

HAIGAZIAN UNIVERSITY

The Perfectionism Social Disconnection Model in First-Time Lebanese Mothers: Do perceived social support and social comparison orientation on social media act as mediators?

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A Thesis submitted to the Faculty of Social and Behavioral Sciences in partial fulfillment of the requirements for the Master of Art in Psychology – Emphasis: Clinical Psychology at Haigazian University.

Beirut- Lebanon

December 2020

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The Perfectionism Social Disconnection Model in First-Time Lebanese Mothers: Do perceived social support and social comparison orientation on social media act as mediators?

By Helga El Mokdad

is accepted by the Graduate Thesis Committee as satisfying the thesis requirements for the degree Master of Arts/ Clinical Psychology

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Haigazian University

December 2020

*DEDICATION*

*I would like to dedicate this thesis to all the mothers out there who have been struggling with the challenges of motherhood, as well as the challenges of the environment surrounding them, in hopes that they will get a better idea of how to deal with those challenges and thus lower their risk of experiencing negative mental health, especially depression.*

## ACKNOWLEDGMENTS

First, I would like to thank my mother, Eva Yenes, for all the encouragement and support she has provided me with throughout my thesis journey.

I would also like to thank my advisor Dr. Hanine Hout. Her prompt feedback, regular encouragement and constant support made the completion of this thesis possible.

I thank Dr. Lucy Tavitian and Dr. Rana Zayek for their contribution and feedback in order to improve the outcome of the thesis.

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### Abstract

The transition to motherhood is a period that is accompanied by stress and change, whereby first-time mothers are at an increased risk of developing depression. The Perfectionism Social Disconnection Model (PDSM) links socially prescribed perfectionism to depression, and so the following study examined the construct of socially prescribed perfectionism and its relationship with depression. Moreover, the aim of this study was to examine the mediating roles of both perceived social support and social comparison on social media in the link between socially prescribed perfectionism and depression. The sample included 118 first-time mothers recruited from an online survey conducted through Survey Monkey. A questionnaire was administered which includes a demographic form, the subscale of the Multidimensional Perfectionism Scale that measures socially prescribed perfectionism, the Multidimensional Scale of Perceived Social Support, the Iowa Netherlands Comparison Orientation Measure, and the Beck Depression Inventory-II. Data was analyzed using the Statistical Package for Social Sciences (SPSS), where path analysis through PROCESS was used to examine whether the link between socially prescribed perfectionism and depression was mediated by perceived social support and social comparison orientation. Results showed that socially prescribed perfectionism, social comparison orientation on social media, and lack of perceived social support predict depression significantly. Moreover, social comparison orientation on social media and perceived social support mediated the relationship between socially prescribed perfectionism and depression. Results of the study helped identify certain risk factors such as perfectionism, and social comparison orientation while using social media, and this will help implement awareness and prevention programs that can reduce the risk of developing depression in mothers.

*Key words:* Perfectionism Social Disconnection Model, socially prescribed perfectionism, perceived social support, social comparison orientation, depression.

The Perfectionism Social Disconnection Model in First-time Lebanese Mothers: Do perceived social support and social comparison orientation on social media act as mediators?

Motherhood is a period of change and transition that is associated with an increased risk for developing mood and anxiety disorders. This is a critical period not only for the mothers, but also for their children because maternal depression has a negative effect on infant growth, health and nutritional status. Maternal depression also affects the caregiving roles of mothers after having delivered the baby (Madlala & Kassier, 2017). Thus, it is important to identify the risk factors that negatively influence the mental health of mothers. There are numerous vulnerability factors for maternal depression, some of which will not be examined here such as self-criticism, dependency, interpersonal sensitivity and neuroticism (Priel & Besser, 1999; Parker, Barnett, Cooney & Smith, 1991). Perfectionism, a personality trait that was discussed by Hewitt and Flett (1991) in their theory of perfectionism, was also linked to depression (Hewitt & Flett, 1991; Hamachek, 1978). Although several vulnerability factors have been identified for depression, the following study focused on perfectionism, and more specifically on the Perfectionism social disconnection model.

First-time mothers face a lot of challenges and difficulties. Breastfeeding, although sometimes considered to be a practice that mothers will know how to perform naturally, is associated with a lot of stress. Not all mothers will naturally know how to breastfeed, and so it takes weeks of practice and work before first-time mothers accommodate themselves

to this new habit of breastfeeding their babies. Another challenge faced by first-time mothers is their lack of sleep and lack of time for themselves. First-time mothers care for their babies continuously and without any time-out for themselves. This makes mothers feel alienated, especially from their spouses, and it also makes them fatigued and without any energy left to take care of themselves. Not to forget also that first-time mothers lose their pre-baby shape when they deliver their first baby. This also puts a lot of strain on women who have been used to their normal body shape for years, and suddenly find that their bodies have tremendously changed after delivering their first baby. It is also important to note that hormonal changes occur after a mother has given birth to her baby, whereby these hormonal changes may also play a role in exacerbating or increasing the likelihood that a mother will develop depressive symptoms. A study by Schiller, Meltzer-Brody and Rubinow (2014) found that reproductive hormones affect almost every biological system that plays a role in the development of postpartum depression. They also found that a particular group of women are more susceptible to these hormonal changes than others. They referred to these women as the hormone sensitive postpartum depression phenotype. Thus, hormonal changes should also be considered when examining the challenges faced by first-time mothers. These challenges are important to consider in the context of perfectionism, as mothers who strive towards perfectionism may be at an increased risk of being negatively influenced by these challenges. In other words, their inability to reach the ideal, whether in caring for their babies or with respect to themselves, will more severely affect perfectionistic mothers.

Perfectionism has been associated with the mental health of mothers. For instance, high levels of perfectionism in mothers are associated with an increase in anxiety and lower self-efficacy (Gelabert et al; Lee et al., 2012). However, it is important to conceptualize perfectionism before relating it to other constructs and variables, as the different types or dimensions of perfectionism are linked to different psychological disorders or mental difficulties. Hewitt and Flett (1991) found a multidimensional conceptualization of perfectionism, whereby this construct was divided into three dimensions: Other-oriented perfectionism, socially prescribed perfectionism and self-oriented perfectionism. Other-oriented perfectionism, whereby individuals with this type of perfectionism are highly judgmental of others and expect them to be perfect, was not linked to depression or anxiety; however, it was significantly associated with an increase in interpersonal problems (Hewitt & Flett, 1993). In contrast, self-oriented perfectionists put very high standards for themselves and seek to achieve those high standards, without any expectation or reference to others. A recent study by Djafarova and Trofimenko (2017) found that self-oriented and other-oriented perfectionism do not predict depression. However, socially prescribed perfectionism, whereby individuals with high levels of this type of perfectionism are highly critical of themselves, and believe that being perfect is very important to others and therefore strive to portray a perfect and flawless image of themselves, was significantly linked to depression in several studies (Higgins, Bond, Klein, & Strauman, 1986; Cha, 2016; Hewitt & Flett, 1991; Jahromi, Naziri, & Barzegar, 2012; Enns, Cox & Borger, 2001). An important model that examined the link between socially prescribed perfectionism and depression is the perfectionism social disconnection model.

This model was first developed as a means of explaining the link between perfectionism and suicidality, but later after conducting other studies, depression was also included as an outcome in this model. Only one dimension of perfectionism, which is socially prescribed perfectionism, was included in this model. It was found that socially prescribed perfectionism was linked to depression, as mediated by social disconnection, such that individuals with high levels of socially prescribed perfectionism become socially disconnected from others, and this social disconnection they experience leads to their experiencing of depressive symptoms. To elaborate more, social disconnection and interpersonal problems mediated the relationship between depression and this dimension of perfectionism (Hewitt, Flett, Sherry & Caelian, 2006). Another study by Hewitt et al. (2006) attempted to find an explanation for the relationship between social disconnection and socially prescribed perfectionism. Results indicated that interpersonal over-sensitivity and hostility resulted from socially prescribed perfectionism, which eventually increased the likelihood of developing depressive symptoms. It is important to clarify that the perfectionism social disconnection model has been examined in several populations and has been assessed by including the aforementioned constructs as means of explaining the link between socially prescribed perfectionism and depression. However, the following study examined this model in a new population and with two new constructs, social comparison orientation and perceived social support, in an attempt to explain the link between socially prescribed perfectionism and depression in first-time Lebanese mothers.

The following study therefore attempted to explain the mechanism that links socially prescribed perfectionism and depression in the perfectionism social disconnection

model in a sample of first-time mothers in Lebanon. Perceived social support was the first mediator examined in the study, as the social disconnection model proposes that individuals with high levels of socially prescribed perfectionism become socially disconnected. Thus, it was important to examine the level of perceived social support in these individuals, and especially in perfectionistic first-time mothers. Social comparison orientation was the second construct examined in the link between socially prescribed perfectionism and depression. Social comparison orientation increases the likelihood that an individual is directed and influenced by people in his or her surroundings; this is a construct quite related to how socially prescribed perfectionists tend to behave (Gibbons & Buunk, 1999). Moreover, social comparison orientation has been studied in relation to depression, and results show that individuals who engage in social comparisons or score highly on the social comparison orientation scale are more likely to develop negative reactions and depressive symptoms (Bazner, Bromer, Hammelstein, & Meyer, 2006). Social comparison orientation is also a very important construct to study in the context of social media use, especially when studying first-time mothers who are the most active internet users because they tend to search for information about parenting (Plantin and Daneback, 2009). Mass media portrays idealized images of motherhood that may reinforce the perfectionistic traits of certain mothers and pressures them to become the “perfect mothers” (Gentile, 2011; Henderson, Harmon, & Newman, 2016). Social networking sites have provided new platforms whereby individuals may engage in social comparisons through social media use (Coyne, McDaniels, and Stockdale, 2016). The Social Comparison theory states that individuals who are confronted with information about other

people's lives tend to compare that information with their own experiences. These comparisons may result in either positive or negative self-judgements about one's own life (Festinger, 1954).

### **Rationale**

The perfectionism social disconnection model has proposed a link between the personality trait of socially prescribed perfectionism and depression, as mediated by social disconnection. Other studies also tried to explain the perfectionism social disconnection model by assessing the influence of other mediators on this relationship. For instance, Kumpasoglu (2019) studied mattering and perceived social support in the relationship between perfectionism and depression in a sample of university students. Other mediators of this link were also examined by Padoa, Berle and Roberts (2018). They studied how social comparison on social media can explain the association between perfectionism and depression in a sample of mothers in Australia. In their study, social support was controlled for and it was not included as a mediator variable. Thus, the following study attempted to examine the roles of both social comparison orientations on social media and perceived social support as mediators in the perfectionism social disconnection model.

The perfectionism social disconnection model has been mainly studied in samples of university students, as in the study by Kumpasoglu (2019). Very few studies have examined this model with mothers, and as far as we know, none of the studies have done so with first-time Lebanese mothers. Thus, the study in the following paper examined whether the perfectionism social disconnection model applies to first-time Lebanese

mothers. Although the sample in the previous study by Padoa, Berle and Roberts (2018) included first-time mothers, the authors did not report any comparison between first-time mothers and multiparous mothers (mothers with more than one child). First-time mothers have lower levels of maternal confidence and higher levels of stress when compared to multiparous mothers (Phelps, Belsky and Crnic, 1998; Kapp, 1998). First-time mothers included in the following study were not restricted to any age group. An integrative analysis has found that young mothers respond positively to social support, whereby there is an association between social support and the development of a positive maternal identity. Increasing social support and providing these young mothers with new information about motherhood will help them better cope with the physical and psychological challenges of young motherhood (Erfina, Widyawati, McKenna, Reisenhofer, Ismail, 2019). Another integrative review was also conducted to examine the experiences of women who became mothers at an advanced age. This review found that advanced motherhood revolves around four main themes which including getting additional information about what motherhood is all about, perceiving the risks, adapting to a new routine after childbirth, and the ideal moment for motherhood (Aldrighi, Wall, Souza, Cancelli, 2016). Mothers who give birth at an advanced age show more worry towards the risks of childbirth and pregnancy, and this was not mentioned with regards to younger mothers. Moreover, younger mothers were concerned with the burden of responsibility of having a child, whereas the mothers at an advanced age were more likely to think of this time as an ideal moment for motherhood. The aforementioned studies have certain common themes, such as the search for information, and the issue related to the

time when these women have become mothers. This is of great relevance to the following study, because both age groups are concerned with the search for information and the time when they become mothers. Since these themes are common in both age groups, and these themes are mostly relevant to the following study, first-time mothers were not restricted to any age group. Moreover, it seems that the differences between younger and older mothers revolved more around the qualitative nature of their concerns and worries. Thus, it is important to mention that although mothers of different age groups were included in the present study, age was not examined as an independent variable and no differences were examined between age groups.

Moreover, social relationships are highly valued in the Lebanese culture, as maintaining relationships and socializing with both the nuclear and the extended family is considered very important. Social support from the family circle and from friends is a very important resource available in the Lebanese culture, such that social support is highly embedded in the values, culture, and beliefs of Lebanese individuals (Farhood et al., 1993; Sabbah, Drouby, Sabbah, Retel-Rude, & Mercier, 2003). The importance of social support and the availability of that support in the Lebanese culture held several implications with respect to the variables that were examined in the following study. In other words, the fact that social support is readily available and perceived by many Lebanese mothers makes us question whether the perfectionism social disconnection model is applicable to first-time Lebanese mothers. To clarify, the perfectionism social disconnection model suggested that individuals with high levels of socially prescribed perfectionism become socially disconnected, and show less perceived social support, which eventually leads to

depression. However, it was important to also examine other aspects of the Lebanese culture that can increase the load on first-time mothers and make them feel pressured. In the Lebanese culture, generations are overwhelmed and dominated with the sense of patriarchy and gender traditions that are transferred from previous generations to the ones after them over and over (Hamieh & Usta, 2011). That is to say that males are encouraged to become strong men that can protect and control women; but women on the other hand are encouraged and reinforced to fulfill their roles in household tasks, to be submissive and obedient towards their male partners, and to be beautiful. Moreover, women are also expected to be fully devoted to their families and to show care and support towards their husbands, children, and extended families (Hamieh & Usta, 2011). Thus, it is clear that there are two sides to the Lebanese culture that can affect mothers, as one side can provide mothers with social support, while the other aspect revolves around gender roles that can somewhat pressure women into fulfilling a perfect role as both mothers, wives, and in their care towards extended family. Thus, one would question whether this other aspect of the Lebanese tradition and culture can put increased pressure on women, especially those who have perfectionistic traits and are high on socially prescribed perfectionism. It was significant to examine whether Lebanese first-time mothers who have high levels of socially prescribed perfectionism will show lower levels of perceived social support, which may increase the likelihood of developing depressive symptoms. Moreover, the following study also inspected whether high levels of socially prescribed perfectionism lead to higher levels of social comparison orientation on social media. This also brought up the question of whether Lebanese mothers, who mainly rely on the family as a social support

system, are prone to engaging in social comparison on social media. Moreover, this made us wonder whether this pressure from the society in Lebanon about women's roles also influences whether the PDSM applies and how it applies to first-time Lebanese mothers. Thus, the following study focused on whether perceived social support and social comparison orientation on social media mediated the relationship between socially prescribed perfectionism and depression in first-time Lebanese mothers.

It is important to note that first-time mothers included in the sample of the following study were Lebanese women with one child only whose age did not exceed four years. A study done by Chaaya and colleagues (2002) in Lebanon examined the prevalence of postpartum depression in a sample of 396 women in the Beirut and Bekaa regions, and they found that the overall prevalence of postpartum depression was 21% (Chaaya, Campbell, Kak, Shaar, Harb, & Kaddour, 2002). Thus, it was important to investigate the risk factors that increased the likelihood of developing postpartum depression in Lebanese women. Moreover, another study found that the four-year time period after delivery of the first child is a crucial time, as the prevalence of depression was 14.5 % when assessing women 4 years postpartum, and this is much higher than at any time during the first year postpartum. This study also showed that women who had only one child 4 years postpartum and did not have any subsequent children after that were more likely to develop depressive symptoms 4 years after having delivered their first child (Woolhouse, Gartland, Mensah, & Brown, 2015). This study, although done in Melbourne, Australia and not in Lebanon, has several implications with regards to the importance of including first-time mothers whose children are 4 years or younger in the following study.

Another study that took place in Alexandria, Egypt also showed that women who developed postpartum depression were more likely to experience depressive symptoms four years after childbirth (Abdollahi & Zarghami, 2018).

The first mediation variable included in the following study was social comparison orientation on social Media. Several studies have found that engaging in social comparisons on social media is associated with various negative behavioral and mental health outcomes (Brunson, 2013; Cramer, et al., 2016; Fardouly, et al., 2015; Fox & Vendemia, 2016; Nesi & Pinstein, 2015; Smith, et al., 2013; Vogel, et al., 2014; Vogel, et al., 2015). However, very few studies have attempted to examine this association in a parenting context. One study found that high levels of social comparison on social media is associated with negative maternal outcomes, specifically an increase in role overload and decreased levels of perceived parental competence (Coyne, Mcdaniel, and Stockdale, 2016). Another experimental study found that looking at acquaintances' profiles causes individuals to view their acquaintances more positively than when viewing them in the control condition (that is outside Facebook, in an offline context) (Vogel and Rose, 2017). They judged their acquaintances' socially desirable characteristics (e.g., successfulness, popularity, attractiveness, intelligence) quite positively. The findings, when interpreted in the context of parenthood, might suggest that mothers also feel that individuals on social media (other mothers) have more socially desirable traits. This might make them feel as if they are not "good enough" mothers and cannot live up to the ideal way of being a mother. A study by Lee (2014) has shown that people tend to portray their 'best selves' on social networking sites and this might explain why engaging in social comparisons on social

media is associated with negative feelings towards oneself. Thus, not only are people exposed to the 'best selves' of others, but they are also engaging in a positive bias when viewing others' profiles on social media. These combined, one would question whether mothers also engage in this upward social comparison and view other mothers in a more positive light on social media. This social media platform that reinforces social comparison use of the social networking sites is a very important construct to examine in the context of the perfectionistic personality traits of new mothers.

Another important variable that was included in the following study is perceived social support. The hypothesis that perfectionism influences perceived social support, but not received social support, and this eventually influences an increase in the likelihood of developing depression was supported by Sherry et al. (2008). However, Sherry et al. (2008) conducted their study on a sample of university students and the results supported their hypothesis of perceived social support acting as a mediator in the perfectionism social disconnection model. Kumpasoglu (2019) also studied perceived social support and mattering together, and found that both act as mediators in explaining the mechanism that links perfectionism to depression. However, with first-time Lebanese mothers, perceived social support is a very important protective factor against developing depressive symptoms, and so it was of paramount importance to examine perceived social support in the relationship between socially prescribed perfectionism and depression in first-time Lebanese mothers.

To sum up, the perfectionism social disconnection model was studied to examine how and if it applied to first-time Lebanese mothers. As far as we know, this population has not been studied in the context of the perfectionism social disconnection model. Moreover, in an attempt to explain the mechanism that links socially prescribed perfectionism to depression in first-time Lebanese mothers, the two variables of perceived social support and social comparison orientation on social media were included as mediator variables in the study. There is no study, as far as we know, that investigated the effects of both social comparison orientations on social media and perceived social support together to better comprehend their unique and combined effects in the relationship between socially prescribed perfectionism and depression. Besides that, comparative social media use has been found to mediate the relationship between perfectionism and maternal depression and anxiety in a sample of Australian mothers in general, but no study, to our knowledge, has yet examined the strength of this relationship in first-time Lebanese mothers (Padoa, Berle, and Roberts, 2018).

### **Research Questions**

Does social comparison orientation on social media and perceived social support mediate the relationship between perfectionism and depression in first-time mothers in Lebanon? This study examined whether the perfectionism social disconnection model applied to this population and whether the mediator variables together explained the relationship between socially prescribed perfectionism and depression in first-time mothers in Lebanon.

## **Significance**

The following study had several theoretical and practical implications.

Theoretically and empirically, this would be the first study that examined the perfectionism social disconnection model in a sample of first-time Lebanese mothers. Moreover, it is the first study that included both social comparison orientation on social media and perceived social support together and viewed their unique and combined effects in mediating the relationship between socially prescribed perfectionism and depression.

Practically speaking, the findings of this study are very important for the treatment interventions and awareness programs that are implemented with first-time mothers. The transition to motherhood is a stressful period in which mothers engage in the process of becoming a parent for the first time and through the process, they invest in their personal development (Berg & Premberg, 2010). In other words, mothers search for information and support in an attempt to face this new period of motherhood with sufficient preparation (Kralik, Visentin, & van Loon, 2006). Besides that, a study conducted by Enstieh and Hallstrom (2016) showed that successful modes of support for mothers include receiving realistic information about the skills required for parenting and the changes experienced with respect to their relationships with their partners. Another important mode of support in which mothers engage in is their use of the internet, whereby they try to obtain information about parenthood from the internet rather than obtaining trustworthy information from professionals (Evans, Donelle, & Hume-LoveLand, 2011). Thus, the findings of this study can be implemented through awareness programs on social media

and in maternity wards, where professional doctors and mental health professionals can target perfectionism by portraying a more realistic view of what motherhood is all about and educating first-time mothers about what they should expect and how to deal with certain challenges upon delivering their first child. Perfectionism, especially socially prescribed perfectionism, prevents mothers from using the social support around them and benefitting from it. Thus, targeting perfectionism as a personality trait in therapy or through awareness programs can help individuals better perceive the social support that they may be receiving and blocking due to their perfectionism. In addition, psychologists can help perfectionistic first-time mothers by teaching them effective ways so that they no longer block the social support they receive and so that reduce their avoidance in social interactions and are better able to benefit from social support (Dunkley, Sanislow, Grilo, & Mcglashan, 2006). Besides that, social comparison orientation of first-time mothers and engaging in such comparisons on social media can also become the target of awareness programs that teach new mothers effective ways of using the internet without being affected by the negative aspects of social media use. Thus, new mothers can learn to use social media as a means of getting information and support instead of using it as a platform to engage in social comparisons.

