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THE EFFECTIVENESS OF COUNSELING PROGRAMS IN ENHANCING QUALITY OF LIFE FOR FAMILIES OF CHILDREN WITH AUTISM SPECTRUM DISORDER IN JORDAN

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ABSTRACT

This study examined the effectiveness of a developed counseling program in enhancing quality of life of families of children with autism spectrum disorder and its relationship with selected variables, and thirty parents of children with autism spectrum disorder were selected randomly. The Quality of Life Scale (QOLS) was developed by the researchers and used before and after applying the counseling program. The findings showed statistical differences in the post-measurement in favor of the experimental group, demonstrating the program's effectiveness. In addition, there were no statistical differences found in the level of quality of life related to the severity of the autism disorder and social and economic status. The study concluded that having a disabled child in the family, regardless of social and economic level, imposes the family to consider their child's situation and develop their abilities to the fullest extent through having the required information of the child's situation and searching for educational alternatives to suit their abilities.

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Contribution/Originality: Families of children with an autism spectrum disorder in Jordan face many challenges in their daily lives while coping with these disorders; this study may help teachers and counselors enhance the quality of life for these families through different counseling programs.

1. INTRODUCTION

According to the fifth edition of the Diagnostic and Statistical Manual, Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder characterized by a delay or changes in social interaction and communication and restricted, repetitive behavioral patterns and activities (American Psychiatric Association, 2013). The prevalence of ASD fluctuates depending on several factors, including the size of the sample, age, early diagnosis, and cultural factors, and was estimated to affect approximately 27 out of 10,000 children in 2018". (Poovathinal et al., 2018).

Children with ASD and their parents are mostly treated in academic research as a homogeneous group rather than a heterogeneous category. Research, however, indicates that parents of children with ASD experience several difficulties and obstacles. Most of these difficulties are physical, social, emotional, and functional (Eapen & Guan, 2016) and are mostly related to their adjustment to their child's ASD characteristics and developmental difficulties (Hastings, 2003). Thus, several studies have indicated that parents of children with ASD suffer from psychological distress, family stress, restricted daily living activities, and lower well-being compared to parents of typically developing children (Abbeduto et al., 2004; Hyassat, 2013; Lee, Harrington, Louie, & Newschaffer, 2007). Alongside these difficulties, parents of children with ASD have responsibilities to provide care, parental services, and daily living assistance to their children, so the need to examine and improve their quality of life (QoL) becomes vital.

QoL emerged in psychology in the early 1920s and was seen as a part of positive psychology. Martin Seligman called for people to focus on the positive aspects of the individual where the origins are health and well-being rather than disease, and put forward the idea that human beings can integrate into society when they focus on the positive aspects of life (Seligman & Csikszentmihalyi, 2015). However, although the new term has gained broad attention from researchers theoretically and practically (Mandzuk & McMillan, 2005), there has been no agreement on a specific definition. The World Health Organisation (1995) defined QoL as an individual's *"perception of their position in life in the context of the culture and value systems in which they live and concerning their goals, expectations, standards, and concerns*", while Rogerson (1999) described it as a strong emotional relationship between the individual and their environment, and this relationship is centered on the individual's feelings and perceptions. Tree (2009) sees it as a positive outlook and appetite for life, and that belief creates the possibility of achieving goals and desires and the likelihood of having good and positive experiences instead of focusing on the negative side. Finally, Michael (2009) defined QoL as an individual's ability to perceive the good things that they will experience based on acknowledged and specific behaviors. In this study, QoL has been defined as the degree of satisfaction felt by the families of children with ASD towards the different dimensions of life. A developed QoL scale measured these dimensions: life; physical and psychological health; income; morality; interactions in family and social relationships; having support and social provision; positively engaging in daily living activities; optimism and the ability to pursue happiness, which is related to the psychological readiness of the individual; and the role of others and their ability to provide support for the family when interacting with the surrounding environment.

