

HAIGAZIAN UNIVERSITY

The Impact of Unmet Needs of Parents of Children with Autism on their Psychological Health

Nisrine Chamseddine

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.

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The Impact of Unmet Needs of Parents of Children with Autism on their Psychological Health

By

Nisrine Chamseddine

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

Date _____

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Date _____

Signature of Thesis Committee Member

Date _____

Signature of Thesis Committee Member

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DEDICATION

I would like to dedicate this thesis to all the parents and children I have worked with during the past eight years. I learn from them every day.

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Abstract

This study investigated the impact of unmet needs of parents of children with autism on their psychological well-being and life satisfaction. A total 75 parents, of which 21 had a child diagnosed with autism, participated in this study. They were all recruited from a regular school offering specialized services for children with autism and their families. While all 75 parents completed a demographic questionnaire, the Satisfaction with Life Survey and the Ryff's Scale for Psychological Well-Being Scale, the 21 parents of children with autism filled out an additional questionnaire, the Family Needs Questionnaire. T-test and correlational analyses were used for examining the 4 hypotheses. The results revealed that parents of children with autism scored much lower on the life satisfaction scale as well as the self-acceptance subscale of the psychological well-being Scale when compared with parents of typically developing children; hypothesis 1 was confirmed. Moreover, there was no significant impact of the parents' expressed needs on their reported life satisfaction and psychological well-being, thus hypotheses 2 and 3 were not confirmed. Mothers of children with autism in this study were not found to be lower on life satisfaction and psychological well-being than fathers of children with autism; hypothesis 4 was not confirmed. The results of this study highlight the importance of making parents of children with autism aware of how to be more self-compassionate and self-accepting which will, in time, help them enjoy a higher well-being.

The Impact of Unmet Needs of Parents of Children with Autism on their Psychological Health

When a child is diagnosed with autism, a combination of challenges emerge, not only for the child him/herself, but also for the family that just received the diagnosis. Over the past few years, a rise in the number of children diagnosed with the autistic spectrum disorder has been noted; as a matter of fact nowadays 1 in 68 children is diagnosed with autism while 1 in 150 children was diagnosed with autism in 2007 (Centers for Disease Control and Prevention, Atlanta, USA, 2017).

Autism Spectrum Disorders (ASD) are an umbrella of developmental disorders embracing more than a single diagnosis including autism, Asperger's Syndrome as well as Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS) (Klin, McPartland, and Volkmar, 2005). According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5, 2013, p.50), autism is noted through "persistent difficulties in the social use of verbal and nonverbal communication". These difficulties may ensue in operative communication shortcomings. Substantial impairments are observed with children on the Autism Spectrum particularly in the areas of social interaction, verbal as well as non-verbal communication, appropriate play skills in addition to obsessed interests in objects and/or subjects (Klin et al, 2005). Problematic behaviors begin at an early age and become more discernible as the child grows up; parents usually report that their child behaves in a way that is different from children his age (DSM-5). In the following research study, the terms autism, autism spectrum disorder (ASD) and "on the spectrum" will be used to refer to the same disorder clarified in this introduction.

Observations reported in the literature reveal that due to the chronic nature of the impairments associated with an ASD diagnosis, families try to deal with a number of problems in the best way they feel is helpful to their child. Literature review reveals that the problems that emerge with an ASD diagnosis impact families of the diagnosed child to the extent that parents of children on the Autism Spectrum Disorder (ASD) declare having more mental health problems than parents of neurotypical children as well as those belonging to other clinical groups (Benjak 2009; Bitsika and Sharpley 2004; Kuusikko-Gauffun et al. 2013; Micali et al. 2004; Singer 2006, Hadopp et al. 2003, Johnson et al. 2003). A Virginia Polytechnic Institute and State University study conducted in 2001 reported that the autism diagnosis alone was significant enough to elevate the stress levels among 140 mothers of different ethnic and socio-economic backgrounds. The study measured the parents of children with ASD anxiety as well as depression related to their diagnosed children's problematic behaviors using the Depression, Anxiety and Stress Scale along with a series of questionnaires. It was specifically noted that the problematic behaviors that may be associated with an autism diagnosis resulted in more stress in parents of children on the spectrum than those with children having different disorders (Rezendes & Scarpa, 2011). In addition to that, parental stress was found to be directly linked to the child's condition in a research review that examined coping strategies of parents of children with autism (Mancil et al., 2009). Primary caregivers of children with autism undergo a great number of stressors due to the display of autism characteristics such as the child's troubled sleeping routines, their lack of self-control, the difficulties they encounter in gaining self-help skills, etc. Thus, it is noted that families of children with ASD report a troubled and an uneasy life as their days are structured in a way that prioritizes the diagnosed child's needs (Cappe et al. 2011).

Comparing parenting stress between mothers of pre-school aged children diagnosed with autism and those having different developmental disorders or no discerned disorders at all, Estes et al. (2009) noted higher levels of stress and psychological distress in parents of children on the spectrum. Similarly, a study compared the quality of life (QOL) of parents of children on the spectrum to that of parents of children diagnosed with Attention Deficit Disorder and Attention Deficit and Hyperactivity Disorder and revealed that parents of children diagnosed with ASD QOL was severely affected (Lee et al. 2008). Moreover, more parenting stress was recorded in mothers of children with autism when compared to the levels of stress reported by mothers of typically developing children as well as those having disabilities not related to autism (Eisenhower et al. 2005). Additionally, a Saudi study evaluated the presence of anxiety and depression in primary caregivers of children with autism, comparing the results to those of a control group consisting of parents of neurotypical children. The results revealed that 22% out of 50 parents of children with autism had a history of psychiatric problems while only 2% of the control group parents held a similar history (Al-Mansour et al. 2013).

As parents of children with autism express more stress, less psychological well-being and profoundly affected quality of life, it is noted, based on various studies in literature (Baker, Ericzen et al, 2005, Siklos & Kerns, 2006) that parents of children on the autistic spectrum reach out and seek support to be able to handle the chronic situation that accompanies an autism diagnosis. In support of this, it was found that parents of children on the spectrum sought both emotional and educational support by participating in specific parents support groups, believing that it helped them cope with their child's condition with more efficiency (Clifford & Mennes, 2012). In this same study, parents of children on the spectrum reported experiencing symptoms of depression, anxiety as well as lack of satisfaction with the support they receive whether it was

instrumental, informational or emotional. Additionally, and since 2010, parents' informal reports at the Lebanese Autism Society - an institution where the researcher of this proposal happens to be working at the present - reveal that the overall well-being of the parents affects the effectiveness of interventions addressed to the diagnosed child. Thus, this research study proposes to investigate the relationship between the manifestation of parents of children with ASD needs and their overall expression of life satisfaction and psychological well-being, compared to those of parents of typically developing children.

Background of the Study

Autism Speaks (July 2014) states that parents are “never prepared” to receive an autism diagnosis, which can be a cause of distress often leading to grieving.

Being a primary caregiver for a child with autism reflected in more elevated stress levels than parenting typically developing children and those with differentiated disorders (Hastings, 2002). In fact, throughout the diagnosis process, parents feel helpless and ineffective as they face uncertainty. In fact, when faced with an autism diagnosis, parents find themselves in a state of shock, accompanied by psychological distress and feelings of helplessness (Bumin., Gunl., & Tukul., 2008). They find themselves looking at numerous specific and chronic challenges (such as financial stressors) related to the received diagnosis (Clifford & Minnes, 2012).

In addition to feeling overwhelmed, stressed out and helpless after the diagnosis of their child, parents cannot help but also feel that they are not provided with the appropriate services. For instance, in a study conducted in Iran, which looked into both information and support needs of parents of children with ASD, the authors concluded that there is a deficiency in autism knowledge and understanding as well as a general discontent with the available services. In fact, parents sought more information and were not satisfied with the assistance provided to them

when it came their own experience with having a child with autism (Samadi, McConkey & Kelly, 2011). Therefore, in order for parents to be able to give their child with ASD the best care possible, they should have the tools to do it; moreover, their psychological well-being as well as their needs are then to be assessed and the appropriate support is to be offered (Baker-Ericzen et al. 2005; Hutton & Carron, 2005).

Previous studies as well as clinical findings support the fact that when parents are given the proper tools to become actively involved in the services provided to their child on the spectrum, they can make the child's condition better (Marcus et al., 2005, Rapin, 2005) and demonstrate a "healthier adaptation to having a child with ASD" (Freedman and Boyer, 2000). In addition, intervening with parents of a child with ASD, whether through mental health counseling or general educational tips (Freedman and Capobianco-Boyer, 2000), make dealing with the child easier (Siklos & Kerns, 2006). Therefore, in order to be able to intervene properly with the parents, a needs assessment is necessary. In other words, understanding the unmet needs of such parents.