## Literature Review

### Chapter 1

The Perfectionism Social Disconnection Model is the model on which the following study is based. A brief history of this model will be presented along with the constructs in this model; in addition, the different studies that examined how socially prescribed perfectionism and depression are linked are also depicted. After that, a discussion of depression and its vulnerability factors follow, explaining how socially prescribed perfectionism is an important construct that is linked to depression in several studies. Self-oriented perfectionism will also be discussed by examining the conflicting results with regards to its relationship with depression; while some studies showed a link between self-oriented perfectionism and depression, other recent studies did not find a significant relationship. This conflict in results and the fact that the perfectionism social disconnection model only includes socially prescribed perfectionism is the reason behind only including that dimension of perfectionism, socially prescribed perfectionism, as an independent variable in the following study. And finally, a discussion of perceived social support and social comparison orientation will follow, linking them both to depression and proposing that these two constructs will explain the link between socially prescribed perfectionism and depression.

### **Perfectionism Social Disconnection Model**

The Perfectionism Social Disconnection Model (PDSM) was developed in the beginning as a means of examining the link between perfectionism and suicidality. After conducting studies and research on this model, another variable was also added to the model as an outcome. This variable is depression, and so the model currently includes both depression and suicidality as outcomes, and links them to perfectionism. However, it is important to note that perfectionism as a whole was not linked to depression, but only one dimension of perfectionism, which is socially prescribed perfectionism. In other words, individuals with high levels of socially prescribed perfectionism who do not achieve unrealistically high standards are more prone to reprimand and blame themselves, while feeling guilty at the same time (Dean & Range, 1996). The feelings of guilt and inadequacy may eventually lead to depression. Having the cognitive distortions and hopelessness associated with depression, the individuals will also be at an increased risk of suicidal ideation and suicidal attempts (Dean & Range, 1996). Attempts to explain the mechanism by which perfectionism is linked to depression and suicidality have studied the interaction between stressful events in an individual's environment and different types of perfectionism (Hewitt & Flett, 2002). They proposed that when individuals experience stressful events that are somehow related to a certain type of perfectionism, then this interaction will result in a greater increase in the risk of developing depressive symptoms, suicidal ideation, or suicidal attempts. To clarify, self-oriented perfectionists may experience a lack of achievement in the workplace, which is a stressful event that is pertinent in their case, as self-oriented perfectionists strive towards achievement

excessively and are greatly influenced if they experienced a lack of achievement at the workplace. Thus, in this case, the lack of achievement will interact with this type of perfectionism (self-oriented perfectionism), which results in heightened irritability of the self-oriented perfectionist and consequently increases the risk of depression and suicidality. This, however, is in contrast with the more recent study by Djafarova and Trofimenko (2017) in which no significant relationship was found between self-oriented perfectionism and depression. Another example that may further clarify the importance of the type of stressor that matches the specific dimension of perfectionism is one related to a social stressor. A mother with high levels of socially prescribed perfectionism may be criticized by someone for not breast-feeding her baby. This mother will then show heightened reactivity and irritability because of the high standards set by society that she did not meet (Hewitt & Flett, 2002, 1993). Her heightened negative reaction and irritability will consequently make her more prone to developing depressive and suicidal symptoms. To further elucidate the specific nature of the stressful events discussed, Hewitt, Flett, Sherry and Caelian (2006) hypothesized that interpersonal problems and social disconnection are mediators that link perfectionism to suicidality and depression, in the Perfectionism Social Disconnection Model (PDSM). Hewitt et al. (2006) also clarified the link between socially prescribed perfectionism and social disconnection, which is a mediator in the model. They proposed that socially prescribed perfectionism may result in feelings of interpersonal over-sensitivity and hostility, which may eventually lead to social disconnection and a feeling of lack of belonging.

Another study was conducted to examine the link between perfectionistic concerns and depressive symptoms, as mediated by social disconnection. The hypothesis was supported, as individuals who show high interpersonal perfectionism tend to believe that others do not approve of them and are not satisfied with them, which eventually leads to their developing of depressive symptoms (Sherry et al., 2013). Not only do those individuals suffer from an exacerbation and increase of negative social experiences, but they also suffer from a decrease and a deterioration of their positive social experiences as well (Mackinnon et al., 2012). It is important to note that interpersonal perfectionism is mainly represented by socially prescribed perfectionism, which is the only dimension of perfectionism that is interpersonal in nature. The following studies attempted to refine and generate hypotheses based on the perfectionism social disconnection model.

Therefore, the link between perfectionism, or to be more specific socially prescribed perfectionism, and social disconnection is explained through the generation of interpersonal over-sensitivity and hostility among individuals with high socially prescribed perfectionism. Consequently, social disconnection results in depression and suicidality. Although interpersonal over-sensitivity and hostility do explain the link between socially prescribed perfectionism and social disconnection, the following study will not be looking into those specific factors. In fact, over-sensitivity of individuals and hostility are mentioned so as to show the importance of those factors with respect to perceived social support. Being highly sensitive and hostile may lead to a lack of perceived social support which may also explain the link between socially prescribed perfectionism and depression. Being highly sensitive may also explain some individuals' heightened tendency to engage

in social comparisons as a means of meeting the unrealistically high standards that other people portray on social media. When they see others who are perfect and leading perfect lives, individuals with heightened sensitivity may feel worse about themselves and engage more and more in social comparisons as a means of trying to reach that standard. This hypothesis is of interest in the following study, as the current thesis applied the PDSM model and expanded on it, by examining the link between socially prescribed perfectionism and depression, as mediated by perceived social support and social comparison orientation on social media. Moreover, this model including association were examined in First-time mothers. The following sections will discuss the several constructs that were included in the current thesis which expand on the PDSM model and apply it for the first time on first-time mothers. Several studies and theories will be presented to illustrate the importance of these constructs in the lives of first-time mothers.

### **Depression**

According to the World Health Organization (WHO), depression is considered to be one of the most widespread psychological disorders affecting over 322 million people worldwide (2017). It is a mental disorder that affects the cognitive, emotional, behavioral, and physical aspects of an individual's life. Depression is more common in women, as its prevalence is twofold greater in females than in males (Kessler, 2005). According to the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), the symptoms of depression include: low mood, changes in appetite, changes in sleep, decreased interest and pleasure in activities, decreased concentration or indecisiveness,

feelings of guilt or worthlessness, decrease in energy or fatigue, and suicidal ideation or suicidal attempt (American Psychiatric Association, 2013).

Individuals are especially prone to developing depressive symptoms during times of stress and change, and motherhood is one of those periods of change whereby women are at an increased risk of developing anxiety and mood disorders. It is also important to note that when depression affects women who have recently transitioned to motherhood, it not only affects the emotional and occupational lives of those women, but it also extends its negative impact on the family, partner, and the mother-child interactions (Murray et al., 1996; McMahon et al., 2006). A study by Madlala and Kassier (2017) found that maternal depression has a negative effect on infant growth, health and nutritional status, and it also interferes with the caregiving roles of the mothers towards their children. Having mentioned the debilitating effects of maternal depression, there is a need to identify and discuss the risk factors of this psychological disorder as a means of implementing prevention and treatment programs that target those risk factors and perhaps decrease the risk of developing maternal depression. Depression has been studied extensively with several vulnerability factors being identified, including perfectionism. As a part of this, vulnerability factors for maternal depression will be discussed in the following section.

### **Vulnerability Factors for Maternal Depression**

Women who are becoming mothers for the first time are required to engage in new tasks and acquire new abilities that aid them in their caring for their babies. These new tasks take up most of the mother's time and consume her excessively, as she can no longer

divert her attention towards other aspects of her life (Pridham & Chang, 1992). Moreover, the temperament of a baby greatly influences how well a first-time mother copes with motherhood, as an irritable and weepy baby may require much more effort and energy than expected. This can increase the tiredness and over-load the mother is experiencing, which makes the mother more prone to doubt her competence and ability of playing the role of motherhood (Tarkka et al., 1999). Other physiological changes accompany the post-partum period as well. Those physical changes include: breast engorgement or hardening, uterine contractions, urinary contractions and incontinence, constipation, perspiration and other changes that can increase the discomfort of mothers after having delivered their babies (Cleveland Clinics, 2018). The physiological and psychological changes that accompany motherhood represent a huge change in the lives of new mothers, and the transition to motherhood can be a stressful period in which a small percentage of women may experience severe depressive symptoms, whereas the larger percentage experiences lower levels of dysphoric mood and feelings of worthlessness and inadequacy (Gotlib, Whiffen, Mount, Milne, & Cordy, 1989; Hopkins et al., 1984).

Several theories have emerged which attempt to explain how certain personality characteristics can be vulnerability factors for depression. One of those theories is Blatt's theory about dependency and self-criticism. Self-criticism can be defined as having low sense of self-worth, feelings of guilt, a fear of failure, and having worries about the social image or status in front of others. Self-criticism is very important, as socially prescribed perfectionists are self-critical and worry about maintaining their social image in front of others. Dependency refers to the concept of building self-worth from the support that is

provided by others in your environment. Dependency however is also characterized by a fear of loss, rejection or abandonment from others. Blatt suggested that self-criticism and dependency are two personality traits that are associated with depression, and therefore considered vulnerability factors to depression (Kopala-Sibley & Zuroff, 2017). A study by Priel & Besser (1999) examined the vulnerability factors of self-criticism and dependency as predictors of postpartum depression. They hypothesized that women who place a high emphasis on self-critical and dependency motives will develop dysfunctional attitudes, and this may increase their likelihood of developing depressive symptoms. Results of the study showed that the period of becoming a mother for the first time is indeed a stressful life event that particularly affects women with high levels of criticism and low levels of dependency. In other words, highly self-critical women are more likely to employ their self-criticism and engage in this negative thinking pattern when they are experiencing times of stress and change. Moreover, women who are independent (low on dependency) tend to feel that their independence is compromised because of their responsibility towards their new born child. These findings are important to consider with respect to the constructs that will be examined in the following proposed study. In other words, self-criticism was linked to depression, and this supports the relationship between socially prescribed perfectionism and depression, since socially prescribed perfectionists are self-critical of themselves in order to maintain their social image. On the other hand, women who were low on dependency and did not benefit from the social support around them were more likely to develop depressive symptoms. This supports the notion that perceived social support is an important construct to examine, as lower dependency indicates lower

perceived social support, which in turn is linked to an increase in depressive symptoms. Moreover, it was interesting to find that dependent women were more accepting of the support around them during pregnancy and after having delivered the baby, which indicates that dependency served as a protective factor against the development of depressive symptoms (Priel & Besser, 1999). Thus, in line with Blatt's theory about dependency and self-criticism (1982), people who are highly dependent consider social support as a priority in their lives, and they evaluate their self-worth based on others' approval of them. Thus, dependency may serve as a protective factor when social support is present for highly dependent individuals, but not when it is absent or not perceived. In other words, having a fight with a friend, separation from a partner, and being rejected or experiencing loss are events that may significantly impact dependent women which may result in their feelings of loneliness, hopelessness, and sadness (Alden & Bieling, 1996). Being self-critical is a characteristic of perfectionistic women, which further supports their heightened proneness to developing depressive symptoms. Dependency, the other personality factor examined in Blatt's theory, elucidates the importance of examining the perceived social support in first-time mothers as well.

Another theory that assessed personality factors was that of Hewitt and Flett (1991). In their theory of perfectionism, they discussed the different types of perfectionism and how they relate to depression. Results showed that socially prescribed perfectionism is significantly linked to depression. In other words, individuals who have a belief that others require them to be perfect are more likely to develop depressive symptoms (Hewitt & Flett, 1991). In addition, the other two types of perfectionists which are neurotic perfectionists

and self-oriented perfectionists, were also found to be at an increased risk of developing depressive symptoms (Hewitt & Flett, 1991; Hamachek, 1978). Although the aforementioned studies showed a link between self-oriented perfectionism and depression, more recent studies did not find a significant association (Djafarova & Trofimenko, 2017). Moreover, the perfectionism social disconnection model does not include self-oriented perfectionism in the model because of two reasons. First, due to the lack of significant association between self-oriented perfectionism and depression in recent studies, and second, the dimension of perfectionism is of no relevance to social disconnection; it was only found to be a mediator between socially prescribed perfectionism and depression.

A study by Boyce, Parker, Barnett, Cooney & Smith (1991) examined the personality factors of neuroticism and interpersonal sensitivity and their relationship to post-natal depression in a sample of primiparous women (women who have more than one child) who were in a stable adult relationship. They found that women who scored high on interpersonal sensitivity were ten times more likely to experience depressive symptoms 6 months after having delivered their babies. High neuroticism also predicted the likelihood of developing depression, but to a lesser extent (three-fold increase in likelihood of developing depressive symptoms) at a 6-month interval. Similarly, Coppen & Metcalfe (1965) supported this finding, as their study indicated that neuroticism is a vulnerability factor for depression.

While personality traits have been studied extensively in how they act as vulnerability factors for depression, another important aspect of our lives to consider

nowadays is the widespread use of the internet and the social networking sites available. Social Comparison Theory states that individuals are more likely to engage in social comparisons, whether positively or negatively, during times of change and stress (Festinger, 1954; Gibbons & Buunk, 1999). Since the transition to motherhood is considered one of those phases of stress and change that women go through, first-time mothers are more prone to engage in social comparisons on social media. This can become problematic, especially for mothers with high levels of perfectionism, as they tend to compare themselves to the ideals portrayed on social networking sites, with the goal of trying to attain that perfect image. A study was conducted to examine whether engaging in social comparisons on Facebook is associated with depressive symptoms and the mechanism by which this association can be explained. Results showed that negative social comparisons are significantly related to increases in depression. When an individual negatively compares him or herself to others on Facebook, this will result in rumination which in turn will increase the likelihood of developing depressive symptoms (Feinstein, Hershenberg, Bhatia, Latack, Meuwly, & Davila, 2013). Another study by Wickam and Acitelli (2014) revealed that undergraduate students who engaged in social comparisons on Facebook were at an increased risk of having depression. Other studies have also examined mothers' social comparison on Facebook. Schoppe-Sullivan et al. (2017) found that mothers use Facebook as a means of presenting images and behaviors that conform with the perfect image of motherhood. Besides that, they found that new mothers with high levels of socially prescribed perfectionism felt pressured to meet the unrealistically high standards set by society, and so they felt compelled to present the best images of their

children and their mothering practices on social media. This compulsion to post such images was accompanied with an increased likelihood of engaging in social comparisons, and also a need for external validation. When these new mothers did not feel externally validated, and did not attain the high standards they were comparing themselves to on social media, they were more likely to become depressed and have negative emotions (Schoppe-Sullivan et al., 2017). Another study by Djafarova and Trofimenko (2017) explored the views of mothers about using Instagram and how it affected them. This study was qualitative in nature, and it found that most mothers reported that they were feeling societal pressure while using Instagram, because the perfect images portrayed on this social networking site were pressuring them to conform to the ideals of motherhood. Moreover, the mothers also reported that the difficulties and stressful aspects of motherhood were rarely displayed on Instagram (Djafarova & Trofimenko, 2017). The way individuals use the Internet and their engagement in negative social comparisons eventually affects their mental well-being and increases the risk for depression. Having discussed several vulnerability factors for depression, a more detailed discussion of the three important constructs that are relevant to the following study follows. The following section will discuss perfectionism and its different dimensions, and it will be followed by a discussion of social comparison on social media and perceived social support. These three variables were the main focus of this current thesis.

## **Perfectionism**

Perfectionism has been studied thoroughly, and while some researchers viewed perfectionism as unidimensional (Burns, 1980), other researchers found perfectionism to be multidimensional (Frost et al., 1990; Hewitt & Flett, 1991). Multidimensional perfectionism will be focused on, as the different dimensions of perfectionism are correlated with different psychological disorders, and so it is of paramount importance to understand the multidimensional conceptualization so as to better understand perfectionism and how it relates to different constructs. Frost et al. (1990) used the six-factor model of perfectionism, whereby the six factors were all intrapersonal in nature. Their model included several dimensions: personal standards, concern over mistakes, doubting of actions, organization, parental expectations, and parental criticism. Using this six-factor model of perfectionism, the Frost Multidimensional Perfectionism Scale was developed. The scale's validity was supported through its correlation with the Perfectionism Scale that was developed based on Burns' unidimensional model of perfectionism.

Another multidimensional conceptualization of perfectionism was found by Hewitt & Flett (1991). They devised a theory of perfectionism whereby perfectionism was composed of three dimensions. Self-oriented perfectionism, other-oriented perfectionism, and socially prescribed perfectionism were the three dimensions supported by their theory. Each dimension of perfectionism was more or less associated with different psychological problems and disorders, and each dimension will be discussed in detail to better explain how they are related to different problems or psychological difficulties.

Self-oriented perfectionism is directed towards oneself by the individual himself. In other words, individuals with self-oriented perfectionism tend to strive towards unrealistically high standards, avoid failure as much as possible, and carefully observe their own behavior as a means of criticizing themselves. Moreover, these individuals display cognitive distortions such as an “all or none” thinking pattern and tend to blame, punish and look down on themselves (Hewitt & Flett, 1991a; Hewitt & Flett, 1991b; Hewitt & Genest, 1990; Hewitt, Flett & Weber, 1994; Hewitt, Mittelstaedt & Wollert, 1989). Thus, the inability of individuals with self-oriented perfectionism to accomplish the unrealistic standards they strive towards puts them in conflict. The discrepancy between the reality of who they are and the perfect image of themselves that they have tried to achieve was found to be associated with the development of depressive symptoms (Higgins, Bond, Klein, & Strauman, 1986). However, it is very important to stress that the conflicting result between older studies and the more recent studies raises questions of whether this type of perfectionism is related to depression. The more recent studies did not find any association between self-oriented perfectionism and depression (Djafarova & Trofimenko, 2017; Malinowski, Veselka, & Atkinson, 2017). Other-oriented perfectionism is perfectionism directed towards others, especially towards significant others. For instance, an individual may place very high standards of behaving for his or her parents or other important people in his or her surroundings. He or she may criticize others for not accomplishing what they had in mind for them, and this mainly directs criticism and careful examination of behavior towards important people in an individual’s surrounding. This dimension of perfectionism was found to be strongly linked to

interpersonal difficulties (Hewitt & Flett, 2002), but not to depressive or anxiety symptoms (Hewitt & Flett, 1993). Malinowski, Veselka, and Atkinson (2017) also found that other-oriented perfectionism is not correlated with depression. However, it is important to note that they had also found that self-oriented perfectionism is not correlated with depression, and this is in contrast to the findings of earlier studies which indicated that self-oriented perfectionism is associated with depression (Hewitt & Flett, 1991; Hamachek, 1978). These studies supported the concept of including only socially prescribed perfectionism in the Perfectionism Social Disconnection Model as a predictor of depression and suicidality.

Thus, the most relevant construct to the current thesis was the socially prescribed perfectionism. This dimension of perfectionism can be contrasted to other-oriented perfectionism in the sense that the people with socially prescribed perfectionism believe that others in their surrounding are pressuring them to be perfect. They feel that significant others will criticize or negatively evaluate their behavior if not achieving very high standards (Hewitt & Flett, 1991b). Besides that, socially prescribed perfectionism revolves around an inability to please people in one's surrounding. Because individuals high on socially prescribed perfectionism believe that others are imposing certain norms and ideals of behaving, they feel they can never achieve that ideal and this results in several psychological problems. This dimension of perfectionism is more strongly correlated with severe psychological and interpersonal problems than the other two dimensions of perfectionism. As mentioned previously and mostly relevant to the current thesis, socially prescribed perfectionism was associated with depression in several studies (Cha, 2016; Hewitt & Flett, 1991; Jahromi, Naziri, & Barzegar, 2012; Enns, Cox & Borger, 2001). This

dimension of perfectionism is also most relevant to first-time mothers because first-time mothers tend to look for others in order to obtain information on motherhood and parenting. This makes them more susceptible to have higher levels of socially prescribed perfectionism, and an increased risk for developing depressive symptoms.

### **Social Comparison**

Social Comparison was first discussed by Festinger (1954) in his theory of social comparison. This theory postulates that individuals have a tendency to assess their opinions and abilities by comparing them to some standard. This assessment will help individuals decide whether their opinions are right or wrong and whether their abilities are worthy of appraisal. However, such objective standards are not readily available for individuals to use as a scale for comparison, and that is why individuals resort to other people around them to engage themselves in comparisons (Festinger, 1954).

Although Festinger (1954) discussed his theory of social comparison in the context of opinions and abilities only, other researchers employed the theory of social comparison in the context of other constructs and variables. For instance, Gibbons and Buunk (1999) studied an individual's tendency to engage in social comparisons as a personality attribute. They wanted to examine social comparison in the context of personality traits, or in other words how oriented individuals are in engaging in social comparisons as part of their personality structure. After examining social comparison orientation, Gibbons and Buunk (1999) found that individuals who scored high on the social comparison orientation are more likely to be influenced and directed by the people in their surroundings instead of

being influenced or directed by themselves. In addition, such individuals have heightened sensitivity and exhibit uncertainty towards themselves. This is also in line with mothers who have high levels of socially prescribed perfectionism and exhibit heightened sensitivity, as socially prescribed perfectionists are directed by people in their surroundings and do exhibit heightened sensitivity. Being perfectionistic is therefore another personality attribute that might predict social comparison orientation. For instance, in the context of motherhood, first-time mothers who have a social comparison orientation may want to receive information and know more about other first-time mothers and how they are dealing with their new experience of motherhood and tend to compare themselves to them.