ASD is currently classified as a disorder that disrupts normal brain growth, which is reflected in the negative impact on the development of communicative, social, and behavioral development milestones, and it is one of the most challenging and complicated developmental disorders which significantly affects the different aspects of a child's growth (American Psychiatric Association, 2013; Shami, 2004). ASD indicates developmental disability and sensory deficits that last a lifetime and affects the child's behavioral, educational, and social aspects of life (Imam & Jawaldh, 2010), and has adverse effects on various aspects of disabled children's families and their lives (Mohammed, 2011). Literature indicates that QoL can be reached when the individual feels that their basic needs have been fully met and their primary goals have been achieved, which links their QoL with that of others. Al-Ashwal (2005) reviewed several studies related to the QoL of families of children with special needs and found that mutual effectiveness of the QoL between parents and their children is critical where mothers whose QoL was improved were more able to respond effectively to their disabled children and contribute to improving their children's QoL.

Having a child with ASD in the family brings several challenges, including psychological stress and various problems and difficulties that all family members may experience. In addition, having a child with ASD might change the route of the entire family's lives and is considered a turning point that forces them to reorganize their lives and priorities to respond to the needs of the disabled child. This can cause a variety of long-term problems, such as anxiety, introversion and social withdrawal, shame, guilt, a sense of loneliness, and loss of life meaning. They can also suffer from a lack of happiness, lack of efficiency in forming social relationships, negative social attitudes, failure to create ties and friendships, and suffer from unbalanced emotions (DeGrace & Imms, 2006). Furthermore, the difficulties can be seen based on decisions that the families make for their children as they are responsible for them and provide all the daily necessities but the burden was not taken into consideration. Also, in most cases, those families feel that their children with ASD may be associated with a social stigma and this stigma can eventually reach the family itself (Albdirat, 2006). Research provides empirical evidence that parents of children with ASD need constant support with their physical, psychological, social, and environmental health to respond effectively to their children (Mugno, Ruta, D'Arrigo, & Mazzone, 2007), as their QoL was found to be low in several studies. Hartley, Braker, Baker, Seltzer, & Greenberg (2012) found that the QoL and satisfaction with the marital level (whether they live together or separated) of the parents of children with ASD ranged from low to moderate in favor of fathers, and there were differences in the level of QoL and satisfaction attributed to age in favor of the older parent. Kheir et al. (2012) indicated that the QoL of those families fluctuated between low to moderate, and there were differences in the level of QoL attributed to the severity of the disability in favor of children with mild symptoms. Moreover, McStay, Trembath, & Dissanayake (2014a) found that the QoL of parents of children with ASD was low, and no differences in QoL were found that could be attributed to social-economic level or scientific qualification. Pozo, Sarriá, & Brioso (2014) studied the mental health of parents who have children with ASD and its relationship with their QoL, and they found that both mental health and QoL among those parents were low.

Interestingly, it was found that the QoL and mental health among fathers was higher than mothers. Results indicated that parents of children with severe ASD had a lower QoL and mental health level than those of children with mild and moderate ASD. Thus, having a child with ASD adversely affects the quality of family life and may lead to a pessimistic view of life and, ultimately, negative expectations of future events might also be reflected in their children's disabilities and that remains with the parents permanently. The current study concentrates on the counseling needs of the families of children with ASD in the Jordanian context and detects their specific requirements to provide them with special programs to improve their QoL, and this is firmly rooted in the literature (Abdul Qadir, 2011; Arabiyat, 2011). However, several studies have proved that QoL and skills of families of children with autism can be improved after exposure to a counseling program in responding to behavioral difficulties (Abdul Qadir, 2013; Araqa, 2006; Buckley, Ente, & Ruef, 2014), and conducting extended programs and workshops for families of children with autism assists in drawing their attention to the importance of QoL (McStay, Trembath, & Dissanayake, 2014b).

