Further research may conduct a qualitative analysis on this collection to understand the dynamics along with the effective and ineffective components of the intervention. Such a study may contribute to the literature in developing more efficacious interventions.

REFERENCES

Abbey, A., Andrews, F. M., & Halman, L. J. (1991). Gender's role in responses to infertility. *Psychology of Women Quarterly, 15*(2), 295–316. doi: 10.1111/j.1471-6402.1991.tb00798.x

Abbey, A., Andrews, F. M., & Halman, L. J. (1995). Provision and receipt of social support and disregard: What is their impact on the marital life quality of infertile and fertile couples? *Journal of Personality and Social Psychology, 68*(3), 455–469.

Ahmedani, B. K., Crotty, N., Abdulhak, M. M., & Ondersma, S. J. (2015). Pilot feasibility study of a brief, tailored mobile health intervention for depression among patients with chronic pain. *Behavioral Medicine, 41,* 25–32. doi: 10.1080/08964289.2013.867827

Ainsworth, J., Palmier-Claus, J. E., Machin, M., Barrowclough, C., Dunn, G., Rogers, A…Lewis, S. A. (2013). Comparison of two delivery modalities of a mobile phone-based assessment for serious mental illness: Native smartphone application vs text-messaging only implementations. *Journal of Medical Internet Research, 15*(4), e60. doi: 10.2196/jmir.2328

Akyuz, A., Seven, M., Şahiner, G., & Bakır, B. (2013). Studying the effect of infertility on marital violence in Turkish women. *International Journal of Fertility and Sterility, 6*(4), 286–293.

Andersson, G., Ljotsson, B., & Weise, C. (2011). Internet-delivered treatment to promote health. *Current Opinion in Psychiatry, 24*(2), 168–172. doi: 10.1097/YCO.0b013e3283438028

Andersson, G., Carlbring, P., Holmstrom, A., Sparthan, E., Furmark, T., Nilsson-Ihrfelt, E., Buhrman, M., & Ekselius, L. (2006). Internet-based self-help with therapist feedback and in-vivo group exposure for social phobia: A randomized controlled trial. *Journal of Consulting and Clinical Psychology, 74*(4), 677–686. doi: 10.1037/0022-006X.74.4.677

Anderson, K. M., Sharpe, M., Rattray, A., & Irvine, D. S. (2003). Distress and concerns in couples referred to a specialist infertility clinic. *Journal of*

Psychosomatic Research, 54(4), 353–355. doi: 10.1016/S0022-3999(02)00398-7

Antonovsky, A. (1990). A somewhat personal odyssey in studying the stress process. *Stress Medicine, 6*(2), 71–80. doi: 10.1002/smi.2460060203

Ashurst, P., & Hall, Z. (1989). *Understanding women in distress*. London: Routledge.

Arslan-Özkan, İ., Okumuş, H., Lash, A. A., & Fırat, M. Z. (2014). Cultural validation of theTurkish version of the infertility self-efficacy scale–short form (TISE-SF). *Journal of Transcultural Nursing, 25*(3), 232–240. doi: 10.1177/1043659613508784

Batool, S. S., & de Visser, R. O. (2014). Psychosocial and contextual determinants of health among infertile women: A cross-cultural study. *Psychological Health Medicine, 19*(6), 673–679. doi: 10.1080/13548506.2014.880492

Batool, S. S., & de Visser, R.O. (2016). Experiences of infertility in British and Pakistani women. *Health Care for Women International, 37*(2), 180–196. doi: 10.1080/07399332.2014.980890

Baumeister, R. F. (1991). *Meanings in life*. New York, NY: Guilford.

Beatty, L., & Lambert, S. (2013). A systematic review of internet-based self-help therapeutic interventions to improve distress and disease-control among adults with chronic health conditions. *Clinical Psychology Review, 33*, 609–622. doi: 10.1016/j.cpr2013.03.004

Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry, 4*, 561–571.

Beck, A. T., Steer, R. A., & Garbin, M. G. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical Psychology Review, 8*(1), 77–100. doi: 10.1016/0272-7358(88)90050-5

Beck, A. T., Epstein, N., Brown G., & Steer, R.A. (1988). An inventory for measuring clinical anxiety: Psychometric properties. *Journal of Consulting Clinical Psychology, 56*(6), 893–897.

Becker, S., Miron-Shatz, T., Schumacher, N., Krocza, J., Diamantidis, C., & Albrecht, U. V. (2014). mHealth 2.0: Experiences, possibilities, and

perspectives. *JMIR mHealth uHealth, 2*(2), e24. doi: 10.2196/mhealth.3328

Behjati-Ardakani, Z., Akhondi, M. M., Mahmoodzadeh, H., & Hosseini, S. H. (2016). An evaluation of the historical importance of fertility and its reflection in ancient mythology. *Journal of Reproductive Infertility, 17*(1), 2–9.

Ben-Zeev, D., Brenner, C. J., Begale, M., Duffecy, J., Mohr, D. C., & Mueser, K. T. (2014). Feasibility, acceptability, and preliminary efficacy of a smartphone intervention for schizophrenia. *Schizophrenia Bulletin, 40,* 1244–1253. doi: 10.1093/schbul/sbu033

Benasutti, R. T. (2003). Infertility: Experiences and meanings. *Journal of Couple and Relationship Therapy, 2*(4), 51–71. doi: 10.1300/J398v02n04_04

Benyamini, Y., Gozlan, M., & Kokia, E. (2004). On the self-regulation of a health threat: Cognitions, coping and emotions among women undergoing treatment for infertility. *Cognitive Therapy and Research, 28*(5), 577–592. doi: 10.1023/B:COTR.0000045566.97966.22

Benyamini, Y., Gefen-Bardarian, Y., Gozlan, M., Tabiv, G., Shiloh, S., & Kokia, E. (2008). Coping specificity: The case of women coping with infertility treatments. *Psychology and Health, 23*(2), 221–241. doi: 10.1080/14768320601154706

Benyamini, Y. (2009). Stress and coping with women's health issues: A review from a self-regulation perspective. *European Psychologist, 14*(1), 63–71. doi: 10.1027/1016-9040.14.1.63

Berg, B. J., Wilson, J. F., & Weingartner, P. J. (1991). Psychological sequelae of infertility treatment: The role of gender and sex-role identification. *Social Science and Medicine, 33*(9), 1071–1080.

Berghuis, J. P., & Stanton, A. L. (2002). Adjustment to a dyadic stressor: A longitudinal study of coping and depressive symptoms in infertile couples over an insemination attempt. *Journal of Consulting and Clinical Psychology, 70*(2), 433–438. doi: 10.1037//0022-006X.70.2.433

Birenbaum-Carmeli, D., & Dirnfeldb, M. (2008). In vitro fertilization policy in Israel and women's perspectives: The more the better? *Reproductive Health Matters, 16*(31), 182–191. doi: 10.1016/S0968-8080(08)31352-4

Boehmer, S., Luszczynska, A., & Schwarzer, R. (2007). Coping and quality of life after tumor surgery: Personal and social resources promote different

domains of quality of life. *Anxiety, Stress and Coping, 20*(1), 61–75. doi: 10.1080/10615800701195439

Boivin, J. (2003). A review of psychosocial interventions in infertility. *Social Science and Medicine, 57,* 2325–2341. doi: 10.1016/S0277-9536(03)00138-2

Boivin, J., Bunting, L., Collins, J. A., & Nygren, K. G. (2007). International estimates of infertility prevalence and treatment seeking: potential need and demand for infertility medical care. *Human Reproduction, 22*(10), 1506–1512. doi: 10.1093/humrep/dem046

Boivin, J., Scanlan, L. C., Walker, S. M. (1999). Why are infertile patients not using psychosocial counseling? *Human Reproduction, 14*(5), 1384–1391.

Boivin, J., & Kentenich, H. (2002). *Guidelines for counseling in infertility*. ESHRE Monographs: Oxford University Press.

Bower, J. E., Kemeny, M. E., Taylor, S. E., & Fahey, J. L. (1998). Cognitive processing, discovery of meaning, CD4 decline, and AIDS-related mortality among bereaved HIV seropositive men. *Journal of Consulting and Clinical Psychology, 66*(6), 979–986.

Boz, İ., & Okumuş, H. (2017). The "everything about the existence" experiences of Turkish women with infertility: Solicited diaries in qualitative research. *The Journal of Nursing Research, 25*(4), 268–275. doi: 10.1097/JNR.0000000000000166

Breitbart, W., Poppito, S., Rosenfeld, B., Vickers, A. J., Li, Y., Abbey, J…Cassileth, B. R. (2012). Pilot randomized controlled trial of individual meaning-centered psychotherapy for patients with advanced cancer. *Journal of Clinical Oncology, 30*(12), 1304–1309. doi: 10.1200/JCO.2011.36.2517

Breitbart, W., Rosenfeld, B., Pessin, H., Applebaum, A., Kulikowski, J., & Lichtenthal, W. G. (2015). Meaning-centered group psychotherapy: An effective intervention for improving psychological well-being in patients with advanced cancer. *Journal of Clinical Oncology, 33*(7), 749–754. doi: 10.1200/JCO.2014.57.2198

Butler, R. R., & Koraleski, S. (1990). A crisis with no resolution. *Journal of Mental Health Counseling, 12,* 151–163.

Cadell, S., Regehr, C., & Hemsworth, D. (2003). Factors contributing to post-traumatic growth: A proposed structural equation model. *American*

Journal of Orthopsychiatry, 73, 279–287. doi:10.1037/0002-9432.73.3.279

Ceballo, R., Graham, E. T., & Hart, J. (2015). Silent and infertile: An intersectional analysis of the experiences of socio-economically diverse African American women with infertility. *Psychology of Women Quarterly, 39*(4), 497–511. doi: 10.1177/0361684315581169

Centers for Disease Control and Prevention. (2014). Infertility. Retrieved from https://www.cdc.gov/reproductivehealth/Infertility/index.htm#6.

Centers for Disease Control and Prevention. (2017). Infertility. Retrieved from https://www.cdc.gov/reproductivehealth/Infertility/index.htm.

Chachamovich, J. R., Chachamovich, E., Ezer, H., Fleck, M. P., Knauth, D., & Passos, E. P. (2010). Investigating quality of life and health-related quality of life in infertility: A systematic review. *Journal of Psychosomatic Obstetrics and Gynecology, 31*(2), 101–110. doi: 10.3109/0167482X.2010.481337

Childress, C. A., & Asamen, J. K. (1998). The emerging relationship of psychology and the internet: Proposed guidelines for conducting internet intervention research. *Ethics and Behavior, 8*(1), 19–35. doi: 10.1207/s15327019eb0801_2

Chen, C. P. (2001). On exploring meanings: Combining humanistic and career psychology theories in counseling. *Counseling Psychology Quarterly, 14*(4), 317–331. doi: 10.1080/09515070110091308

Christie, K. M., Meyerowitz, B. E., Giedzinska-Simons, A., Gross, M., & Angus, D. B. (2009). Predictors of affect following treatment decision making for prostate cancer: Conversations, cognitive processing, and coping. *Psycho-Oncology, 18*(5), 508–514. doi: 10.1002/pon.1420

Chung, J. E. (2013). Social interaction in online support groups: Preference for online social interaction over offline social interaction. *Computers in Human Behavior, 29,* 1408–1414. doi: 10.1016/j.chb.2013.01.019

Cipolletta, S., & Faccio, E. (2013). Time experience during the assisted reproductive journey: A phenomenological analysis of Italian couples' narratives. *Journal of Reproductive and Infant Psychology, 31*(3), 285–298. doi: 10.1080/02646838.2013.813627

Cleiren, M. P. H. D. (1993). *Bereavement and adaptation: A comparative study of the aftermath of death.* Washington, DC: Hemisphere.

Cohen, K., & Cairns, D. (2012). Is searching for meaning in life associated with reduced subjective well-being? Confirmation and possible moderators. *Journal of Happiness Studies, 13,* 313–331. doi:10.1007/s10902-011-9265-7

Cornish, M. A., Lannin, D. G., Wade, N. G., & Martinez, M. (2017). Can use of positive religious coping predict greater distress? An examination of army soldiers on deployment. *Journal of Counseling Psychology, 64*(3), 302–309. doi: 10.1037/cou0000200

Cousineau, T. M., Green, T. C., Corsini, E. A., Barnard, T., Seibring, A. R., & Domar, A. D. (2006). Development and validation of the infertility self-efficacy scale. *Fertility and Sterility, 85*(6), 1684–1696. doi: 10.1016/j.fertnstert.2005.10.077

Cousineau, T. M., Seibring, A., & Barnard, M. T. (2006). Making meaning of infertility: Existential crisis or personal transformation? *Fertility and Sterility, 86,* 382. doi: 10.1016/j.fertnstert.2006.07.1052

Cousineau, T. M., Green, T. C., Corsini, E., Seibring, A., Showstack, M. T., Applegarth, L…Perloe, M. (2008). Online psychoeducational support for infertile women: A randomized controlled trial. *Human Reproduction, 23*(3), 554–566. doi: 10.1093/humrep/dem306

Cox, S. J., Glazebrook, C., Sheard, C., Ndukwe, G., & Oates, M. (2006). Maternal self esteem after successful treatment for infertility. *Fertility and Sterility, 85*(1), 84–89. doi: 10.1016/j.fertnstert.2005.07.1287

Creamer, M., Burgess, P., & Pattison, P. (1992). Reaction to trauma: A cognitive processing model. *Journal of Abnormal Psychology, 101*(3), 452–459.

Creswell, J. W. (2003). *Research design: Qualitative, quantitative and mixed method approaches (2nd ed.).* California: Sage.

Crowe, C. (1987). 'Women want it: In vitro fertilisation and women's motivation for participation', pp. 84–93 in Spallone, P., & Steinberg, D.L. (1987). *Made to Order: The Myth of Reproductive and Genetic Progress*. Oxford: Pergamon.

Cunha, M., Galhardo, A., & Pinto-Gouveia, J. (2016). Experiential avoidance, self-compassion, self-judgment and coping styles in infertility. *Sexual and Reproductive Healthcare, 10,* 41–47. doi: 10.1016/j.srhc.2016.04.001

Danhauer, S. C., Carlson, C. R., & Andrykowski, M. A. (2005). Positive psychosocial functioning in later life: Use of meaning-based coping

strategies by nursing home residents. *Journal of Applied Gerontology, 24*(4), 299–318. doi: 10.1177/0733464805277754

Daniluk, J. C. (2001). Reconstructing their lives: A longitudinal, qualitative analysis of the transition to biological childlessness for infertile couples. *Journal of Counseling and Development, 79*(4), 439–449. doi: 10.1002/j.1556-6676.2001.tb01991.x

Darwiche, J., Favez, N., Maillard, F., Germond, M., Guex, P., Despland, J.N., & de Roten, Y. (2013). Couples' resolution of an infertility diagnosis before undergoing in vitro fertilization. *Swiss Journal of Psychology, 72,* 91–102. doi: 10.1024/1421-0185/a000102

Davidson, L., Bellamy, C., & Miller, R. (2012). Peer support among persons with severe mental illnesses: A review of evidence and experience. *World Psychiatry, 11*(2), 123–128. doi: 10.1016/j.wpsyc.2012.05.009

Davis, C., & Morgan, M. (2008). Finding meaning, perceiving growth, and acceptance of tinnitus. *Rehabilitation Psychology, 53*(2), 128–138. doi: 10.1037/0090-5550.53.2.128

Day, S. X., & Schneider, P. L. (2002). Psychotherapy using distance technology: A comparison of face-to-face, video, and audio treatment. *Journal of Counseling Psychology, 49*(4), 499–503. doi: 10.1037/0022-0167.49.4.499

DeAndrea, D. C., & Anthony, J. C. (2013). Online peer support for mental health problems in the United States: 2004–2010. *Psychological Medicine, 43*(11), 2277–2288. doi: 10.1017/S0033291713000172

De Graaf, L. E., Huibers, M. J. H., Riper, H., Gerhards, S.H, &Arntz, A. (2009). Use and acceptability of unsupported online computerized cognitive behavioral therapy for depression and associations with clinical outcome. *Journal of Affective Disorders, 116*(3), 227–231. doi: 10.1016/j.jad.2008.12.009

De Liz, T.M., & Strauss, B. (2005). Differential efficacy of group and individual/couple psychotherapy with infertile patients. *Human Reproduction, 20*(5), 1324–1332. doi: 10.1093/humrep/deh743

Debats, D. L., Drost, J., & Hansen, P. (1995). Experiences of meaning in life: A combined qualitative and quantitative approach. *British Journal of Psychology, 86,* 359–375.

Debats, D. L., van der Lubbe, P. M., & Wezeman, F. R. A. (1993). On the psychometric properties of the Life Regard Index (LRI): A measure of meaningful life. *Personality and Individual Differences, 14*(2), 337–345. doi: 10.1016/0191-8869(93)90132-M

Dennis, T. A., & O'Toole, L. (2014). Mental health on the go: Effects of a gamified attention-bias modification mobile application in trait anxious adults. *Clinical Psychological Science, 2,* 576–590. doi: 10.1177/2167702614522228

Deyhoul, N., Mohamaddoost, T., Hosseini, M., & Dezelic, M. (2017). Meaning constructs and meaning-oriented techniques: Clinical applications of meaning and existential exploration. *Journal of Constructivist Psychology, 30*(1), 32–41. doi: 10.1080/10720537.2015.1119086

Dezutter, J., Casalin, S., Wachholtz, A., Luyckx, K., Hekking, J., & Vandewiele, W. (2013). Meaning in life: An important factor for the psychological well-being of chronically ill patients? *Rehabilitation Psychology, 58*(4), 334–341. doi: 10.1037/a0034393

Dirik, G., & Karanci, A. N. (2008). Variables related to post-traumatic growth in Turkish Rheumatoid Arthritis patients. *Journal of Clinical Psychology in Medical Settings, 15*(3), 193–203. doi: 10.1007/s10880-008-9115-x

Domar, A. D., Clapp, D., Slawsby, E. A., Dusek, J., Kessel, B., & Freizinger, M. (2000). Impact of group psychological interventions on pregnancy rates in infertile women. *Fertility and Sterility, 73*(4), 805–811.

Domar, A. D., Penzias, A., Dusek, J. A., Magna, A., Merari, D., Nielsen, B., & Paul, D. (2005). The stress and distress of infertility: Does religion help women cope? *Sexuality, Reproduction & Menopause, 3*(2), 45–51. doi: 10.1016/j.sram.2005.09.007

Donker, T., Petrie, K., Proudfoot, J., Clarke, J., Birch, M. R., & Christensen, H. (2013). Smartphones for smarter delivery of mental health programs: A systematic review. *Journal of Medical Internet Research, 15*(11), e247. doi: 10.2196/jmir.2791

Downey, J., & McKinney, M. (1992). The psychiatric status of women presenting for infertility evaluation. *Fertility and Sterility, 62*(2), 196–205. doi: 10.1037/h0079335

Dulin, P. L., Gonzalez, V. M., & Campbell, K. (2014). Results of a pilot test of a self administered smartphone-based treatment system for alcohol use

disorders: Usability and early outcomes. *Substance Abuse, 35,*168–175. doi: 10.1080/08897077.2013.821437

Duman, D. (2006). Discursive construction of female image in Turkish women's magazines: A socio-historical approach to critical discourse analysis. (Unpublished doctoral dissertation). Hacettepe University, Ankara.

Durak, A., & Palabıyıkoğlu, R. (1994). Beck Umutsuzluk Ölçeği geçerlilik çalışması. *Kriz Dergisi, 2,* 311–319.

Earle, S., & Letherby, G. (2007). Conceiving time? Women who do and do not conceive. *Sociology of Health and Illness, 29*(2), 233–250. doi: 10.1111/j.1467-9566.2007.00546.x

Ebert, D. D., Zarski, A. C., Christensen, H., Stikkelbroek, Y., Cuijpers, P., Berking, M., &Riper, H. (2015). Internet and computer-based cognitive behavioral therapy for anxiety and depression in youth: A meta-analysis of randomized controlled outcome trials. *PLoS ONE, 10*(3), e0119895. doi: 10.1371/journal.pone.0119895

Elliott, R., Fischer, C. T., & Rennie, D. L. (1999). Evolving guidelines for publicationof qualitative research studies in psychology and related fields. *The British Journal of Clinical Psychology, 38,* 215–229.

Erdem, K., & Ejder-Apay, S. (2014). A sectional study: the relationship between perceived social support and depression in Turkish infertile women. *International Journal of Fertility and Sterility, 8*(3), 303–314.