A study has been conducted to examine the association between social comparison orientation and depression (Bazner, Bromer, Hammelstein, & Meyer, 2006). The sample included 913 university students who were administered the Beck Depression Inventory II (BDI-II) and were assessed on their social comparison orientation. The students were directed to engage in an activity whereby they compared themselves on several dimensions to others who were better off than them. The researchers found that individuals who were currently experiencing a depressive episode were more likely to employ social comparison than those who were not currently depressed. Depressed individuals were also more strongly affected by the upward social comparison activity they engaged in compared to non-depressed individuals. What is quite interesting however was that even those who were not depressed currently in the study exhibited negative emotions and reactions towards upwards social comparisons (Bazner, Bromer, Hammelstein, & Meyer, 2006). Thus, the importance of this finding lies in the fact that even when individuals are

not currently depressed, they may experience negative reactions towards engagement in upward social comparisons and this brings forward the question of whether social comparison orientation increases the risk of developing depressive symptoms.

Social comparison on social networking sites has also been examined in its relationship with several negative outcomes. Social comparison on social networking sites was associated with several negative emotional and behavioral outcomes, as people who engage in social comparisons frequently were more likely to experience negative emotions such as envy, defensiveness and regret. Moreover, they were more likely to exhibit negative behaviors such as lying and blaming others (White, Langer, Yariv, & Welch, 2006). Other studies also found that individuals who compare themselves to others who are superior to them also experience more negative outcomes (Tessar, Miller, & Moore, 1988) and this is in line with the findings by Bazner, Bromer, Hammelstein and Meyer (2006).

While most studies used samples that included university students, social comparison was also examined in the context of motherhood. A study by Madge and O'Conner (2006) found that certain social networking sites may reinforce gender stereotypes and inequality in gender roles, and this may negatively contribute to mothers' wellbeing, as mothers may experience additional stress when presented with such information on social networking sites. Other than the stereotypic gender role reinforcement on certain websites, social networking sites are filled with images of perfection and portrayals of the ideal, and this becomes problematic especially when first-

time mothers compare themselves to those ideals (Pempek et al., 2009). Thus, since motherhood is considered to be one of the most stressful and life changing events in a woman's life (Milgrom et al., 2008), mothers may experience an increase in their likelihood of engaging in social comparisons on social media, especially first-time mothers who are the most active internet users (Plantin & Daneback, 2009), and this may negatively impact their mental health.

### **Social Support**

According to Cobb (1976), individual's experience social support by adopting the belief that they are valued, loved and belong to a social network. Evidence also suggests that social support is of paramount importance as it boosts the physical and mental health of individuals in the general population, including women who are in the transition phase to motherhood (Leahy-Warren, McCarthy & Corcoran, 2011). Social support can be divided into two types: received social support and perceived social support. These two types of support differ because one type is quantitative in nature (received social support) and the other type is qualitative in nature (perceived social support). To clarify further, on one hand, received social support is the actual amount of support an individual receives from family, friends and other sources (Kef, 1997). On the other hand, perceived social support represents the social support an individual perceives as being available, in terms of others being present in their lives and satisfying their needs (Procidano & Heller, 1983).

Having mentioned the difference between the two different types of support that are studied in the literature, it was interesting to examine the association between social

support and the physical and psychological well-being of individuals. Several studies have investigated this association and their results indicated that an increase in social support is significantly linked to a decrease in depressive symptoms (Roh, Burnette, Lee, Lee, Easton, & Lawler, 2015; Chao, 2014; Bouteyre, Maurel, & Bernaud, 2007). Other studies have also supported the buffering effect of social support, as individuals who experience negative life events or stressors were shown to be protected from the negative effects of those stressors when social support was perceived (Wilcox, 1981). Besides that, individuals who experience higher levels of social support are reported to perform better in decision-making and problem-solving activities, as well as adopting an optimistic view (Yildirim, 2006). Social support not only influences the psychological well-being of individuals, but it also significantly impacts physical health. Individuals who experience stressors and are not surrounded with or provided with strong social support tend to suffer from many physical health problems. For example, people who had low social support were more likely to suffer from stress reactivity that is characterized by an increased heart rate (Stansfeld, Fuhrer, Head, Ferrie & Shipley, 1997) and higher blood pressure levels (Uchino, Cacioppo, & KiecoltGlaser, 1996). While social support can influence positive outcomes in many situations, it is interesting to note the individuals with high levels of socially prescribed perfectionism show increased social disconnection, which may also be experienced as a lack of perceived social support, and consequently this can result in an increase in the risk of having depression. Thus, perceived social support was included in the following study as a mediator, and not as an independent variable, in an attempt to

examine whether it explained the link between socially prescribed perfectionism and depression in first-time mothers.

### **Social Support and Perfectionism**

Social support has also been examined in the context of personality traits. More specifically, the interpersonal dimension of perfectionism, or socially prescribed perfectionism has been shown to affect the interpersonal relationships of individuals. Individuals who are socially prescribed perfectionists have a tendency to hide their imperfections, as they hold beliefs that others will only approve of them if they achieve high standards. A study conducted by Sherry et al. (2008) derived its hypothesis from the social disconnection model. They wanted to better understand the mechanism by which perfectionism was linked to depressive symptoms. Their sample included 222 undergraduate psychology students from the University of British Columbia who completed several questionnaires that measured perfectionism, received social support, perceived social support, and depressive symptoms. Results provided support for the positive association between socially prescribed perfectionism and depression. Moreover, socially prescribed perfectionism did not affect the way an individual receives social support; however, it does influence the manner in which individuals feel and perceive social support. In other words, received social support did not mediate the relationship between socially prescribed perfectionism and depression, but perceived social support was supported as a mediator of this relationship (Sherry et al., 2008). An important finding was also that self-oriented perfectionism and other-oriented perfectionism were not

significantly linked to either of the two types of social support, and this finding is in line with Hewitt et al.'s (2003) statement that socially prescribed perfectionism is the only dimension of perfectionism that is associated with social disconnection. This further added to the rationale of using perceived social support as a mediator, but only in relation to socially prescribed perfectionism and its link to depression.

Another recent study by Kumpasoglu (2019) also supported the view of perceived social support as a mediator between socially prescribed perfectionism and depression. This study also included mattering, which is the concept of how an individual perceives that he or she matters or is of importance to other people in his or her surroundings, as a mediator in the relationship between perfectionism and depressive symptoms. The sample consisted of 343 students from the Middle East Technical University. Depression was measured using the Beck Depression Inventory while perfectionism was measured using the Multidimensional Perfectionism Scale and the Perfectionistic Self Presentation Scale. Moreover, the Multidimensional Scale of Perceived Social Support was used to assess perceived social support, and the General Mattering scale was used to measure the extent to which an individual believes that he or she matters to others. Results supported the link between socially prescribed perfectionism and depression, and it was also shown that mattering and social support mediate the relationship between those two variables. In other words, individuals who scored high on socially prescribed perfectionism had a decreased likelihood of perceiving social support and mattering, and this in turn explained the increase in depressive symptoms in those individuals (Kumpasoglu, 2019).

Perceived social support can be experienced from several sources in an individual's life. However, since in the following study the sample included first-time mothers, it was interesting to examine the partner's role in providing this support for mothers. This, of course has to do with whether the mothers are single, divorced, or married. But even when mothers are married and their partners are physically available, it does not always imply that the partner is providing support for the mothers and it also does not mean that mothers always perceive the support they receive from their partners. In other words, since the following study examined perceived social support as a mediator in the PDSM model, it also investigated whether the partner's role was significant in the perceived support the mothers reported. This piece of data was reported at the end of the Multidimensional scale of perceived social support which asked about the person from whom mothers perceived the social support. A study by Stapleton et al. (2012) found that mothers who report higher perceived social support from their partners in mid-pregnancy experienced lower levels of emotional distress postpartum. Moreover, the study also reported that having a high-quality partner support relationship during pregnancy influences the mother's well-being positively, as well as the infant's well-being. This might have also implied that perceiving partner support during the transition to motherhood could have also boosted maternal well-being; consequently, the partner's support was also reported if available under the general construct of perceived social support.

### **Perceived Social Support and Social Comparison**

Perceived social support and social comparison are theoretically two different constructs; however, both have been extensively examined in their relationship to depression. Moreover, these two constructs have also been studied in the context of social networking sites. For example, a study was conducted to assess the mediating role of perceived social support in the relationship between social support seeking on Facebook and depression. Results indicated that individuals who seek social support on Facebook and perceive emotional support from others tend to show a decrease in depressive symptoms. However, when individuals seek social support, but do not perceive the presence of such support, this tends to deteriorate their well-being and negatively impact the depressive symptoms. In other words, this results in higher depressive symptoms among those individuals (Frison & Eggermont, 2015). Social comparison has also become the focus of studies that have examined this construct in the context of social networking sites. Research has shown that individuals who scored high on the social comparison orientation scale were more likely to engage in Facebook use and were consequently more negatively affected when engaging in social comparisons on Facebook (Vogel et al., 2015). In addition, Buunk and Gibbons (2007) have also found that individuals who obtained higher scores on social comparison orientation showed greater uncertainty towards themselves. This uncertainty prompts those individuals to use Facebook and other social networking sites as a platform for comparing themselves to others.

The majority of studies have examined social comparison and social support separately, and only a few studies have examined the relationship between these two constructs. A study by Jang et al. (2016) examined the relationship between Facebook use,

social comparison orientation, perceived social support, and mental health. They found that an increase in social comparison orientation is correlated with a decrease in mental health. Besides that, perceived social support was supported in having a positive association with mental health. With respect to the relationship between social comparison orientation and perceived social support, the researchers did not support the hypothesis that those two constructs are related. In other words, perceived social support and social comparison orientation were not significantly linked (Jang et al., 2016). This further supported the assertion that social comparison and perceived social support are different.

Although Jang et al. (2016) found that social comparison orientation and perceived social support are not associated, both of these variables have been supported as being mediators in the relationship between perfectionism and depression. Padoa, Berle, and Roberts (2018) examined the relationship between perfectionism and mental health (anxiety, stress, and depression) in a sample of mothers in Australia. Results indicated that self-oriented parenting perfectionism was associated with higher depressive and anxiety symptoms, and that this relationship was mediated by social comparison on social networking sites. To clarify further, mothers who imposed unrealistically high standards on themselves with respect to their parenting were more likely to use social networking sites to compare themselves to other mothers, and this social comparison made them more likely to develop depressive and anxiety symptoms (Padoa, Berle, & Roberts, 2018). It is important to note that societal-prescribed perfectionism was also related to depression, but no mediation effect of social comparison was supported in this relationship. Another study by Kumpasoglu (2019) found socially prescribed perfectionism is associated with an

increase in depression. To explain this relationship, they examined the mediating roles of perceived social support and mattering in this association. Results showed that perceived social support mediated the link between socially prescribed perfectionism and depression, which further supports the perfectionism social disconnection model that explains the link between perfectionism and depression.

### **Aim of the Study**

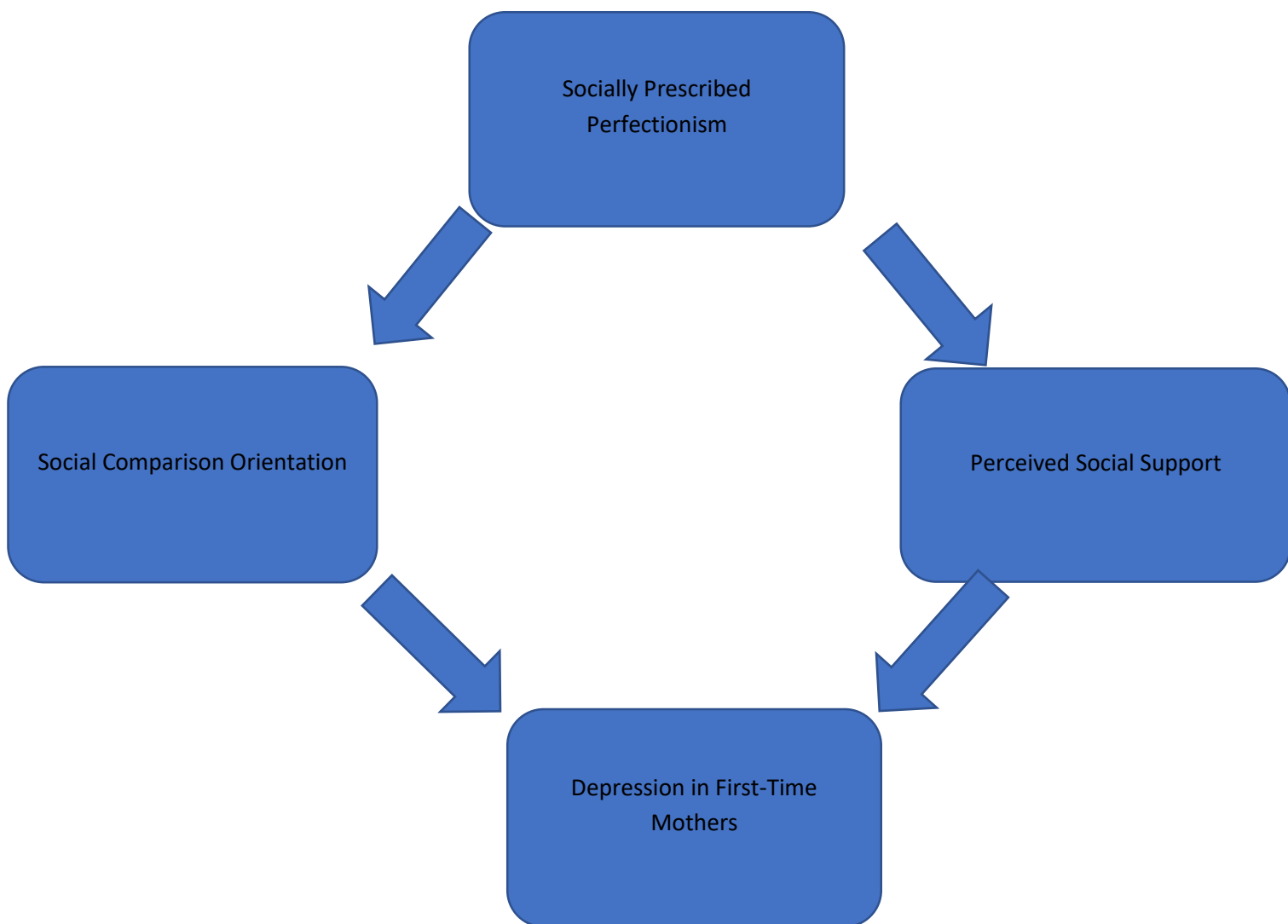
The aim of the following study was to expand on the Perfectionism Social Disconnection Model by examining the mediating roles of both perceived social support and social comparison orientation on social media in the relationship between socially prescribed perfectionism and depression. Only a few studies have examined the mediating role of social comparison orientation. More specifically, there are no available studies that have investigated the mediating roles of the two variables together, namely, perceived social support and social comparison orientation. The sample included first-time mothers because the perfectionism social disconnection model has not been applied on this population before, and hence the mechanism, explaining the link between socially prescribed perfectionism and depression in first-time mothers, was examined.

### **Hypotheses**

1. Socially prescribed perfectionism, as measured by the subscale of the Multidimensional Perfectionism Scale, predicts depression, as measured by the Beck-Depression Inventory 2<sup>nd</sup> Edition (BDI-II). An increase in socially prescribed perfectionism predicts an increase in depression.

2. Social Comparison Orientation, as measured by the Iowa-Netherlands Social Comparison Orientation Measure, predicts depression, as measured by the Beck-Depression Inventory 2<sup>nd</sup> edition. An increase in social comparison orientation predicts an increase in depression.
3. Perceived social support, as measured by the Multidimensional Scale of Perceived Social Support, inversely predicts depression, as measured by the BDI-II. A decrease in perceived social support predicts an increase in depression.
4. Social Comparison Orientation, as measured by the Iowa-Netherlands Social Comparison Orientation Measure, mediates the relationship between socially prescribed perfectionism, as measured by the subscale of the Multidimensional Perfectionism Scale and depression, as measured by the BDI-II. An increase in socially prescribed perfectionism leads to an increase in social comparison orientation, which eventually leads to an increase in depression.
5. Perceived social support, as measured by the Multidimensional Scale of Perceived Social Support, mediates the relationship between socially prescribed perfectionism, as measured by the subscale of the Multidimensional Perfectionism Scale, and depression, as measured by the BDI-II. An increase in socially prescribed perfectionism leads to a decrease in perceived social support, which eventually results in an increase in depression.

Figure 1: PDSM model expanded in the current study



## Chapter 2

### Methods

#### Participants

The sample of the following study consisted of 130 participants. Using Kline's (2005) recommendations on calculating sample size for a path analysis, the model used in the following study included four variances (1 variance for each variable), 4 regression paths (direct effects), 2 co-variances, and 3 error variances (variances on the dependent variables only). After adding up all the variances, co-variances, error variances and regression paths, the sum was multiplied by 10. Thus, the sample size in the following study was calculated by multiplying 13 by 10. Moreover, the sample in the following study included only First-time mothers. However, only 118 mothers were included in the sample because 14 mothers did not meet the inclusion criteria (they were not first-time mothers). Although the definition of first-time mothers includes pregnant women, the following study comprised solely of women who had one child only under the age of four years. Pregnant women had not yet experienced the caregiving role and therefore, not having experienced taking care of an infant, would have made it difficult for them to compare their experiences of caring for and raising a child, to other mothers. Thus, all participants taking part in the following study were first-time mothers who had one child who is at most 4 years old. A study by Mcleish and Redshaw (2017) showed that first time mothers are most prone to developing depressive symptoms in the first year after having delivered their babies. The sampling method employed was purposive sampling, as the participants

were recruited online through Survey Monkey, by only asking mother who filled the inclusion criteria to participate in the online survey.

## Measures

The current study examined the relationship between socially prescribed perfectionism (the independent variable) and the mental health of first-time mothers (operationalized by depression), as mediated by social comparison on social media and perceived social support. Specific instruments were used to measure each of the aforementioned variables in the study. The instruments that are used in the following research study included a demographic form, the subscale of the Multidimensional Perfectionism Scale that measures socially prescribed perfectionism (Hewitt & Flett, 1991), the Iowa-Netherlands Comparison Orientation Measure (Gibbons & Buunk, 1999), the Beck Depression Inventory-II (Beck, Steer, & Brown, 1996), and the Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet, & Farley, 1988). The reliability and validity of each instrument will be discussed, along with previous studies that have used those instruments and the corresponding internal consistency measures (Cronbach's alpha) found in those studies.

**The Multidimensional Perfectionism Scale.** Socially Prescribed Perfectionism in first-time mothers was measured using the subscale of the Multidimensional Perfectionism scale (MPS) [appendix], which includes the items that measure socially prescribed perfectionism. A study that initially examined the psychometric properties of the MPS found that it has adequate internal consistency, as the Cronbach's alpha was 0.88, 0.74. and

0.81 for self-oriented, other-oriented, and socially prescribed perfectionism correspondingly (Hewitt and Flett, 1991). This study also provided initial validity evidence for the MPS scale, as perfectionism was strongly associated with clinician ratings. This association supported the validity of the MPS (Hewitt & Flett, 1991). A more recent study has also used the Multidimensional Perfectionism scale in order to measure perfectionism in women during pregnancy. It showed that the MPS has good internal reliability (Cronbach's  $\alpha = 0.91$ ) (and 0.96 for the sample used in the study) (Wittkowski, Garrett, Cooper, & Wieck, 2017). Moreover, moderate associations existed between the concern over mistakes subscale and the doubts about actions subscale and the Edinburgh Postnatal Depression Scale (EPDS) ( $r = 0.34$  and  $r = 0.31$  respectively) (Mazzeo et al., 2006). It is very important to note that the MPS has been cross culturally applied to a Lebanese sample of students, with the intention of studying predictors of self-handicapping in both Lebanese and British students, but the study did not report any reliability or validity estimates of the MPS when administered to a Lebanese sample (Pulford, Johnson, & Awaida, 2005). Other scales have also been used to measure perfectionism, such as the Big Three Perfectionism Scale (BTPS). However, the following study employed the MPS because the MPS measures self-oriented perfectionism, other-oriented perfectionism, and socially prescribed perfectionism; the BTPS measures three other types of perfectionism which include rigid perfectionism, self-critical perfectionism, and narcissistic perfectionism (Smith, Saklofske, Stoeber, & Sherry, 2016). This research study investigated perfectionism in the context of the Perfectionism Social Disconnection Model, which mainly addresses socially prescribed perfectionism. Thus, the subscale that was used from the MPS is the preferred scale for

measuring socially prescribed perfectionism because the BTPS does not measure the higher-order constructs that the following research was interested in studying.

**The Multidimensional Scale of Perceived Social Support.** The first mediator variable in the study was perceived social support. This variable was measured using the Multidimensional scale of Perceived Social Support (MSPSS). It contains 12 items that measure an individual's perceived social support from three sources: Family, friends and significant others. A question that asked which person in particular provided this support is present at the end of this questionnaire, and that helped in reporting whether the husband was part of the mother's support system. A recent study used the MSPSS to measure social support in mothers, and it found an excellent internal consistency (Cronbach's  $\alpha = 0.94$ ) for this scale (Padoa, Berle, & Roberts, 2018). Previous studies also attempted to assess the psychometric properties of this scale and they found it had a good to excellent internal reliability that ranged from 0.84 to 0.92 ( Zimet, Powell, Farley, Werkman, & Berkoff, 1990). A study by Merhi & Kazarian (2012) attempted to validate the Arabic version of the MSPSS. Their study showed that the Arabic translation of the MSPSS had a high internal consistency (Cronbach's  $\alpha = 0.87$ ). Moreover, the internal consistencies of each of Family, Friends, and Significant Others sources of social support were also high: 0.82, 0.86, and 0.85 correspondingly. In addition, the global scores on the MSPSS were correlated with Family scores, friends scores, and significant others scores. The correlations correspondingly were as follows:  $r = 0.67$ ,  $r = 0.81$ ,  $r = 0.74$ . The three subscales were also correlated with each other. This indicated the applicability and effective use of this scale as a measure of social support in the Lebanese population. Other

scales have been used to measure social support as well such as the Berlin Social Support Scale (BSSS). The BSSS has 6 subscales that measure different dimensions of social support which include: perceived social support, received support, protective buffering, support seeking, need for support, and actually provided support (Schulz & Schwarzer, 2003). However, it is important to note that the perceived social support subscale of the BSSS is measured using 8 items and has an internal consistency (Cronbach's  $\alpha=0.83$ ) which is much lower than the internal consistency of the MSPSS (Cronbach's  $\alpha=0.94$ ). Moreover, the Arabic translation of the MSPSS also showed an internal consistency (Cronbach's  $\alpha=0.87$ ) higher than that of the BSSS.