2. METHODS

2.1. Research Problem and Questions

Literature indicated that the term QoL gained significant attention and was defined theoretically and practically based on the disabled and their families (Darling, Senatore, & Strachan, 2012; Lundy, 2011; Taha, 2013; Wang et al., 2004). Global research in this area theoretically and practically has led to a dearth of applied research that studied this term and has sought to improve disabled families' quality of life through counseling programs in the Arab world and locally in Jordan. Concentration in Jordan was always on providing essential services for disabled children, which concentrates on enjoyment of life and requires an understanding of individuals themselves, their abilities, and socializing with others, rather than the needs of their parents who play a critical role in shaping their QoL (Mohammed, 2011). Based on the above, having an appropriate QoL can be achieved by meeting basic needs and achieving goals in essential aspects of life. Thus, there is an urgent need to provide families with appropriate counseling programs to help them achieve a good QoL (World Health Organisation, 1995). There is a lack of studies regionally and researchers did not find any previous studies in Jordan which focused on applying a counseling program to improve the QoL for families of disabled children, specifically the families of people with ASD. The current study seeks to answer the following three questions:

1. Are there significant differences at the level of statistical significance (α =0.05) between the control group and the experimental group on the QoL scale post-test?

2. Are there significant differences at the level of statistical significance (α =0.05) on the QoL scale of families of children with ASD regarding the autism spectrum disorder variable?

3. Are there significant differences at the level of statistical significance (α =0.05) on the QoL scale of families of children with ASD regarding the variable of socioeconomic level of the family?

2.2. Research Design

In order to achieve the objectives, this study adopted a quasi-experimental approach and used a "nonequivalent control group" where the sample was chosen randomly. Participants were divided into two groups – the control group and the experimental group – where pre- and post-tests were applied before and after implementation of the programme to measure the effectiveness of the independent variable (the counseling programme) on the dependent variable (QoL level).

2.3. Participants

This study targeted families of children with ASD in Amman, Jordan who are aged 30–50 years in the 2017/2018 academic year. Thirty fathers and mothers of children with ASD were chosen randomly from three of the special education centers in Amman who agreed to participate in the study during the first semester of 2017/2018. Participants were split evenly into two groups: the control group, which consisted of 15 fathers and mothers who had not been subject to treatment, and an experimental group which also consisted of 15 fathers and mothers who had been subjected to treatment (counseling program). Table 1 shows the distribution of the sample according to the study's variables.

Table 1. Frequencies and percentages for members of the study's sample according to the variables.

Variable	Category	Repetition	Ratio
Group	Control	15	50.0%
	Experimental	15	50.0%
Severity of the disability	Mild	7	23.3%
	Moderate	10	33.3%
	Severe	13	43.3%
Socioeconomic level	Low	7	23.3%
	Middle	14	46.7%
	High	9	30.0%
Overall		30	100.0%

2.4. QoL Scale

To achieve the objectives of the current study, the QoL scale was developed for the purposes of applying it to the parents of children with ASD before and after the intervention program. It was developed based on the existing literature (Abdul Qadir., 2013; Mohammed, 2011; Taha, 2013), and Arabic literature was also used as it appears to be realistically closer to the study's sample (conservative cultural background) and context. However, global literature was not omitted and was utilized where appropriate. Researchers identified the QoL dimensions and reviewed the standards in previous scales which dealt with aspects of the QoL in order to select the appropriate items and formulation (Abdullah, 2014; Abu Halawa, 2010; Ansari, 1998; Iraqi & Madloum, 2005). The final draft of the scale consisted of 47 items distributed among seven dimensions: physical health (1–7), satisfaction with life (8–15), social interaction (16–21), daily living activities (22–28), income (29–34), mental health (35–41), and happiness (42–47). Participants were asked to respond to each item by using a three-point Likert scale: always, sometimes, and rarely. The majority of the participants took approximately 45 minutes to complete the entire scale.

2.5. Validity and Reliability

The validity and reliability of the developed scale were assured. First, the initial draft of the scale was reviewed by ten experts in special education at three Jordanian universities. Based on their revision, the language in some items was modified, some items were omitted and others were added, and the final draft was then produced consisting of 47 items. Second, construct validity was carried out. Construct validity refers to the ability of the scale to measure what it claims. The researchers used the correlation between the respective item and the total sum score (with the respective item) after it was applied to a pilot sample of 25 parents of children with ASD chosen from outside the study sample. Results showed that all of the correlation coefficient values of all of the tool items have fluctuated between 0.35 and 0.80, which is statistically significant at the level of $\alpha = 0.05$. This indicator is acceptable compared to previous studies and indicates the internal consistency between the items and the total score of the instrument. Reliability was verified through applying the scale to a pilot sample from outside the study sample which consisted of (25) fathers and mothers of children with ASD using the reliability coefficient manner, a test re-test procedure, and then calculating the Pearson correlation coefficient with a two-week interval between the two applications. Results indicated that the total reliability coefficient of the instrument was 0.83. Also, reliability was calculated by extracting the reliability of the instrument coefficient of the internal consistency coefficient (Cronbach's alpha), which reached 0.91. Reliability coefficients were also calculated for the dimensions of QoL and are shown in Table 2.