Eysenbach, G., Powell, J., Englesakis, M., Rizo, C., & Stern, A. (2004). Health related virtual communities and electronic support groups: Systematic review of the effects of online peer to peer interactions. *British Medical Journal, 328,* 1166–1172. doi: 10.1136/bmj.328.7449.1166

Ferber, G. M. (*1995*). An empathy-supporting approach to the treatment of infertile women. *Psychotherapy: Theory, Research, Practice, Training, 32*(3), 437–442. doi: 10.1037/0033-3204.32.3.437

Ferland, P., & Caron, S. L. (2013). Exploring the long-term impact of female infertility: A qualitative analysis of interviews with postmenopausal women who remained childless. *The Family Journal: Counseling and Therapy for Couples and Families, 21*(2), 180–188. doi: 10.1177/1066480712466813

Ferreira, M., Antunes, L., Duarte, J., & Chaves, C. (2015). Influence of infertility and fertility adjustment on marital satisfaction. *Procedia - Social and Behavioral Sciences, 171,* 96–103. doi: 10.1016/j.sbspro.2015.01.094

Fiorillo, D., McLean, C., Pistorello, J., Hayes, S. C., & Follette, V. M. (2017). Evaluation of a web-based acceptance and commitment therapy program for women with trauma-related problems: A pilot study. *Journal of Contextual Behavioral Science, 6*(1), 104–113. doi: 10.1016/j.jcbs.2016.11.003

Fischer, C. T. (2009). Bracketing in qualitative research: conceptual and practical matters. *Psychotherapy Research, 19*(4-5), 583–590. doi: 10.1080/10503300902798375

Fjelland, J. E., Barron, C. R., & Foxall, M. (2008). A review of instruments measuring two aspects of meaning: Search for meaning and meaning in illness. *Journal of Advanced Nursing 62*(4), 394–406. doi: 10.1111/j.1365-2648.2008.04597.x

Frankl, V. (1963). *Man's search for meaning*. Boston: Beacon Press.

Frazier, P., Nguyen-Feng, V., & Baker, M. (2017). Reconstructing meaning after sexual assault. In Frazier, P., Nguyen-Feng, V., Baker, M. (Eds), *Reconstructing Meaning After Trauma, Theory, Research and Practice*, (pp. 103–116). doi: 10.1016/B978-0-12-803015-8.00007-3

Folkman, S. (1997). Positive psychological states and coping with severe stress. *Social Science and Medicine, 45*(8), 1207–1221. doi: 10.1016/S0277-9536(97)00040-3

Galst, J. P. (2018). The elusive connection between stress and infertility: A research review with clinical implications. *Journal of Psychotherapy Integration, 28*(1), 1–13. doi: 10.1037/int0000081

Galvez, L. (2016). *Gender and Well-Being in Europe: Historical and Contemporary Perspectives.* New York: Routledge.

Gameiro, S., van den Belt-Dusebout, A. W., Smeenk, J. M. J., Braat, D. D. M., van Leeuwen, F. E., & Verhaak, C. M. (2016). Women's adjustment trajectories during IVF and impact on mental health 11–17 years later. *Human Reproduction, 31*(8), 1788–1798. doi: 10.1093/humrep/dew131

Gençöz, T. (2000). Pozitif ve negative duygu ölçeği: Geçerlik ve güvenirlik çalışması. *Türk Psikoloji Dergisi, 15*(46), 19–26.

Gibson, D. M. (2007). The relationship of infertility and death: Using the relational/cultural model of counseling in meaning making. *The Human Psychologist, 35*(3), 275–289. doi: 10.1080/08873260701415348

Giudice, L. C., & Kao, L. C. (2004). Endometriosis. *The Lancet, 364*, 1789–1799. doi:10.1016/S0140-6736(04)17403-5

Glover, L., Hunter, M., Richards, J. M., Katz, M., & Abel, P. D. (1999). Development of the Fertility Adjustment Scale. *Fertility and Sterility, 72*(4), 623–628. doi: 10.1016/S0015-0282(99)00304-0

Glover, L., McLellan, A., & Weaver, S. M. (2009). What does having a fertility problem mean to couples? *Journal of Reproductive and Infant Psychology, 27*(4), 401–418. doi:10.1080/02646830903190896

Gourounti, K., Anagnostopoulos, F., & Vaslamatzis, G. (2010b). Psychosocial predictors of infertility related stress: A review. *Current Women's Health Reviews, 6,* 318–332. doi: 10.1016/j.rbmo.2012.03.002

Graham, J. E., Lobel, M., & Glass, P. (2008). Effects of written anger expression in chronic pain patients: making meaning from pain. *Journal of Behavioral Medicine, 31*(3), 201–212. doi: 10.1007/s10865-008-9149-4

Graham, M. (2015). Is being childless detrimental to a woman's health and well-being across her life course? *Women's Health Issues, 25*(2), 176–184. doi: 10.1016/j.whi.2014.12.002

Greenstein, M. (2000). The house that's on fire: Meaning-centered psychotherapy pilot group for cancer. *American Journal of Psychotherapy, 54*(4), 501–511.

Greil, A. L., Leitko, T. A., & Porter, K. L. (1988). Infertility: His and hers. *Gender and Society, 2*(2), 172–199. doi: 10.1177/089124388002002004

Greil, A. L. (1997). Infertility and psychological distress: A critical review of the literature. *Social Science Medicine, 45*(11), 1679–1704. doi: 10.1016/S0277-9536(97)00102-0

Greil, A. L., Slauson-Blevins, K., & McQuillan, J. (2010). The experience of infertility: A review of recent literature. *Sociology of Health & Illness, 32*(1), 140–162. doi: 10.1111/j.1467-9566.2009.01213.x

Greil, A. L., & McQuillan, J. (2004). Help-seeking patterns among subfecund women. *Journal of Reproductive and Infant Psychology, 22*(4),305–319. doi: 10.1080/02646830412331298332

Guz, H., Ozkan, A., Sarısoy, G., Yanık, F., & Yanık, A. (2003). Psychiatric symptoms inTurkish infertile women. *Psychosomatic Obstetrics and Gynecology, 24*(4), 267–271. doi: 10.3109/01674820309074691

Gürtin, Z. B. (2016). Patriarchal pronatalism: Islam, secularism and the conjugal confines of Turkey's IVF boom. *Reproductive BioMedicine and Society Online, 2,* 39–46. doi: 10.1016/j.rbms.2016.04.005

Haagen, E. C., Tuil, W., Hendriks, J., de Bruijn, R. P. J., Braat, D. D. M., & Kremer, J. A. M. (2003). Current internet use and preferences of IVF and ICSI patients. *Human Reproduction, 18*(10), 2073–2078. doi:10.1093/humrep/deg423.

Hammarberg, K., Astbury, J., & Baker, H. W. G. (2001). Women's experience of IVF: A follow-up study. *Human Reproduction, 16*(2), 374–383.

Hammerli, K., Znoj, H., & Barth, J. (2009). The efficacy of psychological interventions for infertile patients: A meta-analysis examining mental health and pregnancy rate. *Human Reproduction, 15*(3), 279–295. doi: 10.1093/humupd/dmp002

Handa, S., Patel, B. B., Ray, S., Nimonkar, R., Singh, H., & Pandya, K. H. (2017). An unborn hope: A study of psychosocial characters, choices and motivations amongst infertile couples at an art centre at Pune. *International Journal of Current Advanced Research, 6*(9), 5756–5760. doi: 10.24327/ijcar.2017.5760.0794

Harlow, L. L., Newcomb, M. D., & Bentler, P. M. (1986). Depression, self-derogation, substance abuse, and suicide ideation: Lack of purpose in life as a mediational factor. *Journal of Clinical Psychology, 42*(1), 5–21.

Harrison, V., Proudfoot, J., Wee, P. P., Parker, G., Pavlovic, D. H., & Manicavasagar, V. (2011). Mobile mental health: Review of the emerging field and proof of concept study. *Journal of Mental Health, 20*(6), 509–524. doi: 10.3109/09638237.2011.608746

Hart, V. A. (2002). Infertility and the role of psychotherapy. *Issues in Mental Health Nursing, 23*(1), 31–41.

Hayes, S. C., & Smith, S. (2005). *Get out of your mind and into your life – The new acceptance and commitment therapy*. Oakland: New Harbinger Publications.

Hays, S. (1996). *The cultural contradictions of motherhood*. New Haven, CT: Yale University Press.

Hays, S. (2003). *Flat broke with children: Women in the age of welfare*. Oxford: Oxford University Press.

Hedman, E., Ljótsson, B., & Lindefors, N. (2012). Cognitive behavior therapy via the internet: A systematic review of applications, clinical efficacy and cost effectiveness. *Expert Review of Pharmacoeconomics and Outcomes Research, 12*(6), 745–764. doi: 10.1586/erp.12.67

Heidegger, M. (1962). *Being and time.* Oxford: Blackwell.

Helgeson, V. S., Reynolds, K. A., & Tomich, P. L. (2006). A meta-analytic review of benefit finding and growth. *Journal of Consulting and Clinical Psychology, 74*(5), 797–816. doi: 10.1037/0022-006X.74.5.797

High, A., & Steuber, K. (2014). An examination of support (in)adequacy: Types, sources, and consequences of social support among infertile women. *Communication Monographs, 81*(2), 157–178. doi: 10.1080/03637751.2013.878868

Hinton, L., Kurinczuk, J. J., & Ziebland, S. (2010). Infertility; isolation and the internet: A qualitative interview study. *Patient Education and Counseling, 81*(3), 436–441. doi: 10.1016/j.pec.2010.09.023.

Hisli, N. (1989). Beck Depresyon Envanteri'nin geçerliliği üzerine bir çalışma. *Psikoloji Dergisi, 22,* 118–122.

Hollos, M., Larsen, U., Obono, O., & Whitehouse, B. (2009). The problem of infertility in high fertility populations: meanings, consequences and coping mechanisms in two Nigerian communities. *Social Science Medicine, 68*(11), 2061–2068. doi: 10.1016/j.socscimed.2009.03.008

Holter, H., Anderheim, L., Bergh, C., & Möller, A. (2006). First IVF treatment—short-term impact on psychological well-being and the marital relationship. *Human Reproduction, 21*(12), 3295–3302. doi: 10.1093/humrep/del288

Holzle, C., Brandt, U., Lutkenhaus, R., & Wirtz, M. Solution-focused counseling for involuntarily childless couples in Strauss, B. (2002). *Involuntary childlessness: Psychological assessment, counseling and psychotherapy*. Seattle: Hogrefe & Huber Publishers.

Houston, T. K., Cooper, L. A., & Ford, D. E. (2002). Internet support groups for depression: A 1-year prospective cohort study. *American Journal of Psychiatry*, *159*(12), 2062–2068. doi: 10.1176/appi.ajp.159.12.2062

Huang, M. P., & Alessi, N. E. (1996). The Internet and the future of psychiatry. *American Journal of Psychiatry, 153*(7), 861–869. doi: 10.1176/ajp.153.7.861

Hunt, M., Schloss, H., Moonat, S., Poulos, S., & Wieland, J. (2007). Emotional processing versus cognitive restructuring in response to a depressing life event. *Cognitive Therapy and Research, 31*(6), 833–851. doi: 10.1007/s10608-007-9156-8

Iafusco, D., Ingenito, N., & Prisco, F. (2000). The chatline as a communication and educational tool in adolescents with insulin-dependent diabetes: Preliminary observations. *Diabetes Care, 23*(12), 1853–1853. doi: 10.2337/diacare.23.12.1853b

Ivanova, E., Lindnera, P., Ly, K. H., Dahlind, M., Vernmarkc, K., Andersson, G., & Carlbring, P. (2016). Guided and unguided acceptance and commitment therapy for social anxiety disorder and/or panic disorder provided via the internet and a smartphone application: A randomized controlled trial. *Journal of Anxiety Disorders, 44*, 27–35. doi: 10.1016/j.janxdis.2016.09.012

Inhorn, M. C., & Van Balen, F. (eds). (2002). *Infertility around the Globe: New Thinking on Childlessness, Gender and Reproductive Technologies*. Berkeley and Los Angeles: California University Press.

Jaffe, J. (2016). The view from the fertility counselor's chair. In S. N. Covington (Ed.), *Fertility counseling: Clinical guide and case studies* (pp. 239–251). New York: Cambridge University Press.

Jaffe, J. (2017). Reproductive trauma: Psychotherapy for pregnancy loss and infertility clients from a reproductive story perspective. *Psychotherapy, 54*(4), 380–385. doi: 10.1037/pst0000125

Jansen, N. A., & Onge, J. M. S. (2015). An internet forum analysis of stigma power perceptions among women seeking fertility treatment in the United

States. *Social Science and Medicine, 147,* 184–189. doi: 10.1016/j.socscimed.2015.11.002

Jim, H. S., Richardson, S. A., Golden-Kreutz, D. M., & Anderson, B. L. (2006). Strategies used in coping with a cancer diagnosis predict meaning in life for survivors. *Health Psychology, 25*(6), 753–761. doi: 10.1037/0278-6133.25.6.753

Johansson, M., & Berg, M. (2005). Women's experiences of childlessness 2 years after the end of in vitro fertilization treatment. *Scandinavian Journal of Caring Science, 19*(1), 58–63. doi: 10.1111/j.1471-6712.2005.00319.x

Jungwirth, A., Giwercman, A., Tournaye, H., Diemer, T., Kopa, Z., Dohle, G., & Krauszet, C. (2012). European Association of Urology Guidelines on Male Infertility: The 2012 Update. *European Urology, 62*, 324–332. doi: 10.1016/j.eururo.2012.04.048

Karaca, A., & Unsal, G. (2015). Psychosocial problems and copings strategies among Turkish women with infertility. *Asian Nursing Research*, *9*(3), 243–250. doi: 10.1016/j.anr.2015.04.007

Kavlak, O., & Saruhan, A. (2002). A study on determination the loneliness level in infertile women and to assess the factors that effects of the loneliness level. *Ege Journal of Medicine, 41*(4), 229–232.

Keystone, M., & Kaffko, K. (1992). The braided threads: Intimacy, sexuality and gender differences. *The Canadian Journal of Human Sexuality, 1*(2), 47–54.

Khalili, M. A., Kahraman, S., Ugur, M. G., Agha-Rahimi, A., & Tabibnejad, N. (2012). Follow up of infertile patients after failed ART cycles: A preliminary report from Iran and Turkey. *European Journal of Obstetrics and Gynecology and Reproductive Biology, 161*(1), 38–41. doi: 10.1016/j.ejogrb.2011.11.025

Kitanovic, B., Tulic, L., &Soldatovic, I. (2016). Women coping strategies to infertility stress can impact IVF outcome, *24th European Congress of Psychiatry /European Psychiatry, 33,* 624. doi: 10.1016/j.eurpsy.2016.01.2342.

Klein, B., & Richards, J. C. (2001). A brief internet-based treatment for panic disorder. *Behavioural and Cognitive Psychotherapy, 29*(1), 113–117.

Klein, J., P., Berger, T., Schröder, J., Späth, C., Meyer, B., Caspar, F…Hohagen, F. (2016). Effects of a psychological internet intervention in the treatment of mild to moderate depressive symptoms: Results of the EVIDENT study, a randomized controlled trial. *Psychotherapy and Psychosomatics, 85*(4), 218–228. doi: 10.1159/000445355

Klock, S. (2011). Psychological Issues Related to Infertility. *Global Library of Women's Medicine.* doi: 10.3843/GLOWM.10413

Koenig, H. G., Berk, L. S., Daher, N. S., Pearce, M. J., Bellinger, D. L., Robins, C. J…King, M. B. (2014). Religious involvement is associated with greater purpose, optimism, generosity and gratitude in persons with major depression and chronic medical illness. *Journal of Psychosomatic Research, 77*(2), 135–143. doi: 10.1016/j.jpsychores.2014.05.002

Kok, G., Burger, H., Riper, H., Cuijpers, P., Dekker, J., van Marwijk, H…Bockting, C. L. H. (2015). The three-month effect of mobile internet-based cognitive therapy on the course of depressive symptoms in remitted recurrently depressed patients: results of a randomized controlled trial. *Psychotherapy and Psychosomatics, 84*(2), 90–99. doi: 10.1159/000369469

Korpatnick, S., Daniluk, J., & Pattinson, H. A. (1993). Infertility: A nonevent transition. *Fertility and Sterility, 59,* 163–171.

Koschmann, T. (2002). Dewey's contribution to the foundations of CSCL research. In G. Stahl (Ed.), *Computer support for collaborative learning: Foundations for a CSCL community: Proceedings of CSCL 2002*. (pp. 17-22). Boulder, CO: Lawrence Erlbaum Associates.

Kraaij, V., Garnefski, N., Schroevers, M., Jmer, J., & Helmerhorst, F. (2010). Cognitive coping, goal adjustment, and depressive and anxiety symptoms in people undergoinginfertility treatment: A prospective study. *Journal of Health Psychology, 15*(6), 876–886. doi: 10.1177/1359105309357251

Larkin, M., Watts, S., & Clifton, E. (2006). Giving voice and making sense in interpretative phenomenological analysis. *Qualitative Research in Psychology, 3*(2), 102–120. doi: 10.1191/1478088706qp062oa

Lawson, A. K., & Marsh, E. E. (2017). Hearing the silenced voices of underserved women: The role of qualitative research in gynecologic and reproductive care. *Obstetrics and Gynecology Clinics of North America, 44*(1), 109–120. doi: 10.1016/j.ogc.2016.11.005

Latifnejad-Roudsari, R., Allan, H.T., & Smith, P. A. (2007). Looking at infertility through the lens of religion and spirituality: A review of the literature. *Human Fertility, 10*(3), 141–149. doi: 10.1080/14647270601182677

Lazarus, R., & Folkman, S. (1984). *Stress, Appraisal, and Coping.* New York: Springer.

Lee, G. L., Blyth, E. D., & Chan, C. W. (2012). Understanding the patterns of adjustment to infertility of IVF users using narrative and autobiographical timeline. *Asian Pacific Journal of Reproduction, 1*(2), 125–134. doi: 10.1016/S2305-0500(13)60063-9

Lee, G. L., Neimeyer, R. A., & Chan, C. W. (2012). The meaning of childbearing among IVFservice users assessed via laddering technique. *Journal of Constructivist Psychology, 25*(4), 302–324. doi: 10.1080/10720537.2012.703573

Lee, V., Cohen, S. R., Edgar, L., Laizner, A. M., & Gagnon, A. J. (2006). Meaning-making intervention during breast or colorectal cancer treatment improves self-esteem, optimism, and self-efficacy. *Social Science and Medicine, 62,* 3133–3145. doi: 10.1016/j.socscimed.2005.11.041

Leon, I. G. (2010). Understanding and treating infertility: Psychoanalytic considerations. *The Journal of the American Academy of Psychoanalysis and Dynamic Psychiatry, 38*(1), 47–75. doi: 10.1521/jaap.2010.38.1.47

Letherby, G. (1999). Other than mother and mothers as others: the experience of motherhood and non-motherhood in relation to 'infertility' and 'voluntary childlessness'. *Women's Studies International Forum, 22*(3), 359–372. doi: 10.1016/S0277-5395(99)00028-X

Levy, S., Brizendine, L., & Nachtigall, R. D. (2006). How to treat depression, stress associated with infertility treatment. *Current Psychiatry, 5*(10), 65–74.

Lilgendahl, J. P., & McAdams, D. P. (2011). Constructing stories of self-growth: How individual differences in patterns of autobiographical reasoning relate to well-being inmidlife. *Journal of Personality, 79*(2), 392–428. doi: 10.1111/j.1467-6494.2010.00688.x

Lord, S., & Robertson, N. (2005). The role of patients' appraisal and coping in predicting distress in IVF. *Journal of Reproductive and Infant Psychology, 23*(4), 319–332. doi: 10.1080/02646830500273566

Lukse, M., & Vacc, N. (1999). Grief, depression and coping in women undergoing infertility treatment. *Obstetrics and Gynecology, 93*(2), 245–251.