**The Iowa-Netherlands Comparison Orientation Measure.** After measuring socially prescribed perfectionism and perceived social support in first-time mothers, social comparison orientation on social media, of first-time mothers, was measured using the Iowa-Netherlands Comparison Orientation Measure. This scale includes 11 items that have to be answered on a Likert scale ranging from 1=I disagree strongly to 5=I agree strongly. The scale's psychometric properties have been assessed by Gibbons & Buunk (1999), and results indicate that the scale is reliable (Cronbach's  $\alpha=0.83$ ) and valid (the scale was significantly correlated with other theoretically related measures). Moreover, the study also instructed the first-time mothers to answer questions on this scale based on their engagement in social comparisons when using Facebook, Instagram, or other social networking sites. A recent study implemented the use of this scale and adapted it to social comparison engagement on social media, and they found that the Iowa-Netherlands Comparison Orientation Measure had an internal consistency of 0.88 in their study (Padoa,

Berle, & Roberts, 2018). These findings supported the reliability and validity of this scale. However, to date, there was no use of this scale in Lebanon. The Iowa-Netherlands Comparison Orientation Measure (INCOM) has been the most relevant and widespread scale used to measure social comparison orientation; other studies have used certain subscales that have been adapted from the INCOM, but as stated previously there are no other scales used to measure social comparison orientation. It is important to note that the Social Comparison Motives Scale is another important scale used to measure the motives behind engaging in social comparisons (Tigges, 2009), but this scale is of no relevance in this study because it aims to measure the tendency to engage in social comparison and not the motives behind social comparisons.

**The Beck Depression Inventory-II.** Depression, the outcome variable, was measured using the Beck-Depression Inventory-II. The BDI-II is a self-report measurement of depression which includes 21 items used to measure the severity of depression in adolescents and adults ages 13 years and older. The items are rated on a 4-point Likert scale that ranges from 0 to 3. The internal consistency of the following scale was calculated and it was found to have a Cronbach's alpha of 0.92 for outpatients and 0.93 for students. Other studies have also examined the internal consistency of the BDI-II and they found reliability estimated that ranged from 0.89 to 0.93 (Steer & Clark, 1997; Whisman, Perez & Ramel, 2000; Wiebe & Penley, 2005). The BDI-II also demonstrated good test-retest reliability with an average correlation of 0.93. Other psychometric properties of the BDI-II were examined and those included convergent and discriminant validity. When the BDI-II was compared to the Beck Depression Inventory First Edition

Revised, a high correlation was found between the scores on the BDI-II and the BDI-IA using different samples of outpatients. The correlation between the scores on the two scales was 0.93, which indicated that both scales resulted in a similar pattern of scores for measuring depression. The BDI-II also showed a higher correlation with the Revised Hamilton Psychiatric Rating Scale for Depression (0.71) than the Revised Hamilton Anxiety Rating Scale (0.47). In other words, it has good discriminant validity between depression and anxiety because the BDI-II was more strongly correlated with other measures of depression and more weakly correlated with scales that measure constructs other than depression, such as anxiety in this case (Arbisi, 2001). The BDI-II has been translated to Arabic and it has been shown that the Arabic version of the BDI-II has good reliability and validity when used in an Arabic context (the alpha coefficients ranged from 0.82 to 0.93) (Alansari, 2006). The use of this scale has also been validated with a sample of civilians from South Lebanon, as the BDI-II had a high internal consistency with Cronbach's alpha being 0.84 and 0.88 for both Lebanese samples in the study by Farhood and Dimassi (2015). Other instruments are also available for measuring depression such as the Hamilton Depression Scale. Although the Hamilton Depression Scale has been considered the "gold standard" for measuring depression, the BDI-II has surpassed the gold standard in several areas. The BDI-II can be administered easily and does not require an interviewing process as is the case in the HDS. Moreover, the BDI-II is intended to measure the severity of depressive symptoms in the past two weeks, whereas the HDS does not specify a range or interval for participants when asking them about depressive

symptoms. Most importantly, the BDI-II has a higher reliability (internal consistency with Cronbach's  $\alpha=0.95$ ) than the HDS (Cronbach's  $\alpha=0.79$  to  $0.81$ ) (Essays, 2018).

**Demographic Form.** This form was intended to gather information about the demographics of participants, which include age, marital status, educational level, and working status. This form was placed at the beginning of the questionnaire.

### **The Procedure**

The following study was a quantitative cross-sectional survey design, in which a questionnaire was administered to participants over a limited period of time. The research proposal and the questionnaire were submitted to the Institutional Review Board (Ethics Committee), in the faculty of Social and Behavioral Sciences at Haigazian University. After receiving approval from the Institutional Review Board, the questionnaire was used for data collection. A consent form was placed at the beginning of the questionnaire, in which the participants were required to mark their consent on the form and indicate their voluntary participation in the study. The questionnaire included a cover letter stating the purpose of the study, the reason the participants were chosen to take part in the study, and information about the researcher conducting the study. The questionnaire also included all the aforementioned scales with a demographic information form at the beginning of the questionnaire. The questionnaire was administered in English and Arabic, as all of the aforementioned scales have been previously translated to Arabic, except for the Iowa Netherlands Comparison Orientation Measure (INCOM) and the Multidimensional Perfectionism Scale. The INCOM and the MPS were translated to Arabic to ensure that the

items did not change in meaning, and that the reliability and validity of the scales were not affected. The translation procedure included several stages, with the first stage being a forward translation. Two individuals who were bilingual (English and Arabic) but whose mother language is Arabic translated the INCOM from English to Arabic and produced a written report summarizing certain points that indicated the rationale behind their choices of translation. It should be noted that one of the translators had adequate knowledge of the scale from a clinical perspective, whereas the other translator was someone who does not have knowledge about the scale from a clinical perspective or otherwise. The second stage of translation involved a synthesis process, whereby the two translations were combined and a written report carefully summarized the synthesis process. Then, an expert committee that included professionals reviewed the 2 different translations and the combined translations and then came up with the pre-final version of the translated questionnaire. The final step was the pilot testing of the questionnaire with a small group of first-time mothers. This pilot testing was done with approximately 50 mothers whereby their responses about what they thought was meant by each item of the questionnaire were recorded. This pilot testing was done to ensure that the meaning of items and the adapted version as a whole retained its equivalence in a similar situation (Beaton, Bombardier, Guillemin, & Ferraz, 2000). After conducting the first part of the pilot test, cognitive interviewing took place which ensured that all items were understood well. Reliability testing was performed on the pilot study (50 questionnaires) and the four scales were found to be reliable (with Cronbach's alpha > .70). Once the pilot study was completed, data collection began, and questionnaires were distributed online through Survey Monkey. A

screening question was included after the demographics form to ensure that the woman completing the questionnaire was a first-time mother with only one child who is at most 4 years old. Only after indicating that, their responses were included in the present study. The ordering of the scales on the questionnaire was counterbalanced so that any order effects and carry over effects were eliminated. It is also important to note that participants were informed that their participation was to remain anonymous. Besides that, participants were also informed that the information gathered using the questionnaires was kept confidential and was only used for research purposes of the following study. The questionnaire took approximately 20 minutes to complete.

The collected data were analyzed using the Statistical Package for Social Sciences (SPSS), and, in particular, PROCESS, which is an add-on for SPSS. Path analysis was used to examine whether the link between socially prescribed perfectionism and depression was mediated by social comparison orientation and perceived social support. Descriptive statistics and the correlations between the different variables were calculated. To determine the presence of significant correlations and mediation analyses, one model using path analysis through PROCESS was implemented to do all the aforementioned analyses.

## Chapter 3

### Results

#### I. Preliminary Analysis

Before conducting the main analysis of the present study, a preliminary analysis was conducted. The preliminary analysis aimed to examine the presence of any missing values, to check for the reliability of the measures used, and to check for any univariate or multivariate outliers. Normality analysis was also included in the preliminary analysis, as it had implications on how to proceed with the main analysis.

##### a. Missing Value Analysis.

After data were collected from participants online through Survey Monkey, results showed that the sample included 132 participants. However, the data from 14 mothers were excluded because they were not first-time mothers. The missing value analysis was therefore conducted on the 118 remaining participants. The following analysis revealed that all of the variables included in the present study had less than 5% missing values. To clarify, this means that none of the variables included in the present study had any significant missing values. Moreover, the Little's MCAR test was also run, as it is important to check whether the values were missing completely at random or whether some pattern had influenced the missing value analysis. Results showed that  $X^2(384) = 420.45, p = .097$ . Since  $p = 0.097$  which is greater than 0.05, the results of the Little's MCAR test were not significant. In other words, the data of the variables was missing completely at random (Tabbchnick & Fidel, 2007).

### b. Reliability of Scales.

Reliability analyses were also conducted to check for the reliability of the scales that were used in the following study. The scale that measured socially prescribed perfectionism, which is a subscale of the Multidimensional Perfectionism Scale, was found to have good reliability with a Cronbach's alpha of 0.71. The Multidimensional Scale of Perceived Social Support was found to have very good reliability with a Cronbach's alpha of 0.86. In addition, the Iowa-Netherlands Social Comparison Orientation Measure that measured social comparison orientation on social media also revealed very good reliability. The Cronbach's alpha was 0.80 which indicates very good reliability of this scale. And finally, the Beck Depression Inventory 2<sup>nd</sup> edition had very good reliability as well, with a Cronbach's alpha = 0.89 (Table 1).

*Table 1*

*Reliability Analysis*

	Cronbach's Alpha	N of items
Socially Prescribed Perfectionism	0.71	15
Perceived Social Support	0.86	12
Iowa-Netherlands Social Comparison Orientation Measure	0.80	11
Beck Depression Inventory 2 <sup>nd</sup> edition	0.89	21

### **c. Univariate Outliers.**

Analyses were also conducted by using z-scores to examine whether each of the variables in the present study had any univariate outliers. The predictor variable of socially prescribed perfectionism, social comparison orientation on social media and depression did not have any univariate outliers. No univariate outliers were found on the aforementioned variables because all of the z-scores were between -3.29 and +3.29. However, only one univariate outlier was found on perceived social support, one of the mediators, with a z-score = -3.43 and case number 27. This case number 27 was not excluded from the analysis as it was not found to be a multivariate outlier (see section Assumptions of Path Analysis).

### **d. Normality.**

Since the sample size in the present study was 118 participants (between 100 and 300), the Kolmogorov-Smirnov test was used to test for the normality of the variables. In this test, if  $p < 0.05$ , which shows that the test is significant, then normality was considered not to have been met. The K-S test revealed that for socially prescribed perfectionism normality was not met, as  $D(118) = 0.11, p = .001$ . Besides that, normality was also not met for perceived social support as  $D(118) = 0.10, p = .004$ . However, normality was met for the second mediator variable, social comparison orientation on social media. The Kolmogorov-Smirnov test showed that for social comparison orientation,  $D(118) = 0.07, p = .200$ . And finally, regarding the variable of depression, which is the outcome variable, normality was not met because the K-S test revealed that  $D(118) = 0.13, p < .001$ .

## II. Sample Descriptives

Of the 132 survey respondents, 14 women responded that they are not first-time mothers, and so they were excluded from the study. The final sample included in the following study therefore consisted of 118 first-time Lebanese mothers. Regarding age, 42 of the first-time mothers were between the ages of 18 and 25 (35.9%), 64 of them were between the ages of 26 and 33 (54.7%), and the remaining 11 first-time mothers were between the ages of 34 and 41 (9.4%). Moreover, the majority of the first-time mothers who participated were married ( $n=115$ , 97.5%), while the remaining 3(2.5%) mothers were widowed. With respect to employment status, 43 (36.4%) of mothers were not employed and not looking for work, 23 (19.5%) of mothers were not employed but looking for work, 21 (17.8%) were employed and working part-time jobs, and finally 31 (26.3%) were employed first-time mothers who were working full-time jobs. In addition, the majority of first-time mothers in the sample had graduated from college ( $n=50$ , 42.4%). The remaining first-time mothers were more diverse on educational status, as 8 (6.6%) had reported that they had reached an educational level between 7<sup>th</sup> grade and 11<sup>th</sup> grade, 6 (5.1%) reported they had graduated from high school, 30 (25.5%) engaged in some college years (1 to 3 years of college) but had not graduated from college, 15 (12.7%) had engaged in some graduate school, and 9 (7.6%) had completed graduate school. Finally, in the multi-dimensional scale of perceived social support, the majority of mothers reported that the special person from whom they receive social support is their husband (61%). 16.9% of mothers regards their siblings as special people, 11% perceived their mothers and 1.7%

their fathers as special person, 11% friends, 1.7% cousin while 3.4% reported that no special person.

Table 2

*Sample Descriptives*

		N	%
Age	18-25	42	35.9%
	26-33	64	54.7%
	34-41	11	9.4%
Marital Status	Married	115	97.5%
	Widowed	3	2.5%
Employment Status	Not Employed and Not Looking for Job	43	36.4%
	Not Employed but Looking for Job	23	19.5%
	Employed- Part Time Basis	21	17.8%
	Employed- Full time Basis	31	26.3%
Education	7 <sup>th</sup> Grade and 11 <sup>st</sup> Grade	8	6.6%
	Graduated from High School	6	5.1%
	Engaged in College years (1 to 3 years)	30	25.5%
	Graduated from College	50	42.4%
	Engaged in Graduate Studies	15	12.7%
	Completed Graduate School	9	7.6%
Special Person	Husband	72	61.0%

Mother	13	11.0%
Father	2	1.7%
Siblings	20	16.9%
Cousin	2	1.7%
Friends	13	11.0%
No one	4	3.4%

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### III. Scale Descriptives.

In table 5, the means and standard deviations of the scales are provided. With respect to the outcome variable, depression, it is evident that on average the participants were low on depressive symptoms ( $M = 0.82$ ,  $SD = 0.50$ ). Regarding the scale of perceived social support, which measured one of the mediator variables, it seems that on average the participants had high levels of perceived social support ( $M = 5.42$ ,  $SD = 0.99$ ). Besides that, participants were, on average, low on social comparison orientation on social media ( $M = 2.80$ ,  $SD = 0.64$ ). Finally, concerning the socially prescribed perfectionism scale, which measured the predictor variable, participants were more or less low on the personality trait of socially prescribed perfectionism ( $M = 3.79$ ,  $SD = 1.21$ ).

Table 3

*Scale Descriptives*

Demographics	N	Minimum	Maximum	Mean	Standard Deviation
Socially Prescribed Perfectionism	118	1.00	6.60	3.79	1.21

Perceived Social Support	118	2.00	7.00	5.42	0.99
Social Comparison	118	1.00	4.27	2.80	0.64
Depression	118	0.00	2.10	0.82	0.50
Valid N (listwise)	118				

#### IV. Correlations.

A Spearman's Rho (*one-tailed*) test was conducted to examine the correlation between the predictor variable, socially prescribed perfectionism, the two mediators which are social comparison orientation on social media and perceived social support, and the outcome variable which is depression. A Spearman's Rho (*one-tailed*) test was used because normality was not met for three of the variables: socially prescribed perfectionism, perceived social support, and depression. However, normality was met only for social comparison orientation on social media. Since normality was not met for three of the above mentioned variables, and since the present study entitled the use of confirmatory hypothesis, Spearman's Rho (*one-tailed*) test was used instead of using Pearson's correlation test.

The Spearman's Rho correlation test revealed that there was a significant negative small to medium correlation between socially prescribed perfectionism and perceived social support:  $r_s = -.18, p = .025$  (*one-tailed*). This indicated that participants with higher levels of socially prescribed perfectionism tended to have lower levels of perceived social support. Moreover, the Spearman's correlation test also revealed that there was a significant positive small to medium correlation between socially prescribed perfectionism and social comparison orientation on social media:  $r_s = .25, p = .003$  (*one-tailed*). This

suggested that individuals with higher levels of socially prescribed perfectionism tended to engage more in social comparisons on social media. A significant positive medium to large correlation was also found between socially prescribed perfectionism and depression:  $r_s = .43, p < .001$  (*one-tailed*); indicating that those who are high on socially prescribed perfectionism were more likely to develop depressive symptoms.

The Spearman's Rho correlation test also revealed that there was a non-significant correlation between perceived social support and social comparison orientation on social media:  $r_s = -.11, p = 0.130$  (*one-tailed*). However, the Spearman's correlation test revealed a significant negative medium to large correlation between perceived social support and depression:  $r_s = -.38, p < .001$  (*one-tailed*). This shows that individuals who experienced more perceived social support tended to have lower levels of depression. And finally, a significant positive small to medium correlation was revealed between social comparison orientation on social media and depression:  $r_s = .27, p = .002$  (*one-tailed*); showing that individuals who engaged more in social comparisons on social media were more likely to develop depressive symptoms.

Table 4

*Pearson's Zero Order Correlation Matrix*

	Perceived Social Support	Social Comparison	Depression
Socially Prescribed Perfectionism	-.18*	.25**	.43***
Perceived Social Support		-.11	-.38***
Social Comparison			.27**

\*. Correlation is significant at the 0.05 level (*one-tailed*).

- \*\* . Correlation is significant at the 0.01 level (one-tailed).  
\*\*\* . Correlation is significant at the 0.001 level (one-tailed).

## **V. Path Analysis**

### **a-Assumptions of the Path Analysis**

Based on the path analysis, four regression analyses were executed.

#### *First Regression: Socially Prescribed Perfectionism Predicting Depression*

For the regression analysis in which socially prescribed perfectionism predicts depression, Mahalanobis distance was used to examine multivariate outliers. The criterion states that any case with Mahalanobis distance  $> 10.828$  is considered to be a multivariate outlier. After the inspection of Mahalanobis distances, it was revealed that there were no cases of multivariate outliers;  $X^2(1) = 5.40, p < .001$ . Moreover, standardized residuals were used to reveal the presence of any outliers in the solution; the criterion being that any case with standardized residual  $> |3.29|$  is considered to be an outlier in the solution. The standardized residuals ranged between -1.79 and 2.63 which revealed that there were no cases of outliers in the solution. Cook's distance was used to see whether there are any influential cases, with the criterion that any case with Cook's distance  $> 1$  is considered to be an influential case. Cook's distances ranged between 0.00 and 0.06 revealing that there were no influential cases. For testing of independence of errors, the Durbin Watson score was examined such that normal scores fall between 1 and 3. In this analysis, Durbin

Watson score was equal to 1.81 indicating that the assumption of independence of errors was met. VIF scores were also examined to test for the assumption of no multicollinearity, such that VIF scores  $< 10$  indicate no multicollinearity. For this analysis, VIF score was less than 10 indicating that the assumption of no-multicollinearity was met. The normality of residuals was inspected using the histogram and P-P plot. The histogram (Figure 1) revealed that the residuals were not normally distributed (positively skewed and leptokurtic) and the P-P plot (Figure 2) showed that the observed cumulative probability of residuals and the expected cumulative probability of residuals did not coincide (forming an S-shape). Thus, the assumption of normality of residuals was not met. Finally, the assumption of homoscedasticity (Figure 3) was tested using the scatterplot (ZRESID versus ZPRED). The assumption of homoscedasticity was not met because the scatterplot revealed that the residuals were not evenly scattered around zero (points are funneling out). Therefore, since the assumptions of normality of residuals and homoscedasticity were not met, the bootstrapping method was implemented in the main data analysis (Field, 2013).