Table 2. Stability and internal consistency coefficients of Cronbach's alpha in fields of the total score for QoL scale.

Dimension	Test re-test reliability	Internal consistency
Physical health	0.92	0.86
Life satisfaction	0.94	0.85
Social interaction	0.90	0.82
Daily activities	0.91	0.82
Income	0.92	0.86
Mental health	0.89	0.86
Happiness	0.87	0.88
Total	0.83	0.91

2.6. Scale Correction

The correction was considered by giving weights (3.2, 1) to the responses (always, sometimes, and rarely), and vice versa when items are negative, noting that negative items in the scale are (1, 2, 4, 5, 6, 7.29, 30.31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41), where the highest mark is 141 and the lowest mark is 47.

2.7. Developing the Counseling Program

A counseling program was developed using related literature and psychological counseling was reviewed; this included determining appropriate counseling methods to respond to families with special needs, specifically families of children with ASD, and how to translate counseling sessions for practical implementation (Abdul Qadir, 2011; Arabiyat, 2011). In the next stage, literature on QoL was reviewed (Mohammed, 2011; Taha, 2013) to determine the aspects of QoL. Counseling programs that were used in previous studies were also reviewed and used, especially those that concentrated on improving the QoL for families with special needs, such as Araqa (2006), Abdul Qadir (2013) and Abdullah (2014), by determining the counseling program objectives and the time needed to implement them. Literature was also used to identify the necessary tools and procedures, determine the counselor's role, the role of the agent in the meeting, and how to evaluate each session. Based on the above steps, a counseling program was developed and then presented to a group of arbitrators in psychotherapy, family counseling, and special education to verify and validate its content to where an 80% agreement between arbitrators had been reached. After evaluating the program, appropriate adjustments were made through deletion or addition, and the final draft of the program was prepared. Finally, the researchers supervised the counseling program's training process in collaboration with fellow specialists in the field of family counseling to implement the counseling sessions. The role of the counselors (researchers) included implementing the program sessions, managing meetings, directing participants' reactions and answers towards the discussion, and showing commitment and positivity. The clients' role (the experimental group) was to acknowledge and understand the current issue, provide answers and solutions, actively participate in the discussion and work with the group, and rate the sessions. The period of implementation of the counseling program was four weeks, from May 1st to May 29th 2018, and in its final form consisted of three main sessions: the preliminary hearing lasting 45 minutes, eight counseling sessions of 45 minutes each, and a final session of 45 minutes (see Table 3).

Table 3. Sessions, titles, and techniques.

Session	Title	Technique	Week
Preliminary	Introducing and applying the pre-test of the study's tool	Lecture	1
First	Counseling process, counseling relationship, the role of counselor and client and the importance of counseling in the life of the families of children with special needs	Lecture, discussion, and dialogue	1
Second	The importance of physical health and maintaining it	Discussion, dialogue, and foresight	2
Third	Life satisfaction	Strategies to deal with stress	2
Fourth	Social interaction skills	Developing skills in social networking and support	3
Fifth	Daily life activities and free time activities	Developing social communication skills, stress management	3
Sixth	Financial management	Relaxation and cognitive evaluation	4
Seventh	Mental health	Relaxation and cognitive therapy	4
Eighth	Positivity and happiness	Developing self-efficacy	4
Final	Applying the post-test of the study's tool	Lecture	4

The QoL scale was applied to both experimental and control groups (pre-test) to verify the equality of the two groups. To do this, the mean and standard deviations for the sample's pre-performance on the quality of life scale were extracted depending on the variable groups (experimental and control). A t-test was used to determine the statistical differences between the means, as shown in the below table.

Table 4. Mean and standard deviations, and t-test depending on the group variable on the QoL scale (pre-test).