Lythcott, J., & Duschl, R. (1990). Qualitative research: From methods to conclusions. *Science Education, 74*(4), 449–460. doi: 10.1002/sce.3730740405

Mahajan, N. N., Turnbull, D. A., Davies, M. J., Jindal, U. N., Briggs, N. E., & Taplin, J. E. (2009). Adjustment to infertility: the role of intrapersonal and interpersonal resources/vulnerabilities. *Human Reproduction, 24*(4), 906–912. doi: 10.1093/humrep/den462

Malik, S. H., & Coulson, N. S. (2010). Coping with infertility online: An examination of self-help mechanisms in an online infertility support group. *Patient Education and Counseling, 81*(2), 315–318. doi: 10.1016/j.pec.2010.01.007

Mallen, M., Day, S., & Green, M. (2003). Online versus face-to-face conversation: An examination of relational and discourse variables. *Psychotherapy: Theory, Research, Practice, Training, 40*(1-2), 155–163. doi:10.1037/0033-3204.40.1-2.155

Mann, C., & Stewart, F. (2002). *Internet Communication and Qualitative Research: A Handbook for Researching Online.* London: Sage.

Manning, J., & Kunkel, A. (2014). *Researching interpersonal relationships: Qualitative methods, studies, and analysis.* Thousand Oaks, CA: Sage.

Marcus, D., Marcus, H., Marcus, N., Appleton, T., & Marcus, S. (2007). Infertility counseling: An internet-based survey. *Human Fertility, 10*(2), 111–116. doi: 10.1080/14647270601166969

Marrero, S. J. (2013). The role of the psychologist in reproductive medicine. (Unpublished doctoral dissertation). Rutgers University, NJ.

Marshall, M., & Marshall, E. (2012*). Logotherapy Revisited: Review of Viktor E. Frankl's Logotherapy.* Ottawa Institute of Logotherapy.

Mascaro, N., & Rosen, D.H. (2005). Existential meaning's role in the enhancement of hope and prevention of depressive symptoms. *Journal of Personality, 73*(4), 985–1014. doi: 10.1111/j.1467-6494.2005.00336.x

Matthews, R., & Matthews, A. M. (1986). Infertility and involuntary childlessness: The transition to nonparenthood. *Journal of Marriage and Family, 48*(3), 641–649. doi: 10.2307/352050

Matthiesen, S., Klonoff-Cohen, H., & Zachariae, R. (2012). The effect of an expressive writing intervention (EWI) on stress in infertile couples undergoing assisted reproductive technology (ART) treatment: A randomized controlled pilot study. *British Journal of Health Psychology, 17*(2), 362–378. doi: 10.1111/j.2044-8287.2011.02042.x

Menning, B. E. (1980). The emotional needs of infertile couples. *Fertility and Sterility, 34*(4), 313–319.

Menning, B. E. (1982). Psychosocial impact of infertility. *The Nursing Clinics of North America, 17*(1), 155–163.

Mindes, E. J., Ingram, K. M., Kliewer, W., & James, C. A. (2003). Longitudinal analyses of the relationship between unsupportive social interactions and psychological adjustment among women with fertility problems. *Social Science Medicine, 56*(10), 2165–2180.

Monach, J. H. (1993). *Childless: No choice—The experience of involuntary childlessness.* London: Routledge.

Morell, C. M. (1994). *Unwomanly Conduct: The Challenges of Intentional Childlessness*. London: Virago.

Morrow, K. A., Thoreson, R. W., & Penney, L. L. (1995). Predictors of psychological distress among infertility clinic patients. *Journal of Consulting and Clinical Psychology, 63*(1), 163–167. doi: 10.1037/0022-006X.63.1.163

Mosalanejad, L., & Khodabakshi-Koolee, A. (2012). Looking at infertility treatment through the lens of the meaning of life: The effect of group logotherapy on psychological distress in infertile women. *International Journal of Fertility and Sterility, 6*(4), 224–231.

Moura-Ramos, M., Gameiro, S., Canavarro, M. C., Soares, I., & Almeida-Santos, T. (2012). The indirect effect of contextual factors on the emotional distress of infertile couples. *Psychology and Health, 27*(5), 533–549. doi: 10.1080/08870446.2011.598231

Moura-Ramos, M., Gameiro, S., Canavarro, M. C., Soares, I., & Almeida-Santos, T. (2016). Does infertility history affect the emotional adjustment of couples undergoing assisted reproduction? The mediating role of the

importance of parenthood. *British Journal of Health Psychology*, *21*(2), 302–317. doi: 10.1111/bjhp.12169

Nazik, E., Apay, S., Özdemir, F., & Nazik, H. (2015). Traditional Practices of Turkish Infertile Women: An Example from a Rural County. *Collegium antropologicum*, *39*(1), 21–25.

Neff, D. (1994). The social construction of infertility: The case of the matrilineal Nayars in South India. *Social Science and Medicine, 39*(4), 475–485.

Oakley, A., McPherson, A., & Roberts, H. (1990). *Miscarriage*, 2nd Edition. London: Penguin.

Obeisat, S., Gharaibeh, M. K., Oweis, A., & Gharaibeh, H. (2012). Adversities of being infertile: The experience of Jordanian women. *Fertility Sterility, 98*(2), 444–449. doi: 10.1016/j.fertnstert.2012.04.036

Ockhuijsen, H., van den Hoogen, A., Eijkemans, M., Macklon, N., & Boivin, J. (2014). The impact of a self-administered coping intervention on emotional well-being in women awaiting the outcome of IVF treatment: A randomized controlled trial. *Human Reproduction, 29*(7), 1459–1470. doi: 10.1093/humrep/deu093

Oh, H. J., Lauckner, C., Boehmer, J., Fewins-Bliss, R., & Li, K. (2013). Facebooking for health: An examination into the solicitation and effects of health-related social support on social networking sites. Computers in Human Behavior, *29*(5), 2072–2080. doi: 10.1016/j.chb.2013.04.017

Oravec, J. A. (2000). Online counseling and the internet: perspectives for mental health care supervision and education. *Journal of Mental Health Care, 9*(2), 121–135. doi: 10.1080/09638230050009122

Öner, N., & Le Compte, A. (1983). *Durumluk Sürekli Kaygı Envanteri El Kitabı.* İstanbul: Boğaziçi Üniversitesi Yayınları.

Park, C. L., & Al, A.L. (2006). Meaning making and growth: New directions for research on survivors of trauma. *Journal of Loss and Trauma, 11*(5), 389–407. doi: 10.1080/15325020600685295

Park, C. L., Folkman, S., & Bostrom, A. (2001). Appraisals of controllability and coping incaregivers and HIV+ men: Testing the goodness-of-fit hypothesis. *Journal of Consulting and Clinical Psychology, 69*(3), 481–488. doi:10.1037/0022-006X.69.3.481

Park, C. L., Edmondson, D., Fenster, J. R., & Blank, T. O. (2008). Meaning making and psychological adjustment following cancer: The mediating roles of growth, life meaning, and restored just-world beliefs. *Journal of Consulting and Clinical Psychology, 76*(5), 863–875. doi: 10.1037/a0013348

Park, C. L. (2013). The meaning making model: A framework for understanding meaning, spirituality, and stress-related growth in health psychology. *The European Health Psychologist, 15*(2), 40–47.

Park, C. L., & George, L. S. (2013). Assessing meaning and meaning making in the context of stressful life events: Measurement tools and approaches. *The Journal of Positive Psychology: Dedicated to furthering research and promoting good practice, 8*(6), 483–504. doi: 10.1080/17439760.2013.830762

Parry, D. C. (2005). Work, leisure, and support groups: An examination of the ways women with infertility respond to pronatalist ideology. *Sex Roles, 53*(5-6), 337–346.

Parsell, M. (2008). Pernicious virtual communities: Identity, polarization and the Web 2.0. *Ethics and Information Technology, 10*(1), 41–56. doi: 10.1007/s10676-008-9153-y

Pasch, L. A., & Christensen, A. (2000). Couples facing fertility problems. In Greil, A. L. (1997). Infertility and psychological distress: A critical review of the literature. *Social Science Medicine, 45,* 1679–1704. doi: 10.1016/S0277-9536(97)00102-0

Pasch, L. A., Holley, S. R., Bleil, M. E., Shehab, D., Katz, P. P., & Adler, N. E. (2016). Addressing the needs of fertility treatment patients and their partners: Are they informed of and do they receive mental health services? *Fertility and Sterility, 106*(1), 209–215. doi: 10.1016/j.fertnstert .2016.03.006

Patton, M. Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage.

Paul, M. S., Berger, R., Berlow, N., Rovner-Ferguson, H., Figlerski, L., Gardner, S., & Malave, A. F. (2010). Post-traumatic growth and social support in individuals with infertility. *Human Reproduction, 25(1),* 133–141. doi: 10.1093/humrep/dep367

Peacock, E. J., & Wong, P. T. P. (1990). The Stress Appraisal Measure (SAM): A multidimensional approach to cognitive appraisal. *Stress Medicine, 6*(3), 227–236. doi: 10.1002/smi.2460060308

Peddie, V. L., & Porter, M. (2007). Limitations of infertility treatment: Psychological, social and cultural. *Therapy, 4(3),* 313–322. doi: 10.2217/14750708.4.3.313

Petchesky, R. (1980). Reproductive freedom: Beyond a women's right to choose. *Signs, 5*(4), 661–685. doi: 10.1086/493757

Peterson, B. D., Pirritano, M., Block, J. M., & Schmidt, L. (2011). Marital benefit and coping strategies in men and women undergoing unsuccessful fertility treatments overa 5-year period. *Fertility and Sterility, 95*(5), 1759–1763. doi: 10.1016/j.fertnstert.2011.01.125

Peterson, B., Boivin, J., Norré, J., Smith, C., Thorn, P., & Wischmann, T. (2012). An introduction to infertility counseling: A guide for mental health and medical professionals. *The Journal of Assisted Reproduction and Genetics, 29*(3), 243–248.doi: 10.1007/s10815-011-9701-y

Pfeiffer, P. N., Henry, J., Ganoczy, D., & Piette, J. D. (2017). Pilot study of psychotherapeutic text messaging for depression. *Journal of Telemedicine and Telecare, 23*(7), 665–672.doi: 10.1177/1357633X16659955

Pinquart, M., Silbereisen, R. K., & Froehlich, C. (2009). Life goals and purpose in life in cancer patients. *Supportive Care in Cancer, 17*(3), 253–259. doi: 10.1007/s00520-008-0450-0

Pinto-Gouveia, J., Galhardo, A., Cunha, M., & Matos, M. (2012). Protective emotional regulation processes towards adjustment in infertile patients. *Human Fertility, 15(1),* 27–34. doi: 10.3109/14647273.2011.654310

Powell, B. (2001). *Classical Myth, 3rd ed*. NJ: Upper Saddle River.

Proudfoot, J. (2013). The future is in our hands: The role of mobile phones in the prevention and management of mental disorders. *Australian and New Zealand Journal of Psychiatry, 47*(2), 111–113. doi: 10.1177/0004867412471441

Rawal, N., & Haddad, N. (2005). Use of internet in infertility patients. *The Internet Journalof Gynecology and Obsterics, 5*(2), 1–5. doi: 10.1016/j.urology.2015.03.005.

Remennick, L. (2000). Childless in the land of imperative motherhood: Stigma and coping among infertile Israeli women. *Sex Roles, 43*(11-12), 821–841. doi: 10.1023/A:1011084821700

Repper, J., & Carter, T. (2011). A review of the literature on peer support in mental health services. *Journal of Mental Health, 20*(4), 392– 411. doi:10.3109/09638237.2011.583947

Roepke, A. M. (2015). Psychosocial interventions and post-traumatic growth: A meta-analysis. *Journal of Consulting and Clinical Psychology, 83*(1), 129–142. doi: 10.1037/a0036872

Roudsari, R. L., Allan, H. T., & Smith, P. A. (2007). Looking at infertility through the lens of religion and spirituality: A review of the literature. *Human Fertility, 10*(3), 141–149. doi: 10.1080/14647270601182677

Rowland, R. (1992). *Living Laboratories: Women and Reproductive Technology*. London: Cedar.

Sansom-Daly, U. M., Wakefield, C. E., Bryant, R. A., Butow, P., Sawyer, S., Patterson, P… Cohn, R. J. (2012). Online group-based cognitive behavioural therapy for adolescents and young adults after cancer treatment: a multicenter randomised controlled trial of Recapture Life-AYA. *BioMed Central Cancer, 12,* 339–351. doi: 10.1186/1471-2407-12-339

Sarı, S., & Gençöz, F. (2015). Shame experiences underlying depression of adult Turkish women. *Qualitative Health Research, 26*(8), 1002–1013. doi: 10.1177/1049732315579177

Satir, D. G., & Kavlak, O. (2017). Use of the internet related to infertility by infertile women and men in Turkey. *Pakistan Journal of Medical Sciences, 33*(2), 265–269. doi: 10.12669/pjms.332.12620

Schneider, K. J., Bugental, J. F. T., & Pierson, J. F. (2001). *The handbook of humanistic psychology.* Thousand Oaks, CA: Sage.

Schmidt, L., Holstein, B., Chistensen, U., & Boivin, J. (2005). Does infertility cause marital benefit? An epidemiological study of 2250 women and men in fertility treatment. *Patient Education and Counseling, 59*(3), 244–251. doi:10.1016/j.pec.2005.07.015

Sear, R. (2015). Evolutionary contributions to the study of human fertility. *Population Studies, 69,* 39–55. doi: 10.1080/00324728.2014.982905

Seber, G., Dilbaz, N., Kaptanoğlu, C., & Tekin, D. (1993). Umutsuzluk Ölçeği: Geçerlilik ve güvenirliği. *Kriz Dergisi, 1,* 139–142.

Sexton, M. B., Byrd, M. R., O'Donohue, W. T., & Jacobs, N. N. (2010). Web-based treatment for infertility-related psychological distress. *Archieves Womens Mental Health, 3*(4), 347–358. doi: 10.1007/s00737-009-0142-x

Sexty, R. E., Hamadneh, J., Rösner, S. T., Strowitzki, T., Ditzen, B., Toth, B., & Wischmann, T. (2016). Cross-cultural comparison of fertility specific quality of life in German, Hungarian and Jordanian couples attending a fertility center. *Health and Quality of Life Outcomes, 14,* 27–36. doi: 10.1186/s12955-016-0429-3

Seyedi-Asl, S. T., Sadeghi, K., Bakhtiari, M., Ahmadi, S. M., Nazari-Anamagh, A., & Khayatan, T. (2016). Effect of group positive psychotherapy on improvement of life satisfaction and the quality of life in infertile woman. *International Journal of Fertility and Sterility, 10*(1), 105–112.

Sherman, A. C., & Simonton, S. (2012). Effects of personal meaning among patients inprimary and specialized care: Associations with psychosocial and physical outcomes. *Psychology and Health, 27*(4), 475–490. doi: 10.1080/08870446.2011.592983

Simon, T. L. (2013). Spoken through desire: Maternal subjectivity and assisted reproduction. *Studies in Gender and Sexuality, 14*(4), 289–299. doi: 10.1080/15240657.2013.848321

Slade, P., O'Neill, C., Simpson, A. J., & Lashen, A. J. (2007). The relationship between perceived stigma, disclosure patterns support and distress in new attendees at an infertility clinic. *Human Reproduction, 22*(8), 2309–2317. doi: 10.1093/humrep/dem115

Smith, J. A., & Osborn, M. (2003). Interpretative phenomenological analysis. In J.A. Smith (Ed.), *Qualitative psychology: A practical guide to research methods*. London, Sage.

Spek, V., Cuijpers, P., Nyklícek, I., Riper, H., Keyzer, J., & Pop, V. (2007). Internet-based cognitive behaviour therapy for symptoms of depression and anxiety: A meta-analysis. *Psychological Medicine, 37*(3), 319–328. doi: 10.1017/S0033291707000542

Stanton, A., & Dunkel-Schetter, C. (1991). Psychological adjustment to infertility: A review of theoretical approaches. In Stanton, A. & Dunkel-Schetter, C. eds. *Infertility: perspectives from stress and coping research.* New York: Plenum, pp. 3–16.

Stegner, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). The meaning in life questionnaire: Assessing the presence of and search for meaning in life. *Journal of Counseling Psychology, 53*(1), 80–93. doi: 10.1037/0022-0167.53.1.80

Stewart, D. E., Boydell, K. M., McCarthy, K., Swerdlyk, S., Redmond, C., & Cohrs, W. (1992). A prospective study of the effectiveness of brief professionally led support groups for infertility patients. *International Journal of Psychiatry in Medicine, 22*(2), 173–182.

Su, T. J., Chen, H. F., Chen, Y. C., Yang, Y. S., & Hung, Y. T. (2005). Factors related to meaning of life in Taiwanese women treated with in vitro fertilization. *Journal of the Formosan Medical Association, 105*(5), 404–413.

Sullivan, E. V. (1984). *A critical psychology: interpretation of the personal world.* New York: Plenum.

Suthers, D. D. (2006). Technology affordances for intersubjective meaning-making: Aresearch agenda for CSCL. *International Journal of Computer Supported Collaborative Learning, 1*(2), 1–24.

Wirtberg, I., Möller, A., Hogström, L., Tronstad, S. E., & Lalos, A. (2007). Life 20 years after unsuccessuful infertility treatment. *Human Reproduction, 22*(2), 598–604. doi: 10.1093/humrep/del401

Wisman, A., & Goldenberg, J. L. (2005). From the grave to the cradle: evidence that mortality salience engenders a desire for offspring. *Journal of Personality and Social Psychology, 89*(1), 46–61. doi: 10.1037/0022-3514.89.1.46

Taylor, S. E., & Brown, J. D. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin, 103*(2), 193–210.

Takefman, J. E., Brender, W., Boivin, J., & Tulandi, T. (1990). Sexual and emotional adjustment of couples undergoing infertility investigation and the effectiveness of preparatory information. *Journal of Psychosomatic Obstetrics and Gynecology, 11*(4), 275–290. doi: 10.3109/01674829009084423

Tabong, P. T. N., & Adongo, P. B. (2013). Understanding the social meaning of infertility and childbearing: A qualitative study of the perception of childbearing and childlessness in Northern Ghana. *Plos One, 8*(1), e54429. doi:10.1371/journal.pone.0054429

Theodosiou, L., & Green, J. (2003). Emerging challenges in using health information from the internet. *Advances in Psychiatric Treatment, 9*(5), 387–396. doi: 10.1192/apt.9.5.387.

Thomsen, D. K., Matthiesen, S., Frederiksen, Y., Ingerslev, H. J., Zachariae, R., & Mehlsen, M. Y. (2016). Trait anxiety predicts the emotional valence of meaning-making in life stories: A 10-year prospective study. *Personality and Individual Differences, 102,* 51– 55.

Thompson, G. R. (2016). Meaning therapy for addictions: A case study. *Journal of Humanistic Psychology, 56*(5), 457–482. *doi: 10.1177/0022167815585913*

Throsby, K. (2002). "Calling it a day": The decision to end IVF treatment (Unpublished doctoral dissertation). Gender Institute, London School of Economics.

Throsby, K., & Gill, R. (2004). It's different for men: Masculinity and IVF. *Men and Masculinities, 6*(4), 330–348. doi: 10.1177/1097184X03260958

Thurer, S. (1995). *The myths of motherhood: How culture reinvents the good mother*. New York: Penguin.

Todorova, I. L. G., & Kotzeva, T. (2006). Contextual shifts in Bulgarian women's identity in the face of infertility. *Psychology and Health, 21*(1), 123–141. doi: 10.1080/14768320500143354

Trochim, W. (2000). *The Research Methods Knowledge Base, 2nd Edition*. Cincinnati, OH: Atomic Dog Publishing.

Tulbure, B. T. (2015). Appreciating the positive protects us from negative emotions: The relationship between gratitude, depression and religiosity. *Procedia - Social and Behavioral Sciences 187*, 475–480. doi: 10.1016/j.sbspro.2015.03.089

Turkey Demographic and Health Survey. (2013). Hacettepe University Institute of Population Studies, T.R. Ankara, Turkey: Ministry of Development and TUBITAK.

Turkish Ministry of Health (2008). Annual Social Security Health Application Statute, Official Gazette no. 27012.

Ulrich, M., & Weatherall, A. (2000). Motherhood and infertility: viewing motherhood through the lens of infertility, *Feminism and Psychology, 10*(3), 323–336. doi: 10.1177/0959353500010003003

Ulusoy, M., Şahin, N. H., & Erkmen, H. (1998). Turkish version of the Beck Anxiety Inventory: Psychometric properties. *Journal of Cognitive Psychotherapy: An International Quarterly, 12,* 163–172.