*Figure 1: Histogram Testing the Assumption of Normality of Residuals*

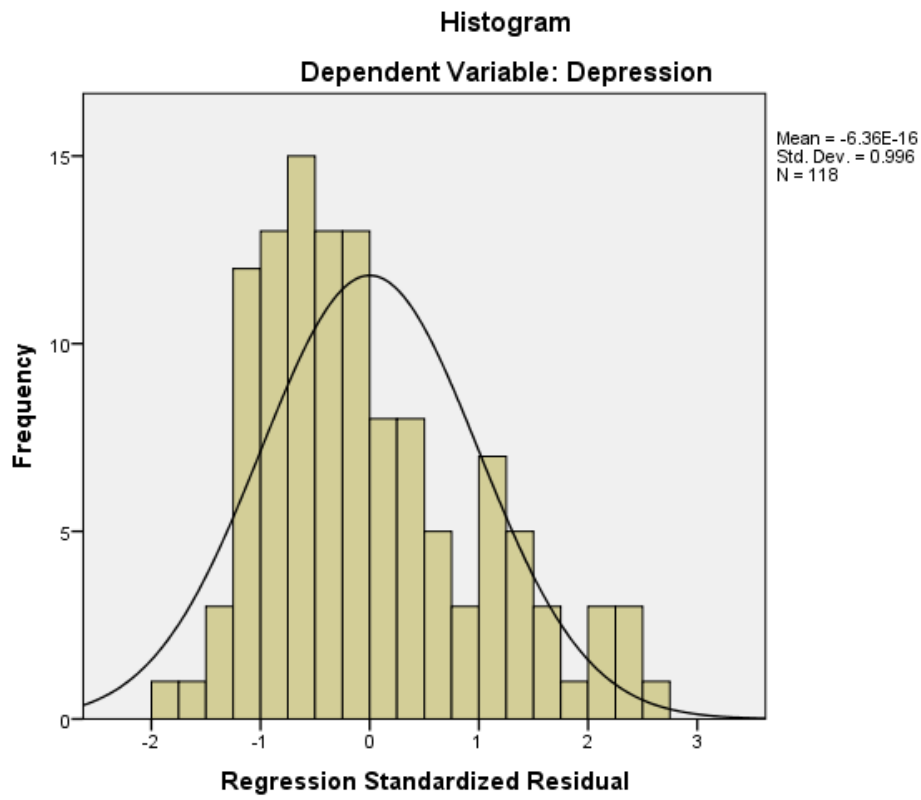


Figure 2: P-P Plot Testing the Assumption of Normality of Residuals

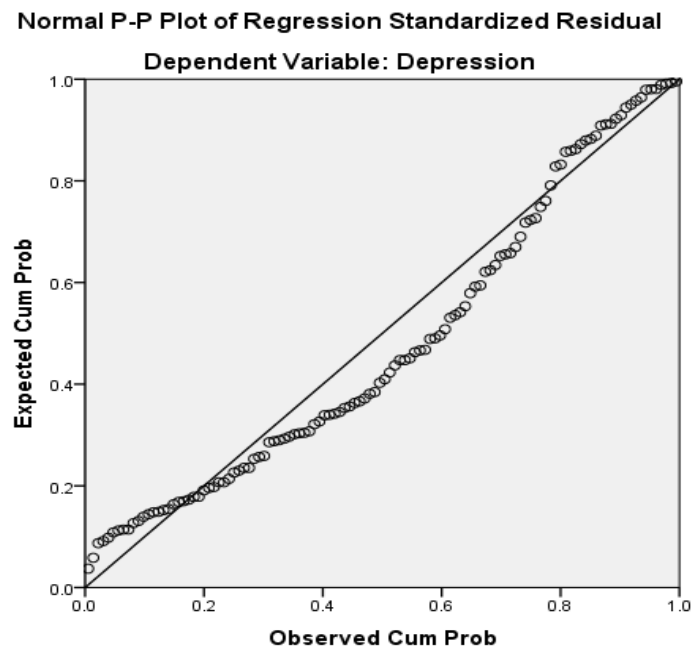
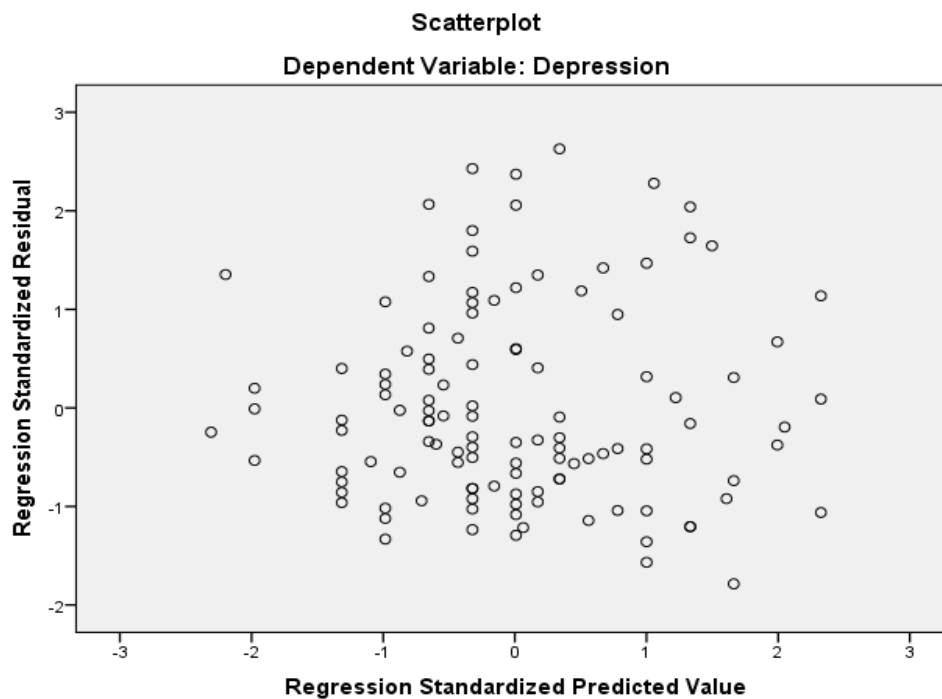


Figure 3: Scatterplot Testing the Assumption of Homoscedasticity



### Second Regression: Socially Prescribed Perfectionism Predicting Social Comparison Orientation on Social Media

For this regression analysis, Mahalanobis distance was used to examine multivariate outliers, whereby the criterion states that any case with Mahalanobis distance  $> 10.828$  is considered to be a multivariate outlier. The inspection of Mahalanobis distances revealed that there were no cases of multivariate outliers;  $X^2(1) = 5.40, p < .001$ . In addition, standardized residuals were used to inspect for any outliers in the solution, with the criterion that any case with standardized residual  $> |3.29|$  is considered to be an outlier in the solution. The standardized residuals ranged between -2.60 and 2.07 revealing

that there were no cases of outliers in the solution. Influential cases were inspected using Cook's Distances with the criterion that any case with Cook's distance  $> 1$  is considered to be an influential case. Cook's distances ranged between 0.00 and 0.15 which showed that there were no influential cases. To test for independence of errors, the Durbin Watson score was used; the criterion for Durbin Watson scores states that normal scores fall between 1 and 3. In this analysis, Durbin Watson score was equal to 1.65 indicating that the assumption of independence of errors was met. Furthermore, the assumption of no multicollinearity was tested using VIF scores with the criterion that VIF scores  $< 10$  indicate no multicollinearity. For this analysis, VIF score was less than 10 indicating that the assumption of no-multicollinearity was met. The normality of residuals was inspected using the histogram and P-P plot. The histogram (Figure 4) revealed that the residuals were normally distributed (no skewness and no kurtosis) and the P-P plot (Figure 5) revealed that the observed cumulative probability of residuals coincided with the expected cumulative probability of normality (not forming an S-shape). As such, the assumption of normality of residuals was met. Finally, the assumption of homoscedasticity (Figure 6) was tested using the scatterplot (ZRESID versus ZPRED). This scatterplot revealed that the residuals were not evenly scattered around zero (points are funneling out), indicating that the assumption of homoscedasticity was not met. Since the assumption of homoscedasticity was not met, the bootstrapping method was implemented in the main data analysis.

Figure 4: Histogram Testing the Assumption of Normality of Residuals

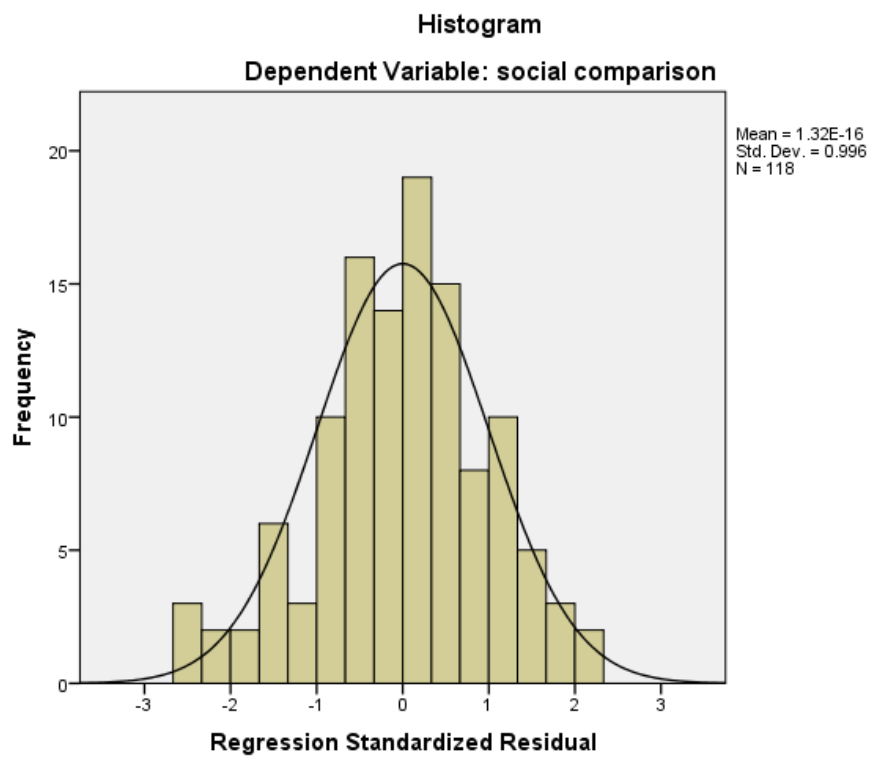


Figure 5: P-P Plot Testing the Assumption of Normality of Residuals

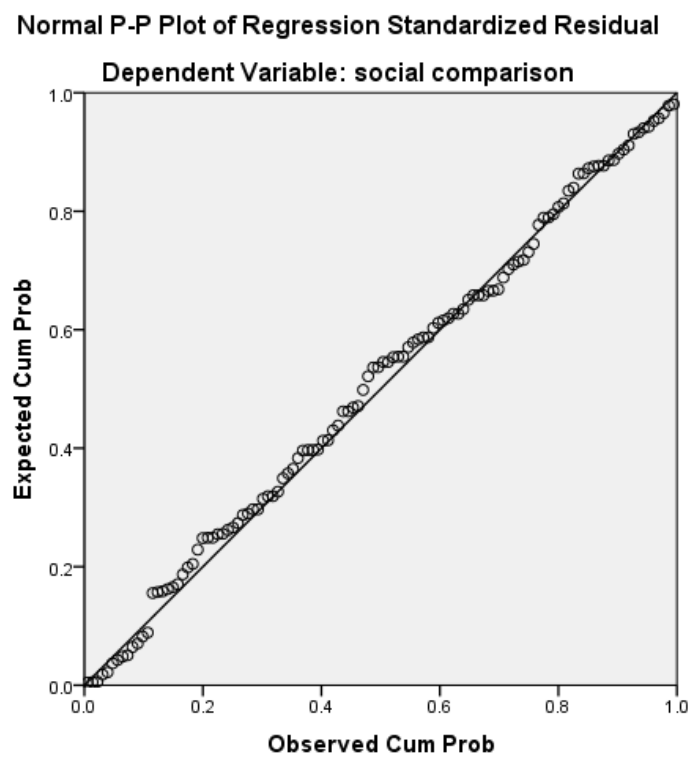
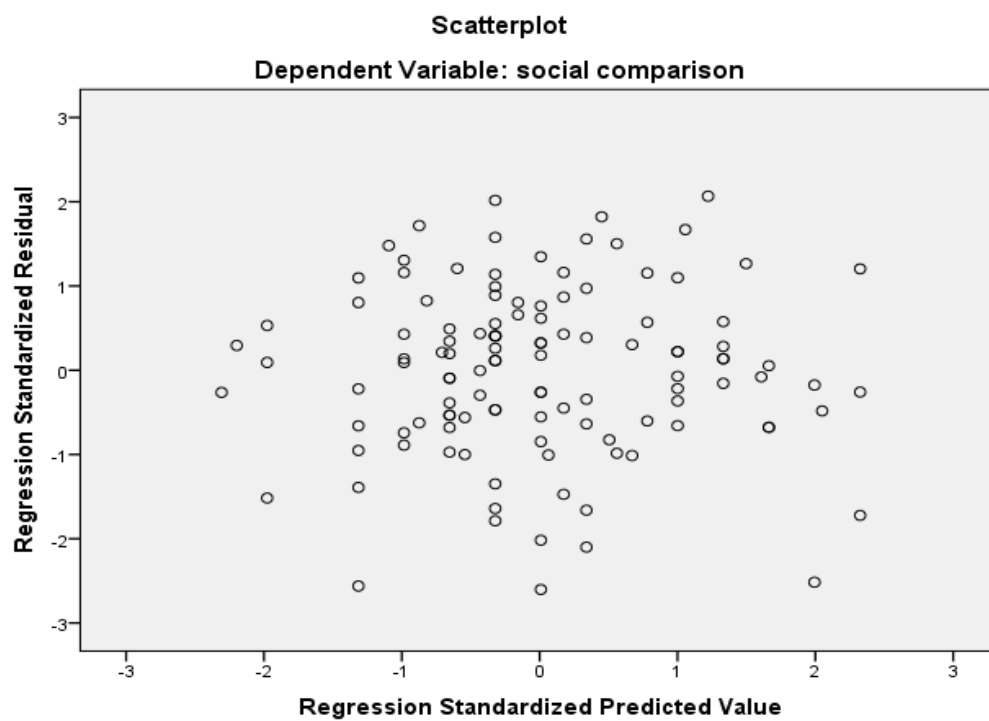


Figure 6: Scatterplot Testing the Assumption of Homoscedasticity



### **Third Regression: Socially Prescribed Perfectionism Predicting Perceived Social Support**

For this regression analysis, Mahalanobis distance was used to examine multivariate outliers, whereby the criterion states that any case with Mahalanobis distance  $> 10.828$  is considered to be a multivariate outlier. The inspection of Mahalanobis distances revealed that there were no cases of multivariate outliers;  $X^2(1) = 5.40, p < .001$ . In addition, standardized residuals were used to examine the presence of any outliers in the solution, such that any case with a standardized residual  $> |3.29|$  is considered to be an outlier in the solution. The standardized residuals ranged between  $-3.37$  and  $1.88$  revealing that there was one case of outliers in the solution (case # 27). Influential cases were inspected using Cook's Distances with the criterion that any case with Cook's distance  $> 1$  is considered to be an influential case. Cook's distances ranged between  $0.00$  and  $0.11$  revealing that there were no influential cases. Since case #27 was found to be an outlier in the solution, but was not found to be an influential case, it was retained in the final model. The Durbin Watson test was used to test for the assumption of independence of errors, with the criterion that normal scores fall between 1 and 3. In this analysis, Durbin Watson score was equal to  $1.54$  indicating that the assumption of independence of errors was met. Furthermore, the assumption of no multicollinearity was tested using VIF scores with the criterion that VIF scores  $< 10$  indicate no multicollinearity. For this analysis, VIF score was less than 10 indicating that the assumption of no-multicollinearity was met. The normality of residuals was inspected using the histogram and P-P plot. The histogram (Figure 7) revealed that the residuals were not normally distributed (negatively skewed)

and the P-P plot (Figure 8) revealed that the cumulative observed probability of residuals did not coincide with the expected cumulative probability of residuals (forming an S-shape). As such, the assumption of normality of residuals was not met. Finally, the assumption of homoscedasticity (Figure 9) was tested using the scatterplot (ZRESID versus ZPRED). This scatterplot revealed that the residuals were not evenly scattered around zero (points are funneling out), indicating that the assumption of homoscedasticity was not met. Therefore, since the assumptions of normality of residuals and homoscedasticity were not met, the bootstrapping method was implemented in the main data analysis.

Figure 7: Histogram Testing the Assumption of Normality of Residuals

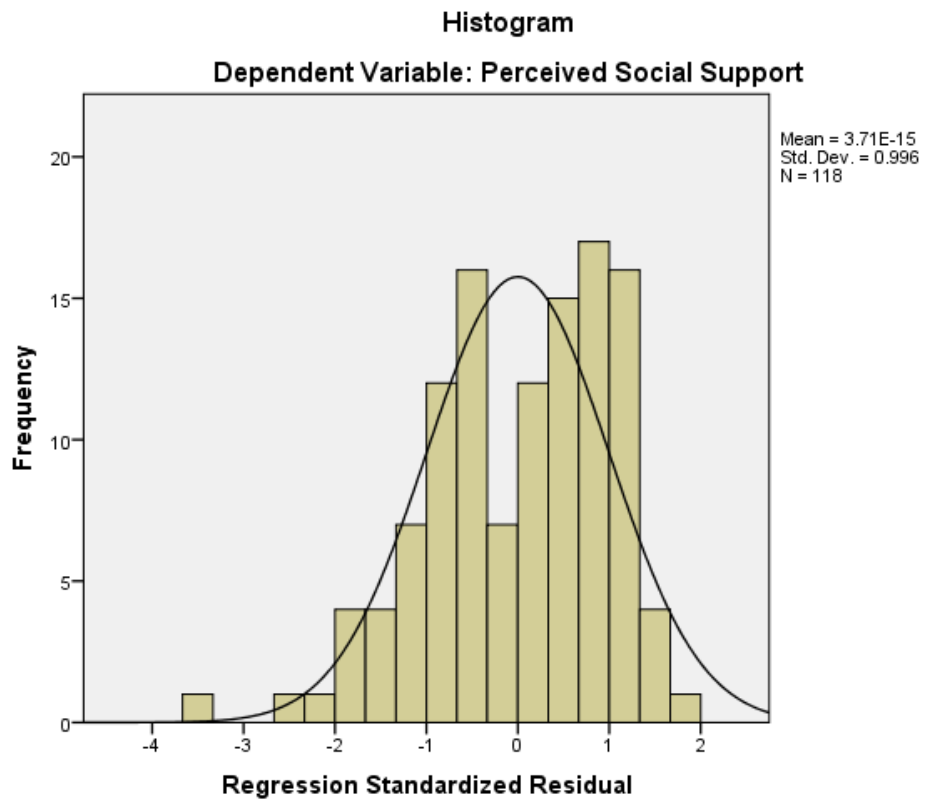


Figure 8: P-P Plot Testing the Assumption of Normality of Residuals

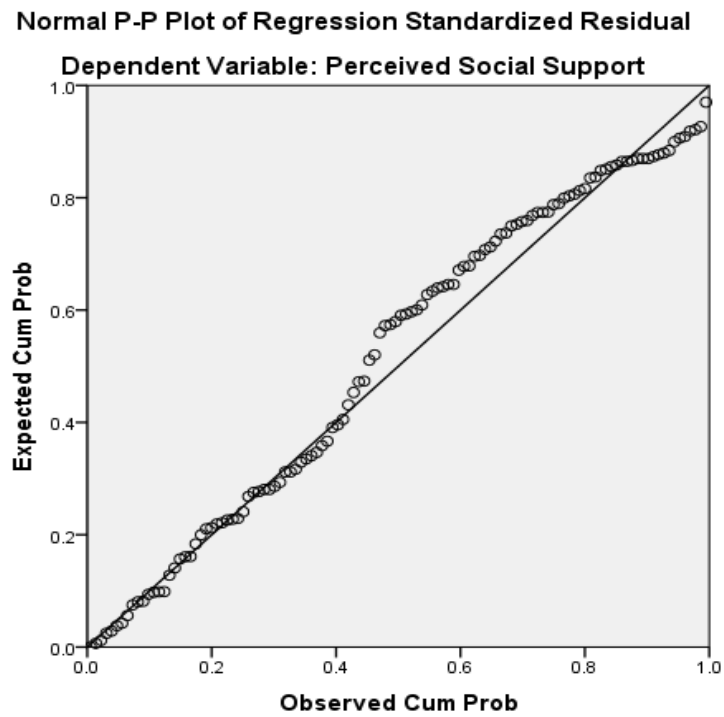
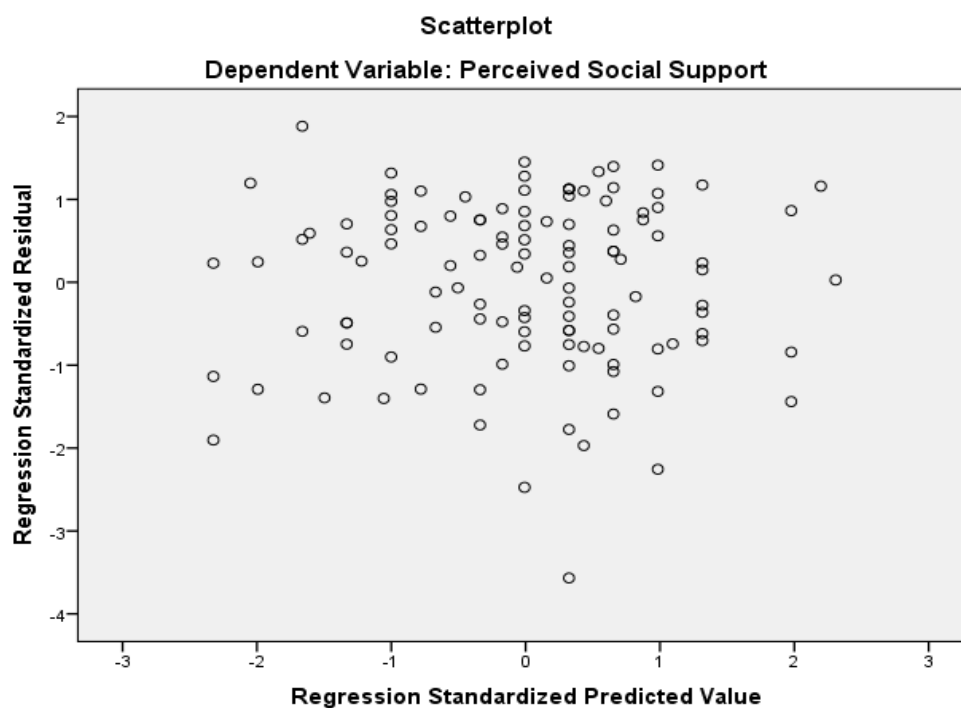


Figure 9: Scatterplot Testing the Assumption of Homoscedasticity



#### Fourth Regression: Socially Prescribed Perfectionism, Perceived Social Support and Social Comparison Predicting Depression

For this regression analysis, Mahalanobis distance was used to examine multivariate outliers, whereby the criterion states that any case with Mahalanobis distance  $> 16.266$  is considered to be a multivariate outlier. The inspection of Mahalanobis distances revealed that there were no cases of multivariate outliers;  $X^2(3) = 13.17, p < .001$ . In addition, standardized residuals were used to inspect for the presence of any outliers in the solution, with the criterion that any case with standardized residual  $> |3.29|$

is considered to be an outlier in the solution. The standardized residuals ranged between -1.89 and 2.70 revealing that there were no cases of outliers in the solution. Cook's distance was used to examine influential cases, with the criterion that any case with Cook's distance  $> 1$  is considered to be an influential case. Cook's distances ranged between 0.00 and 0.08 revealing that there were no influential cases. To test for the Independence of errors, the Durbin Watson score was examined such that normal scores fall between 1 and 3. In this analysis, the Durbin Watson score was equal to 1.69 indicating that the assumption of independence of errors was met. Furthermore, the assumption of no multicollinearity was tested using VIF scores with the criterion that VIF scores  $< 10$  indicate no multicollinearity. For this analysis, VIF scores were less than 10 indicating that the assumption of no-multicollinearity was met. The normality of residuals was inspected using the histogram and P-P plot. The histogram (Figure 10) revealed that the residuals were not normally distributed (positively skewed) and the P-P plot (Figure 11) revealed that the cumulative observed probability of residuals didn't coincide with the cumulative expected probability of normality (forming an S-shape). As such, the assumption of normality of residuals was not met. Finally, the assumption of homoscedasticity (Figure 12) was tested using the scatterplot (ZRESID versus ZPRED). This scatterplot revealed that the residuals were not evenly scattered around zero (points are funneling out), indicating that the assumption of homoscedasticity was not met. Since the assumptions of normality of residuals and homoscedasticity were not met, bootstrapping method was implemented in the main data analysis.