	Group	Number	SMA	SD	Value of T	DF	Statistical Significance
Total score (pre)	Control	15	1.93	0.129	-1.720	28	0.97
	Experimental	15	1.79	0.275			

It can be seen from Table 4 that there was no significant difference ($\alpha = 0.05$) between the means in the pre-test of the QoL scale depending on the variable group (control and experimental) where the value of T was 1.720 within the statistically significant value of 0.97. This result indicates that the two groups were equal before applying the counseling program. The counseling program was applied to the experimental group after conducting a meeting with its members to clarify the program and its important goals in raising the QoL level and the statement of positive significance in life, as well as agreeing on a mechanism for implementing the program, the duration and location of the sessions, and its applied techniques. The QoL scale was applied as a pre-test on the experimental and control groups to verify the counseling program's effectiveness. The data collected was then entered into SPSS to analyze it. After the analysis, the results were extracted, and appropriate recommendations were made based on the study's findings.

2.8. Analysis

Results for the first question.

Are there significant differences at the level of statistical significance (α = 0.05) between the control group and the experimental group on the post-test of the QoL scale?

To answer this question, the mean and standard deviations were calculated for the sample's performance depending on the variable groups (control and experimental) where the t-test was used, as shown in Table 5.

Table 5. Mean and standard deviations, and t-test depending on the group variable.

Dimension	Group	N	SMA	SD	T	DF	Statistical Significance
Physical health	Control	15	2.22	0.295	5.447	28	0.000
	Experimental	15	2.75	0.238			
Life satisfaction	Control	15	2.07	0.455	7.219	28	0.000
	Experimental	15	2.94	0.114			
Social interaction	Control	15	2.14	0.308	0.795	28	0.000
	Experimental	15	2.69	0.314			
Daily life activities	Control	15	2.07	0.503	6.152	28	0.000
	Experimental	15	2.91	0.177			
Financial management	Control	15	2.08	0.538	1.006	28	0.323
	Experimental	15	2.32	0.773			
Mental health	Control	15	2.20	0.491	2.154	28	0.040
	Experimental	15	2.63	0.593			
Happiness	Control	15	2.19	0.217	10.920	28	0.000
	Experimental	15	2.89	0.121			
Total post-test	Control	15	2.14	0.152	9.580	28	0.000
	Experimental	15	2.74	0.193			

Table 5 shows statistical differences at the level (α = 0.05) between the two groups in all dimensions, except financial management in favor of the experimental group. This finding demonstrates the effectiveness of the counseling program in improving the QoL of families with children with ASD.

Results for the second question.

Are there significant statistical differences at the level of significance (α = 0.05) on the QoL post-test scale between families of children with ASD depending on the variable of the severity of the disability?

To answer this question, the mean and standard deviations were extracted for the performance of the sample depending on the severity of the disability (see Table 6).

Table 6 shows an ostensible variation in the averages and standard deviations in the post-test of the QoL scale depending on the severity of the disability. To interpret the statistical differences between the averages, a one-way analysis of variance (ANOVA) was used, as shown in Table 7.

It can be seen from Table 7 that there were no statistically significant differences at the level of significance (α = 0.05) due to the severity of disability in all dimensions of the QoL scale and the scale as a whole of the families of children with ASD.

Results related to the third question.

Are there significant differences (α = 0.05) on the QoL scale for families of children with ASD according to the variable of socioeconomic level of the family?

Table 6. Mean and standard deviations for the measurement of QoL depending on the severity of disability.