More precisely, in this study, the author used a Parent questionnaire (the Family Needs Questionnaire developed by Kreutzer et al., and adapted by Siklos and Kerns in 2006) in order to evaluate and assess the different needs of these parents. It is important to note here that a control group of parents, mainly parents with typically developing children, was used as well in this study for comparative purposes. In addition to the Parents' needs, two other variables, namely, the psychological well-being and the life satisfaction were assessed as well.

In fact, a number of studies (White & Hastings, 2014) concluded that the level of well-being of the parents of children with ASD changed depending whether these parents were offered appropriate services and interventions; for instance, a study looking at the impact that attachment

and social support have on parents of children with autism illustrated that decreased social support resulted in parents reporting higher stress levels (Bishop, 2015), as non-effective coping strategies were found to be links to elevated stress levels (Cappe, et al., 2011). In other studies that looked into the association between the child's ASD problematic behaviors and the self-reported stress levels of mothers, parents who expressed high levels of stress and anxiety were those who stated experiencing difficulties handling their child with ASD problem behaviors as well as having marital problems, feelings of loneliness and depression (Tomanik et al., 2004, Hutton & Caron, 2005). Therefore, the current study predicted to find a similar relationship between unmet parental needs and the level of psychological well-being among a sample of Lebanese parents.

In addition to psychological well-being, life satisfaction was investigated in this study as it also correlates with unmet needs. In a French study that investigated parents of children with autism adjustment, parental stress, which correlated with the parents' explicit reported needs, was found to be an indicator of their described poor life satisfaction (Cappe et al., 2011). In another study that was conducted amongst 118 Chinese parents of children diagnosed with autism, examining three different variables: their self-esteem, the social support they receive as well as their expressed life satisfaction, it was found that those parents had poor levels of life satisfaction when compared to the control group. The same study found that having access to support – which in this study was social – elevated the parents' life satisfaction scores (Lu et al., 2015). Moreover, when comparing parents of children with autism with parents of neurotypically developing children on their perception of quality of life, a study conducted in Sydney by Eapen and Guan (2016) revealed that caring for a child on the spectrum reflects in poorer quality of life as expressed by parents. Therefore, the current study predicted to find a similar relationship

between unmet parental needs and the level of life satisfaction among a sample of Lebanese parents.

Furthermore, the impact of parenting a child with autism on the lives of the primary caregivers was also studied in Jordan by Dardas (2016). The researcher revealed that parents – especially mothers – suffered from poor quality of life and psychosocial health. In fact, being the primary caregiver of the child, mothers usually report carrying the heavier burden and more negative impact of rearing a child with autism than fathers in Middle Eastern countries (Zahr & Hattar-Pollara, 1998; Gau et al., 2011; Patterson & McCubbin, 1983; Roach, Orsmond, & Barrat, 1999; Azar & Badr, 2006). Mothers are then more susceptible to experience stress and anxiety than fathers do (Hassall et al., 2005; Helitzer, Cunningham-Sabo, Varleit, & Crowe, 2002). Therefore, the current study predicted that mothers of children on the autism spectrum disorder report lower on the life satisfaction and psychological well-being than fathers of children on the autism spectrum.

Statement of the Problem

The aim of this study was threefold: First, to look into the relationship that might exist between unmet parental needs and the parents' level of psychological well-being and life satisfaction, given that they have a child diagnosed on the autism spectrum disorder. As we have established in the background of the study, offering parents of children with ASD comprehensive support is necessary since such interventions that are directly aimed to satisfy the parents' specific needs ease their daily struggles caused by ASD. Therefore, this study looked into the parents of children with ASD reported specific needs and hoped to offer a model framework of interventions for parents, which would be implemented in parallel with the services presented to the diagnosed children themselves. As it was shown in numerous studies before, parents need to

receive a full range of supports (Dardas, 2014) as their empowerment reflects positively on the child's well-being as well as his/her progress (Siklos & Kerns, 2006, Cappe et al., 2011, Clifford & Minnes, 2013). For instance, a British study that looked into home-based intervention programs tailored to both parents and children with autism (in this specific case, Applied Behavioral Analysis was studied) revealed that when parents receive proper training, they feel empowered which, in turn, reflects positively on the child's response to intervention (Dillenburger et al., 2002).

Second, the aim of this study was also to compare the psychological health (life satisfaction as well as psychological well-being) of parents of children with autism to the psychological health of a control group consisting of parents of children that do not present any diagnosed disorder. Proving these relationships would provide more evidence that unfulfilled parental needs would impact negatively on their state of mental health, i.e., their psychological well-being and satisfaction with life, and eventually, their children will bear the consequences.

Third, the study aimed at looking into the difference in the overall psychological well-being between mothers and fathers of children with autism. It was assumed that, since Lebanese mothers are more involved in the day to day process of raising a child with autism than fathers, they will report lower on psychological well-being and life satisfaction than their spouses.

Based on the above rationale and the literature discussed in the background of the study, the researcher investigated the following hypotheses:

Hypothesis 1: Parents of children on the autism spectrum disorder will report lower on the

- a- life satisfaction than those of typically developing children
- b- psychological well-being than those of typically developing children.

Hypothesis 2: There is a negative correlation between the reported unmet parental needs and psychological well-being among parents of children on the autism spectrum disorder.

Hypothesis 3: There is a negative correlation between the reported unmet parental needs and life satisfaction among parents of children on the autism spectrum disorder.

Hypothesis 4: Mothers of children on the autism spectrum disorder report lower on life satisfaction and psychological well-being than fathers of children on the autism spectrum.

The Professional Significance of the Study

Recent studies, such as, Cappe et al. 2011 and Dardas, 2014 revealed that it is important to interfere positively with families of children with autism. A randomized controlled trial looked into the effect of specific intervention programs (such as parent education and behavior management programs) on the parents of children with ASD mental health and overall adjustment. It revealed that implementing the suggested intervention programs reflected in substantial and on-going progress in the parents overall mental health as well as progressive relief of the negative psychological symptoms. This study resulted in a justified implementation of early intervention programs specifically tailored to parents who displayed unmet needs and mental health problems (Tonge et al. 2006). In fact, working on the needs of parents of children diagnosed with autism is of equal importance to working with the diagnosed children themselves. Similarly, a case control study in Oman looked into the stress, anxiety as well as depression (using the Depression, Anxiety and Stress Scale) of parents of children with ASD, comparing them to control groups that consisted of parents of normally developing children as well as those of children having diagnoses different than autism. This study revealed that scores of stress, depression and anxiety were significantly higher in parents of children on the spectrum

than those of the parents on the control groups. The study concluded in the crucial importance of offering help and support to parents of children with autism (Al-Farsi et al, 2016). Thus, it is important to conduct this research study in order to understand the parents' lifestyle, i.e., their day to day living when faced with an autism diagnosis, as well as to provide them with the necessary and accurate support throughout their daily struggles with their child with ASD. Although catering for children with autism needs is growing in Lebanon there is still not enough targeted support and assistance given to parents of the diagnosed children. A great number of studies highlight the needs of children with autism (Myers & Johnson, 2007; Horner, Carr, Strain, Todd & Reed, 2002; Goldstein, 2002), however, few of them shed the light on the parents' reported met and unmet needs (Siklos & Kerns 2006, Cappe et al., 2011, Dardas, 2014,). Therefore, by conducting a comprehensive assessment of the parents' different needs from the moment of the diagnosis and throughout the child's school years, and comparing them to those of parents of children that do not hold an autism diagnosis we will be able to provide them with the appropriate services and help them deal with their children across different settings and situations.

In addition to the research significance of this study, there are also the clinical implications. The set of recommendations that the author will conclude the study with, will be of benefit to various professionals in the field and not just teachers and counselors in school settings. Clinical psychologists, social workers, therapists as well as special educators, who work with ASD children and their parents, could all make use of these suggested different strategies, skills and interventions.

Overview of Methodology

The sample in this study consisted of a purposive sample of twenty-five families having one or more child (aged between 3 and 12 years) diagnosed with autism; the diagnosed children are currently enrolled at Adduha High School where they benefit from a specialized integration program for children with autism provided by the Lebanese Autism Society (LAS), Classes for Children with Autism (CCA-English). LAS is a Lebanese Non-Governmental Organization (NGO) that caters for the needs of individuals with autism and that by advocating for their rights and providing them and their families with support and services, from early childhood through adulthood. CCA-English integrates children with autism in regular classroom settings, providing them with the necessary therapies and support.

In addition to that, a control group was used that included one hundred families having a typically developing child attending a regular school (Adduha High School) where the children with autism are integrated. The instruments that were used in the following study are: a demographic questionnaire as well as the Family Needs Questionnaire along with the Satisfaction with Life Scale and the Ryff scales for Psychological Well-Being.