Figure 10: Histogram Testing the Assumption of Normality of Residuals

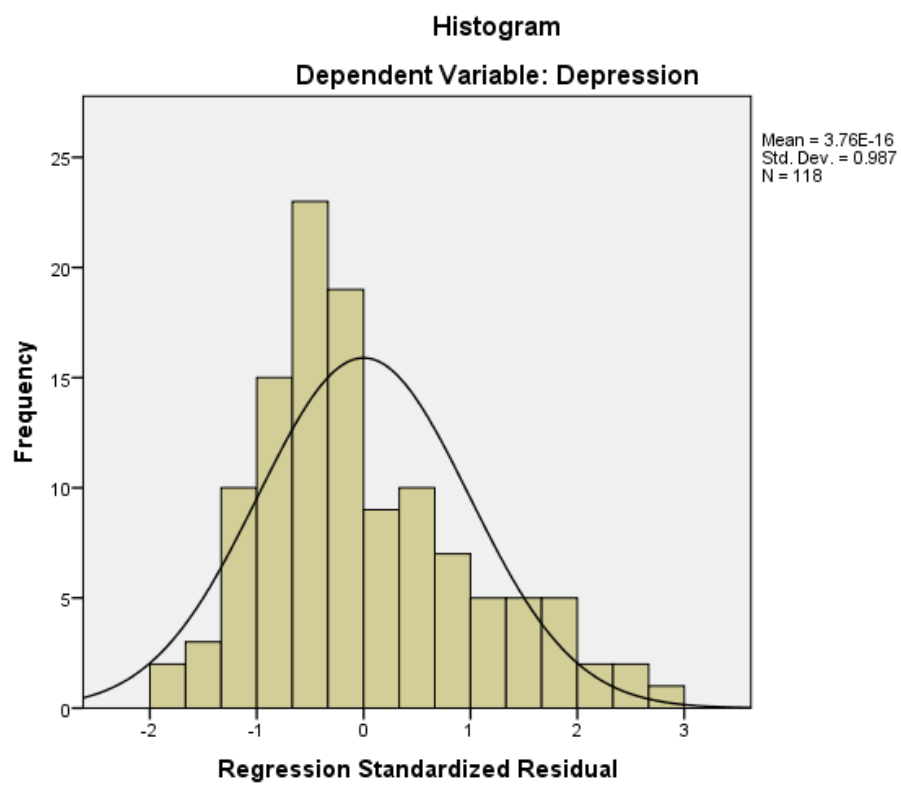


Figure 11: P-P Plot Testing the Assumption of Normality of Residuals

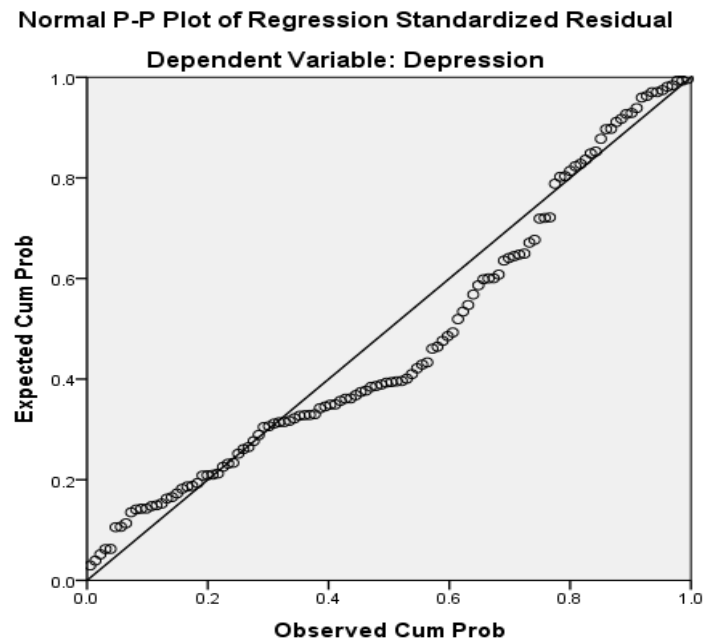
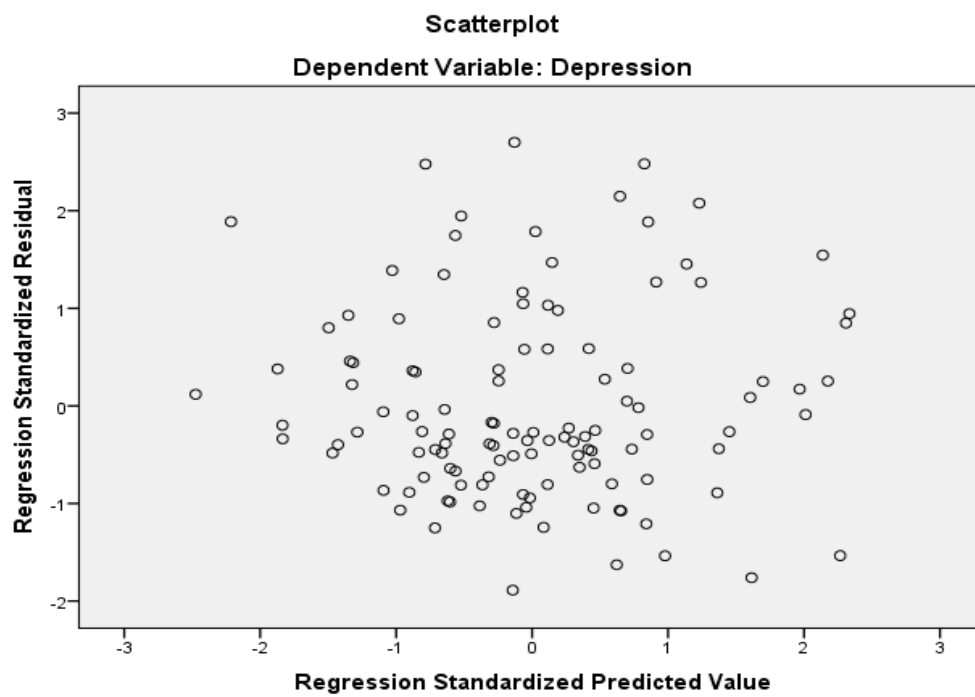


Figure 12: Scatterplot Testing the Assumption of Homoscedasticity



### **b- Path Analysis Main Analysis**

The main analysis was conducted using the PROCESS macro in SPSS- model 4 (Hayes, 2013). Since the normality of residuals and/or the homoscedasticity assumptions were not met for the four regression analyses, then bootstrap approach based on 10,000 (re)samples was implemented. An effect was considered to be significant when the 95% Confidence Intervals didn't include zero (Hayes, 2018).

The path analysis revealed that the regression model containing socially prescribed perfectionism was a significant model in predicting the outcome variable Depression;  $F(1, 116) = 27.85, p < .001 (R^2 = 19.36\%)$ . The bootstrapped coefficient revealed that socially prescribed perfectionism was a significant positive predictor of depression;  $B = 0.18, Bias = -0.00001, SE = 0.03, 95\%CI [0.12, 0.25]$ . This indicated that the first hypothesis which states that socially prescribed perfectionism predicts depression was supported with participants who have higher levels of socially prescribed perfectionism tended to have higher levels of depression.

The path analysis also revealed that the regression model containing socially prescribed perfectionism was a significant model in predicting the mediator social comparison;  $F(1, 116) = 7.42, p = .008 (R^2 = 6.01\%)$ . The bootstrapped coefficient revealed that socially prescribed perfectionism was a significant positive predictor of social comparison;  $B = 0.13, Bias = -0.001, SE = 0.05, 95\%CI [0.04, 0.23]$ . This indicates that

participants who have higher levels of socially prescribed perfectionism tend to have higher levels of social comparison orientation on social media.

The path analysis also revealed that the regression model containing socially prescribed perfectionism was a significant model in predicting the mediator perceived social support;  $F(1, 116) = 5.13, p = .025 (R^2 = 4.23\%)$ . The bootstrapped coefficient revealed that socially prescribed perfectionism was a significant negative predictor of perceived social support;  $B = -0.17, Bias = 0.002, SE = 0.08, 95\%CI [-0.32, -0.02]$ . This indicated that participants who have higher levels of socially prescribed perfectionism tended to have lower levels of perceived social support

The path analysis also revealed that the regression model containing socially prescribed perfectionism, perceived social support and social comparison was a significant model in predicting the outcome variable depression;  $F(1, 114) = 19.80, p < .001 (R^2 = 34.26\%)$ . The bootstrapped coefficients revealed that socially prescribed perfectionism was a significant positive predictor of depression;  $B = 0.13, Bias = -0.001, SE = 0.03, 95\%CI [0.07, 0.20]$ . The bootstrapped coefficients also revealed that social comparison on social media was a significant positive predictor of depression;  $B = 0.16, Bias = 0.002, SE = 0.05, 95\%CI [0.05, 0.25]$ . As such, hypothesis two which states that social comparison on social media predicts depression was supported indicating that participants who had higher levels of social comparison on social media tended to have higher levels of depression. The bootstrapped coefficients also revealed that perceived social support was a significant negative predictor of depression;  $B = -0.17, Bias = 0.0004, SE = 0.04, 95\%CI [-0.25, -$

0.09]. As such, hypothesis three which states that perceived social support inversely predicts depression was supported indicating that participants who had higher levels of perceived social support tend to have lower levels of depression. The bootstrapped coefficients also revealed that social comparison on social media was a significant mediator between socially perceived perfectionism and depression (*indirect effect* = 0.03, *SE* = 0.01, *95%CI* [0.003, 0.06]). This indicates that hypothesis four which states that social comparison on social media mediates the relationship between socially prescribed perfectionism and depression was supported. Finally, the bootstrapped coefficients revealed that perceived social support was a significant mediator between socially prescribed perfectionism and depression (*indirect effect* = 0.02, *SE* = 0.01, *95%CI* [0.003, 0.04]). This indicated that hypothesis five which states that perceived social support mediates the relationship between socially prescribed perfectionism and depression was supported.

## Chapter 4

### Discussion

The present study aimed to examine whether the Perfectionism Social Disconnection Model (PDSM), which links socially prescribed perfectionism to depression, applies to first-time Lebanese Mothers. While this model uses social disconnection as a mediator variable, the following study examined the Perfectionism Social Disconnection Model by using two new mediators. Thus, the following study attempted to examine the roles of both social comparison orientation on social media and perceived social support as mediators in the relationship between socially prescribed perfectionism and depression. Previous studies have mostly examined the PDSM using samples of university students, and only few studies have done so with samples of mothers. The present study only included first-time Lebanese mothers whose child is no more than 4 years old; as research has shown that first-time mothers have lower levels of confidence and higher levels of stress. They are also more prone to developing depressive symptoms, compared to multiparous mothers, in the first four years after having delivered their first child (Woolhouse, Gartland, Mensah, & Brown, 2015; Abdollahi & Zarghami, 2018). In the current study, the sample included 132 participants, out of which only 118 were first-time mothers. The remaining 14 participants were excluded because they have not met the inclusion criteria for participation. Moreover, the majority of the participants were married (97.5%) and most of them were between the ages of 18 and 33.

The first hypothesis which states that socially prescribed perfectionism predicts depression was supported and validated. An increase in socially prescribed perfectionism

was associated with an increase in depressive symptoms. This finding is consistent with the existing literature, as the study by Padoa, Berle and Roberts (2018) also found that socially prescribed perfectionism is linked to depression. Socially prescribed perfectionists perceive their surroundings as a pressure because they believe that others impose certain norms and standards of behaving they can never truly achieve, which in turn results in severe psychological problems. Thus, this dimension of perfectionism was previously associated with severe psychological and interpersonal problems. The findings of the current thesis are therefore in line with previous research studies that have linked socially prescribed perfectionism to depression, whereby an increase in this dimension of perfectionism was linked to an increase in depressive symptoms (Cha, 2016; Hewitt & Flett, 1991; Jahromi, Naziri, & Barzegar, 2012; Enns, Cox & Borger, 2001). This has several implications to first-time mothers who tend to turn to others in order to obtain information about motherhood. First-time mothers will therefore heavily rely on the information in their surroundings and feel pressured to achieve those standards of behavior, putting them at a greater risk of depression.

Concerning the second hypothesis in which social comparison orientation on social media predicts depression, results showed a significant association between these two variables. Thus, the second hypothesis was supported, as an increase in social comparison orientation on social media was linked to an increase in depression. This finding is consistent with previous literature on social comparison orientation, whereby a study by Feinstein et al. (2013) also found that individuals with high levels of social comparison orientation on social media were more likely to develop depressive symptoms ((Feinstein,

Hershenberg, Bhatia, Latack, Meuwly, & Davila, 2013). Another study which included a sample of university students also found that individuals who engaged in social comparisons on Facebook were at an increased risk of developing depression (Wickam & Acitelli, 2014). Besides that, previous literature also shows that certain studies have examined mothers' behaviors on social media, whereby mothers tended to portray and post the best images of their children and their mothering practices on social media. However, this compulsion and need to post such images of perfection rendered the mothers more susceptible to engaging in social comparisons on social media. Thus, when mothers did not feel validated and accepted, and they felt that they were unable to meet those high standards of perfection on social media that they were comparing themselves to, this increased their depression and negative emotions (Schoppe-Sullivan et al., 2017). The findings from the current thesis are thus consistent with the existing literature on the relationship between social comparison orientation on social media and depression.

The third hypothesis predicted that perceived social support will inversely predict depression. In other words, a decrease or lack of perceived social support will be associated with an increase in depressive symptoms. As predicted, the relationship between perceived social support and depression was found to be significant in the current thesis proposal. This finding further validates the existing literature on the inverse relationship between perceived social support and depression. Studies have found that perceived social support acts as a buffer against depression. In other words, an increase in perceived social supports protects individuals against the adverse effects of certain life stressors, which in turn decreases their likelihood of developing depressive symptoms (Roh, Burnette, Lee,

Lee, Easton, & Lawler, 2015; Chao, 2014; Bouteyre, Maurel, & Bernaud, 2007, Wilcox, 1981). Frison and Eggermont (2015) also found that individuals who seek social support on social media and perceive emotional support from others showed a decrease in their depressive symptoms. Another study by Jang et al. (2016) also validated the positive association between perceived social support and mental health in general.

Hypothesis 4 examined the role of engaging in social comparisons on social media, and the influence this variable has on the relationship between socially prescribed perfectionism and depression. This hypothesis was supported as results showed that social comparison orientation on social media does act as a mediator in the PDSM. In other words, the findings from the present study found that individuals who were high on socially prescribed perfectionism were more likely to compare themselves to others on social media platforms. This comparison to others on social media had a negative effect on their mental health, resulting in an increase in depression. To clarify further, socially prescribed perfectionists who usually feel that others put high standards of behavior for them to achieve, compare themselves more to images and ideals on social media, which increases their risk of depression. This finding seems to be consistent with some of the studies in the previous literature, but not others. A study by Jang et al. (2016) did support a similar finding whereby social comparison orientation mediated the relationship between perfectionism and depression. However, in the study by Padoa, Berle, and Roberts (2018), social comparison orientation did not mediate the relationship between societal-prescribed perfectionism and depression. Nevertheless, they did mention that this finding which was contrary to their prediction might have been due to the fact that the mothers who

participated in their study did not reveal their distress or dissatisfaction with motherhood. Social desirability effects were present, as mothers with high levels of socially prescribed perfectionism fear the judgement of others and are strongly preoccupied with what others think of them. Moreover, Padoa, Berle, and Roberts (2018) did also mention that their sample of mothers was very heterogenous, in the sense that it included mothers who were of different age groups and who had several children of different age groups. As they had reported, this was a limitation of their study, and they had recommended that perhaps examining the role of social comparison orientation as a mediator in the PDSM might be validated if the sample included only first-time mothers. Their explanation stemmed from the finding that first time mothers are the most active internet users according to Plantin and Daneback (2009). The current thesis only included first-time mothers, and perhaps it is for this reason that that mediating role of social comparison orientation was found to be significant in the relationship between socially prescribed perfectionism and depression.

Hypothesis 5 examined the mediating role of perceived social support in the relationship between socially prescribed perfectionism and depression. Indeed, results showed that perceived social support did act as a mediator; as an increase in socially prescribed perfectionism predicted a decrease in perceived social support, which in turn predicted an increase in depressive symptoms. This suggests that mothers who turn to others and feel that others place high standards and ideals of behaviors tend to perceive less social support, resulting in depression. This finding is consistent with the findings from the study conducted by Sherry et al. (2008) which also supported the mediating role of perceived social support between the two variables of socially prescribed perfectionism

and depression. Moreover, a study by Kumpasoglu (2019) also found that perceived social support and mattering act as mediators in the PDSM. Jang et al. (2016) also conducted a study to examine the mediating role of perceived social support, and his findings were also consistent with the findings of other studies as well as the findings of the current thesis proposal. Thus, it seems that first-time mothers who feel that others pressure them to achieve certain standards and norms, tend to feel more distant from others and perceive less of the social support present around them. This in turn might negatively affect their mental health and increase their likelihood of developing depression.

After having discussed the five hypotheses separately, it is important to also discuss the Perfectionism Social Disconnection Model as a whole. The findings of the following study have supported the role of perceived social support and social comparison orientation on social media as mediators in the relationship between socially prescribed perfectionism and depression. This has several implications as to how this model as a whole can help explain the relationship between the predictor and outcome variable, and also as to how this model adds to the existing literature. Firstly, regarding the question of whether the model applies to first-time Lebanese mothers, the findings have shown that this hypothesis was supported. In other words, first-time Lebanese mothers with high levels of socially prescribed perfectionism tend to experience lower perceived social support and engage more in social comparisons while using the Internet, which in turn increases their risk of developing depression. This means that although the personality trait of socially prescribed perfectionism was linked to depression through the PDSM, with social disconnection acting as the mediator, other mediators also explain the mechanism by

which socially prescribed perfectionism might increase the risk of depression. In addition, this also might help elucidate the complex nature of socially prescribed perfectionism, whereby it may have several means by which it can lead to depression. Not to forget also that the study by Pado, Berle and Roberts (2018) did not find social comparison orientation to be a mediator in the model when applied to mothers in general. The findings of the following study however have supported the role of social comparison orientation on social media as a mediator in the model when applied to first-time mothers specifically. This may be due to the fact that first-time mothers are the most active internet user (Plantin & Daneback, 2017).

### **Clinical Implications**

The present study is the first study to examine the Perfectionism Social Disconnection Model in a Lebanese population; and not to forget also that it is the first study to examine this model in a sample of first-time mothers. Moreover, it is the first study that included both social comparison orientation on social media and perceived social support as mediators in the relationship between socially prescribed perfectionism and depression. The findings of the current thesis study also have several practical implications that can benefit first-time mothers, caregivers, clinicians and health care providers as well. Mothers usually tend to prepare themselves before the transition to motherhood by searching for information and support that might help them in the preparation phase (Kralik, Visentin, & van Loon, 2006). An important mode by which mothers try to obtain information is through the Internet and social networking sites, rather

than seeking help and trustworthy information from professionals in the field (Evans, Donelle, & Hume-LoveLand, 2011). Thus, it is of paramount importance to implement the findings of this study in awareness programs and maternity wards. In other words, professional doctors and mental health practitioners can target perfectionism by portraying a more realistic view of what motherhood is all about, as well as educating first-time mothers about what to expect and how to deal with the challenges of becoming a first-time mother.

Besides that, it is also important to discuss the findings of the present study in the context of the Lebanese culture. On one hand the Lebanese culture values social support and considers social support as a very important aspect of the Lebanese culture. However, on another hand, women are pressured to fulfill their roles as mothers and to show care, support and be fully devoted to their husbands, children, and extended family (Hamieh & Usta, 2011). It is clear from the findings of the study that even though social support is readily available in the Lebanese culture, first-time mothers with higher levels of socially prescribed perfectionism do not benefit from this support as they do not perceive it, and this in turn increases their risk of developing depressive symptoms. Thus, it is important that psychologists and other mental health providers can incorporate effective ways of targeting socially prescribed perfectionism in therapy and through awareness programs. This might help first-time mothers benefit from the readily available social support around them and perceive that support which can have a buffering effect against depression. In addition, campaigns and awareness programs can also be held in maternity wards as a means of targeting social comparison orientation and engaging in social comparisons on

social networking sites. New mothers can be educated about the unrealistic and unhelpful imagery that is portrayed on social media and how using such images and portrayals as standards of comparison can have counterproductive effects. Thus, new mothers can learn to use social media to get information and support from others rather than using it as a platform to engage in social comparisons. Targeting socially prescribed perfectionism and social comparison orientation on social media can therefore positively influence mothers. They will be better able to perceive the social support around them and they will have a lower risk of developing depression. Of course that will not only benefit mothers, but it will also benefit their children, as the mental health of mothers is found to be associated with the social and cognitive development of their children (Milgrom et al., 2004).