QoL	Category	N	SMA	SD
Physical health	Mild	7	2.55	0.498
	Moderate	10	2.56	0.378
	Severe	13	2.40	0.315
	Total	30	2.49	0.378
Life satisfaction	Mild	7	2.52	0.547
	Moderate	10	2.44	0.710
	Severe	13	2.55	0.449
	Total	30	2.50	0.552
Social interaction	Mild	7	2.29	0.448
	Moderate	10	2.53	0.483
	Severe	13	2.40	0.337
	Total	30	2.42	0.412
Daily activities	Mild	7	2.47	0.684
	Moderate	10	2.53	0.576
	Severe	13	2.47	0.545
	Total	30	2.49	0.569
Physical condition	Mild	7	1.93	0.892
	Moderate	10	2.58	0.557
	Severe	13	2.05	0.502
	Total	30	2.20	0.666
Psychological health	Mild	7	2.80	0.231
	Moderate	10	2.39	0.560
	Severe	13	2.23	0.651
	Total	30	2.41	0.578
Happiness	Mild	7	2.52	0.495
	Moderate	10	2.53	0.407
	Severe	13	2.55	0.363
	Total	30	2.54	0.396
Total post-test	Mild	7	2.45	0.392
	Moderate	10	2.50	0.435
	Severe	1	2.38	0.276
	Total	30	2.44	0.354

To answer this question, the mean and standard deviations for the QoL scale of the sample according to the socioeconomic level of the family were extracted; Table 8 illustrates the results.

Table 8 shows ostensible variations in mean and standard deviations in the post-test results of the QoL scale according to the variable of socioeconomic level. The one-way ANOVA was used to interpret the significance of statistical differences, as shown in Table 9.

Table 9 shows no statistically significant differences at the level of significance (α = 0.05) attributed to the variable of socioeconomic status of the family in all dimensions of the QoL scale, and on the scale as a whole, among families of children with ASD.

Table 7. Variance analysis (one-way ANOVA) pre-test of the impact of the QoL scale.

QoL	Source	Sum of squares	DF	Average squares	F	Statistical significance
Physical health	Between groups	0.186	2	0.093	0.635	0.537
	Inside groups	3.961	27	0.147		
	Overall	4.147	29			
Life satisfaction	Between groups	0.071	2	0.035	0.109	0.897
	Inside groups	8.757	27	0.324		

	Overall	8.828	29			
Social interaction	Between groups	0.261		0.130	0.754	0.480
	Inside groups	4.670	27	0.173		
	Overall	4.931	29			
Daily activities	Between groups	0.022	2	0.011	0.031	0.969
	Inside groups	9.353	27	0.346		
	Overall	9.375	29			
Physical condition	Between groups	2.273	2	1.136	2.899	0.072
	Inside groups	10.583	27	0.392		
	Overall	12.856	29			
Psychological health	Between groups	1.465	2	0.733	2.406	0.109
	Inside groups	8.222	27	0.305		
	Overall	9.688	2			
Happiness	Between groups	0.004	2	0.002	0.012	0.988
	Inside groups	4.534	27	0.168		
	Overall	4.538	9			
Overall Dimensions of class	Between groups	0.082	2	0.041	0.314	0.733
	Inside groups	3.542	27	0.131		
	Overall					

Table 8. Mean and standard deviations of the pre-test of the QoL according to the socioeconomic level variable of the family.

QoL	Categories	N	SMA	SD
Physical health	Low	7	2.47	0.513
	Average	14	2.57	0.331
	High	9	2.37	0.336
	Total	30	2.49	0.378
Life satisfaction	Low	7	2.45	0.504
	Average	14	2.47	0.681
	High	9	2.60	0.379
	Total	30	2.50	0.552
Social interaction	Low	7	2.29	0.448
	Average	14	2.56	0.350
	High	9	2.30	0.447
	Total	30	2.42	0.412
Daily activities	Low	7	2.43	0.655
	Average	14	2.55	0.441
	High	9	2.44	0.723
	Total	30	2.49	0.569
Physical condition	Low	7	2.00	0.822
	Average	14	2.33	0.577
	High	9	2.15	0.699
	Total	30	2.20	0.66
Psychological health	Low	7	2.61	0.450
	Average	14	2.42	0.602
	High	9	2.25	0.638
	Total	30	2.41	0.578
Happiness	Low	7	2.43	0.450
	Average	14	2.62	0.384
	High	9	2.50	0.391
	Total	30	2.54	0.396
The overall dimensions of class	Low	7	2.39	0.403
	Average	14	2.50	0.362
	High	9	2.3	0.324
	Total	30	2.44	0.354

Table 9. One-way analysis of variance of the impact of socioeconomic level.