Van den Broeck, U., Emery, M., Wischmann, T., & Thorn, P. (2010). Counseling in infertility: Individual, couple and group interventions. *Patient Education and Counseling, 81*(3), 422–428. doi: 10.1016/j.pec.2010.10.009

Van den Broeck, U., D'Hooghe, T., Enzlin, P., & Demyttenaere, K. (2010). Predictors of psychological distress in patients starting IVF treatment: Infertility specific versus general psychological characteristics. *Human Reproduction, 25*(6), 1471–1480. doi: 10.1093/humrep/deq030

Van Rooij, F. B., Van Balen, F., & Hermanns, J. M. A. (2007). Emotional distress and infertility: Turkish migrant couples compared to Dutch couples and couples in Western Turkey. *Journal of Psychosomatic Obstetrics & Gynecology, 28*(2), 87–95. doi: 10.1080/01674820701410015

Vanderlinden, L. K. (2009). German genes and Turkish traits: Ethnicity, infertility, and reproductive politics in Germany. *Social Science Medicine, 69*(2), 266–273. doi: 10.1016/j.socscimed.2009.03.027

Van der Spek, N., Vos, J., van Uden-Kraan, C. F., Breitbart, W., Cuijpers, P., Knipscheer-Kuipers, K…Leeuw, I. M. (2014). Effectiveness and cost-effectiveness of meaning-centered group psychotherapy in cancer survivors: Protocol of a randomized controlled trial. *BioMed Central Psychiatry, 14,* 22–30. doi:10.1186/1471-244X-14-22

Verhaak, C. M., Smeenk, J. M. J., van Minnen, A., Kremer, J.A.M., & Kraaimaat, F. W. (2005b). A longitudinal, prospective study on emotional adjustment before, during and after consecutive fertility treatment cycles. *Human Reproduction, 20*(8), 2253–2260. doi: 10.1093/humrep/dei015

Verhaak, C. M., Smeenk, J. M. J., Evers, A. W. M., Kremer, J. A. M., Kraaimaat, F. W., & Braat, D. D. M. (2007). Women's emotional adjustment to IVF: A systematic review of 25 years of research. *Human Reproduction Update, 13*(1), 27–36. doi:10.1093/humupd/dml040

Villani, D., Grassi, A., Cognetta, C., Cipresso, P., Toniolo, D., & Riva, G. (2012).The effects of a mobile stress management protocol on nurses working with cancer patients: A preliminary controlled study. *Studies in Health Technology and Informatics, 173*, 524–528.

Wakefield, C. E., Sansom-Daly, U. M., McGill, B. C., McCarthy, M., Girgis, A., Grootenhuis, M…Cohn, R. J. (2015). Online parent-targeted cognitive-behavioural therapy intervention to improve quality of life in families of young cancer survivors: Study protocol for a randomised controlled trial. *Trials, 16*, 153–165. doi: 10.1186/s13063-015-0681-6

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS Scales. *Journal of Personality and Social Psychology, 54*(6), 1063–1070. doi: 10.1037//0022-3514.54.6.1063

Weinshel, M. (1990). Practice sketch: treating an infertile couple. *Family Systems Medicine, 8*, 303–313.

Wingert, S., Harvey, C. D. H., Duncan, K. A., & Berry, R. E. (2005). Assessing the needs of assisted reproductive technology users of an online bulletin board. *International Journal of Consumer Studies, 29*(5), 468–478. doi: 10.1111/j.1470-6431.2005.00461.x

Wischmann, T. (2008). Implications of psychosocial support in infertility: A critical appraisal. *Journal of Psychosomatic Obstetrics and Gynecology, 29*(2), 83–90. doi:10.1080/01674820701817870

Wischmann, T., & Thorn, P. (2013). (Male) infertility: What does it mean to men? Newevidence from quantitative and qualitative studies. *Reproductive BioMedicine Online, 27*(3), 236–243. doi: 10.1016/j.rbmo.2013.06.002

Wright, K. B., & Bell, S. B. (2003). Health-related support groups on the internet: Linking empirical findings to social support and computer-mediated communication theory. *Journal of Health Psychology, 8*(1), 39–54. doi: 10.1177/1359105303008001429

Wright, K. B., Rains, S., & Banas, J. (2010). Weak-tie support network and perceived life stress among participants in health-related, computer-mediated support groups. *Journal of Computer-Mediated Communication, 15*(4), 606–624. doi:10.1111/j.1083-6101.2009.01505.x

Wong, P. T. P. & Fry, P. S. (Eds.). (1998). *The human quest for meaning.* New York: Guilford Press.

Wong, P. T. P., Wong, L. C. J., & Scott, C. (2006). The positive psychology oftransformation: Beyond stress and coping. In Wong, P. T. P., & Wong, L. C. J. (Eds.), *Handbook of Multicultural Perspectives on Stress and Coping*. New York, NY: Springer.

Wong, P. T. P. (2010). Meaning therapy: An integrative and positive existential psychology. *Journal of Contemporary Psychotherapy, 40*(2), 85–99. doi: 10.1007/s10879-009-9132-6.

Yalom, I. D. (1980). *Existential Psychotherapy*. New York: Basic Books.

Yarar, F. (2015). Investigating psychopathology from flow psychology perspective: Defining autotelic personality (Unpublished doctoral dissertation). Middle East Technical University, Ankara.

Yeung, N. C. Y., Lu, Q., Wong, C. C. Y., & Huynh, H. C. (2016). The roles of needs satisfaction, cognitive appraisals, and coping strategies in promoting post-traumatic growth: A stress and coping perspective. *Psychological Trauma: Theory, Research, Practice, and Policy, 8*(3), 284–292. doi: 10.1037/tra0000091

Ying, L.Y., Wu, L.H., & Loke, A.Y. (2015). Gender differences in experiences with and adjustments to infertility: A literature review. *International Journal of Nursing Studies, 52*(10), 1640–1652. doi: 10.1016/j.ijnurstu.2015.05.004

Yu, Y., Peng, L., Chen, L., Long, L., He, W., Li, M., & Wang, T. (2014). Resilience and social support promote post-traumatic growth of women with infertility: The mediating role of positive coping. *Psychiatry Research, 215*(2), 401–405. doi: 10.1016/j.psychres.2013.10.032

Zegers-Hochschild, F., Adamson, G. D., de Mouzon, J., Ishihara, O., Mansour, R…Vanderpoel, S. (2009). International Committee for Monitoring Assisted Reproductive Technology (ICMART) and the World Health Organization (WHO) revised glossary of ART terminology, 2009. *Fertility and Sterility, 92*(5), 1520–1524. doi:10.1016/j.fertnstert.2009.09.009

Zillien, N., Haake, G., Fröhlich, G., Bense, T., & Souren, D. (2011). Internet use of fertility patients: a systemic review of the literature. *Journal of Reproductive Medicine and Endocrinology, 8*(4), 281–287.

APPENDICES

APPENDIX A: INFORMED CONSENT FORM (STUDY 1)
ARAŞTIRMAYA GÖNÜLLÜ KATILIM FORMU

Değerli Katılımcı,

Bu çalışma, Orta Doğu Teknik Üniversitesi Psikoloji Bölümü Klinik Psikoloji Doktora programına bağlı olarak Prof. Dr. Özlem Bozo danışmanlığı altında yürütülen, Doktora Öğrencisi Yeliz Şimşek Alphan'ın doktora tez çalışmasıdır.

Çalışmanın amacı Türkiye'de yaşayan infertil kadınların infertiliteyi anlamlandırma süreçlerini incelemektir. Benzer durumda olan kadınlara yardımcı olmak için, sizden bu konuda çok şey öğreneceğimize inanıyoruz. Çalışmaya katılmayı kabul ederseniz araştırmanın yürütücüsü Uzman Klinik Psikolog Yeliz Şimşek Alphan ile yaklaşık bir saat süren, açık uçlu sorulardan oluşan yarı-yapılandırılmış bir görüşme yapacaksınız. Görüşme esnasında daha sonra detaylı incelenmek üzere ses kaydı alınacaktır. Vereceğiniz tüm bilgilertamamıyla gizli tutulacak, bütün cevaplar toplu olarak araştırma amacıyla değerlendirilecektir. Görüşme, genel olarak kişisel rahatsızlık verecek sorular içermemektedir. Ancak, katılım esnasında sorulardan ya da herhangi başka bir nedenden ötürü kendinizi rahatsız hissederseniz soruyu cevaplamayabilir ya da çalışmayı yarıda bırakabilirsiniz. Çalışma bitince, bu çalışma ile ilgili sorularınız için veya çalışma hakkında daha fazla bilgi almak için Uzm. Psk. Yeliz Şimşek Alphan (E-posta: simsek_yeliz@yahoo.com veya yeliz.simsek@metu.edu.tr) ile iletişim kurabilirsiniz. Bu çalışmaya katıldığınız için şimdiden teşekkür ederiz.

Bu çalışmaya tamamen gönüllü olarak katılıyorum ve istediğim zaman yarıda kesip çıkabileceğimi biliyorum. Verdiğim bilgilerin bilimsel amaçlı yayınlarda kullanılmasını kabul ediyorum (Lütfen işaretleyiniz).

Evet Hayır

APPENDIX B: SEMI-STRUCTURED INTERVIEW QUESTIONS
YARI YAPILANDIRILMIŞ MÜLAKAT SORULARI

1. Ne kadar zamandır çocuk sahibi olmaya çalışıyorsunuz?
(How long have you been trying to conceive?)

2. Hamile kalmakla ilgili güçlük yaşadığınızı ne zaman fark ettiniz?
(When did you realize that you have problems with getting conceive?)

3. Daha sonra ne yaptınız?
(What did you do then?)

4. İnfertil olduğunuzu öğrendiğinizde neler hissettiniz?
(How did you feel when you first learned about your infertility?)

5. Hissettiğiniz duygularla nasıl başa çıktınız?
(How did you cope with those emotions?)

6. İnfertilite tanısı almış olmak sizi nasıl etkiledi?
(How have you been affected by infertility diagnosis?)

7. Aldığınız tanı ilişkilerinizi nasıl etkiledi?
(How do you think your relationships are affected from your infertility diagnosis?)

8. İnfertilite sizin için ne anlama geliyor?
(What does infertility mean to you?)

9. Çocuk sahibi olmak sizing için ne anlama geliyor?
(What does having a child mean to you?)

10. İnfertilite tanısını almadan evvel kendinizi nasıl biri olarak tarif ederdiniz? Şimdi nasıl biri olarak tarif ediyorsunuz?
(How do you define yourself before and then?)

11. Tanı almadan önceki gelecek planlarınız nelerdi? Şimdiki gelecek planlarınız neler?
(What were your future plans before infertility diagnosis? What are your future plans right now?)

12. Bu görüşmeyi yapmış olmakla ilgili neler hissediyorsunuz?
(How do you feel about making this interview?)

APPENDIX C: INFORMED CONSENT FORM (STUDY 2)
ARAŞTIRMAYA GÖNÜLLÜ KATILIM FORMU

Değerli Katılımcı,

Bu çalışma, Orta Doğu Teknik Üniversitesi Psikoloji Bölümü Klinik Psikoloji Doktora programına bağlı olarak Prof. Dr. Özlem Bozo danışmanlığı altında yürütülen, Doktora Öğrencisi Yeliz Şimşek Alphan'ın doktora tez çalışmasıdır.

Çalışmanın amacı anlam odaklı online grup terapisinin Türkiye'de yaşayan infertil kadınların psikolojik iyilik haline etkilerini araştırmaktır. Bu amaçla, infertilite tanısı almış kadın katılımcılar ile 8-hafta boyunca internet üzerinden devam edecek 90 dakika süreli bir grup terapisine katılımınız beklenmektedir. Çalışmanın yürütücüsü olan Uzman Psikolog tarafından gerçekleştirilecek görüşmeler en az 6, en fazla 10 katılımcı ile gerçekleştirilecektir. Görüşmeler eşzamanlı yazışmalar yoluyla forum formatında uygulanacaktır. Grup terapisi seansları tamamen gizlilik altında yürütülecektir. Bu sürede sizden 9 ölçekten oluşan anketi 8 hafta arayla toplamda iki defa doldurmanız talep edilecektir. Bu ankete vereceğiniz cevaplar da tamamıyla gizli tutulacak ve sadece araştırma amacıyla toplu olarak değerlendirilecektir. Anket, genel olarak kişisel rahatsızlık verecek sorular içermemektedir. Ancak, katılım esnasında sorulardan ya da herhangi başka bir nedenden ötürü kendinizi rahatsız hissederseniz soruyu cevaplamayabilir ya da çalışmayı yarıda bırakabilirsiniz. Çalışma bitince, bu çalışma ile ilgili sorularınız için veya çalışma hakkında daha fazla bilgi almak için Uzm. Psk. Yeliz Şimşek Alphan (E-posta: simsek_yeliz@yahoo.com veya yeliz.simsek@metu.edu.tr) ile iletişim kurabilirsiniz. Katılımınız için şimdiden teşekkür ederiz.

Bu çalışmaya tamamen gönüllü olarak katılıyorum ve istediğim zaman yarıda kesip çıkabileceğimi biliyorum. Verdiğim bilgilerin bilimsel amaçlı yayınlarda kullanılmasını kabul ediyorum (Lütfen işaretleyiniz).

Evet Hayır

APPENDIX D: DEMOGRAPHIC INFORMATION FORM (STUDY 2)
DEMOGRAFİK BİLGİ FORMU

İsminiz (Takma isim verebilirsiniz, daha sonra hatırlayacağınız bir isim olmasına dikkat ediniz)

1. Yaşınız ____

2. Cinsiyetiniz K □ E □

3. Medeni Durumunuz Evli □ , Bekar □ , Diğer □ (Belirtiniz) _____

4. **Evli iseniz kaç senedir? ____**

5. Eşinizin ve\veya sizin başka bir evlilik geçmişiniz var mı?

Eşimin var □ Benim var □ İkimizin de var □ İkimizin de yok □

6. Eşinizin ve\veya sizin daha önceki evliliklerinizden çocukları var mı?

Eşimin var □ Benim var □ İkimizin de var □ İkimizin de yok □

7. Eşiniz ile nasıl bir ilişkiniz var?

Oldukça Kötü □ Kötü□ Orta□ İyi □ Oldukça iyi □

8. Tanı aldığınız herhangi bir psikolojik rahatsızlığınız var mı?

Hayır □ Evet □ ise lütfen açıklayınız:_____

9. Tanı aldığınız herhangi bir fiziksel rahatsızlığınız var mı?

Hayır □ Evet □ ise lütfen açıklayınız:_____

10.Gelir düzeyiniz; Düşük □ , Orta □ , Yüksek □

11. En son mezun olduğunuz okul:

İlköğretim□ Lise□ Üniversite □ Master □ Doktora□ Diğer□……

12. Herhangi bir işte çalışıyor musunuz? Evet □, Hayır □

(Yanıtınız **Evet** ise) Kaç senedir? ____

14. Hayatınızın en uzun süresini nerede geçirdiniz?

Köy □ Kasaba □ Şehir □ Büyükşehir □

15. Daha önce gebe kaldınız mı? Evet □ , Hayır □

(Yanıtınız **Evet** ise) **Şu ana kadar geçirdiğiniz gebeliklerde bebek kaybınız oldu mu?**

Hayır □ Evet □ ise lütfen bu kayıpların kaçıncı haftalarda ve ne şekilde (düşük, biyokimyasal gebelik, kürtaj gibi) olduğu hakkında bilgi veriniz:

_____

_____

Varsa, kaybedilen bebek sayısı? _____

16. Çocuk sahibi olamama nedeniniz size ne olarak açıklandı?

Kadına ait infertilite □ Erkeğe ait infertilite □

Hem kadın, hem erkeğe ait infertilite □ Nedeni bilinmeyen infertilite □

Diğer □

(Belirtiniz)_____

17. Çocuk sahibi olamama nedeniniz size hangi tür infertilite olarak açıklandı?

Primer infertilite \ Birincil kısırlık (En az 1 yıl süreyle korunmamaya rağmen hiç gebelik oluşmaması)□

Sekonder infertilite \ İkincil kısılık (Önceden gebelik oluşması, fakat tekrar çocuk isteme durumunda en az bir yıl korunmamaya rağmen yeni bir gebelik olmaması)□

Diğer □

(Belirtiniz)_____

18. Ne kadar zaman önce infertilite (kısırlık) tanısı aldınız?

1 yıldan az □ (*Lütfen ay cinsinden belirtiniz: ..... ay)

1 yıldan fazla □ (*Lütfen yıl cinsinden belirtiniz: ..... yıl)

19. Ne kadar süredir çocuk sahibi olmak için uğraş veriyorsunuz?

1 yıldan az □ (*Lütfen ay cinsinden belirtiniz: ..... ay)

1 yıldan fazla □ (*Lütfen yıl cinsinden belirtiniz: ..... yıl)

20. Şu anda çocuk sahibi olmak için tedavi görüyor musunuz? (Tüp bebek, aşılama, mikro-enjeksiyon vb.) Evet □ , Hayır □

(Yanıtınız **Evet** ise) Ne kadar süredir tedavi görüyorsunuz?

1 yıldan az □ (*Lütfen ay cinsinden belirtiniz: ..... ay)

1 yıldan fazla □ (*Lütfen yıl cinsinden belirtiniz: ..... yıl)

21. Daha önce çocuk sahibi olmak için tedavi gördünüz mü? Evet □, Hayır □

(Yanıtınız **Evet** ise) Kaç tedavi denemeniz oldu? ____

APPENDIX E: MEANING IN LIFE QUESTIONNAIRE

YAŞAM ANLAMI ÖLÇEĞİ

Lütfen hayatınızı ve varoluşunuzu neyin önemli ve kayda değer hale getirdiğini düşünmek için bir dakikanızı ayırıp, olabildiğince dürüst ve kesin bir şekilde aşağıdaki ifadelere yanıt verin. Bu ifadeleri yanıtlarken, doğru veya yanlış cevapların olmadığını ve cevaplarının kişiden kişiye değişebileceğini unutmayınız. İfadeleri aşağıdaki ölçeğe göre yanıtlayınız.

Kesinlikle Yanlış	Çoğunlukla Yanlış	Kısmen Yanlış	Doğru veya Yanlış Diyemem	Kısmen Doğru	Çoğunlukla Doğru	Kesinlikle Doğru
1	2	3	4	5	6	7

_____1. Hayatımın anlamını biliyorum.

_____2. Hayatımı anlamlı hissettirecek bir şey arıyorum.

_____3. Her zaman hayatımın amacını bulma arayışındayımdır.

_____4. Hayatımın net bir amacı vardır.

_____5. Hayatımı neyin anlamı kıldığını bilirim.

_____6. Hayatım için tatmin edici bir amaç keşfettim.

_____7. Sürekli, hayatımı kayda değer hale getirecek bir şeyler arıyorum.

_____8. Hayatım için bir amaç ya da misyon arıyorum.

_____9. Hayatımın net bir amacı yok.

_____10. Hayatımda bir anlam arıyorum.

APPENDIX F: STRESS APPRAISAL MEASURE

STRES DEĞERLENDİRME ÖLÇEĞİ

Bu anket, daha önce tanımladığımız olay hakkındaki düşüncelerinizle ilgilidir. Doğru ya da yanlış cevap yoktur. Lütfen, durum hakkındaki ŞU ANKİ düşüncelerinize göre değerlendirme yapınız. Lütfen, TÜM soruları cevaplayınız. Her bir soruyu sizin için uygun rakamı DAİRE İÇİNE ALARAK değerlendiriniz.