This study relied on self-reporting methods; a package containing a parental participation consent form, and the surveys along with the scales were either given to parents by hand or sent home with their children. Given questionnaires included both age and gender of parents and children, whether having an autism diagnosis or not, the marital status as well as educational and employment statuses.

Delimitations

Although it is expected that parents of children with autism share and express the same needs and intervention necessities, one of the limitations to this study is that it only represents

families of children with Autism that were or are currently integrated in a regular school where they benefit from a specialized intervention program; it neither sheds light on families of children diagnosed with autism in different institutions, nor of parents of not institutionalized children.

Another possible limitation of the study is the honesty of some of the parents. After all, some of the parents' children are still attending and benefiting from the school's services and therefore, the issue of transparency becomes highlighted.

Definitions of Key Terms

Autism Spectrum Disorder: According to the DSM-5, it is perceived through tenacious deficits in social communication as well as interaction and that through different settings and contexts. An individual on the Autism Spectrum Disorder displays deficits in social-emotional reciprocity, as well as the nonverbal communication and development and maintenance of relationships.

Neurotypical (or typically developing children): According to the Merriam-Webster Dictionary (2010), it is a term used to describe a person that does not display any autistic patterns of behaviors. It expands to designate people that do not suffer from any mental illnesses or disorders.

Life Satisfaction: According to Buetell, N. (2006), Life Satisfaction one of the main indicators of well-being (that also include positive and negative affect). It inclusively assesses feelings as well as attitudes about an individual's life at a specific period of time. As Sumner (1966) describes it, Life Satisfaction is "A positive evaluation of the conditions of your life, a judgment that at least on balance, it measures up favorably against your [...] expectations."

Psychological Well-Being: As defined in *The Ryff Scales for Psychological Well-Being*, it is a multi-faceted “dynamic concept” looking at subjective, social, and psychological aspects of an individual’s perception. Well-being is a “state of equilibrium or balance that can be affected by life events or challenges” (Doge, Daly, Huyton & Sanders, 2012). See Appendix F for the definitions of the six dimensions studied in the *Ryff Scales for Psychological Well-Being*.

Chapter 2

Literature Review

A large number of studies addressed the issue of parents' psychological health when facing a child with a disability. The purpose of this chapter is to discuss a body of literature that shed light on the issue of parents' unmet needs, psychological well-being and life satisfaction when raising a child on the Autism Spectrum Disorder (ASD).

Autism Spectrum Disorder: Definition and Explanation

Autism Spectrum Disorder is defined as a neurodevelopmental disorder with an early-onset. It is described among a number of communication disorders, problems regarding the social functioning as well as a set of challenges affecting behaviors, and thus having a damaging effect on the everyday life (APA, 2013a). Children with ASD then suffer from substantial impairments typically noticeable in the areas of social interaction and communication (whether verbal or non-verbal); moreover, they engage in atypical behaviors, such as remarkably extreme fixations and interests, stereotyped and repetitive body movements, unusual usage of objects in addition to sensory sensitivities that might alter the everyday functioning of the child (APA, 2013). Parents commonly note that their child with autism does not behave in a typical manner, and that they feel that their diagnosed child is different and not developing as expected, noting discrepancies between typically developing children and their own child (Firth & Dryer, 2013).

Impact of a Disability Diagnosis on Parents

Parents of children with disabilities have to carry a heavier burden nurturing a child with autism (Kumar & Mohanty, 2011) and hence they have to endure more stress than those of

typically developing children (Esdaile & al., 2003). Upon receiving a disability diagnosis, the parents of the diagnosed child go through a number of overwhelming feelings and emotions vacillating between shock and denial to anger and distress, going through periods of uncertainty and incongruity (Iacolino & al., 2016), as well as sorrow and sense of failure (Kourkoutas & Georgiadi, 2011). At the time of the diagnosis, parents report elevated levels of depression that drop as the time passes (Monte & Halterman, 2007; Glidden & Schoolcraft, 2007).

Psychological Health of Parents of children with diagnosed disabilities

Both qualitative and quantitative studies underline that parents report having a reduced potential of keeping up with a normal quality of life as well as experiencing elevated levels of stress and anxiety in addition to depression when compared to a population of parents not having a child that falls into a disability criteria (Benson and Karlof, 2009). More specifically, children with ASD, in comparison to neurotypical children, revealed to have a stressful impact on their parents' stress scores (Baker-Ericzen & Al., 2015). Data collected in Australia from parents having one or more child(ren) with autism revealed that having a child on the spectrum was immediately linked to higher levels of stress, anxiety and depression when compared with the "normal" population (Bitsika & Sharpley, 2004). Furthermore, Gray (2003) reported that mothers of children on the Autism Spectrum Disorder felt both guilty and depressed. Looking at the well-being of mothers of preschool children with intellectual disabilities, Eisenhower & al. (2005) found that mothers of children with intellectual disabilities displaying problematic behaviors revealed being more stressed than mothers of children going through a typical development. Likewise, in an Iranian study by Yousefi et al. (2013), in which the researcher compared the stress of 50 mothers of children with autism and 80 mothers of typically developing children on the Parenting Stress Index, the results indicated significant differences

between the stress levels of the two groups, mainly mothers of children with autism scoring higher than the control group. Furthermore, Koegel and al. (1992) looked into the stress profiles in mothers of children with autism; findings of the study reported that being a caregiver for a child with autism held challenges that increased stress levels of the mothers consistently across different populations regardless of their age group, residency location and cultural backgrounds.

In order to suggest a proper support system for parents, particularly for mothers of children with autism, a study examined the relationship between the diagnosed child's behavioral problems and the level of stress of 65 mothers (Seymour et al., 2013). This study revealed that since problematic behaviors need constant attendance, mothers of children with autism suffered from high levels of fatigue, which was considered to have a negative impact on both their cognitive and physical functioning leaving them with elevated stress levels as well as diminished reported well-being. In another recent study, the researchers also concluded that the various social, emotional and behavioral difficulties that children with autism experience, make their parents more stress prone than parents of typically developing children (Lecavalier et al., 2013).

Due to the unpredictable nature of the behaviors of a child diagnosed with autism and the difficulty to provide parents with a clear future quality of life or prognosis, having a child with autism may have a negative effect on the parents' psychological health (Firth & Dryer, 2013; Falvo, 2005; Baker Ericzen & al., 2003). Indeed, parents dread regarding the prognosis's ambiguity leaves place to anxiety and worry (Pelchat and Lefebvre, 2004). As a matter of fact, it was found that the specific behaviors-such as irregular cognitive operations as well as untypical social interactions in addition to behavioral problems-which are related to neurodevelopmental disorders but particularly those on the autism spectrum, turned out to be predictors of both stress and distress in parents (Konstantareas and Papageorgiou, 2006; Bishop et al., 2007). Moreover, it

is noted in the literature that the characteristics of the disorder itself as well as its severity are major sources of stress to parents (Saloviita, 2003). In fact, at the University of Kansas, a study conducted by Wang and al., (2004) examined how the child's severity of disability impacted and predicted the family quality of life. It resulted in confirming that the child's severity of symptoms was a core predictor of the parents' quality of life; the more severe symptoms the child displayed, the less parents scored on the quality of life administered scales. Additionally, the higher the child's impairments, the higher parents scored on stress scales (Firth & Dryer, 2013).

A cross-sectional study conducted by Azar and Kurdahi-Badr (2006) in Lebanon looked at the factors affecting the adaptation of mothers of children diagnosed with mental disabilities. They reached a sample of 127 Lebanese mothers revealing that a high number of the studied sample demonstrated depressive symptoms as well as high levels of stress. The cause of stress, as reported by Azar and Kurdahi-Badr, is produced by the burden of the child's condition as well as the social impact that accompanies it. The results of the given study revealed that 46.5% of the mothers in the study displayed depressive symptoms, while 60% of them scored highly on stress scales.

As seen in the literature, even when compared to groups of parents of children with different types of disabilities, parents having a child diagnosed with autism consistently reported feeling more stress and anxiety (Dabrowska and Pisula, 2010). A Saudi study conducted in 2012 by Haimour and Abu-Hawwash (2012) amongst parents of children with different types of diagnosed disabilities such as mental retardation, learning disabilities, physical disabilities, and autism revealed that the group of parents of children with ASD received the lowest Quality of Life scores. Another study covering 162 parents of children diagnosed with Down syndrome,

Autism or no diagnosis at all indicated that parents of children on the spectrum held a bigger load in the areas of stress, dependency and managements, limitations to the family's opportunities as well as the care received across their lifespan (Dabrowska and Pisula, 2010).