While targeting the personality trait of perfectionism and the mediator variable of social comparison orientation on social media are important, it is also of paramount importance to take into account the implications of the following study as a whole. To clarify, socially prescribed perfectionism, social comparison, and perceived social support were all validated as being risk factors for depression. Moreover, perceived social support and social comparison orientation on social media were also supported to mediate the relationship between socially prescribed perfectionism and depression; thus, while targeting each construct alone through awareness programs and therapy might be beneficial, it is important to consider the whole model when trying to help first-time mothers. In other words, increasing perceived social support by including family members and friends in awareness programs might also be beneficial and might act as a buffer against depression. Educating them about the challenges of motherhood and about the

constructive ways of using social media might also help first-time mothers. However, the most helpful approach might be to use an integrative approach that targets all three constructs that might increase the risk of developing depression. So, perhaps increasing perceived social support might act as a buffer in reducing the perfectionistic tendencies of first-time mothers. Or perhaps reducing social comparisons might also help in that.

### **Limitations**

The following study has several limitations that could be addressed in future studies that aim to examine the Perfectionism Social Disconnection Model. First, the generalizability of the findings is limited for several reasons. The recruitment method employed in the following study is an online purposive sampling, whereby the survey was distributed on Survey Monkey. Moreover, the majority of first-time mothers included in the sample were married and between the ages of 18 and 33. This suggests that the findings of the study are not generalizable to a wider population with characteristics that differ from the sample included in the following study. The sample size was also small which further adds to the above mentioned limitation. Another limitation is the fact that the following thesis is a quantitative cross-sectional survey design. The cross-sectional survey design precludes any temporal or causal inferences regarding the relationship between the variables included in the study. Besides that, participants were on average low on socially prescribed perfectionism, social comparison orientation, and depression. Moreover, on average, they were high on perceived social support. This shows that participants may have

responded in a socially desirable manner even though they have been informed that participation is anonymous and responses will be kept confidential.

### **Future Studies**

Future research can address several limitations that have been mentioned above and perhaps add to the already existing literature by including new variables and examining the PDSM in a different manner. To further clarify, future studies can include a larger sample size and a more diverse one as well. The present study mainly included married first-time mothers; however, it would be beneficial to examine whether the findings of the present study hold when examined in divorced first-time mothers. Moreover, the findings of the study only validate the presence of a significant correlation between the variables and are in support of the mediating roles of social comparison orientation on social media and perceived social support. Nevertheless, it would be interesting to examine whether there is a causal or temporal relationship between the variables in the PDSM, which can be implemented through experimental procedures in future studies. And future research can also address new mediators in the PDSM that can help better explain the relationship between socially prescribed perfectionism and depression.

Besides that, the following study examined perceived social support in its role as a mediator in the link between socially prescribed perfectionism and depression. However, this alone does not tell us much regarding the specific kind of social support that may have been perceived or not by mothers. In other words, first-time mothers may not be perceiving emotion support from others but they might be perceiving some other kind of support.

Thus, it is essential that future researchers examine in more detail the kind of support that was perceived in order to better explain the nature of this social support and find practical ways to intervene and help first-time mothers. In addition, the following study included first-time mothers with one child who is at most 4 years old. However, no comparison was done between mothers who have just given birth recently (with newborns up to age 6 months) and mothers with a child who is of an older age group. This comparison is also interesting to examine to see if the hormonal changes that accompany motherhood in the beginning might affect the findings that were supported between the constructs in the following study.

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## Appendix A

### Participant Information Letters and Consent Forms in English and Arabic

#### **Participant information letter**

Dear Ms./Mr.

I am Helga El Mokdad, a student at Haigazian University from the Department of Social and Behavioral Sciences. I am currently carrying out a research study titled 'The Perfectionism Social Disconnection Model in First-time Lebanese Mothers: Do perceived social support and social comparison orientation on social media act as mediators?' advised by Dr.Hanine Hout.

You are being asked to take part in this study since first-time Lebanese mother.

Kindly read the below information to decide whether you would like to participate in this research study.

#### **Purpose of the Research Project**

This research study aims at examining the Perfectionism social disconnection model in first-time Lebanese mothers and it is the first study that will include both perceived social support and social comparison orientation on social media and will view their unique and combined effects in mediating the relationship between socially prescribed perfectionism and depression. This study will therefore offer insight into the Lebanese population and will begin to fill the gap in this research topic. Moreover, the findings of this study can be implemented through awareness programs on social media and in maternity wards. This study will contribute towards the partial fulfillment of my academic study requirements at Haigazian University.

#### **What will I be asked to do?**

- If you choose to participate in this research study, you will be asked to fill in a questionnaire. Your participation will involve completing a survey that entails statements that you will have to rate based on agreement, a demographic form for approximately 20 minutes.
- Participation in this project is voluntary. You are free to withdraw anytime without having to give any reason for your withdrawal.

**What are my rights?**

- Participation in this study is completely voluntary, anonymous and confidential. Your name or any other identifying information will not be asked.
- Data you provide along with data from all participants in the present research will be stored in aggregate in a password protected folder. The data will be analysed and reported in aggregate. Only the principle investigators of this study will have access to the compiled data which will be stored for a period of 10 years post data. During this time, you have the right to inspect the data.
- You have the right to withdraw your consent or discontinue participation at any time for any reason. Your decision to refuse participation or withdraw will not involve any penalty or loss of benefits to which you are entitled. Discontinuing participation in no way affects your relationship with Haigazian University.
- This research study has been reviewed and has received clearance from the Haigazian University ethics committee (Dr.hanine hout). If you have any further concerns about your rights as a research participant, please, do not hesitate to contact Dr.Hanine Hout at Haigazian University.

**What are the risks and benefits of participation?**

- Participation in this study does not involve any physical risk or emotional risk to you beyond the risks of daily life.
- You will receive no direct benefits from participating in this research; however your participation does help researchers better understand the mechanism by which socially prescribed perfectionism and depression are correlated in first-time Lebanese mothers.

**Contact information**

If you have any questions or concerns about the research you may contact:

Helga El Mokdad, Principal Investigator

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#### رسالة توضيحية خاصة بالمشاركين

عزيزي السيدة / السيد.

أنا هيلجا المقداد طالبة في جامعة هايكازيان من قسم العلوم الاجتماعية والسلوكية. أقوم حالياً بإجراء دراسة بحثية بعنوان "نموذج الكمالية للانفصال الاجتماعي لدى الأمهات اللبنانيات لأول مرة: هل الدعم الاجتماعي المتصور وتوجيه المقارنة الاجتماعية على وسائل التواصل الاجتماعي بمثابة وسطاء؟" نصحت به الدكتورة حنين حوت.

يُطلب منك المشاركة في هذه الدراسة منذ أن كانت أم لبنانية لأول مرة.

يرجى قراءة المعلومات الواردة أدناه لتحديد ما إذا كنت ترغب في المشاركة في هذه الدراسة البحثية.

الغرض من مشروع البحث

تهدف هذه الدراسة البحثية إلى فحص نموذج الكمالية للانفصال الاجتماعي لدى الأمهات اللبنانيات لأول مرة ، وهي الدراسة الأولى التي ستشمل كلاً من الدعم الاجتماعي المتصور وتوجه المقارنة الاجتماعية على وسائل التواصل الاجتماعي وستعرض آثارهما الفريدة والمشاركة في التوسط في العلاقة بين الكمال والاكتمال المنصوص عليها اجتماعياً. لذلك ستقدم هذه الدراسة نظرة ثاقبة للسكان اللبنانيين وستبدأ في سد الفجوة في موضوع البحث هذا. علاوة على ذلك ، يمكن تنفيذ نتائج هذه الدراسة من خلال برامج التوعية على وسائل التواصل الاجتماعي وأقسام الولادة. ستساهم هذه الدراسة في الإيفاء الجزئي لمتطلبات دراستي الأكاديمية في جامعة هايكازيان.

ماذا سيطلب مني أن أفعل؟

- إذا اخترت المشاركة في هذه الدراسة البحثية ، فسيُطلب منك ملء استبيان. ستشمل مشاركتك إكمال استطلاع يتضمن بيانات يجب عليك تقييمها بناءً على الاتفاق ، نموذج ديموغرافي لمدة 20 دقيقة تقريباً.
- المشاركة في هذا المشروع تطوعية. أنت حر في الانسحاب في أي وقت دون الحاجة إلى إبداء أي سبب لانسحابك.

ما هي حقوقي؟

- المشاركة في هذه الدراسة تطوعية تمامًا ومجهولة المصدر وسريّة. لن يُطلب منك اسمك أو أي معلومات تعريفية أخرى.
  - سيتم تخزين البيانات التي تقدمها مع البيانات من جميع المشاركين في البحث الحالي بشكل إجمالي في مجلد محمي بكلمة مرور. سيتم تحليل البيانات والإبلاغ عنها بشكل إجمالي. سيتمكن المحققون الرئيسيون فقط في هذه الدراسة من الوصول إلى البيانات المجمعة والتي سيتم تخزينها لمدة 10 سنوات بعد البيانات. خلال هذا الوقت ، لديك الحق في فحص البيانات.
  - يحق لك سحب موافقتك أو التوقف عن المشاركة في أي وقت ولأي سبب. لن ينطوي قرارك برفض المشاركة أو الانسحاب على أي عقوبة أو خسارة في المزايا التي يحق لك الحصول عليها. لا يؤثر التوقف عن المشاركة بأي شكل من الأشكال على علاقتك بجامعة هايكازيان.
  - تمت مراجعة هذه الدراسة البحثية وحصلت على تصريح من لجنة الأخلاقيات بجامعة هايكازيان (د. حنين حوت). إذا كانت لديك أي مخاوف أخرى بشأن حقوقك كمشارك في البحث ، من فضلك ، لا تتردد في الاتصال بالدكتورة حنين حوت في جامعة هايكازيان.
- ما هي مخاطر وفوائد المشاركة؟

- لا تنطوي المشاركة في هذه الدراسة على أي مخاطر جسدية أو عاطفية عليك بخلاف مخاطر الحياة اليومية.
- لن تتلقى أي فوائد مباشرة من المشاركة في هذا البحث. ومع ذلك ، فإن مشاركتك تساعد الباحثين على فهم أفضل للآلية التي يتم من خلالها ربط الكمال الموصوف اجتماعيًا بالاكتئاب لدى الأمهات اللبنايات لأول مرة.

معلومات للتواصل

إذا كانت لديك أي أسئلة أو مخاوف بشأن البحث ، يمكنك الاتصال بـ:

هلجا المقداد ، الباحث الرئيسي

جامعة هايكازيان

037706-03

Helgamokdad@gmail.com

الدكتورة حنين حوت مستشارة أطروحة

جامعة هايكازيان

989812-03

o HANINE.HOUT@haigazian.edu.lb

## Participant Consent Form

**The Perfectionism Social Disconnection Model in First-time Lebanese Mothers: Do perceived social support and social comparison orientation on social media act as mediators?**

Please read the following statements :

I have volunteered to participate in this research project conducted for purposes of study. My participation is voluntary and does not involve payment of any kind.

I agree to participate in this research project conducted for purposes of study. My decision is voluntary and does not involve payment of any kind.

I know that I can choose to withdraw from participation any time without any penalties or consequences whatsoever. I also hold the right to decline to respond to any question(s) that I may feel uncomfortable with.

My participation involves answering a questionnaire taking a test for approximately 10 minutes.

I have been assured that the researcher will maintain my identity confidential.

I have been assured that the information from this survey will be used for the purpose of academic study only.

I have received the assurance that this research study has been duly reviewed and approved by the Haigazian University ethics committee.

I agree that the data gathered be kept in a secure location under the care of the study investigators for a period of 10 years.

I have read, listened and fully understand the explanation given to me. All my questions have been satisfactorily answered.

I, therefore, choose to voluntarily participate in this research study.

1. Do you agree with the statements above and give your consent to participate?

Yes

No

#### موافقة المشارك

نموذج الكمالية للانفصال الاجتماعي لدى الأمهات اللبانيات لأول مرة: هل الدعم الاجتماعي المتصور وتوجيهه المقارنة الاجتماعية على وسائل التواصل الاجتماعي بمثابة وسطاء؟

يرجى قراءة البيانات التالية ووضع علامة اختيار في المربعات المجاورة لها. لقد تطوعت للمشاركة في هذا المشروع البحثي الذي يتم إجراؤه لأغراض الدراسة. مشاركتي طوعية ولا تتضمن أي مدفوعات من أي نوع. أوافق على المشاركة في هذا المشروع البحثي الذي يتم إجراؤه لأغراض الدراسة. قراري طوعي ولا يتضمن أي دفع من أي نوع. أعلم أنه يمكنني اختيار الانسحاب من المشاركة في أي وقت دون أي عقوبات أو عواقب من أي نوع. لدي أيضًا الحق في رفض الرد على أي سؤال (أسئلة) قد أشعر بعدم الارتياح تجاهه. تتضمن مشاركتي الإجابة على استبيان لمدة 20 دقيقة تقريبًا. لقد تم التأكيد لي أن الباحث سوف يحافظ على سرية هويتي. لقد تأكدت من أن المعلومات الواردة في هذا الاستطلاع ستستخدم لغرض الدراسة الأكاديمية فقط. لقد تلقيت تأكيدًا بأن هذه الدراسة البحثية قد تمت مراجعتها واعتمادها على النحو الواجب من قبل لجنة الأخلاقيات بجامعة هايكازيان.

أوافق على الاحتفاظ بالبيانات التي تم جمعها في مكان آمن تحت رعاية الباحثين في الدراسة لمدة 10 سنوات.

لقد تم التأكيد لي أنه يمكنني الوصول إلى بياناتي (إذا تم تحديدها) في أي وقت. لقد قرأت واستمعت وفهمت تمامًا الشرح المقدم لي. تم الرد على جميع أسئلتني بشكل مرض. لذلك أختار المشاركة طوعية في هذه الدراسة البحثية. لقد تلقيت نسخة من نموذج الموافقة هذا موقعة من الباحث.

هل توافق على كل ما ورد اعلاه وتوافق على المشاركة؟

نعم

لا

## Appendix B

### Demographics Questionnaire in English and Arabic

1.What is your age?

18-25

26-33

34-41

42-49

50 and above

2.Which of the following best describes your current relationship status?

Married

Widowed

Divorced

Separated

In a domestic partnership or civil union

Single, but cohabiting with a significant other

Singe, never married

3.Which of the following categories best describes your employment status?

Employed, working full-time

Employed, working part-time

Not Employed, looking for work

Not employed, not looking for work

Retired

Disabled, not able to work

4. What is the highest level of education you have completed?

5. Are you a first-time mother (you have only one child, are not pregnant, and your child is 4 years old or less)?

Yes or No

ضع دائرة حول الإجابة الصحيحة أو أكتب الجواب في الفراغ:

ما هو عمرك؟

18-25

26-33

34-41

42-49

50 أو أكثر

ما هو وضعك العائلي؟

متزوجة

مطلقة

ارملة

منفصلة عن الشريك

في شراكة محلبة او اتحاد مدني

عزباء ولكن تتعايش مع الشريك

عزباء ولم اتزوج قط

اي من الفئات التالية افضل وصفا لحالتك الوظيفية؟

اعمل بدوام كامل

اعمل بدوام جزئي

لا اعمل ولكن ابحث عن عمل

لا اعمل ولا ابحث عن عمل

متقاعدة

اعاني من اعاقة وغير قادرة على العمل

ما هو اعلى مستوى تعليمي اتممته؟

هل أنت أم لأول مرة (لديك طفل واحد فقط ولست حامل وطفلك يبلغ من العمر 4 سنوات أو أقل)؟

نعم

لا

## Appendix C

Multidimensional Perfectionism Scale (only subscale that measures socially prescribed perfectionism) in English and Arabic

**Multidimensional Perfectionism Scale** (Hewitt, P.L., & Flett, G.L. (1990). Perfectionism and depression: A multidimensional analysis. *Journal of Social Behavior and Personality*, 5, 423-438.

**INSTRUCTIONS:** Listed below are a number of statements concerning personal characteristics and traits. Read each item and decide whether you agree or disagree & to what extent. **To score your responses, put the number of your response in the column that is highlighted next to this question.**

	Disagree							Agree	Self Oriented	Other Oriented	Socially Prescribed
1. When I am working on something, I cannot relax until it is perfect	1	2	3	4	5	6	7				
2. I am not likely to criticize someone for giving up too easily	7	6	5	4	3	2	1				
3. It is not important that people I am close to are successful	7	6	5	4	3	2	1				
4. I seldom criticize my friends for accepting second best	7	6	5	4	3	2	1				
5. I find it difficult to meet others' expectations of me	1	2	3	4	5	6	7				
6. One of my goals is to be perfect in everything I do	1	2	3	4	5	6	7				
7. Everything that others do must be of top-notch quality	1	2	3	4	5	6	7				
8. I never aim for perfection on my work	7	6	5	4	3	2	1				

9.	Those around me readily accept that I can make mistakes too	7	6	5	4	3	2	1			
10	It doesn't matter when someone close to me does not do their absolute best	7	6	5	4	3	2	1			
11	The better I do, the better I am expected to do	1	2	3	4	5	6	7			
12	I seldom feel the need to be perfect	7	6	5	4	3	2	1			
13	Anything that I do that is less than excellent will be seen as poor work by those around me	1	2	3	4	5	6	7			
14	I strive to be as perfect as I can be	1	2	3	4	5	6	7			
15	It is very important that I am perfect in everything I attempt	1	2	3	4	5	6	7			
16	I have high expectations for the people who are important to me	1	2	3	4	5	6	7			
17	I strive to be the best at everything I do	1	2	3	4	5	6	7			
18	The people around me expect me to succeed at everything I do	1	2	3	4	5	6	7			
19	I do not have very high standards for those around me	7	6	5	4	3	2	1			
20	I demand nothing less than perfection of myself	1	2	3	4	5	6	7			
21	Others will like me even if I don't excel at everything	7	6	5	4	3	2	1			
22	I can't be bothered with people who won't strive to better themselves	1	2	3	4	5	6	7			
23	It makes me uneasy to see an error in my work	1	2	3	4	5	6	7			
24	I do not expect a lot from my friends	7	6	5	4	3	2	1			
SUBTOTALS Page 1									SO =	OO =	SP= 

Add up in each column the colored areas to create summary score for each dimension												
		Disagree							Agree	Self Oriented	Other Oriented	Socially Prescribed
25	Success means that I must work even harder to please others	1	2	3	4	5	6	7				
26	If I ask someone to do something, I expect it to be done flawlessly	1	2	3	4	5	6	7				
27	I cannot stand to see people close to me make mistakes	1	2	3	4	5	6	7				
28	I am perfectionistic in setting my goals	1	2	3	4	5	6	7				
29	The people who matter to me should never let me down	1	2	3	4	5	6	7				
30	Others think I am okay, even when I do not succeed	7	6	5	4	3	2	1				
31	I feel that people are too demanding of me	1	2	3	4	5	6	7				
32	I must work to my full potential at all times	1	2	3	4	5	6	7				
33	Although they may not say it, other people get very upset with me when I slip up	1	2	3	4	5	6	7				
34	I do not have to be the best at whatever I am doing	7	6	5	4	3	2	1				
35	My family expects me to be perfect	1	2	3	4	5	6	7				
36	I do not have very high goals for myself	7	6	5	4	3	2	1				
37	My parent rarely expected me to excel in all aspects of my life	7	6	5	4	3	2	1				
38	I respect people who are average	7	6	5	4	3	2	1				
39	People expect nothing less than perfection from me	1	2	3	4	5	6	7				

40	I set very high standards for myself	1	2	3	4	5	6	7			
41	People expect more from me than I am capable of giving	1	2	3	4	5	6	7			
42	I must always be successful at school or work	1	2	3	4	5	6	7			
43	It does not matter to me when a close friend does not try their hardest	7	6	5	4	3	2	1			
44	People around me think I am still competent even if I make a mistake	7	6	5	4	3	2	1			
45	I seldom expect others to excel at whatever they do.	7	6	5	4	3	2	1			
SUBTOTALS Page 2											
Add up in each column the colored squares for each dimension											
SUBTOTALS from Page 1											
SUBSCALE TOTALS									SO	OO	SP=
									=	=	
<b>Medical Student Averages and Standard Deviations (in parentheses) for Comparison (Henning et al., 1998)</b>									<b>67</b> <b>(15)</b>	<b>57</b> <b>(13)</b>	<b>47</b> <b>(13)</b>
<b>Medical students (Enns et al. 2001)</b>									<b>70</b> <b>(15)</b>	<b>56</b> <b>(12)</b>	<b>49</b> <b>(13)</b>

مقياس الكمال متعدد الأبعاد – النسخة العربية

Hewitt, P.L., & Flett, G.L. (1990). Perfectionism and depression: A multidimensional analysis.  
*Journal of Social Behavior and Personality*, 5, 423-438.



									أبقى كفؤ في نظر الناس حتى عندما أخطئ	15
مجموع صفة الكمالية على الصعيد الإجتماعي										

### Appendix D

#### Multidimensional Scale of Perceived Social Support

Instructions: We are interested in how you feel about the following statements. Read each statement

carefully. Indicate how you feel about each statement.

Circle the "1" if you Very Strongly Disagree

Circle the "2" if you Strongly Disagree

Circle the "3" if you Mildly Disagree

Circle the "4" if you are Neutral

Circle the "5" if you Mildly Agree

Circle the "6" if you Strongly Agree

Circle the "7" if you Very Strongly Agree

1. There is a special person who

is around when I am in need.                      1   2   3   4   5   6   7

2. There is a special person with

whom I can share joys and sorrows.            1   2   3   4   5   6   7

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

Who is the special person you were referring to in the previous questions? Specify your relationship with this person and not his or her name (brother, sister, husband, etc...)?