	Hiç	Çok Az	Orta Düzeyde	Oldukça	Aşırı Düzeyde
1. Bu, tamamen çaresiz bir durum mu?	1	2	3	4	5
2. Bu, sonuçlarından hiç kimsenin kaçamayacağı bir durum mu?	1	2	3	4	5
3. İhtiyaç duyduğumda yardım isteyebileceğim herhangi bir kişi ya da destek talep edebileceğim bir uzman (psikolog, doktor, vb.) var mı?	1	2	3	4	5
4. Bu durum, beni endişelendiriyor mu?	1	2	3	4	5
5. Bu durumun benim için önemli sonuçları var mı?	1	2	3	4	5
6. Bu durumun benim üzerimde olumlu bir etkisi olacak mı?	1	2	3	4	5
7. Bu sorunla uğraşmak için ne kadar hevesliyim?	1	2	3	4	5
8. Bu durumun sonuçlarından ne kadar etkileneceğim?	1	2	3	4	5
9. Öncesine göre, bu problem sayesinde ne kadar daha güçlü bir kişi olabilirim?	1	2	3	4	5
10. Bu durumun sonuçları olumsuz olur mu?	1	2	3	4	5
11. Bu durumla başa çıkabilecek yeteneklere sahip miyim?	1	2	3	4	5
12. Bu durumun benim yaşamımda ciddi etkileri olacak mı?	1	2	3	4	5

13. Bu durumla baş etmek için gerekli niteliklere sahip miyim?	1	2	3	4	5
14. Bu sorunla baş etmek için bana yardım edebilecek bir kaynağım var mı?	1	2	3	4	5
15. Bu sorunla baş etmede bana yardım sağlayabilecek uygun ve yeteri kadar kaynağım var mı?	1	2	3	4	5
16. Bu durumla ilgili bir şey yapabilmek herhangi bir kişinin gücünü aşar mı?	1	2	3	4	5
17. Bu durumun olumlu sonuçlarının da olabileceğini düşünmek beni ne kadar heyecanlandırıyor?	1	2	3	4	5
18. Bu, ne kadar tehdit edici bir durum?	1	2	3	4	5
19. Bu, herhangi bir kişinin çözemeyeceği bir sorun mu?	1	2	3	4	5
20. Bu durumla baş edebilir miyim?	1	2	3	4	5
21. Bu sorunun üstesinden gelmem için bana yardım edebilecek herhangi biri var mı?	1	2	3	4	5
22. Bu durumda başarılı sonuçlar elde etmek için gerekli becerilere sahip miyim?	1	2	3	4	5
23. Bu durumun benim için uzun vadeli sonuçları var mı?	1	2	3	4	5
24. Bu durumun benim üzerimde olumsuz bir etkisi olacak mı?	1	2	3	4	5

APPENDIX G: POST TRAUMATIC GROWTH INVENTORY
TRAVMA SONRASI BÜYÜME ENVANTERİ

Aşağıda hastalığınızdan dolayı yaşamınızda olabilecek bazı değişiklikler verilmektedir. Her cümleyi dikkatle okuyunuz ve belirtilen değişikliğin sizin için ne derece gerçekleştiğini aşağıdaki ölçeği kullanarak belirtiniz.

0= Hastalığımdan dolayı böyle bir değişiklik yaşamadım

1= Hastalığımdan dolayı bu değişikliği çok az derecede yaşadım

2= Hastalığımdan dolayı bu değişikliği az derecede yaşadım

3= Hastalığımdan dolayı bu değişikliği orta derecede yaşadım

4= Hastalığımdan dolayı bu değişikliği oldukça fazla derecede yaşadım

5= Hastalığımdan dolayı bu değişikliği aşırı derecede yaşadım

	Hiç yaşamadım					**Aşırı derecede yaşadım**
1. Hayatıma verdiğim değer artı.	0	1	2	3	4	5
2. Hayatımın kıymetini anladım.	0	1	2	3	4	5
3. Yeni ilgi alanları geliştirdim.	0	1	2	3	4	5
4. Kendime güvenim arttı.	0	1	2	3	4	5
5. Manevi konuları daha iyi anladım.	0	1	2	3	4	5
6. Zor zamanlarda başkalarına güvenebileceğimi anladım.	0	1	2	3	4	5
7. Hayatıma yeni bir yön verdim.	0	1	2	3	4	5
8. Kendimi diğer insanlara daha yakın hissetmeye başladım.	0	1	2	3	4	5
9. Duygularımı ifade etme isteğim arttı.	0	1	2	3	4	5
10. Zorluklarla başa çıkabileceğimi anladım.	0	1	2	3	4	5

11. Hayatımı daha iyi şeyler yaparak geçirebileceğimi anladım.	0	1	2	3	4	5
12. Olayları olduğu gibi kabullenmeyi öğrendim.	0	1	2	3	4	5
13. Yaşadığım her günün değerini anladım.	0	1	2	3	4	5
14. Hastalığımdan sonra benim için yeni fırsatlar doğdu.	0	1	2	3	4	5
15. Başkaların karşı şefkat hislerim arttı.	0	1	2	3	4	5
16. İnsanlarla ilişkilerimde daha fazla gayret göstermeye başladım.	0	1	2	3	4	5
17. Değişmesi gereken şeyleri değiştirmek için daha fazla gayret göstermeye başladım.	0	1	2	3	4	5
18. Dini inancım daha güçlendi.	0	1	2	3	4	5
19. Düşündüğümden daha güçlü olduğumu anladım.	0	1	2	3	4	5
20. İnsanların ne kadar iyi olduğu konusunda çok şey öğrendim.	0	1	2	3	4	5
21. Başkalarına ihtiyacım olabileceğini kabul etmeyi öğrendim.	0	1	2	3	4	5

APPENDIX H: BECK DEPRESSION INVENTORY
BECK DEPRESYON ENVANTERİ

Aşağıda, kişilerin ruh durumlarını ifade ederken kullandıkları bazı cümleler verilmiştir. Her madde, bir çeşit ruh durumunu anlatmaktadır. Her maddede o duygu durumunun derecesini belirleyen 4 seçenek vardır. Lütfen bu seçenekleri dikkatlice okuyunuz. Son bir hafta içindeki (şu an dâhil) kendi duygu durumunuzu göz önünde bulundurarak, size uygun olan ifadeyi bulunuz. Daha sonra, o madde numarasının karşısında, size uygun ifadeye karşılık gelen seçeneği bulup işaretleyiniz.

1. a) Kendimi üzgün hissetmiyorum.
   b) Kendimi üzgün hissediyorum.
   c) Her zaman için üzgünüm ve kendimi bu duygudan kurtaramıyorum.
   d) Öylesine üzgün ve mutsuzum ki dayanamıyorum.
2. a) Gelecekten umutsuz değilim.
   b) Geleceğe biraz umutsuz bakıyorum.
   c) Gelecekten beklediğim hiçbir şey yok.
   d) Benim için bir gelecek yok ve bu durum düzelmeyecek.
3. a) Kendimi başarısız görmüyorum.
   b) Çevremdeki birçok kişiden daha fazla başarısızlıklarım oldu sayılır.
   c) Geriye dönüp baktığımda, çok fazla başarısızlığımın olduğunu görüyorum.
   d) Kendimi tümüyle başarısız bir insan olarak görüyorum.
4. a) Her şeyden eskisi kadar zevk alabiliyorum.
   b) Her şeyden eskisi kadar zevk alamıyorum.
   c) Artık hiçbir şeyden gerçek bir zevk alamıyorum.
   d) Bana zevk veren hiçbir şey yok. Her şey çok sıkıcı.
5. a) Kendimi suçlu hissetmiyorum.
   b) Arada bir kendimi suçlu hissettiğim oluyor.
   c) Kendimi çoğunlukla suçlu hissediyorum.
   d) Kendimi her an için suçlu hissediyorum.
6. a) Cezalandırıldığımı düşünmüyorum.
   b) Bazı şeyler için cezalandırılabileceğimi hissediyorum.
   c) Cezalandırılmayı bekliyorum.
   d) Cezalandırıldığımı hissediyorum.

7. a) Kendimden hoşnutum.
   b) Kendimden pek hoşnut değilim.
   c) Kendimden hiç hoşlanmıyorum.
   d) Kendimden nefret ediyorum.
8. a) Kendimi diğer insanlardan daha kötü görmüyorum.
   b) Kendimi zayıflıklarım ve hatalarım için eleştiriyorum.
   c) Kendimi hatalarım için her zaman suçluyorum.
   d) Her kötü olayda kendimi suçluyorum.
9. a) Kendimi öldürmek gibi düşüncelerim yok.
   b) Bazen kendimi öldürmeyi düşünüyorum fakat bunu yapamam.
   c) Kendimi öldürebilmeyi isterdim.
   d) Bir fırsatını bulursam kendimi öldürürdüm.
10. a) Her zamankinden daha fazla ağladığımı sanmıyorum.
    b) Eskisine göre şu sıralarda daha fazla ağlıyorum.
    c) Şu sıralar her an ağlıyorum.
    d) Eskiden ağlayabilirdim, ama şu sıralarda istesem de ağlayamıyorum.
11. a) Her zamankinden daha sinirli değilim.
    b) Her zamankinden daha kolayca sinirleniyor ve kızıyorum.
    c) Çoğu zaman sinirliyim.
    d) Eskiden sinirlendiğim şeylere bile artık sinirlenemiyorum.
12. a) Diğer insanlara karşı ilgimi kaybetmedim.
    b) Eskisine göre insanlarla daha az ilgiliyim.
    c) Diğer insanlara karşı ilgimin çoğunu kaybettim.
    d) Diğer insanlara karşı hiç ilgim kalmadı.
13. a) Kararlarımı eskisi kadar kolay ve rahat verebiliyorum.
    b) Şu sıralarda kararlarımı vermeyi erteliyorum.
    c) Kararlarımı vermekte oldukça güçlük çekiyorum.
    d) Artık hiç karar veremiyorum.
14. a) Dış görünüşümün eskisinden daha kötü olduğunu sanmıyorum.
    b) Yaşlandığımı ve çekiciliğimi kaybettiğimi düşünüyor ve üzülüyorum.
    c) Dış görünüşümde artık değiştirilmesi mümkün olmayan olumsuz değişiklikler olduğunu hissediyorum.
    d) Çok çirkin olduğumu düşünüyorum.

15. a) Eskisi kadar iyi çalışabiliyorum.

    b) Bir işe başlayabilmek için eskisine göre kendimi daha fazla zorlamam gerekiyor.

    c) Hangi iş olursa olsun, yapabilmek için kendimi çok zorluyorum.

    d) Hiçbir iş yapamıyorum.

16. a) Eskisi kadar rahat uyuyabiliyorum.

    b) Şu sıralar eskisi kadar rahat uyuyamıyorum.

    c) Eskisine göre 1 veya 2 saat erken uyanıyor ve tekrar uyumakta zorluk çekiyorum.

    d) Eskisine göre çok erken uyanıyor ve tekrar uyuyamıyorum.

17. a) Eskisine kıyasla daha çabuk yorulduğumu sanmıyorum.

    b) Eskisinden daha çabuk yoruluyorum.

    c) Şu sıralarda neredeyse her şey beni yoruyor.

    d) Öyle yorgunum ki hiçbir şey yapamıyorum.

18. a) İştahım eskisinden pek farklı değil.

    b) İştahım eskisi kadar iyi değil.

    c) Şu sıralarda iştahım epey kötü.

    d) Artık hiç iştahım yok.

19. a) Son zamanlarda pek fazla kilo kaybettiğimi sanmıyorum.

    b) Son zamanlarda istemediğim halde üç kilodan fazla kaybettim.

    c) Son zamanlarda beş kilodan fazla kaybettim.

    d) Son zamanlarda yedi kilodan fazla kaybettim.

-Daha az yiyerek kilo kaybetmeye çalışıyorum. EVET ( ) HAYIR ( )

20. a) Sağlığım beni pek endişelendirmiyor.

    b) Son zamanlarda ağrı, sızı, mide bozukluğu, kabızlık gibi sorunlarım var.

    c) Ağrı, sızı gibi bu sıkıntılarım beni epey endişelendirdiği için başka şeyleri düşünmek zor geliyor.

    d) Bu tür sıkıntılar beni öylesine endişelendiriyor ki, artık başka bir şey düşünemiyorum.

21. a) Son zamanlarda cinsel yaşantımda dikkatimi çeken bir şey yok.

    b) Eskisine göre cinsel konularla daha az ilgileniyorum.

    c) Şu sıralarda cinsellikle pek ilgili değilim.

    d) Artık, cinsellikle hiçbir ilgim kalmadı.

APPENDIX I: BECK HOPELESSNESS SCALE

BECK UMUTSUZLUK ÖLÇEĞİ

Aşağıda geleceğe ait düşünceleri ifade eden bazı cümleler verilmiştir. Lütfen her bir ifadeyi okuyarak, bunların size ne kadar uygun olduğuna karar veriniz. Size uygun olanlar için "Evet", uygun olmayanlar için ise "Hayır" sütununun altındaki kutuyu işaretleyiniz.

	Evet	Hayır
1. Geleceğe umut ve coşku ile bakıyorum.		
2. Kendim ile ilgili şeyleri düzeltemediğime göre çabalamayı bıraksam iyi olur.		
3. İşler kötüye giderken bile her şeyin hep böyle kalmayacağını bilmek beni rahatlatıyor.		
4. Gelecek on yıl içinde hayatımın nasıl olacağını hayal bile edemiyorum.		
5. Yapmayı en çok istediğim şeyleri gerçekleştirmek için yeterli zamanım var.		
6. Benim için çok önemli konularda ileride başarılı olacağımı umuyorum.		
7. Geleceğimi karanlık görüyorum.		
8. Dünya nimetlerinden sıradan bir insandan daha çok yararlanacağımı umuyorum.		
9. İyi fırsatlar yakalayamıyorum. Gelecekte yakalayacağıma inanmam için de hiçbir neden yok.		
10. Geçmiş deneyimlerim beni geleceğe iyi hazırladı.		
11. Gelecek, benim için hoş şeylerden çok tatsızlıklarla dolu görünüyor.		
12. Gerçekten özlediğim şeylere kavuşabileceğimi ummuyorum.		
13. Geleceğe baktığımda şimdikine oranla daha mutlu olacağımı umuyorum.		
14. İşler bir türlü benim istediğim gibi gitmiyor.		
15. Geleceğe büyük inancım var.		

16. Arzu ettiğim şeyleri elde edemediğime göre bir şeyler istemek aptallık olur.		
17. Gelecekte gerçek doyuma ulaşmam olanaksız gibi.		
18. Gelecek bana bulanık ve belirsiz görünüyor.		
19. Kötü günlerden çok, iyi günler bekliyorum.		
20. İstediğim her şeyi elde etmek için çaba göstermenin gerçekten yararı yok, nasıl olsa onu elde edemeyeceğim.		

APPENDIX J: STATE-TRAIT ANXIETY INVENTORY / STATE DURUMLUK KAYGI ÖLÇEĞİ

Aşağıda kişilerin kendilerine ait duygularını anlatmada kullandıkları bir takım ifadeler verilmiştir. Her ifadeyi dikkatlice okuyun, sonra da şu anda nasıl hissettiğinizi, ifadelerin sağ tarafındaki rakamlardan uygun olanını işaretlemek suretiyle belirtin. Doğru ya da yanlış cevap yoktur. Herhangi bir ifadenin üzerinde fazla zaman sarf etmeksizin, şu anda nasıl hissettiğinizi gösteren cevabı işaretleyin.

	Hiç	Biraz	Çok	Tamamiyle
1. Şu anda sakinim.	1	2	3	4
2. Kendimi emniyette hissediyorum.	1	2	3	4
3. Şu anda sinirlerim gergin.	1	2	3	4
4. Pişmanlık duygusu içindeyim.	1	2	3	4
5. Şu anda huzur içindeyim.	1	2	3	4
6. Şu anda hiç keyfim yok.	1	2	3	4
7. Başıma geleceklerden endişe ediyorum.	1	2	3	4
8. Kendimi dinlenmiş hissediyorum.	1	2	3	4
9. Şu anda kaygılıyım.	1	2	3	4
10. Kendimi rahat hissediyorum.	1	2	3	4
11. Kendime güvenim var.	1	2	3	4
12. Şu anda asabım bozuk.	1	2	3	4
13. Çok sinirliyim.	1	2	3	4
14. Sinirlerimin çok gergin olduğunu hissediyorum.	1	2	3	4
15. Kendimi rahatlamış hissediyorum.	1	2	3	4
16. Şu anda halimden memnunum.	1	2	3	4
17. Şu anda endişeliyim.	1	2	3	4
18. Heyecandan kendimi şaşkına dönmüş hissediyorum.	1	2	3	4
19. Şu anda sevinçliyim.	1	2	3	4
20. Şu anda keyfim yerinde.	1	2	3	4

APPENDIX K: POSITIVE AND NEGATIVE AFFECT SCALE
POZİTİF VE NEGATİF DUYGULANIM ÖÇLEĞİ

Bu ölçek farklı duyguları tanımlayan bir takım sözcükler içermektedir. Geçtiğimiz hafta nasıl hissettiğinizi düşünüp her maddeyi okuyun. Uygun cevabı her maddenin yanına ayrılan yere puanları daire içine alarak işaretleyin. Cevaplarınızı verirken aşağıdaki puanları kullanın.

Çok az veya hiç
Biraz
Ortalama
Oldukça
Çok fazla

1) ilgili	1…….	2…….	3…….	4…….	5…….
2) sıkıntılı	1…….	2…….	3…….	4…….	5…….
3) heyecanlı	1…….	2…….	3…….	4…….	5…….
4) mutsuz	1…….	2…….	3…….	4…….	5…….
5) güçlü	1…….	2…….	3…….	4…….	5…….
6) suçlu	1…….	2…….	3…….	4…….	5…….
7) ürkmüş	1…….	2…….	3…….	4…….	5…….
8) düşmanca	1…….	2…….	3…….	4…….	5…….
9) hevesli	1…….	2…….	3…….	4…….	5…….
10) gururlu	1…….	2…….	3…….	4…….	5…….
11) asabi	1…….	2…….	3…….	4…….	5…….
12) uyanık (dikkati açık)	1…….	2…….	3…….	4…….	5…….
13) utanmış	1…….	2…….	3…….	4…….	5…….
14) ilhamlı (yaratıcı düşüncelerle dolu)	1…….	2…….	3…….	4…….	5…….
15) sinirli	1…….	2…….	3…….	4…….	5…….
16) kararlı	1…….	2…….	3…….	4…….	5…….
17) dikkatli	1…….	2…….	3…….	4…….	5…….
18) tedirgin	1…….	2…….	3…….	4…….	5…….
19) aktif	1…….	2…….	3…….	4…….	5…….
20) korkmuş	1…….	2…….	3…….	4…….	5…….

APPENDIX L: INFERTILITY SELF-EFFICACY SCALE
İNFERTİLİTE ÖZ-YETERLİLİK ÖLÇEĞİ

Bu ölçek, tüp bebek tedavisi alan kişilerin tedavi sırasında yapabilecekleri davranışları içermektedir. Önemli olan, sizin bu davranışları gerçekleştirme konusunda kendinizi ne kadar yeterli hissettiğinizdir. Geçmişte yaptığınız veya yapmadığınız davranışlar olsa da cevaplarınızın şu anda ki durumunuzu yansıtıp yansıtmadığından emin olun. Sizin cevaplarınız şimdi veya yakın gelecekte bu davranışları yapabilme konusunda ki öz-yeterliliğinizi yansıtacaktır.

Lütfen her bir maddeyi okuyunuz. Daha sonra bu davranışı yerine getirebilme konusunda kendinizi ne kadar yeterli hissettiğinizi değerlendiriniz. Ölçekte ki en küçük numarayı işaretlediğinizde bu davranışın size hiç uymadığını, ölçeğin sonunda en yüksek rakamı işaretlersiniz bu davranışın size tamamen uyduğunu gösterecektir. **Lütfen tüm sorulara cevap veriniz.**

Maddeler	Bana hiç uymuyor	Bana biraz uyuyor	Bana çok uyuyor	Bana tamamen uyuyor
1. Tıbbi tedavi sırasıda beni üzebilecek hoş olmayan düşünceleri kafamdan uzaklaştırabileceğime inanıyorum	1	2	3	4
2. Espiri yeteneğimi kaybetmeyeceğime inanıyorum	1	2	3	4
3. Çocuk sahibi olamama hakkındaki olumsuz duygularımı kontrol edebileceğime inanıyorum.	1	2	3	4
4. Çevremde gebe arkadaşlarım olması beni üzmüyor.	1	2	3	4
5. Düşmanlık veya öfke gibi duygularımı kontrol edebileceğime inanıyorum.	1	2	3	4
6. Olumlu tutumumu sürdüreceğime inanıyorum.	1	2	3	4
7. Kendimi suçlama, kusurlu bulma veya utanma gibi duygularımı azaltacağıma inanıyorum.	1	2	3	4
8. Muayene günümü veya test sonuçlarını beklerken rahat/gevşemiş olabileceğime inanıyorum.	1	2	3	4

APPENDIX M: A SHORT MANUAL FOR THE ONLINE INTERVENTION

Goals: The main goal of this manual is to provide summarized information about how online intervention in making-making of infertility takes place. A longer version of the manual can be asked from the main researcher of this study.