Moreover, studying self-esteem, social support and life satisfaction in Chinese parents of children with autism, a study done by Lu and al., (2015) compared 118 parents of children diagnosed with autism to 122 parents of typically developing children on three scales: the Rosenberg Self-Esteem Scale (SES), the Multidimensional Scale of Perceived Social Support (MSPSS) as well as the Satisfaction with Life Scale (SWLS). The results showed that parents of children on the autism spectrum disorder had lower scores when it came to self-esteem, social support as well as life satisfaction than those in the control group. Additionally, life satisfaction was found to be positively correlated with strong social support systems as well as higher perceived self-esteem (Lu et al., 2015). Looking at fathers' reported life satisfaction, a study conducted by Darling et al. (2011) comparing the life satisfaction of fathers of children with disabilities to the life satisfaction of fathers of typically developing children, concluded that stress induced by raising a child with a disability made fathers report being less satisfied in their life than the control group. Taking all the above literature into consideration, the current study predicted that parents of children on the autism spectrum disorder report lower on life satisfaction and psychological well-being than those of typically developing children

Parents' Needs and Psychological Health

It is usually more common to address the diagnosed child's needs in order to provide him/her with the appropriate services. However, when parents are not adequately supported and coping with their diagnosed child's status, the intervention done with the child is itself compromised (Robbins, Dunlap, and Plienis, 1991; Dunn et al., 2001; Richmond et al., 2009).

Therefore, acknowledging the fact that parents of children with disabilities feel overwhelmed by the challenges of providing their diagnosed child with the appropriate services (Burke, 2008), a number of research studies studied the needs of the parents with disabled children, in order to address them properly through tailored intervention plans (Hemdi and Daley, 2017, Papageorgiou and Kalyva, 2010; Lindsay and al., 2016). In one of the studies, it was shown that the more needs were expressed by parents, the more negative their attitudes towards the disability of their child were (Subhash & Showkat, 2014). According to Lindsay et al. (2016) and Pshwani & Menon (1991), approaches targeting needs of all family members proved to be more effective than those only addressing the child's needs relative to their disability; as a matter of fact, directing services towards the family members turned out to be one of the best strategies to enhance the family's well-being as a whole. A study looking at the parents' of children on the autism spectrum disorder self-reported needs as well as their expectations revealed a difference between the needs of 227 mothers and those of 72 fathers (Papageorgiou et al., (2010). The findings of this study showed fathers as having less adaptation and coping skills when compared to mothers.

Siklos and Kerns (2006) developed a study in which 56 parents of children with autism and 32 parents of children with Down syndrome were examined. The study concluded that although parents of children on the spectrum received the same amount and support services as those of children with different kinds of disabilities as well as normally developing children, yet they did not receive the adequate type or needed support (Siklos and Kerns, 2006). The difference in the support received was then proven to be in the quality of services as well as their perceived necessity, and not in the availability of the services presented to parents and their children with special needs (Siklos and Kerns, 2006).

According to Siklos and Kerns (2006), the parents' belief that the support received is "the one needed for them" as well as the quality of support provided have both helped these parents in their effective adaptation and adjustment process. In fact, when effectively supported, parents demonstrated being able to deal with more stressors than those who did not receive the adequate support (Burke, 2008; Sandall & al., 2006). Similarly, it was found that social support as well as proper coping skills impacted the way the family handled their child's disability and diminished the stress it caused (Eisenhower, Baker, and Blacher, 2005). Allowing parents to have more time for themselves and that by providing the disabled child with respite care was linked to a diminution of the stress levels as well as physical strains (Joyce et al., 1983; Harper et al., 2003). Moreover, Kourkoutas et al. (2012) as well as Vassiliki and al., (2015) emphasized the importance of services addressed to the family members, especially parents and that to enhance their parenting skills and practices towards their diagnosed child, highlighting the need of support especially in the domain of psychological well-being. Based on the above discussed literature, the current study predicted that a negative association existed between the number of reported unmet parental needs and psychological well-being among parents of children on the autism spectrum disorder.

Mothers and Fathers of Children with Autism

Regarding differences in well-being between fathers and mothers, a study conducted by Hastings et al (2005) revealed that mothers of children with autism reported more symptoms of depression than fathers when compared to parents with a child with a non-developmental disability and to a control group consisting of parents of neurotypical children. When compared to fathers, mothers-being the main parent caring for the disabled child-report more stress and less psychological well-being, and are more affected and by their disabled child's situation (Roach,

Orsmond, and Barrat, 1999; Hassal et al., 2005). Looking at how symptoms of the Autism Spectrum Disorder affect parental stress, a study involving 124 participants, of which 101 mothers and 23 fathers of children diagnosed with autism, was conducted. It revealed that the child's sociability was a significant predictor of mothers' stress levels, while it is the child's cognitive and sensory awareness that predicted the fathers' stress levels (Allen and al., 2013). Although parenting a child diagnosed on the spectrum can be challenging for both mothers and fathers, they do not experience the parenting dimensions similarly. In order to investigate the differences of how mothers and fathers perceive the parenting dimensions, 99 parents of children with autism were examined (Ozturk et al, 2014). The study aimed to study three areas of parenting: stress, attitude and mental health. Results of the study underlined that although mothers engaged more socially with their diagnosed child than fathers, they were more depressed than fathers, yet showed similar stress levels (Ozturk and al., 2014).

Moreover, the impact of parenting a child with autism on the lives of the primary caregivers, specifically the mother, was studied by many researcher in the Arab world. For instance, looking into unmet needs of mothers of children with autism, a qualitative study was conducted in the Kingdom of Saudi Arabia by Hemdi and Daley (2017). The study resorted to telephone interviews with mothers raising a child diagnosed with autism spectrum disorder. The study findings concluded that six repetitive themes of needs emerged from the reported interviews. In fact, mothers conveyed having insufficient information about their diagnosed child's disorder. They reported needing more professional and direct information about ASD. They also admitted to experiencing poor psychological well-being when receiving their child's diagnosis and believed they needed support and counselling services. Moreover, mothers expressed demanding some alone time, thus help in taking care of their child with autism.

Additionally, they expressed needing accessible and affordable training when it comes to dealing with problematic behaviors accompanying their child's disorder. Furthermore, mothers of children with autism described the need of having proper services offered to their children and that by qualified staff, especially in regular educational settings. Finally, they suffered from lack of support and that expressing their need for constant assistance and help in spreading public autism awareness, dissipating the stigma associated with their child's disability (Hemdi and Daley, 2017).

Another study in the Arab world was conducted by Dardas (2016) in which the researcher concluded that parents of children with autism, but more significantly mothers, suffered from poor quality of life and psychosocial health. In fact, being the primary caregiver of the child, mothers usually report carrying the heavier burden and more negative impact of rearing a child with autism than fathers in Middle Eastern countries (Zahr & Hattar-Pollara, 1998; Gau et al., 2011). In conclusion, mothers of children with disability are more prone to experience stress and anxiety than fathers (Hassall et al., 2005; Helitzer, Cunningham-Sabo, Varleit, & Crowe, 2002). Therefore, the current study predicted that mothers of children on the autism spectrum disorder report lower on the life satisfaction and psychological well-being than fathers of children on the autism spectrum.

In consideration of the studies done and the literature reviewed above, the following hypotheses were examined in this study:

Hypothesis 1: Parents of children on the autism spectrum disorder will report lower on the

- a- life satisfaction than those of typically developing children
- b- psychological well-being than those of typically developing children.

Hypothesis 2: There is a negative correlation between the reported unmet parental needs and psychological well-being among parents of children on the autism spectrum disorder.

Hypothesis 3: There is a negative correlation between the reported unmet parental needs and life satisfaction among parents of children on the autism spectrum disorder.

Hypothesis 4: Mothers of children on the autism spectrum disorder report lower scores on life satisfaction and psychological well-being than fathers of children on the autism spectrum.

Chapter 3

Method

The purpose of the present study was to investigate the impact of unmet needs of parents of children with autism on their psychological well-being and life satisfaction.

Participants

Participants in this study consisted of 75 parents, 21 of children on the autism spectrum and 54 of typically developing children; the sample comprised of 19 fathers and 56 mothers whose ages ranged between 20 and 60 years. The participants were all parents of children who were between 3 and 12 years old, enrolled at Adduha High School between KG1 and Grade 4 classes. The children diagnosed with autism benefited from a specialized integration program which is located in the same school. Students with autism were included in regular classroom settings and were presented with special education services as well as speech and psychomotor therapy sessions to help them benefit from the integration program. Parents in this study received their child's diagnosis when he/she was between 2 and 3 years old.

A majority of the participants reported being married ($n=73$), having between 1 and 6 children. Highest level of education reported by the parent completing the questionnaire ranged between Brevet ($n=13$), High School ($n=16$), technical degree ($n=7$), BA ($n=24$), MA ($n=11$) and PhD ($n=4$). The highest level of education reported about the spouse of the parent completing the survey ranged between brevet ($n=21$), high school ($n=13$), BA ($n=24$), MA ($n=9$) and PhD ($n=4$). Twenty-nine ($n=29$) of the parents completing the questionnaire reported being unemployed, eight (8) of them were part-timers, and thirty-two (32) reported working on a full time basis. A summary of the collected demographic data is found in Table 1.