Scale Reference:

Zimet GD, Dahlem NW, Zimet SG, Farley GK. The Multidimensional Scale of Perceived Social Support.

Journal of Personality Assessment 1988;52:30-41.

:

## Arabic version of the Multidimensional Scale of Perceived Social Support (MSPSS)

## إرشادات:

يتضمن هذا الاستفتاء عدد من الإقترحات التي تتعلق بالدعم الاجتماعي. يستعمل المقياس أدناه من 1 إلى 7 لتقييم كل بند من البنود من خلال وضع دائرة حول الرقم المناسب.

7	6	5	4	3	2	1	
أوافق بشدة	أوافق باعتدال	أوافق قليلا	حيادي	اعتراض قليلا	أعترض باعتدال	أعترض بشدة	
7	6	5	4	3	2	1	1- هناك شخص مميز بجانبني عندما أحتاجه.
7	6	5	4	3	2	1	2- هناك شخص مميز أستطيع أن أشارك أقرابي و أحزاني معه.
7	6	5	4	3	2	1	3- عائلتي تحاول مساعدتي.
7	6	5	4	3	2	1	4- إنال مساعدة عاطفية ودعم من عائلتي.
7	6	5	4	3	2	1	5- هناك شخص مميز هو/هي مصدر حقيقي للراحة لي.
7	6	5	4	3	2	1	6- أصدقائي يحاربون مساعدتي.
7	6	5	4	3	2	1	7- بإمكانني الإعتماد على أصدقائي عندما تجري الأمور بشكل سيء.
7	6	5	4	3	2	1	8- بإمكانني التحدث عن مشاكلي مع عائلتي.
7	6	5	4	3	2	1	9- عندي أصدقاء أستطيع أن أشارك أقرابي و أحزاني معهم.
7	6	5	4	3	2	1	10- هناك شخص مميز في حياتي يهتم بمشاعري.
7	6	5	4	3	2	1	11- عائلتي ترغب في مساعدتي لإتخاذ القرارات.
7	6	5	4	3	2	1	12- أستطيع أن أتحدث عن مشاكلي مع أصدقائي.

من هو الشخص المميز الذي أشرت إليه بالإستمارة؟ حدد علاقتك به وليس الإسم. مثلا، أخي، زوجي.

## Appendix E

**SCALE FOR SOCIAL COMPARISON ORIENTATION (INCOM, Iowa-Netherlands Comparison Orientation Scale) English version****Primary references:**

Gibbons, F.X. & Buunk, B.P. (1999). Individual differences in social comparison: The development of a scale of social comparison orientation. *Journal of Personality and Social Psychology*, 76, 129-142.

Buunk, B.P., Belmonte, J., Peiró, J.M., Zurriaga, R., & Gibbons, F.X. (2005). Diferencias individuales en la comparación social: Propiedades de la escala española de orientación hacia la comparación social. *Revista Latinoamericana de Psicología*, 37, 561-581.

Buunk, A.P., & Gibbons, F.X. (2006). Social comparison orientation: a new perspective on those who do and those who don't compare with others. In Guimond, S. (Ed.) *Social Comparison and Social Psychology: Understanding cognition, intergroup relations and culture* (pp. 15-33). Cambridge: Cambridge University Press.

**Response scale for all items:**

1. I disagree strongly
2. I disagree
3. I neither agree nor disagree
4. I agree
5. I agree strongly

**Recode:** items 6 en 10

**Short version:** items 1, 3, 4, 6, 7, 11

*Most people compare themselves from time to time with others. For example, they may compare the way they feel, their opinions, their abilities, and/or their situation with those of other people. There is nothing particularly 'good' or 'bad' about this type of comparison, and some people do it more than others. We would like to find out how often you compare yourself with other people on SOCIAL MEDIA (SOCIAL NETWORKING SITES SUCH AS FACEBOOK, INSTAGRAM AND OTHERS). To do that we would like to ask you to indicate how much you agree with each statement below.*

1. I often compare myself with others with respect to what I have accomplished in life
2. If I want to learn more about something, I try to find out what others think about it
3. I always pay a lot of attention to how I do things compared with how others do things

4. I often compare how my loved ones (boy or girlfriend, family members, etc.) are doing with how others are doing
5. I always like to know what others in a similar situation would do
6. I am not the type of person who compares often with others
7. If I want to find out how well I have done something, I compare what I have done with how others have done
8. I often try to find out what others think who face similar problems as I face
9. I often like to talk with others about mutual opinions and experiences
10. I never consider my situation in life relative to that of other people
11. I often compare how I am doing socially (e.g., social skills, popularity) with other people

كيف أجد نفسي في النشاطات التالية في ألمانيا؟ مقياس الميل إلى المقارنة الإجتماعية – النسخة العربية:

المراجع الأساسية:

Gibbons, F.X. & Buunk, B.P. (1999). Individual differences in social comparison: The development of a scale of social comparison orientation. *Journal of Personality and Social Psychology*, 76, 129-142.

Buunk, B.P., Belmonte, J., Peiró, J.M., Zurriaga, R., & Gibbons, F.X. (2005). Diferencias individuales en la comparación social: Propiedades de la escala española de orientación hacia la comparación social. *Revista Latinoamericana de Psicología*, 37, 561-581.

Buunk, A.P., & Gibbons, F.X. (2006). Social comparison orientation: a new perspective on those who do and those who don't compare with others. In Guimond, S. (Ed.) *Social Comparison and Social Psychology: Understanding cognition, intergroup relations and culture* (pp. 15-33). Cambridge: Cambridge University Press.

أغلب الناس يقارنون أنفسهم بالآخرين من وقت لآخر. فمثلا تجدهم يقارنون مشاعرهم وآرائهم وقدراتهم، و/أو أوضاعهم مع مشاعر وآراء وقدرات و/أو أوضاع الآخرين. لا يمكن وصف هذا النوع من المقارنات بالسببي أو الجيد قطعاً والنسبة تتفاوت من شخص لآخر، فهناك من يكثر من القيام بهذه المقارنات أكثر من غيره.

نحن مهتمون بمعرفة مدى مقارنتك لنفسك مع الآخرين على مواقع التواصل الاجتماعي (فايسبوك أو انستاغرام أو اي موقع تواصل اجتماعي آخر)، ولنستطيع فعل ذلك نرجو منك قراءة العبارات التالية وتحديد مدى قبولك أو رفضك لها حسب المعايير التالية:

(1 = أعارض بشدة, 2 = أعارض, 3 = لا أوافق ولا أعارض, 4 = أوافق, 5 = أوافق بشدة)

العدد	العبارات	أعارض	أعارض	لا أوافق ولا أعارض	أوافق	أوافق

بشدة				بشدة		
5	4	3	2	1	غالبًا ما أقارن نفسي بالآخرين وبقا" لما أنجزته في حياتي	1
5	4	3	2	1	عندما أريد التعلّم أكثر عن أمر ما, أحاول أن أعرف ما رأي الآخرين فيه	2
5	4	3	2	1	دائمًا ما أنتبه كثيرًا إلى كيفية قيامي بالأمر مقارنةً بالآخرين	3
5	4	3	2	1	غالبًا ما أقارن أحوال أحيائي ( صديق, أفراد عائلة... ) بأحوال الآخرين.	4
5	4	3	2	1	دائمًا ما أحب أن أعرف ما كان ليفعله الآخرون في مواقف مشابهة لما مررت به	5
5	4	3	2	1	لست من الأشخاص الذين يقارنون أنفسهم بالآخرين كثيرًا	6
5	4	3	2	1	كلما أردت تقييم جودة عملي, أقارنه بعمل الآخرين	7
5	4	3	2	1	غالبًا ما أحاول معرفة رأي الآخرين الذين يمرون بمشاكل مشابهة لمشاكلي	8
5	4	3	2	1	غالبًا ما أحب التحدث مع الآخرين عن الآراء والتجارب المشتركة بيننا	9
5	4	3	2	1	لا أقيم ابدأ وضعي في الحياة من خلال مقارنته بوضع الآخرين	10
5	4	3	2	1	غالبًا ما أقارن أدائي الاجتماعي بالآخرين ( مثل مهاراتي الإجتماعية, شهرتي)	11

## Appendix F

**The Beck Depression Inventory-2<sup>nd</sup> edition**

Please read each group of statements carefully, then choose one phrase from each group that best describes the way you have felt during the last two weeks. If it seems to you that more than one statement in the group of phrases applies to you equally, choose the phrase that applies best to you in this group and make sure that you do not choose more than one phrase in any group.

**1. Sadness**

- 0 I do not feel sad.
- 1 I feel sad much of the time.
- 2 I am sad all of the time.
- 3 I am so sad or unhappy that I can't stand it.

**2. Pessimism**

- 0 I am not discouraged about my future.
- 1 I feel more discouraged about my future than I used to be.
- 2 I do not expect things to work out for me.
- 3 I feel my fortune is hopeless and will get only worse.

**3. Past Failure**

- 0 I do not feel like a failure.
- 1 I have failed more than I should have.
- 2 As I look back I see a lot of failures.
- 3 I feel I am a total failure as a person.

**4. Loss of Pleasure**

- 0 I get as much pleasure as I ever did from the things I enjoy.
- 1 I don't enjoy things as much as I used to.
- 2 I get very little pleasure from the things I used to enjoy.
- 3 I can't get any pleasure from the things I used to enjoy.

**5. Guilty Feelings**

- 0 I don't feel particularly guilty.
- 1 I feel guilty over many things I have done or should have done.
- 2 I feel quite guilty most of the time.
- 3 I feel guilty most of the time.

**6. Punishment Feelings**

- 0 I don't feel I am being punished.
- 1 I feel I may be punished.
- 2 I expect to be punished.
- 3 I feel I am being punished.

**7. Self-Dislike**

- 0 I feel the same about myself as ever.
- 1 I have lost confidence in myself.
- 2 I am disappointed in myself.
- 3 I dislike myself.

**8. Self-Criticisms**

- 0 I don't criticize or blame myself more than usual.
- 1 I am more critical of myself than I used to be.
- 2 I criticize myself for all of my faults.
- 3 I blame myself for everything bad that happens.

**9. Suicidal Thoughts or Wishes**

- 0 I don't have any thoughts of killing myself.
- 1 I have thoughts of killing myself, but I would not carry them out.
- 2 I would like to kill myself.
- 3 I would kill myself if I had the chance.

**10. Crying**

- 0 I don't cry anymore than I used to.
- 1 I cry more than I used to.
- 2 I cry over every little thing.
- 3 I feel like crying, but I can't.

**11. Agitation**

- 0 I am no more restless or would up than usual.
- 1 I feel more restless or would up than usual.
- 2 I am so restless or agitated that it's hard to stay still.
- 3 I am so restless that I have to keep moving or doing something.

**12. Loss of Interest**

- 0 I have not lost interest in other people or activities.
- 1 I am less interested in other people or things than before.
- 2 I have lost most of my interest in other people or things.
- 3 It's hard to get interested in anything.

**13. Indecisiveness**

- 0 I make decisions about as well as ever.
- 1 I find it more difficult to make decisions than usual.
- 2 I have much greater difficulty in making decisions than usual.
- 3 I have trouble making any decision.

**14. Worthlessness**

- 0 I do not feel I am worthless.
- 1 I don't consider myself as worthwhile and useful as I used to.
- 2 I feel more worthless as compared to other people.
- 3 I feel utterly worthless.

**15. Loss of Energy**

- 0 I have as much energy as ever.
- 1 I have less energy than I used to have.
- 2 I don't have enough energy to do very much.
- 3 I don't have enough energy to do anything.

**16. Changes in Sleeping Patterns**

0 I have not experienced any change in my sleeping pattern.

1 I sleep somewhat more/less than usual.

2 I sleep a lot more/less than usual.

3 I sleep most of the day.

I wake up 1-2 hours early and can't get back to sleep.

**17. Irritability**

0 I am no more irritable than usual.

1 I am more irritable than usual.

2 I am much more irritable than usual.

3 I am irritable all the time.

**18. Changes in Appetite**

0 I have not experienced any change in my appetite.

1 My appetite is somewhat greater/lesser than usual.

2 My appetite is much greater/lesser than usual.

3 I crave food all the time or I have no appetite at all.

**19. Concentration Difficulty**

0 I can concentrate as well as ever.

1 I can't concentrate as well as usual.

2 It's hard to keep my mind on anything for very long.

3 I find I can't concentrate on anything.

## 20. Tiredness or Fatigue

- 0 I am no more tired or fatigued than usual.
- 1 I get more tired or fatigued more easily than usual.
- 2 I am too tired or fatigued to do a lot of the things I used to do.
- 3 I am too tired or fatigued to do most of the things I used to do.

## 21. Loss of Interest in Sex

- 0 I have not noticed any recent change in my interest in sex.
- 1 I am less interested in sex than I used to be.
- 2 I am much less interested in sex now.
- 3 I have lost interest in sex completely.

### II-BDI خلال الأربيع أسابيع الماضية، )

#### توجيهات

الرجاء أن تقرأ كل مجموعة من العبارات بعناية ، ثم اختار من كل مجموعة عبارة واحدة والتي تصف بطريقة أفضل الطريقة التي تشعر بها خلال الأسبوعين الأخيرين . ضع دائرة حول الرقم جوار العبارة التي اخترتها. ولو بدا لك أن أكثر من عبارة في مجموعة العبارات تنطبق عليك بطريقة متساوية ، ضع دائرة حول أعلى رقم في هذه المجموعة وتأكد أنك لا تختار أكثر من عبارة في أي مجموعة بما في ذلك المجموعة 16 ( تغيرات في نمط النوم ) أو المجموعة 18 ( تغيرات في الشهية ).

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<p><b>6- مشاعر العقاب</b></p> <p>0 لا أشعر بأنه يقع على عقاب</p> <p>1 أشعر بأنه ربما يقع على عقاب</p> <p>2 أتوقع أن يقع على عقاب</p> <p>3 أشعر بأنه يقع على عقاب</p>	<p><b>1- الحزن</b></p> <p>0 لا أشعر بالحزن</p> <p>1 أشعر بالحزن أغلب الوقت</p> <p>2 أنا حزين طول الوقت</p> <p>3 أنا حزين أو غير سعيد لدرجة لا أستطيع تحملها</p>
<p><b>7- عدم حب الذات</b></p> <p>0 شعوري نحو نفسي كما هو</p> <p>1 فقدت الثقة في نفسي</p> <p>2 خاب أمني في نفسي</p> <p>3 أنا لا أحب نفسي</p>	<p><b>2- التشاؤم</b></p> <p>0 لا أشعر بالاحباط حول مستقبلي</p> <p>1 أشعر بالاحباط حول مستقبلي أكثر من العادة</p> <p>2 لا أتوقع أن تسير الأمور بشكل جيد بالنسبة لي</p> <p>3 أشعر أن مستقبلي بلا أمل وأنه سوف يزداد سوءاً</p>
<p><b>8- نقد الذات</b></p> <p>0 لا أنتقد أو ألوم نفسي أكثر من المعتاد</p> <p>1 انقد نفسي أكثر عما كنت في السابق</p> <p>2 أنقد أو ألوم نفسي على كل أخطائي</p> <p>3 ألوم نفسي على كل شيء سيء يحصل</p>	<p><b>3- الفشل السابق</b></p> <p>0 لا أشعر بأنني شخص فاشل</p> <p>1 فشلت أكثر مما يجب</p> <p>2 عندما أنظر إلى الماضي أرى الكثير من الفشل</p> <p>3 أشعر بأنني شخص فاشل تماماً</p>
<p><b>9- الأفكار أو الرغبات الانتحارية</b></p> <p>0 ليس لدي أي أفكار للانتحار</p> <p>1 لدي أفكار للانتحار ولكن لا يمكنني تنفيذها</p>	<p><b>4- فقدان الاستمتاع</b></p> <p>0 أستمتع بالأشياء التي أحبها كما في السابق</p>

<p>2 أريد أن انتحر</p> <p>3 قد أنتحر لو سححت لي الفرصة</p> <p><b>10- البكاء</b></p> <p>0 لا أبكي أكثر من السابق</p> <p>1 ابكي أكثر من السابق</p> <p>2 أبكي لأبسط الأمور</p> <p>3 أريد أن أبكي لكني لا أستطيع</p>	<p>1 لا أستمتع بالأشياء كما في السابق</p> <p>2 أحصل على قدر قليل جداً من الاستمتاع بالأشياء التي كنت استمتع بها سابقاً</p> <p>3 لا أستطيع الحصول على أي استمتاع من الأشياء التي كنت استمتع بها سابقاً</p> <p><b>5- مشاعر الذنب ( تأنيب الضمير )</b></p> <p>0 لا أشعر بالذنب ( تأنيب الضمير )</p> <p>1 أشعر بالذنب ( تأنيب الضمير ) عن العديد من الأشياء التي فعلتها أو كان علي فعلها</p> <p>2 أشعر بالذنب ( تأنيب الضمير ) أغلب الوقت</p> <p>3 أشعر بالذنب ( تأنيب الضمير ) طول الوقت</p>
<p><b>17- القابلية للغضب أو الانزعاج</b></p> <p>0 قابليتي للغضب أو الانزعاج لم تتغير عن المعتاد</p> <p>1 قابليتي للغضب أو الانزعاج أكبر من المعتاد</p> <p>2 قابليتي للغضب أو الانزعاج أكبر بكثير من المعتاد</p> <p>3 لدي قابلية للغضب أو الانزعاج طول الوقت</p>	<p><b>11- التهيج والاستثارة (قلة الاستقرار أو الهدوء)</b></p> <p>0 لست أكثر تهيجاً أو استثارة عن المعتاد</p> <p>1 أشعر بالتهيج والاستثارة أكثر من المعتاد</p> <p>2 أحتاج أو استثار لدرجة أنه من الصعب على البقاء بدون حركة أو البقاء هادئاً</p> <p>3 أحتاج أو استثار لدرجة يجب علي الاستمرار بالحركة أو فعل شيء</p> <p><b>12- فقدان الاهتمام</b></p>

<p><b>18- تغيرات في الشهية</b></p> <p>0 لم يحدث أي تغير في شهيتي</p> <hr/> <p>1- أ شهيتي أقل من المعتاد إلى حد ما</p> <p>1- ب شهيتي أكبر من المعتاد إلى حد ما</p> <hr/> <p>2- أ شهيتي أقل بكثير من السابق</p> <p>2- ب شهيتي أكبر بكثير من السابق</p> <hr/> <p>3- أ ليست لدي شهية على الإطلاق</p> <p>3- ب اشتهي الطعام طول الوقت</p>	<p>0 لم أفقد اهتمامي بالآخرين أو بالنشاطات</p> <p>1 أصبحت أقل اهتماماً بالآخرين أو بالنشاطات عن السابق</p> <p>2 فقدت أغلب اهتمامي بالآخرين و الأمور الأخرى</p> <p>3 من الصعب أن أهتم بأي شيء</p> <p><b>13- التردد</b></p> <p>0 اتخذ القرارات بنفس كفاءتي المعتادة</p> <p>1 أجد اتخاذ القرارات أصعب من المعتاد</p> <p>2 لدي صعوبة أكثر بكثير عن السابق في اتخاذ القرارات</p> <p>3 لدي مشكلة في اتخاذ أي قرارات</p>
<p><b>19- صعوبة التركيز</b></p> <p>0 أستطيع التركيز كما في السابق</p> <p>1 تركيزي ليس جيداً كما في السابق</p> <p>2 من الصعب علي أن أركز عقلي علي أي شئ لمدة طويلة</p> <p>3 أجد نفسي غير قادر على التركيز على أي شئ</p>	<p><b>14- انعدام القيمة</b></p> <p>0 لا أشعر بأنني عديم القيمة</p> <p>1 لا أشعر بأن لي قيمة أو فائدة كما في السابق</p> <p>2 أشعر بأنني أقل قيمة من الآخرين</p> <p>3 أشعر بأنني عديم القيمة أو بلا فائدة</p>
<p><b>20- التعب و الإرهاق</b></p> <p>0 لست أكثر تعباً أو إرهاقاً من المعتاد</p> <p>1 أشعر بالتعب أو الأرهاق بسهولة أكثر من المعتاد</p>	<p><b>15- فقدان الطاقة</b></p> <p>0 طاقتي لا تختلف عن السابق</p> <p>1 طاقتي أقل من المعتاد</p>

<p>2 يعوقني التعب أو الأرهاق عن عمل الكثير من الأشياء التي اعتدت عملها</p> <p>3 أشعر بالتعب و الأرهاق بحيث لا يمكنني عمل أغلب الأشياء التي اعتدت عليها</p> <p><b>21- فقدان الاهتمام بالجنس</b></p> <p>0 لم ألاحظ أي تغيير في اهتمامي بالجنس مؤخراً</p> <p>1 أنا أقل اهتماماً بالجنس مما اعتدت</p> <p>2 أنا أقل اهتماماً بالجنس الآن بدرجة كبيرة</p> <p>3 فقدت الاهتمام بالجنس تماماً</p>	<p>2 ليس لدي طاقة كافية لعمل الكثير من الأشياء</p> <p>3 ليس لدي طاقة كافية لعمل أي شيء</p> <p><b>16- تغيرات في نمط النوم</b></p> <p>0 لم أشعر بتغيير في نمط (نظام) نومي</p> <p>1- أ أنام أكثر من المعتاد</p> <p>1- ب أنام أقل من المعتاد</p> <p>2- أ أنام أكثر بكثير من السابق</p> <p>2- ب أنام أقل بكثير من السابق</p> <p>3- أ أنام أغلب اليوم</p> <p>3 - ب أستيقظ من نومي مبكراً ساعة أو ساعتان ولا أستطيع أن أعود للنوم مرة أخرى</p>
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