Rules: The participants are asked to be alone and at a silent place where they can attend the online sessions. The general rules of the intervention are determined and announced to the participants in the first session. The main rules are as follows:

1. Sessions will be held in accordance with the confidentiality principle, so make sure you do not to share any information from the sessions with anyone.
2. Do not copy the messages.
3. You need to be online at the session on time.
4. Do not to form subgroups, please do not to create other chat-groups.
5. Please do not to get into two person dialogues while something else was getting discussed in group.
6. Please be patient about the writing time intervals (everyone has different pace of writing)
7. Be careful about language and apparentness of your writing.
8. If someone gets pregnant, we will say goodbye to her with our good wishes.

Sessions

First Session: First session is devoted to providing a safe and supportive environment for the participants. After establishing a consensus regarding the rules of the intervention, each participant is asked to share about her expextations

on the online intervention. It is necessary to eliminate unrealistic expectations such as being the happiest person, having a much better relationship with husband and getting pregnant with the stress relief. The participants are then asked to introduce herself and talk about their infertility experience. It is important to give equal amount of time to each participant. Make a summary at the end of the session and leave at least 10 minutes to complete the session.

Second Session: The main aims of this session are first uncovering the hidden feeling related to infertility and by this way increasing the self-emphaty and self-compassion. The common feelings of theirs are highlighted. The leader of the group should listen the effects of infertility with unconditional positive regard and emphaty. Normalizing the feelings are necessary. It is important to be sensitive about different feelings and experiences related to infertility. The homework concerning the meaning of infertility can be given at the end of this session.

Third Session: The third session of the online intervention is devoted to understanding infertility. The questions: "What does infertility mean to you? What does it mean before and after your diagnosis?" are asked respectively. With the help of the techniques including Socratic questioning and challenging unrealistic thoughts, it is important to help them make sense of the situations they are going through.

Fourth Session: The main aims of the fourth session are providing acceptance and challenging the negative meaning making of infertility. By using the techniques such as emphaty, active listening and reflecting, the leader challenges the negative meanings of infertility. It is important to adopt the following: 1. Everybody has different strengths and limitations. One IVF trial can be enough for someone while some others my want to try many times, 2. Becoming a mother is important but you are more than that, 3. You have the right to stop and take a rest. It does not mean giving it up, it means you satisty a need of yours which is taking a rest, 4. Don't give up on yourself, 5. Whatever the result will be, you ar the most important.

Fifth Session: The fifth session of the online group intervention is devoted to identifying relational needs. The following questions are asked in order: How are you affected by peoples' perception of infertility?, In what ways do people surrounding you affect you?, What do you expect from others?, What do you infer from your relationships with others?, How can you satisfy your relational needs? By the help of Socratic questioning and challenging unrealistic thoughts techniques, the negative meanings of infertility presented by their family, friends and relatives are challenged. Setting realistic expectations from their social network are aimed to be achieved.

Sixth Session: This session is about taking action and increasing behavioral activation. It is important to prevent social isolation among the participants. The leader helps them to set goals about themselves other than infertility-related one. The following are the questions fort his session: When was the last time you did something just for yourself?, What are the things you can actively do to make you feel better?, How can you explain yourself to people to be better understood and get the support you need?

Seventh Session: In order to help the participants in strengthening the positive meaning of infertility and in seeing infertility in a different perspective, the seventh session is devoted to discuss the participants strengths, the things they do best in the infertility process and what infertility brings to their lives. Clarifying values can be a tool in accordance with these aims. In this session, it is appropriate to give the same homework that is given in the second session.

Eight session: The last session is about evaluation. The leader should encourage participants to share about their homeworks; how the meaning of infertiliy has changed from the beginning till that time. Their current interpretations of infertility are discussed. The benefits of the intervention and how they get those benefits can be asked. It is important to ask suggestions for improvement.

APPENDIX N: TURKISH SUMMARY / TÜRKÇE ÖZET

BÖLÜM 1

GENEL GİRİŞ

Bu araştırma, infertilite tanısı almış Türk kadınlarının öznel infertilite deneyimlerini anlamak, infertiliteye yükledikleri anlamları ortaya çıkarmak ve anlam yaratma sürecini nasıl gerçekleştirdiklerini öğrenmek amacıyla yürütülmüştür. Sonrasında infertilitenin olumlu anlamını artırmak amacıyla, anlam-odaklı, internet üzerinden uygulanan bir müdahale geliştirilmiş ve bu müdahalenin etkinliği ölçülmüştür.

Bu tez amaçları doğrultusunda çoklu analiz desenini benimsemiştir. İlk çalışma nitel analiz yöntemiyle, ikinci çalışma ise nicel analiz yöntemiyle yürütülmüştür.

BÖLÜM 2
İLK ÇALIŞMA: BİR YORUMLAYICI FENOMENOLOJİK ANALİZ: İNFERTİLİTEDE ANLAM YARATMA SÜREÇLERİNİ ANLAMAK

2.1. İnfertilite: Anlamı ve Psikolojik Etkileri

İnfertilite, çiftin 12 ay veya daha uzun bir süre boyunca korunmadan cinsellik yaşamasına rağmen hamileliğin oluşmasında zorluk yaşanmasına sebep olan bir üreme sistemi hastalığı olarak tanımlanmaktadır (Zegers-Hochschild ve ark. World Health Organization için, 2009). İnfertilite her 6 çiftten birini etkilemektedir (Boivin, Bunting, Collins ve Nygren, 2007). İnfertilite vakalarının %35-40 oranında erkekten kaynaklanan, %35-40 oranında kadından kaynaklanan, %20-30 oranında ise hem erkek hem kadından kaynaklanan problemlerden oluştuğu tespit edilmiştir (Jungwirth ve ark., 2012).

Gelişen teknoloji ile beraber infertilite tedavi yöntemleri de yıllar içinde artış göstermiştir. Bu yöntemler arsında en yaygın olarak bilineni tüp bebek yöntemi ile hamile kalmadır (CDC, 2017).

Diğer taraftan, infertilitenin bireyler üzerinde yoğun bir psikolojik stres yarattığı farklı çalışmalarca tespit edilmiştir (Greil, 1997; Morrow, Thoreson ve Penney, 1995). Kaygı ve depresyon infertilite yaşayan bireyler, özellikle de kadınlar arasında o kadar yaygındır ki alanyazında, yaşanan kaygı ve depresyonun kanser, kalp hastalıkları ve HIV vakalarında yaşanan kaygı ve depresyona eş değer olduğunu gösteren çalışmalar bulunmaktadır (Domar ve ark., 2000). Yaşanan yoğun stresin yanı sıra, özellikle başarısız tedavilerin neden olduğu kontrol kaybı, sosyal geri-çekilme ve damgalanma hissinin infertil kadınlarda yaygın olduğu görülmüştür (Greil, Slauson-Blevins ve McQuillan, 2010). Dahası alanyazında, kadınların infertiliteden ve başarısız tedavi denemelerinden erkeklere oranla daha olumsuz yönde etkilendiğini gösteren çalışmalar bulunmaktadır (örn. Chachamovich ve ark., 2010; Lukse ve Vacc, 1999). Bu durum, sosyo-kültürel olarak kadınların erkeklere göre çocuk yetiştirme ile daha çok ilişkilendirilmesinden kaynaklanmaktadır (Parry, 2005).

2.2. İnfertilitede Psiko-Sosyal ve Kültürel Etkiler

Kadınlar ve erkeklerin belli bir yaşta evlenmesi ve yine belli bir yaşta çocuk sahibi olması beklentisi pek çok kültürde vardır (Earle ve Letherby, 2007). Ancak infertilite tanısı almak, beklenen bu değişikliği gerçekleştirmenin önünde bir engel olarak bireylerin karşısına çıkar (Korpatnick, Daniluk, ve Pattinson, 1993). İnfertilite aynı zamanda, kadınlığı, evliliğin anlamını ve bireylerin ebeveyn olma amacını tehdit eden bir olgudur (Matthews ve Matthews, 1986). Bazı kültürlerde çocuk sahibi olmaya diğerlerinden daha fazla önem verildiği görülmektedir. Bunun, kadınların infertilite tanısı almaları durumunda yaşadıkları stresi artırdığı bulunmuştur (Peddie ve Porter, 2007).

2.3. İnfertiliteye Uyum

İnfertiliteye uyum karmaşık bir süreçtir ve alanyazın bu hususta çelişkili sonuçlar sunmaktadır. Örneğin bazı çalışmalar kadınların infertiliteye uyum sağlamada çoğunlukla bir zorluk yaşamadıklarını bulurken (örn., Verhaak ve ark., 2007), diğer bazı çalışmalar infertilite tanısı alan kadınların yaşadığı olumsuz duygu durumunun 20-30 yıl sonra dahi görülmeye devam edebileceğini tespit etmiştir (Wirtberg, Moller, Hogström, Tronstad ve Lalos, 2007). Diğer taraftan infertilite sürecine uyum sağlamada olumlu başa çıkmanın katkıda bulunduğu ortaya çıkmıştır. Başka bir ifadeyle, yaşanan durumun yeniden değerlendirilmesi, daha olumlu bir şekilde meseleye yeniden odaklanılması ve hedeflerin koşullara göre güncellenmesi infertilitede depresyon ve kaygı düzeyini azaltmada yardımcı olmaktadır (Kraaıj, Garnefski, Schroevers, Jmer ve Helmerhorst, 2010).

2.4. Anlam Olgusu ve Anlam Yaratma Modeli

Anlam olgusu piskoloji alanyazınına Frankl ile beraber girmiştir. Logoterapinin kurucusu olan Frankl, insanın anlam arayışı içinde olduğunu ve ona en zor gelen durumlara bile bir anlam atfetme becerisine sahip olduğunu ifade eder (Frankl, 1963). İnsanlar özellikle kendileri ile ilgili olana dair anlam oluşturma gayretini gösterirler (Chen, 2001). Bununla beraber anlam yoksunluğunun psikopatoloji ile ilişkili olduğu bulunmuştur (Yalom, 1981). Dolayısıyla, özellikle stres veren durumlarda anlam yaratma stresin azalmasını sağlayarak baş etmeyi kolaylaştırmaktadır (Park ve Folkman, 1997). Anlam Yaratma Modeli'ne göre kişi, stresli durumlarda genel anlam ya da duruma özgü anlam düzeylerinde değişiklik yaparak, başka bir ifadeyle anlam yaratarak stresini azaltabilir (Park, 2013).

2.5. İnfertilitenin Anlamı ve İnfertilitede Anlam Yaratma

Yalom (1980) çocuk sahibi olamamanın kişide anlamsızlığa yol açabileceğini iddia eder. Bununla beraber infertilite alanyazında bir tehdit (Boz ve Okumuş, 2017), başarısızlık (Ulrich ve Weatherall, 2000) ya da bir felaket (Johansson ve Berg, 2005) olarak anılmaktadır. Bu olumsuz anlamlandırmaların kadınlarda kaygıyı artıran bir rolü olduğu bulunmuştur (Thomsen ve ark., 2016). Bu durumda, kadınları infertilitenin olumsuz anlamlandırılmasının etkilerinden korumak için tedaviler geliştirmek önemlidir. Ancak bundan evvel, Türkiye'deki kadınların infertilite ve sürecini nasıl anlamlandırdıkları üzerinde çalışmak faydalı olacaktır.

2.6. Birinci Çalışmanın Amacı

Bu tezde yer alan birinci çalışmanın amacı Türkiye'de kadınların bir sağlık sorunu olan infertiliteyi nasıl anlamlandırdıklarını anlamak ve anlam yaratma süreçlerini ortaya çıkartmaktır. Bu doğrultuda bir nitel analiz çalışması yapılmış ve yöntem olarak da yorumlayıcı fenomenolojik analiz seçilmiştir.

2.1. Yöntem

2.1.1. İnfertiliteyi Nitel Analiz ile Çalışmak Neden Önemlidir?

Nitel çalışmalar araştırmacılara, bireyin anlam dünyasını, içindeki bireysel ve kültürel etmenlerin rolünü de belirleyerek keşfetme fırsatını sunar (Manning ve Kunkel, 2014). Nitel araştırmacılara göre, bir olguyu anlamanın en iyi yolu onu kendi bağlamı içerisinde değerlendirmekten geçer. Söz konusu anlam yaratma ya da oluşturma olduğunda, onu ancak yaşayan kişiden dinlemek nasıl gerçekleştiğine dair bize fikir verir (Kvale, 1996 aktaran Daniluk, 2001). Bu nedenle, kadınların infertilite deneyimlerini, ona yükledikleri anlamları ve anlam yaratma sürecini nitel analizle çalışmak önemlidir.

2.1.2. İnfertiliteyi Yorumlayıcı Fenomenolojik Analiz ile Çalışmak Neden Önemlidir?

Yorumlayıcı fenomenolojik analiz bireyin ifade ettiklerini, araştırmacının öznelliğini de göz önünde bulundurmasını önemseyerek, yorumlayıcı bir bakış açısından anlamasını sağlar (Smith ve ark, 2009). Dolayısıyla tanımlayıcı bir analizin ötesine geçerek, ifade edilenin arkasındakini görmeyi ve yorumlamayı hedefler (Smith ve Osborn, 2003). Bu bağlamda benim hedefim de kadınların infertiliteyi nasıl anlamlandırdıklarını, kültürel etmenleri de dikkate alarak anlamaktır.

2.1.3. Katılımcılar

Bu çalışmada, yorumlayıcı fenomenolojik analiz prensiplerine uyumlu olarak amaçlı örnekleme kullanılmıştır (Smith ve Osborn, 2003). Katılımcıların tamamı kadın, birincil infertilite tanısı almış, bir yıldan uzun süredir çocuk sahibi olmaya çalışan, kadın veya hem kadın hem erkekten kaynaklı infertiliteye sahip ve Türkiye'de yaşayan bireylerden oluşmaktadır. Katılımcıların yaşları 22 ile 35 arasında değişmektedir. Katılımcılar 5000 üyeye sahip bir internet infertilite destek grubundan bulunmuştur. Çalışmada toplam 8 katılımcı yer almıştır. Bu sayı yorumlayıcı fenomenolojik analiz ilkeleri ile uyumludur (Smith ve Osborn, 2003).

2.1.4. İşlem

Çalışma için etik izin Orta Doğu Teknik Üniversitesi etik kurulundan alınmıştır. Katılımcılar ile görüşmeler internet üzerinden araştırmacı tarafından yapılmıştır. Görüşme soruları önceden hazırlanmış ancak katılımcıların kendilerini özgürce ifade etmelerine izin verilmiştir. Görüşmeler 50 ile 90 dakika arasında, ortalama 55 dakika sürmüştür.

2.2. Veri Analizi

Tüm görüşmelerde katılımcıların izniyle ses kaydı alınmış daha sonar bu kayıtlar deşifre edilmiştir. YFA ilkeleri ile uyumlu olarak, ilk görüşmenin analizi yapılmış, temalar çıkarılmıştır. Daha sonra ikinci görüşmenin analizine geçilmiştir. İkinci görüşmenin analizinin tamamlanmasının ardından iki analiz karşılaştırılmıştır. Bu karşılaştırmalar analizi yapılan her görüşme için tekrar etmiştir. Analizler sırasında araştırmacı gözlemleri, duygu ve deneyimlerinin yer aldığı günlüğünden faydalanmıştır.

2.2.1. Kendini Yansıtma

Yorumlayıcı fenomenolojik analiz yönteminde araştırmacının öznelliği yadsınmaz. Aksine araştırmacının öznelliğini göz önünde tutarak analizi yapması beklenir. Bu araştırmanın zenginliğini arttıran bir unsur olarak görülür (Patton, 2002).

Kendini yansıtma ilkesi ile tutarlı olarak, ben çalışmanın araştırmacısı Yeliz Şimşek Alphan, kendi infertilite öykümün olduğunu belirtmeliyim. Bir sure once bu tanıyı almış ve olumsuz etkilerini yaşamış bir kadınım. Şu anda bir oğlum var. Ancak bu araştırmayı yürütme motivasyonum geçmişteki deneyimlerimden ileri gelmektedir.

2.3. Sonuçlar

Sekiz vakanın yorumlayıcı fenomenolojik analizi dört ana tema ortaya çıkarmıştır. Bu temalar şunlardır: *ideal kadın algısı: kendini feda eden anne*, *infertilite algısı: eksik kadın*, *anlam yaratma çabaları* ve son olarak, *eksikliğin aşırı telafisi: anne olmak için kendini feda etmek.*

2.3.1. İdeal Kadın Algısı: Kendini Feda Eden Anne

Yapılan nitel analizde ortaya çıkan ilk ana tema 'İdeal kadın algısı: Kendini feda eden anne' olmuştur. Bu tema katılımcıların anlam yaratma süreçlerinin altında yatan motivasyon olarak nitelendirilebilir. Bu çalışmaya katılan kadınlar, kadın olmayı anne olmakla eş görmüşler, buna ek olarak anne olmayı kendini feda eden bir anne olarak tanımlamışlardır. Dolayısıyla ideal kadın algısı kendini feda eden anne olarak kendini göstermiştir. Çocuklu hayatın idealizasyonu, diğerlerinden daha iyi bir anne olma beklentisi ve bununla beraber kendini hayalindeki çocuğuna adama bu üst-tema içinde yer alan alt-temalar arasında olmuştur.

2.3.2. İnfertilite Algısı: Eksik Kadın

Kadınlığı annelik olarak tanımlayan katılımcılar kendilerine infertilitenin anlamı sorulduğunda, bu soruyu çoğunlukla tek bir kelime ile cevaplamışlardır: Eksiklik. İnfertiliteye yüklenen bu anlam aslında ideal kadına ulaşamamaktan kaynaklanır ki bu da ikinci temanın ilk tema üzerine inşa olduğunu ortaya koymaktadır. İnfertilite süreci üzerinde kontrol sahibi olamama, katılımcıların infertiliteyi eksiklik olarak tanımlamaları üzerinde etkili olmuştur. Hayatları boyunca hemen her şeyi çalışarak ya da çabalayarak elde edebilirken, söz konusu infertilite olduğunda katılımcılar her hangi bir etkilerinin olmamasından yakınmışlardır. Bunun yanı sıra, diğer kadınların özellikle annelerin eksik hissettirmesi katılımcılar tarafından sıkça dile getirildiğinden bir alt-tema olarak kaydedilmiştir. Anne olan kadınların sadece 'Nasılsın?' diye sormalarının bile katılımcıları olumsuz etkilemesi oldukça dikkat çekici bulunmuştur. Bu durum araştırmacıya, katılımcıların hassasiyet düzeylerine dair fikir vermiştir. Tüm bunlarla beraber, katılımcıların eksiklik algısının neden olduğu yoğun duygular yaşadıkları anlaşılmaktadır. Bu duygular öfke, utanç, suçluluk ve haksızlığa uğramışlık hisleri olarak kendini göstermektedir.

2.3.3. Anlam Yaratma Çabaları

İnfertiliteye verilen anlamın eksiklik olması beraberinde pek çok duyguyu ortaya çıkarmaktadır ki bu duygular bir önceki üst-temada belirtilmiştir. Anlam yaratma çabaları teması, katılımcıların içinde bulundukları durumu nasıl yorumladıkları ve böylece hissettikleri duygular ile nasıl başa çıktıklarını yansıtan bir temadır. Katılımcıların deneyimlerine anlamlar atfettikçe olumsuz duygularının azaldığı, anlamsızlık içinde olduklarında ise tersine olumsuz duyguları daha yoğun biçimde yaşandıkları gözlenmiştir. Örneğin, bastırma ve kaçınma katılımcılar arasında sıkça rastlanan mekanizmalar olarak görülmüş ve bu mekanizmalar *'infertiliteden kaçış'* alt teması altında toplanmıştır. Bu alt-tema için anlamsızlık evresi ya da anlam bulma öncesi evre yorumu yapılabilir. Katılımcılar duygularıyla yüzleşip, yaşadıkları durum ya da deneyimlere bir anlam atfetme ihtiyacını hissetmeye başladıklarında sıklıkla ortaya çıkan dinsel başa çıkma yöntemleri olmuştur. Bu bağlamda, en sık kullandıkları ifade *'İnfertilite benim sınavım'* bir alt-tema olarak kodlanmıştır. Çalışmaya katılan kadınlar yaşadıkları durumu bir sınav olarak tarif ederken, daha zor bir sınavdan geçmedikleri için Tanrı'ya şükretmektedirler. *'Şükretme',* bu üst-temanın son alt-teması olarak öne çıkmaktadır. Anlam yaratma çabalarının ulaştığı son nokta olarak düşünülebilecek olan şükretme katılımcılara iyi hissettiren, infertilite ile mücadele etme gücü veren ve dahi içinde bulundukları durumu anlamlı kılan bir mekanizma olarak dikkati çekmiştir.