Table 1:
Demographic Descriptive Statistics (n=75)

	Number	Percentage	
Parent Completing the Survey			
Mother	56	75%	
Father	19	25%	
Age			
20-25	1	1%	
25-30	3	4%	
30-35	30	43%	
35-40	18	26%	
40-45	6	9%	
45+	11	16%	
Marital Status			
Married	73	97%	
Divorced	1	1%	
Widowed	1	1%	
Employment status			
Unemployed	32	43%	
Employed-Full Time	35	47%	
Employed-Part Time	8	11%	
Number of Children			
1 to 2	37	49%	
3 to 4	30	40%	
5 to 6	8	11%	
Children live with			
Both Parents	69	92%	
Mother	5	7%	
Father	1	1%	
Other	0	0%	
Number of children at AHS			
	1	13	57%
	2	6	26%
	3	2	9%
	4	1	4%
	5	1	4%
Autism Diagnosis			
Yes	21	28%	
No	54	72%	
Gender of diagnosed child			
Male	18	86%	
Female	3	14%	
Number of children with autism			
	1	21	100%
	2	0	0%

Materials

All parents in the study received a packet containing a consent form (See Appendix A), a demographic questionnaire (See Appendix B), the Satisfaction with Life Scale (SWLS) (See Appendix C) as well as the Ryff's Psychological Well-Being (PWBS) 42-items scale (See Appendix D). Parents of children reporting having one child or more diagnosed with autism received an envelope containing the Family Needs Questionnaire (FNQ) adapted by Siklos and Kerns (See Appendix E). The following is a description of the materials used:

Demographics Questionnaire

A demographic questionnaire was created for the purposes of this study in order to collect relevant information (*i.e.* gender, age, education level, autism diagnosis, etc.) of the target population. The demographic questionnaire used in this study comprised of 16 questions of which 12 are multiple choice ones and 4 are fill-in-the-blank questions (See Appendix B).

Satisfaction with Life Scale

The Satisfaction with Life Scale (SWLS) is a five item scale that assesses the global life satisfaction using a 7-point Likert-type scale (see Appendix C) ranging between 1 (strongly disagree) and 7 (strongly agree). Obtained scores can range between 5 and 35, with a 0.87 coefficient alpha (Diener, Emmons, Larsen, & Griffin, 1985; Eid and Diener, 2004).

Developed in the United States of America to assess the overall life satisfaction, the SWLS measures the general life satisfaction of an individual rather than looking at specific satisfaction domains (Neto, 1992). The SWLS was demonstrated to be a valid and reliable measure that can be used through different age groups and settings. Furthermore, it displayed a good convergent validity alongside other subjective scales. It is then recommended to be used to

complement other well-being scales as it looks into the conscious evaluation of one self's life satisfaction (Pavot and Diener, 2009). Being brief, the SWLS can be supplementary to any other scale with little time cost.

Ryff Scales for Psychological Well-Being

The Ryff Scales for Psychological Well-Being (see Appendix D) was designed to measure the psychological well-being of individuals, tackling 6 of its areas: Autonomy, Environmental Mastery, Personal Growth, positive relations to others, Purpose in Life and Self-Acceptance. In the Ryff's Psychological Well-Being Scale, the autonomy scale looks into self-determination and independence as well as the person's sense of control. The environmental mastery sub scale assesses the test-taker's capability of manipulating and controlling multifaceted situations. As for the personal growth section, it measures the individual's wants to accomplish their potential. When it comes to positive relationships and purpose in life, they respectively measure the capability of establishing quality relationships with others and the person's own goals in life. Self-acceptance finally looks into how much does the test-taker look positively at themselves.

In this study, the medium form of the PWB will be used; it includes 42 questions, reflecting the above mentioned areas of psychological well-being with an internal consistency that ranged between 0.72 and 0.88 (Salama-Younes et al., 2011). Answers are noted through a 6-point-Likert-type scale ranging between 1 (strongly disagree) and 6 (strongly agree).

The Family Needs Questionnaire (FNQ)

Parents who reported having a child diagnosed on the Autism Spectrum Disorder were also given the Family Needs Questionnaire (FNQ) to complete (see Appendix E). Although originally developed and designed to assess the needs of families of traumatic brain injury (TBI)

survivors, the FNQ-R (see Appendix B) was found to be used in literature addressing families of kids with ASD needs and other neurological disabilities as the difficulties and shortcomings observed in children with TBI reflect those observed in children on the Autism Spectrum Disorder (Siklos & Kerns, 2006). The original FNQ psychometric properties reflected a 0.75 coefficient of internal consistency which, according to Kreutzer, Serio and Bergquist (1994), was perceived as acceptable due to the diversity of the questionnaire's items.

Siklos in Kerns, in 2006, created a tailored version of the original Family Needs Questionnaire that was created by Kreutzer, Comclair and Waaland in 1988 and that to specifically target parents of children with special needs, especially those diagnosed with autism and Down Syndrome. Siklos and Kerns then developed a FNQ version to assess needs regularly conveyed by parents of children with special needs, tailoring particular declarations pointing to those specific needs. Its authors state that it "can be used to develop individualized educational and therapy programs tailored to family members' stated needs". The modified FNQ returned a 0.95 Cronbach Alpha when tested for internal consistency and reliability by Siklos and Kerns (2006).

Research Design

This is a quantitative study that is based on self-report measures. An independent *t-test* was used to examine hypotheses 1 and 4 and a bivariate correlational design to examine hypotheses 2 and 3. For exploratory purposes, more bivariate correlations were led to define the relationship of each construct in the Ryff's Psychological Well-being Scale to the parents' reported needs. Additionally, a regression analysis was also conducted exploring the parents' satisfaction with life as well as their psychological well-being.

Procedure

Along with their child enrolled at Adduha High School, parents were sent a packet containing an Informed Consent Form, a Demographics Questionnaire, and two scales: the Satisfaction with Life Scale (SWL) and the Ryff's Scale for Psychological Well-Being (PWB) to complete. Parents who reported having a child with autism were also asked to complete the Family Needs Questionnaire (FNQ). One hundred parents received the packets, seventy five of them returned them. Instructions, including a brief description of the study and its benefits, were given to parents to complete the forms in the packet. Any questions or inquiries parents had about the study were addressed and cleared out by contacting the person conducting the study either by telephone or through an individual meeting. Parents were not asked to complete any form that contained their name or phone number and that to ensure confidentiality. Parents who returned the packet reported that completed the questionnaires and scales took them between 30 and 45 minutes. All packets were returned back either sent with the child or by hand.

Data Analysis

After collecting the data, the researcher used the statistical tool SPSS to produce the statistical results.

Chapter 4

Results

The purpose of this study was to study the impact of unmet needs of parents of children with autism on their psychological well-being and life satisfaction. This chapter provides an overview of the results of the investigated hypotheses as well as the reliability testing of the scales used.

Reliability Testing

Cronbach's alpha was calculated in order to determine the internal consistency of the scales used in this study. The reliability coefficients obtained fell into the acceptable range and were as follows: Satisfaction with Life Scale ($\alpha=0.69$), Ryff's Psychological Well-Being Scale ($\alpha=0.83$). As for the Ryff's Psychological Well-Being Subscales, the reliability coefficients turned out to be as follows: Autonomy ($\alpha=0.54$), Environmental Mastery ($\alpha=0.56$), Personal Growth ($\alpha=0.57$), Self-Acceptance ($\alpha=0.64$), Positive Relationships ($\alpha=0.66$), and Purpose in Life ($\alpha=0.47$).

Results of the Cronbach alpha studied in this research are displayed in Table 2.

Table 2:

Cronbach's alpha for the Satisfaction with Life Scale, Ryff's Psychological Well-Being Scale and subscales

	Previous Cronbach's alpha	Current Cronbach's alpha
Satisfaction with Life Scale	.87	.69
Ryff's Psychological Well-Being Scale	.72-.88	.83
Autonomy	.86	.86
Environmental Mastery	.90	.56
Personal Growth	.87	.57
Self-Acceptance	.93	.64
Positive Relationships	.91	.66
Purpose in Life	.90	.47

Hypotheses Testing

Hypothesis 1: Parents of children on the autism spectrum disorder will report lower on the

- a- life satisfaction than those of typically developing children
- b- psychological well-being than those of typically developing children.