QoL	Source	Sum of Squares	DF	Average Squares	F	Statistical Significance
Physical health	Between groups	0.236	2	0.118	0.814	0.454
	Inside groups	3.911	27	0.145		
	Overall	4.147	29			
Life satisfaction	Between groups	0.115	2	0.07	0.178	0.838
	Inside groups	8.713	27	0.323		
	Overall	8.828	29			
Social interaction	Between groups	0.536	2	0.268	1.647	0.211
	Inside groups	4.394	27	0.163		
	Overall	4.931	29			
Daily activities	Between groups	0.097	2	0.049	0.141	0.869
	Inside groups	9.278	2	0.344		
	Overall	9.375	29			
Physical condition	Between groups	0.553	2	0.277	0.607	0.552
	Inside groups	12.302	27	0.456		
	Overall	12.856	29			
Psychological health	Between groups	0.506	2	0.253	0.744	0.485
	Inside groups	9.182	27	0.340		
	Overall	9.688	29			
Happiness	Between groups	0.189	2	0.094	0.586	0.564
	Inside groups	4.349	27	0.161		
	Overall	4.538	29			
The overall dimensions of class	Between groups	0.103	2	0.052	0.397	0.676
	Inside groups	3.521	27	0.130		
	Overall	3.624	29			

3. DISCUSSION

Findings from this study have shown the counseling program's effectiveness in improving the QoL of the families of children with ASD, except for the financial income aspect. On the one hand, the results can be interpreted by the impact of the counseling program in raising awareness of the importance of a good quality of life and its dimensions (physical and mental health, participation in daily living activities, the acquisition of social interaction skills, happiness, and life satisfaction). On the other hand, participants reported that their sense of appreciation of themselves in their social context had increased. Interaction and cooperation during the counseling program sessions assisted participants in gaining experience and their feelings of happiness. Moreover, during the discussions they gained the necessary experience to cope with difficulties, they responded effectively to the needs of their disabled children, and transformed a negative, pessimistic outlook on life to a positive, optimistic one.

It appeared that participants' attitudes had changed where their behavioral perceptions of life were also modified, making them more positive by increasing their sense of satisfaction and happiness. These findings are consistent with Buckley et al. (2014), who indicated that the families of children with ASD with a low QoL had improved after exposure to a counseling program. This is also in line with the findings of Iraqi & Madloum (2005) and Abdul Qadir (2013) who showed an improvement in the QoL for families of children with special needs who received training via counseling programs.

In addition, the results showed that the severity of the disability did not have an impact on every dimension of the QoL scale for families of children with ASD. From what was reported in the literature, it can be understood that the sources of stress within families who have a disabled child (regardless of the severity of the disability) are the limitations or constraints in carrying out daily life activities (Phetrasuwan & Shandor, 2009). Having a disabled child is considered a source of psychological stress and social and emotional difficulties, which are negatively reflected in the parents' psychological and physical health. Al-Mutairi (2006) indicated that having a disabled child in the family contributes to a reduction in the level of social interaction for parents as a result of feelings of social embarrassment, inferiority, shame, and guilt, which are reflected in social relations and the lack of formation of social bonds with others.

The current results differ from some previous studies which indicated that there are differences in the levels of life satisfaction among parents of children with disabilities and autism spectrum disorder that can be attributed to the variable of the severity of disability in favor of a mild level of disability (DeGrace & Imms, 2006; Kheir et al., 2012; Pozo et al., 2014; Wang et al., 2004).

The results showed that there were no statistically significant attributes to the variable of socioeconomic level of the family in all dimensions of QoL scale, and the instrument as a whole, of families of children with ASD. These finding can be interpreted in light of what indicated by Lee (2009) – that having a disabled child in the family, regardless of social and economic level, forces the family to contemplate the child's situation and develop his or her abilities to the fullest extent through having relevant information and searching for educational alternatives that suit the child's abilities. Families also strive to provide the support to facilitate the growth of the child and his or her education until they reach the stage of independence. Hence, every family strives to avail of all support and sources regardless of their economic and social levels to help the autistic child to adjust compared to siblings and peers in their community. The results from this study differ from the results of the study by Wang et al. (2004), which showed differences in the levels of life satisfaction among parents that were attributed to the families' economic level in favor of families with a high income.

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