Katılımcıların anlam yaratma çabalarının doğrusal bir biçimde ilerlemediği de not edilmiştir. Başka bir ifadeyle, katılımcılar bazen infertiliteden kaçmakta ya da ona dair duyguları bastırmakta, bazen anlam bulma çabaları içine girmekte, bazen de bir anlam bulmaktadır. Ancak yineleyen tedaviler ve değişen koşullarda bu süreç dairesel biçimde kendini tekrar etmektedir.

2.3.4. Eksikliğin Aşırı Telafisi: Anne Olmak için Kendini Feda Etmek

Yorumlayıcı fenomenolojik analizde ortaya çıkan son tema *'Eksikliğin aşırı telafisi: Anne olmak için kendini feda etmek'* olmuştur. Bir önceki üst-tema olan anlam yaratma çabalarının vardığı şükretme noktası katılımcıların infertilite ile mücadele etme gücünü artırmıştır. Artan mücadele etme gücü katılımcıları yaşadıkları eksikliğin aşırı telafisine, yani anne olmak için kendini feda etmeye götürmüştür. Katılımcıların bu bağlamda bir güç arayışı içine girdiği ya da güçlü olma arzusu içinde oldukları görülmüştür. '*Güç arayışı/Güçlü olma arzusu'* ilk alt-tema olarak kaydedilmiştir. Bu güç arayışı ile beraber katılımcıların kendini feda örüntüsü içine girdikleri anlaşılmaktadır. Kendini feda, katılımcıların, '*sahip oldukları maddi manevi tüm kaynakları infertilite tedavisine aktarmaları'* ve *'çocuk sahibi olmak dışındaki her şeyi önemsizleştirdikleri'* bir davranış modeli benimsemeleri şeklinde kendini göstermiştir. Çalışmaya katılan kadınların eğitim, iş, kariyer ve hatta eşleri ile olan ilişkilerini dahi geri plana atmaları araştırmacı tarafından oldukça dikkat çekici bulunmuş ve tedavilerin aslında kadınlar için kontrolü tekrar ele almanın bir yolu olarak görüldüğü şeklinde yorumlanmıştır. Ancak bu yolun katılımcılar için *'kontrol (umut) ve kontrolsüzlük (hayal kırıklığı)'* döngüsünü tetiklediği anlaşılmaktadır. Dolayısıyla, *'tedaviye başlamak: kontrol sağlamanın temel yolu (umut)'* ve *'tedaviler: konrol bende, hayır kontrol bende değil (olası hayal kırıklığı)'* alt-temaları ortaya çıkmıştır. Başka bir ifadeyle, kadınların kontrolü ele almak üzere mücadeleye giriştikleri ve tedavilere yoğunlaştıkları kendini feda döngüsü, olası hayal kırıklığı ile son bulmaktadır.

Sonuç olarak ideal kadına ulaşma arzusu, katılımcılarda bir kendini feda örüntüsü yaratmış ve bu kendini feda tedaviler nezdinde kendini göstermiştir. Tedavilerin sonunda bekleyen olası hayal kırıklığı kadınların daha yoğun bir olumsuz ruh hali içine girmelerine yol açmaktadır.

2.4. Tartışma

Bu çalışma infertil Türk kadınlarının, yaşadıkları deneyimleri nasıl anlamlandırdıkları ve nasıl bir anlam yaratma süreci içine girdiklerini ortaya çıkarmayı amaçlamıştır. Alanyazında infertilite deneyimlerini derinlemesine anlamaya dönük nitel çalışmalar mevcutken (örn., Benasutti, 2003; Boz ve Okumuş, 2017; Daniluk, 2001), infertilitenin anlamı ve anlam yaratma süreçlerine dair çalışmalara rastlanmamaktadır. Alanyazındaki bu boşluğu doldurma hedefindeki bu nitel çalışma, 8 kadınla yapılan mülakatların derinlenesine analizi sonucunda ortaya 4 tema çıkarmıştır. Bu temalar *ideal kadın algısı: kendini feda eden anne*, *infertilite algısı: eksik kadın*, *anlam yaratma çabaları* ve son olarak, *eksikliğin aşırı telafisi: anne olmak için kendini feda etmek* olarak isimlendirilmiştir.

Yorumlayıcı fenomenolojik analiz sonucu ortaya çıkan ilk tema *ideal kadın algısı: kendini feda eden anne* olmuştur. Alanyazında kadınlığı anneliğe eşitleyen başka nitel çalışmalar bulmak mümkündür (örn., Ceballo, Graham, ve Hart, 2015; Letherby, 1999). Dikkat çekici bir biçimde, bu çalışmada, kadınlık sadece annelik olarak değil, kendini feda eden bir annelik olarak kendini göstermektedir. Kendini feda eden anne teması Hays'in (1996) yoğun annelik ideolojisi ile benzerlik göstermektedir. Bu ideolojide, çocuk odaklı, uzman yönetiminde, duygusal olarak sömürücü, emek yoğun ve finansal olarak pahalı bir annelik modeli benimsenmiştir. Benzer şekilde, Türk kültüründe de annelik kutsal, insan üstü bir olgu olarak tarif edilir (Duman, 2006).

Nitel analiz sonucu ortaya çıkan ikinci tema *infertilite algısı: eksik kadın* olmuştur. Bu çalışmada kadınların infertiliteye verdikleri anlam olarak en sık kullandıkları ifade eksiklik olmuştur. Alanyazında infertilitenin eksiklik olarak tarif edildiği başka çalışmalara rastlamak mümkündür (örn., Todorova ve Kotzeva, 2006). Bunun yanı sıra, katılımcılar infertiliteyi kontrol edemediklari bir süreç olarak tarif etmişlerdir ki bu da infertilitenin bir eksiklik olarak algılanmasına neden oluşturmaktadır. İnfertilitenin kontrol kaybı hissine yol

açtığını gösteren başka çalışmalar da bulunmaktadır. Bu çalışmlardan bir tanesi kadınlardaki kontrol kaybı hissinin kadın kaynaklı infertilitenin varlığı söz konusu olduğunda daha yoğun yaşandığını bulmuştur (Su, Chen, Chen, Yang, ve Hung, 2005).

Anne olan kadınların yanında duyulan rahatsızlık (Remennick, 2000) ve eksiklik yorumunun neden olduğu duygular (öfke, utanç, suçluluk ve haksızlığa uğramışlık hissi) de alanyazından desteklenebilecek bulgular olarak öne çıkmaktadır (örn., Galhardo, Pinto-Gouveia, Cunha, ve Matos, 2013; Handa ve ark., 2017; Menning, 1982; Greil, 1997; Ying, Wu ve Loke, 2015). İnfertilitenin yarattığı utanç ve suçlulukta Türk kültürünün de etkisinden söz etmek mümkün olabilir zira Türkiye'de yaşayan infertil kadınlar yaşadıkları durumdan dolayı eşleri tarafından suçlanmakta (Guz ve ark., 2003), aile içi şiddete maruz kalmakta ve boşanma ile tehdit edilmektedirler (Akyuz ve ark, 2013).

Anlam yaratma çabaları nitel analizde ortaya çıkan üçüncü tema olmuştur. İnfertilitenin eksiklik olarak anlamlandırılmasının ardından ortaya çıkan duygular ile bastırma ya da kaçınma yoluyla başa çıkmaya çalışan katılımcıların bu kaçışı Darwiche ve arkadaşları'na (2013) göre tedaviler ya da operasyonlar için motivasyonu korumak amacıyla kullanılmaktadır. Anlamsızlık olumsuz duygulanıma neden olurken (Yalom, 1981), katılımcılar anlamlandırma çabası içine girdiğinde dinsel başa çıkma mekanizmaları kendini göstermiştir. İnfertilite vakalarında benzer dini ya da ruhani başa çıkma mekanizmaları alanyazında da görülmektedir. Özellikle Türkiye'de çocuk sahibi olmak için türbeleri ziyaret etme ve muska yazdırma gibi yöntemlere başvurulduğuna sıkça rastlanmaktadır (Nazik, Apay, Ozdemir ve Nazik, 2015). Anlam yaratma çabalarının ulaştığı son nokta olan haline şükretme alanyazında infertil hastalarla çalışılmamıştır ancak başka kronik hastalıklarda olumlu etkileri olduğu bulunmuştur (örn., Koenig ve ark., 2014; Tulbure, 2015).

Yorumlayıcı fenomenolojik analizde bulunan son tema, eksikliğin aşırı telafisi: anne olmak için kendini feda etmek olmuştur. İdeal kadına ulaşma çabası içinde olan katılımcıların, ideal kadını kendini feda eden anne olarak tariflediği ilk temada raporlanmıştır. Anlam yaratma sürecinde son aşamaya gelindiğinde katılımcıların kendilerini, çocuğu için kendini feda edemediğinden çocuk sahibi olmak için kendini feda ettiği bir döngünün içinde buldukları anlaşılmaktadır. Bu noktada Weinshel (1990) "Çocuksuzluğun tek bir telafisi vardır o da çocuk sahibi olmak" demiştir. Yaygınlaşan tüp bebek klinikleri ve çocuk sahibi olmayı öğütleyen politik söylemler nedeniyle infertilite Türkiye'de mutlaka tedavi edilmesi gereken bir rahatsızlık olarak kendini göstermeye başlamıştır (Gürtin, 2016). Böylece infertilite tedavileri eksiklikten kurtuluş ve yeniden bütün olmanın bir yolu haline gelmektedir (Galvez, 2016). Bununla beraber, infertilite sürecinde tedaviler dışındaki her şeyin arka plana atılması sonucu alanyazınla uyumludur (Daniluk, 2001).

2.4.5. Sonuçlar ve İmplikasyonlar

Bu araştırmanın bulguları Türkiye'de yaşayan infertil kadınların, ideal kadına ulaşmanın kendini feda eden bir anne olmaktan geçtiğini düşündüğünü bulmuş, infertil kadınlar çocuk sahibi olamadıkları için ideal kadına ulaşamadıklarından çocuk sahibi olmak için kendini feda döngüsü içine girdikleri gözlenmiştir. Kendilerini feda edebilmeleri için bir güç arayışı içine girdiği anlaşılan bu kadınların, tedavileri de kontrolü ele almanın bir yolu olarak gördüğü anlaşılmaktadır. Ancak olumsuz sonuçlanan tedavi denemeleri olası hayal kırıklığına bir kapı açmaktadır. Bu durumda, infertil kadınların infertiliteyi anlamlandırma süreçlerinde profesyonel psikolojik destek almalarının önemli olduğu düşünülmektedir. İnfertilitede anlam yaratmanın daha olumlu bir bakış açısından desteklendiği durumda kendini feda ve hayal kırıklığı döngüsünün daha sağlıklı başka mekanizmalarla yer değiştirmesi mümkün olabilir.

2.4.6. Çalışmanın Güçlü Yönleri ve Kısıtlılıkları

Bu çalışma, alanyazında yer alan Türk kadınlarının infertiliteyi nasıl anlamlandırdığı ve anlam yaratma süreçlerini nasıl gerçekleştirdiğini araştıran az sayıdaki çalışmadan biridir. Bildiğimiz kadarıyla, bu çalışma bir nitel analiz aracı olarak kullanılan mülakat yöntemini internet üzerinden videokonferans yoluyla uygulayan Türkiye'de yapılmış ilk çalışmadır. Çalışma homojen bir örnekleme ulaşmış ve bu örneklem internet üzerinden mülakat yapılması sayesinde ülkenin farklı bölgelerinden katılımcılar ile gerçekleştirilmiştir.

Çalışmanın kısıtlılıkları arasında tek seferde yapılan mülakatların analize dahil edilmesi yer almaktadır. Sonraki çalışmaların daha detaylı ve derinlemesine bilgi almak adına birden fazla görüşme yapması tavsiye edilmektedir. Ayrıca, bu çalışma erkek infertil hastaların da dahil edilmesiyle genişletiletilebilir.

BÖLÜM 3

İKİNCİ ÇALIŞMA: İNTERNET ÜZERİNDEN UYGULANAN ANLAM ODAKLI BİR MÜDAHALE PROGRAMI GELİŞTİRME VE PROGRAMIN ETKİNLİĞİNİ TEST ETME

3.1. İnfertilite ile İlgilenen Psikoterapötik Müdahaleler

İnfertilite tanısı almış bireylerin yaşadıkları deneyimlerden kaynaklı yoğun kaygı, depresyon, öfke, suçluluk, kontrol kaygı ve sosyal izolasyon yaşadıkları bilinmektedir (Greil, Slauson-Blevins ve McQuillan, 2010). Bu nedenle infertilite yaşayan bireylerin psikolojik detsek almaları alanyazındaki çalışmalarda sıklıkla tavsiye edilmektedir (örn., Peterson ve ark., 2012). Ancak bireylerin uzmanlar tarafından sunulan psikolojik desteklere ulaşma imkanlarının kısıtlı olduğu anlaşılmaktadır (Pasch ve ark., 2016).

3.1.1. Psikolojik Sağlığı artırmak için İnternet üzerinden Gerçekleştirilen Müdahaleler

1990'lı yıllardan bu yana bilgisayar yoluyla ya da internet üzerinden gerçekleştirilen psikolojik müdahalelere dönük çalışmalar yapılması çağrıları alanyazında yer almaktadır (Childress ve Asamen, 1998; Huang ve Alessi, 1996). Bununla beraber giderek daha fazla araştırmacı, internet üzerinden yapılan müdahalelerin etkinliğini ölçen çalışmalar yayınlamaya başlamışlardır (geniş özet için bkz. Andersson, Ljotsson ve Weise, 2011). Ancak bu çalışmaların büyük çoğunluğu bilişsel-davranışçı ekolü benimseyen müdahaleleri test etmekte, alanyazın diğer ekollerden müdahalelerin etkinliğini test eden internet çalışmaları bakımından kısıtlılık arz etmektedir.

3.1.2. İnfertilite ile ilgili Psikolojik Sağlığı artırmak için İnternet üzerinden Müdahaleler

İnternet, hem Türkiye'de hem de dünya genelinde, özellikle infertil bireyler tarafından infertilite ile ilgili bilgi almak için sıkça kullanılmaktadır. Yakın zamanda Türkiye'de yapılmış olan bir çalışma infertil kadınların %74'ünün, infertil erkeklerin ise %68.4'ünün infertilite ile ilgili farklı gerekçelerle internete başvurduğunu bulmuştur (Satir ve Kavlak, 2017).

İnfertil bireyler için internet bir sosyal destek aracı olarak da kullanılmaktadır (Wingert, Harvey, Duncan ve Berry, 2005). Ancak infertil vakalarda internet üzerinden yapılan müdahalelerin etkinliğini ölçen çalışmaların sayısı çok kısıtlıdır. Sadece Sexton ve arkadaşları (2010) internet üzerinden gerçekleştirilen bilişsel davranışçı bir müdahale programının infertil bireylerde genel stresi ve infertilite ile ilgili stresi anlamlı derecede düşürdüğünü bulmuştur.

3.1.3. Anlam Odaklı Terapiler

Anlam yoksunluğu ya da anlamsızlık uzun zamandır psikopatoloji ile ilişkilendirilmektedir (Yalom, 1981). Anlam yoksunluğunun depresyon ve kaygıya yol açtığı uzun zamandır bilinmektedir (örn., Debats, van der Lubbe ve Wezeman, 1993). Diğer taraftan anlam yaratmanın kişide umudu (Mascaro ve Rosen, 2005) ve mutluluğu (Debats ve ark., 1993) artıran bir rolü olduğu anlaşılmaktadır. Frankl (1963) bireylerin, yaşamı en çok tehdit eden anlarda bile anlam yaratma potansiyeline sahip olduğunu iddia eder.

Anlamsızlığın yarattığı olumsuz etkilerle baş etmek için, varoluşçu ve hümanistik yaklaşımlara dayanarak ve psikodinamik, bilişsel, davranışçı ve ilişkisel teorilere entegre edilerek anlam odaklı terapiler geliştirilmiştir (Lukas, 2000 aktaran Dezelic, 2017). Anlam odaklı terapilerde hem durumsal hem de genel anlamın değiştirilmesi hedeflenmektedir (Dezelic, 2017). Başka bir ifadeyle, en zor koşullar için bile anlam bulma ve anlam yaratma bakış açısı benimsenmektedir (Wong, 2010).

3.1.4. İnternet üzerinden Anlam Yaratma

Alanyazın internet üzerinden anlam yaratmanın mümkün olabileceğini tavsiye eden çalışmalara yer verirken (örn., Suthers, 2006), bunu test eden bir çalışmaya rastlanmamıştır. Diğer taraftan, stresli sağlık koşullarında kendini ifadeye dönük yazılı çalışmaların stresi azalttığına dönük bulgular alanyazında yer almaktadır (Graham, Lobel, Glass ve Lokshina, 2008). Örneğin aynı çalışmada yazarak öfkeyi ifade etmenin anlam yaratma üzerinde olumlu bir etki yarattığı bulunmuştur. Benzer şekilde, infertil vakalarda da yazılı ifadenin infertilite stresini düşüren bir etkisi olduğu gözlenmiştir (Matthiesen ve ark., 2011). Dahası, Lee, Blyth, ve Chan (2012), infertilite deneyimlerinin ifade edilmesinin olumlu anlamlandırmayı artırdığını iddia etmektedirler.

3.2. İkinci Çalışmanın Amacı

Bu çalışmada, bir önceki çalışmada ortaya çıkan temalar ışığında ve Wong'un (2010) anlam odaklı terapi yaklaşımı prensipleri doğrultusunda, infertiliteye has ve internet üzerinden uygulanacak bir grup müdahalesi geliştirmek ve bu müdahaleyi test etmek amaçlanmıştır. Anlam yaratmadaki değişiklikleri görmek hedefiyle ön test / son test kontrol gruplu desen uygulanmış; genel anlam, duruma özgü anlam ve psikolojik iyilik hali bir ölçek seti uygulanarak ölçülmüştür. Bu ölçekler genel anlam için Yaşam Anlamı Ölçeği ve Travma Sonrası Büyüme Envanteri; duruma özgü anlam için Stres Değerlendirme Ölçeği; ve psikolojik iyilik hali için Beck Depresyon Envanteri, Beck Umutsuzluk Ölçeği, Sürekli ve Durumluk Kaygı Ölçeği (Durumluk), Pozitif ve Negatif Duygulanım Ölçeği ve son olarak İnfertilite Öz-yeterlilik Ölçeği'dir.

Bu doğrultuda çalışmanın hipotezleri şu şekilde belirlenmiştir:

1. Anlam odaklı internet müdahalesi alan kadınlar almayanlara oranla anlam aramadan anlam bulmaya anlamlı derecede daha fazla geçeceklerdir. Bu nedenle son-test ölçümlerinde;

a) Deney grubu kontrol grubuna göre anlamlı olarak daha az anlam arama puanı alacak

b) Deney grubu kontrol grubuna göre anlamlı olarak daha fazla anlam bulma puanı alacak

c) Travma sonrası büyüme açısından, deney grubundaki kadınlar kontrol grubundaki kadınlara göre daha fazla büyüme göstereceklerdir.

2. İnfertilitenin durumsal anlamında da bir değişiklik beklenmektedir;

a) Deney grubunda yer alan kadınlar kontrol grubundakilere oranla infertiliteyi daha fazla bir mücadele olarak tanımlayacak,

b) Deney grubunda yer alan kadınlar kontrol grubundakilere oranla infertiliteyi daha fazla kendileri tarafından kontrol edilebilir olarak tanımlayacak,

c) Deney grubundaki kadınlar kontrol grubundakilere oranla infertiliteyi başkaları tarafından kontrol edilebilir olarak tanımlayacak,

d) Kontrol grubundaki kadınlar deney grubundaki kadınlara oranla infertiliteyi daha fazla bir tehdit olarak algılayacak,

e) Kontrol grubundaki kadınlar deney grubundaki kadınlara oranla infertiliteyi daha fazla kontrol edilemez olarak değerlendirecektir.