An independent sample t-test was conducted to compare the life satisfaction and psychological well-being of parents having a child diagnosed with autism and parents of typically developing children. A difference was noted in the life satisfaction scores whereby parents of children with autism scored lower than parents of typically developing children with $t(71)=-2.04$ and $p=0.045$ as well as in the Self-Acceptance Psychological Well-Being subtest score, whereby parents of children with autism scored lower than parents of typically developing children with $t(67)= -2.95$ and $p= 0.006$ (see Table 3). The obtained results indicated that a child's autism diagnosis does impact the parents' reported satisfaction with life as well as their Self-Acceptance. Therefore, part (a) of this hypothesis was confirmed.

Table 3:
Independent Samples t-test for SWL scores and PWB scores of parents

		Autism Diagnosis	Mean	Std. Deviation
Satisfaction with Life	Yes (n=21)		23.0476	4.97470
	No (n=52)		25.5962	4.76202
Self-Acceptance	Yes (n=20)		29.3500	5.83343
	No (n=49)		32.9592	4.25715

		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
SWL	Equal Variances Assumed	.035	.852	-2.044	71	.045	-2.548
	Equal Variances not assumed			-2.006	35.628	.053	-2.548
Self-Acceptance	Equal Variances Assumed	2.468	.121	-2.859	67	.006	-3.609
	Equal Variances not assumed			-2.508	27.641	.018	-3.609

Hypothesis 2: There is a negative correlation between the reported unmet parental needs and psychological well-being among parents of children on the autism spectrum disorder.

A Pearson's correlation coefficient was computed to assess the relationship between the reported psychological well-being scores and the reported parents' unmet needs scores, revealing no significant correlation between the two variables, even when the psychological well-being subscales were studied, as seen in table 4. Therefore, this hypothesis was not supported.

Hypothesis 3: There is a negative correlation between the reported unmet parental needs and life satisfaction among parents of children on the autism spectrum disorder.

A Pearson's correlation coefficient was computed to assess the relationship between the reported life satisfaction scores and the reported parents' unmet needs scores, displaying no

significant correlation between the two variables ($r = -0.455$, $n = 18$, $p = 0.058$) (see table 4).

Therefore, this hypothesis was not supported.

Table 4:

Correlations between PWB subscales and family needs

		Autonomy	Environmental Mastery	Personal Growth	Positive Relations	Purpose in Life	Self- Acceptance	Satisfaction with Life
Family Needs	Pearson Correlation	.011	-.367	-.233	-.184	-.441	-.455	-.363
	Sig. (2-tailed)	.966	.134	.352	.466	.067	.058	.138
	N	17	18	18	18	18	18	18

Correlation is significant at the 0.01 level (2-tailed)

Hypothesis 4: Mothers of children on the autism spectrum disorder report less life satisfaction and psychological well-being than fathers of children on the autism spectrum.

An independent sample t-test was conducted to compare the level of psychological well-being and level of life satisfaction between mothers and fathers of children diagnosed with autism. No significant differences were noted when it came to the reported satisfaction with life scores between and fathers with $t(19) = -0.217$ and $p = 0.831$ and psychological well-being scores with $t(17) = 0.599$ and $p = 0.557$ (see table 5). This hypothesis was therefore not confirmed.

Table 5:

Independent sample t-test for SWL and PWB scores for mothers and fathers of children with autism

		Gender	Mean	Std. Deviation
Satisfaction with Life		Male (n=6)	22.6667	5.78504
		Female (n=15)	23.2000	4.82849
Psychological Well-Being		Male (n=5)	191.2000	29.31211
		Female (n=14)	182.6429	26.82882

		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
SWL	Equal Variances Assumed	.291	.596	-.271	19	.831	-.53333
	Equal Variances not assumed			-.200	7.954	.847	-.53333
PWB	Equal Variances Assumed	.008	.931	.599	17	.557	8.557
	Equal Variances not assumed			.573	6.571	.586	8.557

Exploratory Analysis

Although not hypothesized upon, by applying further analysis, the following results were obtained. A multiple linear regression revealed that self-acceptance and environmental mastery explained 33.4% of the variance in the satisfaction with life scores among all parents, $F(2, 66) = 16.583, p < .001$ (see table 4.6). The final model revealed that environmental mastery is a significant positive predictor of satisfaction with life score, $b = 0.403, \beta = .397, t(66) = 3.058, p < .05$. Self-acceptance emerged as a non-significant predictor of SWL SCORE, $b = 0.237, \beta = .239, t(66) = 1.838, p = .071$ (see Table 6).

Table 6:
Multiple regression analysis for SWL, environmental mastery and self-acceptance

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.578 ^a	.334	.314	4.10932

a. Predictors: (Constant), Self-Acceptance score, environmental mastery score

ANOVA^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	560.044	2	280.022	16.583	.000 ^a
	Residual	1114.507	66	16.886		
	Total	1674.551	68			

a. Predictors: (Constant), self-acceptance score, environmental mastery score

b. Dependent Variable: Satisfaction with Life Score

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.118	3.501		1.462	.149
	Environmental Mastery	.403	.132	.397	3.058	.003
	Self-Acceptance	.237	.129	.239	1.838	.071

a. Dependent Variable: Satisfaction with Life Score

Chapter 5

Discussion

This study was conducted to explore the impact of unmet needs of parents of children with autism on their psychological well-being and life satisfaction. This chapter discusses the findings of the investigated hypotheses.

The first hypothesis that parents of children on the autism spectrum disorder will be lower on life satisfaction and psychological well-being than those of typically developing children was partially supported. Results revealed that parents of typically developing children were more satisfied in their life than those having children with autism, however, no differences in well-being were reported between both groups except for the self-acceptance subscale. During the past decade, numerous studies done in different countries reported similar findings regarding the satisfaction of life variable.

Gladding (2007) revealed that childcare itself can be a source of stress for parents of typically developing children when compared to parents without children and hence reported low satisfaction with life. The satisfaction with life, however, is reported to be lower in parents of children diagnosed with a specific disorder when compared to parents of typically developing children (Bailey & Smith, 2000; Paster, Brandwein & Walsh, 2009). Moreover, the life satisfaction of parents of typically developing children tends to get better as the children grow up (Gladding, 2007), whereas the life satisfaction tends to remain low as reported by parents of children needing intense and special care. Specifically, many different studies revealed how having a child with ASD can be an important source of stress for the parents who reported low satisfaction with life (Nazlı, 2001; Hassal, Rose & McDonald, 2005; Hastings, 2003; LeCavalier,

Leone & Wiltz, 2006; Achilles et al., 2007). In fact, when comparing mothers of children with autism to mothers of children with no disability, it was demonstrated that the prior group reported less satisfaction and higher levels of stress than the latter group (Firat, Avci, & Seydađlu, 2001; Weiss, 2002; Moes et al., 1992). Additionally, a study reported by Strachan (2005) revealed that satisfaction with life in fathers of typical children was much higher than the satisfaction with life reported by fathers with children with a disability.

Looking at the overall psychological well-being of parents in this study, self-acceptance, which is a subscale of well-being, appeared to be lower in parents of children diagnosed with autism. In accordance with previous literature, it is found that parents of children on the spectrum described blaming themselves and feeling guilty for having a child diagnosed with autism (Mercer, Creighton, Holden, & Lewis, 2016). Furthermore, a study looking at factors improving the overall psychological well-being of parents of children with autism found that self-compassion as well as acceptance were positively linked to both life satisfaction and psychological well-being (Neff & Faso, 2014).

Regarding the second and the third hypotheses, no significant correlations were found in this study between the parents' reported needs and their life satisfaction or their psychological well-being. Therefore, hypotheses 2 and 3 were not confirmed for the population sample taken in this study. Previously conducted research reported an existing correlation between psychological health (i.e. satisfaction with life and psychological well-being) and the parents' reported unmet needs. For instance, in a study conducted by Hutton and Caron (2005), it was reported that two thirds of the parents who received services whether directly or through their diagnosed child, expressed reduced stress levels and better psychological health. In another study by Pozo et al. (2011), parents who are supported with their child who is diagnosed with autism reported relief

and alleviation of the stress and anxiety feelings. In this study, however, the fact that no significant correlations between the needs of the parents and their psychological well-being or life satisfaction were detected, might be due to the fact that the children at the Lebanese Autism Society, Classes for Children with Autism (English Section) have all benefited from a specialized integration program tailored to provide them with the services and therapies required. Another reason could be related to the parents' reticence of reporting their needs, and that not to be seen as not providing their child with autism with the necessary services.

The fourth hypothesis that mothers of children on the autism spectrum score lower on the psychological well-being and life satisfaction than fathers was not confirmed. No significant difference was found between fathers and mothers of children with autism on these two variables, which is also found in previous research revealing that raising a child diagnosed with autism can be challenging for both parents together (Ozturk, Riccadonna, & Venuti, 2014; Pozo et al., 2013). In fact, when conducting a study on twenty-four fathers and thirty-three mothers of children with autism, Pozo et al (2011) did not find any difference between the two groups concerning their reported stress levels (Ozturk et al., 2014). Additionally, a study done by Allen et al., (2013) looking at the psychological health in mothers and fathers of children with ASD, found that the general characteristics associated with autism were not predictors of parental psychological health themselves.