3. Son olarak, internet müdahalesini alan kadınların psikolojik iyilik halinde bir gelişme beklenmektedir:

a) Deney grubunda yer alan kadınlar kontrol grubunda yer alanlara nazaran anlamlı olarak daha az depresyon raporlayacak,

b) Deney grubunda yer alan kadınlar kontrol grubunda yer alanlara nazaran anlamlı olarak daha az kaygı raporlayacak,

c) Deney grubunda yer alan kadınlar kontrol grubunda yer alanlara göre anlamlı olarak daha az umutsuzluk raporlayacak,

d) Deney grubunda yer alan kadınlar kontrol grubunda yer alanlara oranla anlamlı olarak daha az olumsuz duygulanım raporlayacak,

e) Deney grubunda yer alan kadınlar kontrol grubunda yer alanlara nazaran anlamlı olarak daha fazla olumlu duygulanım raporlayacak,

f) Deney grubunda yer alan kadınlar kontrol grubunda yer alanlara oranla anlamlı olarak daha fazla infertilite öz-yeterlilik raporlayacaklardır.

3.2. Yöntem

3.2.1. Katılımcılar

Birincil infertilite tanısı almış (hiç çocuk sahibi olmayan); kadın, hem kadın hem erkekten ya da bilinmeyen kaynaklı gebe kalma güçlüğü yaşayan; 18 yaşından büyük; bilinen psikolojik ya da fiziksel sağlık sorunu olmayan; Türkiye'de yaşayan ve Türkçe okuyup yazabilen kadınlar çalışmaya katılabilir olarak belirlenmiştir. Üyeleri sadece infertil kadınlardan oluşan bir derneğin (Çocuk İstiyorum Derneği) çevrimiçi destek grubunda çalışmaya davet eden bir video yayınlanmış, bu video davetine önce 112 kadın cevap vermiştir. Çalışmaya katılmaya gönüllü 80 kadın rastgele şekilde deney (n = 40) ya da kontrol (n = 40) grubuna atanmıştır. Deney grubunda yer alan 27 kadın internet üzerinden gerçekleştirilen müdahaleye katılarak son-test ölçümlerini tamamlarken, kontrol grubunda yer alan 24 kadın son-test ölçümlerini tamamlamışlardır.

3.2.2. Ölçüm Araçları

3.2.2.1. Demografik Bilgi Formu

Bu formda katılımcılara yaş, eğitim, iş durumu, gelir düzeyi, kaç yıldır evli olduğu, infertilitenin nedeni, kaynağı, tanıyı ne zaman aldıkları ve eşleriyle ilişkilerinin kalitesine dair sorular sorulmuştur (Ek D)

3.2.2.1. Yaşam Anlamı Ölçeği

Yaşam Anlamı Ölçeği anlam yaratma çalışmalarında sıkça kullanılan bir ölçektir. 10 maddelik, Stegner, Frazier, Oishi, ve Kaler (2006) tarafından geliştirilmiş bu ölçek, anlam arama ve anlama sahip olma şeklinde iki alt ölçekten oluşmaktadır. Ölçeğin Türkçe adaptasyonu Yarar (2015) tarafından yapılmıştır. Bu çalışmada, ölçeğin iç tutarlılığı anlama sahip olma alt ölçeği için ön-testte .74 ve son-testte .71 iken, anlam arama alt ölçeği için ön-testte .78 ve son-testte .88'dir (Ek E).

3.2.2.3. Stres Değerlendirme Ölçeği

Katılımcılar bu ölçeği duruma özgü anlamın ölçülebilmesi doldurmuşlardır (bkz. Park ve George, 2013). Bu çalışmada katılımcılardan ölçeği infertilite durumlarını göz önünde bulundurarak doldurmaları istenmiştir. Yirmi sekiz maddeden oluşan ölçek aslen Peacock ve Wong (1990) tarafından geliştirilmiş, Türkçe'ye adaptasyonu ise Durak ve Senol-Durak tarafından 2011 yılında yapılmıştır. Ölçeğin tehdit, mücadele, kişinin kendisi tarafından kontrol edilebilir, başkaları tarafından kontrol edilebilir ve kimse tarafından kontrol edilemez şeklinde 5 ayrı alt-ölçeği bulunmaktadır. Bu çalışmada ölçeğin iç tutarlılık katsayıları tehdit alt-ölçeği için .80 (ön-test) ve .88 (son-test), mücadele alt-ölçeği için .55 (ön-test) ve .66 (son-test), kişinin kendisi tarafından kontrol edilebilir alt-ölçeği için .83 (ön-test) ve .90 (son-test), diğerleri tarafından kontrol edilebilir alt-ölçeği için 90 (ön-test) and .81 (son-test) ve son olarak kimse tarafından kontrol edilemez alt-ölçeği için .72 (ön-test) ve .76 (son-test) bulunuştur (Ek F).

3.2.2.4. Travma Sonrası Büyüme Envanteri

Yirmi bir maddeden oluşan bu ölçek, travma sonrasında yaşanan olumlu gelişimleri ölçmek adına, Tedeschi ve Calhoun (1996) tarafından geliştirilmiştir. Ölçeğin Türkçe uyarlaması Karancı ve Dirik (2008) tarafından yapılmıştır. Ölçeğin bu çalışmadaki iç-tutarlılığı .94 (ön-test) and .95 (son-test) olarak bulunmuştur (Ek G).

3.2.2.5. Beck Depresyon Ölçeği

Beck, Ward, Mock, ve Erbaugh (1961) tarafından depresyonun derecesini ölçmek için geliştirilmiş bu ölçek Türkçe'ye Hisli (1989) tarafından adapte edilmiştir. Ölçeğin bu çalışmadaki iç-tutarlıığı ön-test için .83, son-test için .88 bulunmuştur (Ek H).

3.2.2.6. Beck Umutsuzluk Ölçeği

Bu ölçek katılımcıların gelecek ile ilgili duygularını, motivasyonlarını ve beklentilerini öğrenmek amacıyla kullanılmıştır. Ölçeğin orijinali Beck, Weissman, Lester ve Trexler tarafından 1974 yılında geliştirilmiş, Türkçe uyarlaması ise Seber, Dilbaz, Kaptanoğlu ve Tekin (1993) tarafından yapılmıştır. Yirmi 'doğru-yanlış' seçenekli sorudan oluşan ölçeğin bu çalışmadaki iç geçerliliği .59 (ön-test) ve .60 (son-test) olarak bulunmuştur (Ek I).

3.2.2.7. Sürekli-Durumluk Kaygı Envanteri-Durumluk

Katılımcıların kaygı düzeylerini ölçmek için kullanılan bu ölçek 4'lü Likert tipi 20 maddeden oluşmaktadır. Ölçek Spielberger (1983) tarafından geliştirilmiş, Öner ve Le Compte (1983) tarafından Türkçe'ye uyarlanmıştır. Bu örneklemde ölçeğin iç-tutarlılığı .93 (ön-test) ve .83 (son-test) olarak bulunmuştur (Ek J).

3.2.2.8. Pozitif ve Negatif Duygulanım Ölçeği

Pozitif ve Negatif Duygulanım Ölçeği 10 maddeden oluşmaktadır ve olumlu ve olumsuz duygulanım düzeyini ölçmek üzere geliştirilmiştir (Watson, Clark ve Tellegen, 1988). Ölçeğin Türk diline adaptasyonu Gençöz (2000) tarafından yapılmıştır. Bu çalışmada ölçeğin iç tutarlılığı pozitif duygulanım için .88 (ön-test) ve .86 (son-test); negatif duygulanım için .88 (ön-test) and .87 (son-test) olarak bulunmuştur (Ek K).

3.2.2.9. İnfertilite Öz-yeterlilik Ölçeği

Bu ölçeğin orijinali Cousineau, Green, Corsini, Barnard, Seibring ve Domar (2006) tarafından infertil kadınların, infertilite tedavileri sürecindeki kendi bilişsel, duygusal ve davranışsal başa çıkmalarına dair algılarını ölçmek amacıyla geliştirilmiştir. On altı maddelik ölçeğin Türkçe adaptasyonu Arslan-Özkan, Okumuş, Lash ve Fırat (2014) tarafından gerçekleştirilmiştir. Bu çalışmadaki iç tutarlılık ön-testte .77, son-testte .79 olarak bulunmuştur (Ek L).

3.3. İşlem

Katılımcılara internet üzerinden ulaşılmış, bilgilendirilmiş onam formları internet üzerinden toplanmıştır. Çalışmaya katılmaya gönüllü olan kadınlara ön ölçüm testleri yine internet üzerinden yollanarak doldurtulmuştur. Sonrasında katılımcılar rastgele 2 gruba (deney ve kontrol) ayrılmış, deney grubu 8 haftalık internet üzerinden, yazışma yoluyla gerçekleştirilen, anlam-odaklı grup müdahalesine katılmışlardır. Kontrol grubu bu esnada hiçbir müdahaleye maruz kalmadan bekletilmiş, etik ilkeler doğrultusunda kontrol grubundaki katılımcılara da daha sonra aynı müdahale uygulanmıştır. Her iki grup, 8 hafta sonra, yine aynı anda son-test ölçümlerini doldurmuşlardır.

İnternet üzerinden gerçekleştirilen grup müdahalesi 8 hafta boyunca, 90 dakikalık seanslar şeklinde devam etmiştir. Tüm gruplara araştırmacı liderlik etmiştir. Deney grubunda yer alan 40 kişi, 5 ayrı grupta bu müdahaleyi almışlardır. Müdahaleyi eksiksiz tamamlayan 27 katılımcı ve kontrol grubunda bekleyerek son-test ölçümlerini vaktinde tamamlayan 24 katılımcı analizlere dahil edilmiştir.

3.4. Sonuçlar

3.4.1. Katılımcılara dair Özellikler

Yapılan *t*-test, ki-kare ve tek yönlü varyans analizleri sonucu deney ve kontrol gruplarının yaş, evlilik yılı, eğitim, gelir, infertilite yılı, nedeni, şu anki tedavi durumu, tüp bebek deneme sayısı ve eş ile ilişkilerin kalitesi bakımından anlamlı olarak farklılaşmadığı görülmüştür.

3.4.2. Korelasyon Analizleri

Tüm ölçekler ve önemli alt ölçeklerin ön-test ve son-test ölçümleri arasında korelasyonel analizler yapılmıştır. Analizlerin tamamı Tablo 6'dan takip edilebilir.

3.4.3. Hipotezlerin Test Edilmesi

2(Grup: Deney, Kontrol) X 2(Zaman: Ön, Son) karışık varyans analizi, Yaşam Anlamı Ölçeği, Travma Sonrası Büyüme Envanteri, Stres Değerlendirme Ölçeği, Beck Depresyon Envanteri, Beck Umutsuzluk Ölçeği, Sürekli Durumluk Kaygı Ölçeği-Durumluk, Pozitif ve Negatif Duygulanım Ölçeği ve İnfertilite Öz-Yeterlilik Ölçeği skorları üzerinde test edilmiştir. Bulunan önemli etkileşim etkileri aşağıdaki gibidir.

İlk grup hipotezler için, varyans analizi anlama sahip olma için etkileşim etkisi bulmuştur [$F(1, 49) = 5.39$, $p < .05$]. Başka bir ifadeyle, her iki grup ön-testte eşit analama sahip olma skorlarına sahipken, son-testte deney grubu (*ort* = 4.99, *ss* = 1.21) kontrol grubuna (*ort* = 4.36, *ss* = 1.44) göre anlamlı olarak daha fazla anlama sahip olma puanı almıştır.

Duruma özgü anlamı ölçen ikinci grup hipotezler için, varyans analizi infertiliteyi bir mücadele olarak görmede deney ve kontrol gruplarında etkileşim etkisi bulmuştur [$F(1, 49) = 8.60$, $p < .05$]. Dahası, infertiliteyi kişinin kendisi tarafından kontrol edilebilir olarak görmesinde bir etkileşim etkisi bulunmuştur [$F(1, 49) = 6.17$, $p < .05$]. Diğer bir ifadeyle, müdahalenin ardından deney grubu kontrol grubuna nazaran infertiliteyi daha fazla bir mücadele ve kontrol edilebilir olarak tanımlamaktadır.

Üçüncü grup hipotezlerde, sadece infertilite öz-yeterlilik bakımından deney ve kontrol grupları arasında bir etkileşim etkisi görülmüştür [$F(1, 49) = 6.17$, $p < .05$]. Başka bir ifadeyle, ön-testte deney ve kontrol grupları benzer infertilite öz-yeterlilik puanları almışken, son-test ölçümlerinde deney grubu kontrol grubuna oranla anlamlı olarak daha fazla infertilite öz-yeterlilik puanı almıştır.

3.5. Tartışma

İnfertilite, bu tanıyı alan bireylerin, özellikle de kadınların hayatını pek çok açıdan etkilemektedir (Greil, Slauson-Blevins ve McQuillan, 2010). Cousineau, Seibring ve Barnard (2006) infertiliteyi derin bir varoluşsal mesele ve kişinin kişisel inanç dünyasına bir meydan okuma olarak tarif eder. Çocuk sahibi olamamak bir anlamsızlığa yol açarak varoluşsal bir kaygıya neden olur (Yalom, 1980). Diğer taraftan anlam yaratma olgusu, kişinin stres veren olaylar sonrasında duruma daha iyi adapte olabilmek için yeniden anlamlandırma sürecine girdiğini ve genel ya da duruma özgü anlamlarda değişikliklere gittiğini iddia etmektedir (Park ve Al, 2006). Bu bağlamda, bireylere anlam yaratma ve infertiliteye daha iyi adapte olmak için psikolojik destek almaları tavsiyelerinde bulunulmaktadır (Peterson ve ark., 2012). Dolayısıyla bu çalışma, infertil kadınların kolayca erişbileceği, internet üzerinden gerçekleştirilen bir müdahale geliştirerek bu müdahalenin olumlu anlam yaratma ve psikolojik iyilik halini desteklemede ne kadar etkin olduğunu bulmayı amaçlamıştır. Çalışma, internet üzerinden yapılan anlam-odaklı grup müdahalesinin umut verici sonuçları olduğunu göstermiştir. Ancak, ilerleyen çalışmalarda etkinliğin artırılması ve farklı stres durumlarında bu müdahalenin test edilmesi alanyazına önemli katkı sunacaktır.

BÖLÜM 4

GENEL TARTIŞMA

4.1. Genel Tartışma

Her iki çalışma Türk infertil kadınların yaşadıkları süreçte adaptasyonu artırmak için anlam yaratma noktasında psikolojik desteğe ihtiyaç duyduklarını göstermiştir. İnfertilitenin eksiklik olarak tarif edilmesinden kaynaklı ortaya çıkan yoğun kendini feda örüntüsü ve ardından yaşanan hayal kırıklığının önüne geçmek, daha sağlık bir anlam yaratma ile mümkün olabilir. Bu bağlamda,

internet üzerinden yazışma yoluyla gerçekleştirilen grup müdahalesinin olumlu anlam oluşturmada umut verici sonuçlar sunduğu gözlenmiştir.

4.2. Çalışmanın Önemi ve İmplikasyonları

Bu çalışma pek çok açıdan alanyazında ilk çalışma olma özelliği göstermektedir. Her iki çalışma da çalışmayı duyurma, veri toplama ve müdahaleyi gerçekleştirme aşamalarında internetten faydalanmıştır. Bu nedenle, internetin araştırma ortamında kullanılmasına dönük alanyazına bir katkı niteliğindedir. Özellikle bilgi ve duygusal destek almak için internete sıkça başvuran (Satir ve Kavlak, 2017) infertil kadınların, ihtiyaç duydukları uzman desteğine kolayca ulaşmaları ve bu destekten fayda sağlamış olmaları oldukça önemlidir. Bundan sonraki çalışmaların infertilite yaşayan bireylerde olumlu anlamlandırmaya dönük müdahaleler noktasında daha etkin çalışmalar ortaya koymaları ve internet müdahalelerinin (bir kısmının ya da tamamının) başka stres veren yaşam olaylarında etkin olup olmadığının anlaşılması, bu müdahaleleri daha büyük kitlelere ulaştırmak açısından oldukça faydalı olacaktır.

APPENDIX O: CURRICULUM VITAE

Ad-Soyad : Yeliz Şimşek Alphan
Doğum Tarihi : 06.02.1985
E-Posta : simsek_yeliz@yahoo.com

Öğrenim Durumu :

Derece	Bölüm/Program	Üniversite	Yıl
Lisans	Psikoloji (Şeref Derecesi)	ODTÜ	2008
Yüksek Lisans	Genel Psikoloji	The City College of The City University of New York	2011
Doktora	Uygulamalı (Klinik) Psikoloji	ODTÜ	2018

Doktora Tezi Başlığı ve Danışmanı:

An Interpretative Phenomenological Analysis of Meaning-Making of Infertility among Infertile Turkish Women: Developing and Testing The Effectiveness of an Online Intervention Program in Meaning-Making (Beklenilen Bitirme Tarihi Haziran, 2018)

Tez Danışmanı **:** Prof. Dr. Özlem Bozo

Görevler **:**

Görev Ünvanı	Görev Yeri	Yıl
Uzm. Klinik Psk. (Terapist)	Psikolojik Danışma ve Gelişim Merkezi, Bilkent Üniversitesi	Nisan 2013– Haziran 2018
Uzm. Klinik Psk. (Terapist)	AYNA Klinik Psikoloji Destek Ünitesi, ODTÜ	Eylül 2013 – Haziran 2016
Uzm. Klinik Psk (Süpervizör)	ODTÜ, Psikoloji Bölümü	Şubat 2015 – Haziran 2016

Stajlar :
Şubat 2015 – Haziran 2016 Orta Doğu Teknik Üniversitesi AYNA Klinik Psikoloji Destek Ünitesi, Süpervizör
Eylül 2013 – Haziran 2016 Orta Doğu Teknik Üniversitesi AYNA Klinik Psikoloji Destek Ünitesi, Psikoterapist
Haziran 2006 – Ağustos 2006 Ankara Üniversitesi Numune Eğitim ve Araştırma Hastanesi

Yayınlar:
Uluslararası hakemli dergilerde yayınlanan makaleler (SCI, SSCI, Arts and Humanities):

Bozo, Ö., Tunca, A., & **Şimşek, Y.** (2009). The effect of death anxiety and age on health-promoting behaviors: A terror-management theory perspective. *The Journal of Psychology, 143*(4), 377–389. doi: 10.3200/JRLP.143.4.377-389

Ulusal hakemli dergilerde yayınlanan makaleler (ULAKBİM, Türk Psikiyatri Dizini):

Demirok, İ., **Şimşek, Y.,** & Süsen, Y. (2014). Mutluluğu ararken: Teorik yaklaşımlar ve psikoterapiye yönelik çıkarımlar. *AYNA Klinik Psikoloji Dergisi, 1*(2), 40–54.

Araştırma Alanları:
- Stresli Yaşam Olaylarında Anlamlandırma
- İnfertilitede Psikolojik Süreçler
- Terapötik İlişki
- Psikoterapide İlişkisel Etmenler
- Kişilik Bozuklukları
- Psikolojide Nitel Analiz Yöntemleri

Editörlük ve Hakemlikler :

Haziran 2017- ... Türk Psikoloji Dergisi (Teknik Editörlük)
Ekim 2015 - ... AYNA Klinik Psikoloji Dergisi (Hakemlik)

APPENDIX P: TEZ FOTOKOPİSİ İZİN FORMU

ENSTİTÜ

Fen Bilimleri Enstitüsü [ ]

Sosyal Bilimler Enstitüsü [X]

Uygulamalı Matematik Enstitüsü [ ]

Enformatik Enstitüsü [ ]

Deniz Bilimleri Enstitüsü [ ]

YAZARIN

Soyadı : Şimşek Alphan

Adı : Yeliz

Bölümü : Psikoloji

TEZİN ADI (İngilizce) : An Interpretative Phenomenological Analysis Of Meaning-Making Of Infertility Among Infertile Turkish Women: Developing And Testing The Effectiveness Of An Online Intervention Program In Meaning-Making

TEZİN TÜRÜ : Yüksek Lisans [ ] Doktora [X]

1. Tezimin tamamı dünya çapında erişime açılsın ve kaynak gösterilmek şartıyla tezimin bir kısmı veya tamamının fotokopisi alınsın. [ ]

2. Tezimin tamamı yalnızca Orta Doğu Teknik Üniversitesi kullancılarının erişimine açılsın. (Bu seçenekle tezinizin fotokopisi ya da elektronik kopyası Kütüphane aracılığı ile ODTÜ dışına dağıtılmayacaktır.) [X]

3. Tezim bir (1) yıl süreyle erişime kapalı olsun. (Bu seçenekle tezinizin fotokopisi ya da elektronik kopyası Kütüphane aracılığı ile ODTÜ dışına dağıtılmayacaktır.) [ ]

Yazarın imzası ..... Tarih .....