Furthermore, Davis and Carter (2008) found that it is the lack of communication as well as the poor social skills of the diagnosed child that might have a direct negative effect on the psychological health reported specifically by mothers. As for fathers, it was found that it is both the sensory and intellectual awareness of the diagnosed child that impact their psychological health (Allen et al., 20013; Freeman et al., 1991; Baker et al., 2002; St John-Seed et al., 2005).

Thus, teaching children with autism social and communication skills helps in reducing the negative impact of the psychological health of their mothers. In other words, offering the parents with the needed services improves their adaptation and psychological health (Weiss, 2002). The fact that this study looked at a sample of verbal children with autism, all integrated in regular classroom settings and receiving the adequate intervention programs, including tackling both their communication and social skills as well as their cognitive and academic skills, might explain why no significant difference in the psychological well-being between mothers and fathers was detected (Freeman et al., 1991; Baker et al., 2002).

Additional Analysis

Conducting further exploratory analysis, this study found that environmental mastery was a predictor of life satisfaction in parents, whether they had a child diagnosed with autism or a typically developing child. Looking into the general psychological well-being of adult men and women, it was found that satisfaction and harmony in life were predicted by high levels of environmental mastery, highlighting that the individual's psychological well-being is a predictor of his/her life satisfaction (Garci, Al Nima, & Kjell, 2014). Nevertheless, those findings do not reveal why the reported positive psychological well-being (here in the form of environmental mastery) predicts more reported satisfaction with life in adults.

Clinical Implications of the Study

This studied demonstrated that in the same educational environment parents of children with autism reported lower levels of life satisfaction as well as lower levels of self-acceptance than those parents of typically developing children. This information allows professionals working with children on the autism spectrum disorder to be attentive to the parents' expressed concerns rather than only focusing on the child's centered services. Although one single study

cannot provide guiding principles for professionals and practitioners when it comes to intervention plans, yet this study concludes with the note that providing the families of children with autism with the necessary services correlates positively with their psychological health. Therefore, it is recommended that specialized educational settings oblige the parents to fill a preliminary needs assessment once their child is enrolled in the program. Such an assessment would help the professionals in charge to incorporate those needs in the intervention plans.

Noting no significant differences between mothers' and fathers' reported psychological well-being, professionals would be encouraged to look at the family's needs as a whole rather than focusing on the needs of a primary caregiver. Additionally, by understanding what aspects of autism has a greater impact on the parents' psychological well-being, addressing the problematic symptoms would be incorporated in the initial intervention plan of the child, along with the services provided to the families of children with autism.

Recommendations for Future Research

Although no intervention plan was studied, it would be valuable for future studies to look into the impact of the intervention plan itself on the parents' needs as well as their psychological health.

Additional research may be conducted to comprehend the overall significance and importance of the needs stated in the Family Needs Questionnaire and that by analyzing each response independently. Conducting such an analysis before the implementation of an intervention program with children on the autism spectrum disorder and their families, and after its completion, helps detect the progression of the parents' expressed needs.

Since this study only looked into a sample of verbal children with a mild autism diagnosis and that received specialized services, additional research may include a wider

spectrum of children with autism, looking also into the psychological health and needs of parents of children with a diagnosis of profound autism and those who do not have access to professional services.

Limitations of the Study

This study had its limitations. It looked into a convenient small sample of parents, all having children enrolled at the same school and benefiting from a regular or specialized inclusion program. All the parents of children with autism in the sample had access to tailored services whether directly or through their children. The study did not look at parents of children who were not enrolled in a specialized program. Second, all children with autism in this sample were verbal and diagnosed with mild autism; the sample did not include any children that had a diagnosis of severe or profound autism.

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Appendix A
Parents' Consent Form

September, 2017

Dear Parents of children enrolled at Adduha High School,

I am Nisrine Chamseddine, a graduate student at Haigazian University, mastering in Clinical Psychology. I am currently writing my thesis on "Impact of Children with Autism on Parents' Psychological Health". My work is currently supervised by Dr. Marwan Gharzeddine.

The purpose of my study is to assess parents psychological health, studying the impact of having one or more child(ren) with autism on it. By understanding how having a child with autism affects the parents psychological health, we will be able to develop an intervention plan, providing parents with what they believe is needed to help them cope with their child's diagnosis and evolution. Therefore, your collaboration in this study is of high importance in order to be able to develop a useful intervention plan.

Kindly take the time to fill the attached questionnaires. Should you need any further explanation, do not hesitate to contact me.

Sincerely,

Nisrine Chamseddine

N.chamseddine@gmail.com

00961-3-174415

Appendix B
Demographic Questionnaire

Kindly check the appropriate answers and/or fill-in the answers in the space provided

1. Person Filling this Form

- Mother
- Father
- Other: -----

2. Gender

- Male
- Female

3. Age of Parent Completing the form -----

4. Marital Status

- Married
- Divorced
- Widowed

5. Highest level of Education

- Brevet
- High School
- BA
- MA
- PhD
- Technical Degree

6. Spouse's Highest Level of Education

- Brevet
- High School
- BA
- MA
- PhD
- Technical Degree

7. Employment Status

- Employed
- Unemployed
- Full Timer
- Part Timer

8. Number of Children

- 1
- 2
- 3
- 4

9. Child(ren) live(s) with

- Both Parents
- Mother
- Father
- Other: -----

10. Number of Children Enrolled at Adduha High School

- 1
- 2
- 3
- 4
- 5

11. Do you have any children diagnosed with autism?

- Yes
- No

12. Gender of Diagnosed Child

- Male
- Female

13. If yes, number of children with autism

- 1
- 2
- 3

14. Age(s) of child(ren) with Autism -----

15. In what grade level is your child enrolled? -----

16. In what year did you receive your child's diagnosis? -----

Appendix C
Satisfaction with Life Scale

Instructions: Below are five statements that you may agree or disagree with. Using the 1-7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding the item.

Please be open and honest in your responding.

- 7** - Strongly agree
- 6** - Agree
- 5** - Slightly agree
- 4** - Neither agree or disagree
- 3** - Slightly disagree
- 2** - Disagree
- 1** - Strongly disagree

_____ In most ways my life is close to my ideal.

_____ The conditions of my life are excellent.

_____ I am satisfied with my life.

_____ So far I have gotten the important things I want in life.

_____ If I could live my life over, I would change almost nothing.

Appendix D
Ryff's Psychological Well-Being Scale

Please indicate your degree of agreement (using a score ranging from 1-6) to the following sentences.

		Strongly Disagree					Strongly Agree
1	I am not afraid to voice my opinions, even when they are in opposition to the opinion of most people.	1	2	3	4	5	6
2	In general, I feel I am in charge of the situation in which I live.	1	2	3	4	5	6
3	I am not interested in activities that will expand my horizons.	1	2	3	4	5	6
4	Most people see me as loving and affectionate.	1	2	3	4	5	6
5	I live life one day at a time and don't really think about the future.	1	2	3	4	5	6
6	When I look at the story of my life, I am pleased with how things have turned out.	1	2	3	4	5	6
7	My decisions are not usually influenced by what everyone else is doing.	1	2	3	4	5	6
8	The demands of everyday life often get me down.	1	2	3	4	5	6
9	I think it is important to have new experiences that challenge how you think about yourself and the world.	1	2	3	4	5	6
10	Maintaining close relationships has been difficult and frustrating for me.	1	2	3	4	5	6
11	I have a sense of direction and purpose in life.	1	2	3	4	5	6
12	In general I feel confident and positive about myself.	1	2	3	4	5	6
13	I tend to worry about what other people think of me.	1	2	3	4	5	6
14	I do not fit very well with the people and the community around me.	1	2	3	4	5	6
15	When I think about it, I haven't really improved much as a person over the years.	1	2	3	4	5	6

16	I often feel lonely because I have few close friends with whom to share my concerns.	1	2	3	4	5	6
17	My daily activities often seem trivial and unimportant to me.	1	2	3	4	5	6
18	I feel like many of the people I know have gotten more out of life than I have.	1	2	3	4	5	6
19	I tend to be influenced by people with strong opinions.	1	2	3	4	5	6
20	I am quite good at managing the many responsibilities of my daily life.	1	2	3	4	5	6
21	I have the sense that I have developed a lot as person over time.	1	2	3	4	5	6
22	I enjoy personal and mutual conversations with family members or friends.	1	2	3	4	5	6
23	I don't have a good sense of what it is I am trying to accomplish in life.	1	2	3	4	5	6
24	I like most aspects of my personality.	1	2	3	4	5	6
25	I have confidence in my opinions, even if they are contrary to the general consensus.	1	2	3	4	5	6
26	I often feel overwhelmed by my responsibilities.	1	2	3	4	5	6
27	I do not enjoy being in new situations that require me to change my old familiar ways of doing things.	1	2	3	4	5	6
28	People would describe me as a giving person, willing to share my time with others.	1	2	3	4	5	6
29	I enjoy making plans for the future and working it make them a reality.	1	2	3	4	5	6
30	In many ways, I feel disappointed about my achievements in life.	1	2	3	4	5	6
31	It's difficult for me to voice my own opinions on controversial matters.	1	2	3	4	5	6
32	I have difficulty arranging my life in a way that is satisfying to me.	1	2	3	4	5	6

33	For me, life has been a continuous process of learning, changing and growth.	1	2	3	4	5	6
34	I have not experienced many warm and trusting relationships with others.	1	2	3	4	5	6
35	Some people wander aimlessly through life, but I am not one of them.	1	2	3	4	5	6
36	My attitude about myself is probably not as positive as most people feel about themselves.	1	2	3	4	5	6
37	I judge myself by what I think is important, not by the values of what others think is important.	1	2	3	4	5	6
38	I have been able to build a home and a lifestyle for myself that is much to my liking.	1	2	3	4	5	6
39	I gave up trying to make big improvements or changes in my life a long time ago.	1	2	3	4	5	6
40	I know that I can trust my friends, and they know they can trust me.	1	2	3	4	5	6
41	I sometimes feel as if I've done all there is to do in life.	1	2	3	4	5	6
42	When I compare myself to friends and acquaintances, it makes me feel good about who I am.	1	2	3	4	5	6

Appendix E
Family Needs Questionnaire

Directions: The following statements describe needs that parents sometimes have. Because many of these needs are likely to be important to you, please respond according to how important each need is in relation to your overall needs. Also, these needs normally change over time. We are interested in knowing how important they are to you at the present time and whether they are being met. The information you provide will help us to understand the needs of your families and other families of children.

Please show how important you feel these needs are, relative to your overall needs, by using the scale below and placing a circle around the number which best describes your answer.

1	2	3	4	5
Unimportant	Slightly Important	Moderately Important	Important	Very Important

Use this scale to tell us whether each need is being met by circling Y, P, or N.

Y	P	N
Yes	Partly	No

I need...	Relative to overall needs, how important?					Need met now?		
	1	2	3	4	5	Y	P	N
1. To be well educated about my child's autism in order to be an effective decision maker regarding the needs of my child.	1	2	3	4	5	Y	P	N
2. Social services continuously rather than in times of crisis.	1	2	3	4	5	Y	P	N
3. To have consistent physical therapy for my child.	1	2	3	4	5	Y	P	N
4. For my child to have friends of his/her own.	1	2	3	4	5	Y	P	N
5. Different professionals such as physicians and medical doctors to agree on the best treatment options for my child.	1	2	3	4	5	Y	P	N

6. Different professionals such as psychologists/counselors to agree on the best therapy option for my child.	1	2	3	4	5	Y	P	N
7. To have a therapist/counselor to turn to for advice or therapy services when my child needs help.	1	2	3	4	5	Y	P	N
8. To have a medical doctor to turn to for advice when my child needs help.	1	2	3	4	5	Y	P	N
9. For my child to have consistent behavior therapy.	1	2	3	4	5	Y	P	N
10. Support from other family members in taking care of my child.	1	2	3	4	5	Y	P	N
11. Weekend and after-school social activities for my child.	1	2	3	4	5	Y	P	N
12. Therapists or counselors who have expertise working with children who have autism like my child.	1	2	3	4	5	Y	P	N
13. To have consistent occupational therapy for my child.	1	2	3	4	5	Y	P	N
14. To be educated as to why my child acts in ways that are different, difficult or unusual.	1	2	3	4	5	Y	P	N
15. For myself to have time to spend alone with my other children in my family.	1	2	3	4	5	Y	P	N
16. To be educated what to do when my child is acting unusually or is displaying difficult behaviors.	1	2	3	4	5	Y	P	N
17. To obtain information and knowledge regarding my child's therapeutic or educational progress.	1	2	3	4	5	Y	P	N
18. To be educate don how much to let my child do by him/herself.	1	2	3	4	5	Y	P	N

19. For my child to engage in social activities with others his/her own age.	1	2	3	4	5	Y	P	N
20. To have my child's school set up consistent speech therapy for my child as part of his/her education plan.	1	2	3	4	5	Y	P	N
21. For myself to have help with housework.	1	2	3	4	5	Y	P	N
22. For myself to get enough sleep.	1	2	3	4	5	Y	P	N
23. For myself to get a break from my responsibilities.	1	2	3	4	5	Y	P	N
24. For myself to spend time with my friends.	1	2	3	4	5	Y	P	N
25. To understand if I am making good decisions about my child.	1	2	3	4	5	Y	P	N
26. For medical professionals working my child to understand the emotional needs of my child.	1	2	3	4	5	Y	P	N
27. For counselors or therapists working with my child to understand the emotional needs of my child.	1	2	3	4	5	Y	P	N
28. For other children to feel comfortable around my child when in social settings.	1	2	3	4	5	Y	P	N
29. To have other family members understand my child's problems.	1	2	3	4	5	Y	P	N
30. To have my child's after school friends to understand his/her problems.	1	2	3	4	5	Y	P	N
31. For myself to express feelings about my child with a parent who has a child with autism.	1	2	3	4	5	Y	P	N
32. My child's social services to continue throughout the summer months and school breaks.	1	2	3	4	5	Y	P	N

33. For myself to be reassured that it is not uncommon to have negative feelings about my child's unusual behaviors.	1	2	3	4	5	Y	P	N
34. For myself to help deal with my fears about my child's future.	1	2	3	4	5	Y	P	N
35. For myself to have help in remaining hopeful about my child's future.	1	2	3	4	5	Y	P	N
36. For myself to be encouraged to ask for help from others.	1	2	3	4	5	Y	P	N
37. My other children to have counseling.	1	2	3	4	5	Y	P	N
38. To obtain information about special programs and services available to my child for my own education.	1	2	3	4	5	Y	P	N
39. To be personally shown respect by those working with my child.	1	2	3	4	5	Y	P	N
40. To have my child's teacher to be able to teach other students in the classroom about his/her unusual behaviors in a constructive way.	1	2	3	4	5	Y	P	N
41. For myself to have time to spend alone with my partner.	1	2	3	4	5	Y	P	N
42. My child's school to set up an individualized educational plan for my child.	1	2	3	4	5	Y	P	N
43. My child to have a teacher's aide with him/her at school who has knowledge about or experience with, working with children with the same disorder as my child.	1	2	3	4	5	Y	P	N
44. To have medical professionals address my child's medical needs on a consistent basis.	1	2	3	4	5	Y	P	N

45. To have counselors or therapists address my child's emotional needs on a consistent basis.	1	2	3	4	5	Y	P	N
46. For my family to agree on decisions regarding our child with autism.	1	2	3	4	5	Y	P	N
47. My child's physician or medical doctor to have experience working with children with autism.	1	2	3	4	5	Y	P	N
48. My child's counselor or therapist to have experience working with children with the same disorder of autism as my child.	1	2	3	4	5	Y	P	N
49. For my family to go out for dinner together a certain number of times each week.	1	2	3	4	5	Y	P	N
50. For my family to take more vacations each year.	1	2	3	4	5	Y	P	N
51. To take week-long vacations by myself each year.	1	2	3	4	5	Y	P	N
52. To have a range of medical services available for my child.	1	2	3	4	5	Y	P	N
53. To have a range of social services available for my child.	1	2	3	4	5	Y	P	N
54. Hospital services that are readily available for my child.	1	2	3	4	5	Y	P	N
55. Medical screening tests for my child every so often.	1	2	3	4	5	Y	P	N
56. A pediatrician who is able to help my child meet his/her nutritional and physical needs	1	2	3	4	5	Y	P	N
57. Medical professionals to agree on the best ways to treat my child.	1	2	3	4	5	Y	P	N
58. To be educated regarding my child's therapeutic and educational progress.	1	2	3	4	5	Y	P	N

Appendix F
Definitions of the Six Dimensions of Psychological Well-Being

Self-acceptance: Emphasis on acceptance of the self and of one's past life.

Positive relations: Having strong feelings of empathy and affection for all human beings and as being capable of greater love, deeper friendship, and more complete identification with others and warm relating to others.

Autonomy: Expressions of internal locus of evaluation, thus not looking to others for approval but evaluating oneself by personal standards.

Environmental mastery: The individual's ability to choose or create environments suitable to his or her psychic conditions.

Purpose in life: Having goals, intentions, and a sense of direction, all of which contribute to the feeling that life is meaningful.

Personal growth: Emphasis to continued growth and the confronting of new challenges or tasks at different periods of life.