EARLY INTERVENTION SERVICES AS PERCEIVED BY PARENTS OF CHILDREN WITH AUTISM IN EGYPT AND SAUDI ARABIA

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Abstract *_Using an online questionnaire, this study investigated the Early intervention services as perceived by Parents of children with autism in Egypt and Saudi Arabia. Two hundred and ninety-seven parents completed the online questionnaire, 194 from Saudi and 103 from Egypt. The results showed that there is a low level of parents Perception for early intervention services and a lack of early intervention services provided to children with autism in Egypt and Saudi Arabia, and that there is an urgent need for more of these services. Research has shown that the time between birth and age 36 months is a critical developmental period in a child's life. These months offer a window of opportunity that will not be available later. Early intervention programs minimize and in some cases prevent delays in development of infants and toddlers with disabilities. They can decrease the need for special education and related services when a child enters school, and increase independence. Children whose special needs are identified and addressed during these crucial early years have a greater chance of reaching their full potential. In this sample of parents, we found low levels of perceptions of early intervention services for children with Autism in Saudi and Egypt. The findings of the present study also indicate that Saudi and Egyptian parents don't know the importance of early intervention for their children with Autism..*

Keywords: *Early Intervention services, Autism.*

I. Introduction

According to some studies in Saudi Arabia and Egypt, More than 350.000 Child with Autism in Saudi [28], and more than 800.000 Child with Autism in Egypt [26], at the moment, no governmental statistics about this disorder in these countries, although these countries focused on special education since a long time ago, But focusing attention on Autistic disorder in Egypt and Saudi Arabia is still in its beginnings. It does not mean that no researches in these countries, But little attention to services which help children with Autism and their families, In particular official government services, Autistic child need to be appreciated more than the need to place [13].

The study of the problems of child with autism and his family considers one of the topics that is of particular importance, particularly with the disorder is characterized by uniqueness [20], and very vague and do not know the reasons for its occurrence and the lack of agreement on specific treatment for him [2]. This is a challenging time to be working in the area of Autism. Currently, Autism is the fastest growing category of disability, with a prevalence of 1 in 88 [7].

Autism Spectrum Disorder (ASD) is defined as a life-long disability that is present from birth or very early in development and affects three main areas including social interaction, communication, and restrictive, repetitive behaviors. Within the autism spectrum, there are five major disorders that include: (a) autistic disorder, (b) Asperger's disorder, (c) Rett's disorder, (d) Childhood disintegrative disorder (CDD), and (e) Pervasive developmental disorder not otherwise specified (PDD-NOS) [3].

Autism is a neurodevelopment disorder described in terms of a pattern of deficits in social behavior and communication accompanied by restricted and repetitive behaviors and interests as well as an onset prior to 36 months [37]. In the Diagnostic and Statistical Manual of Mental Disorders, Autism is defined as a pervasive developmental disorder [3]. The challenges in Autism are evidenced by impairment in the use of nonverbal behavior, lack of spontaneous sharing, lack of socioemotional reciprocity, and / or failure to develop peer relationships.

The impairment in communication is evidenced by a delay in or lack of development of spoken language and gestures, impairment in the ability to initiate or maintain conversation, repetitive and idiosyncratic use of language, and/or lack of pretend play. The restricted repertoire of activities and interests is evidenced in preoccupation with restricted patterns of interest, rigid adherence to routines, repetitive movements and/or preoccupation with parts of objects [37]. Despite researchers efforts to find early signs of Autism, there are no reliable biological makers for Autism, however much has been learned about early symptoms of Autism [38].

In 1987, Baron-Cohen demonstrated that children with Autism consistently fail in joint attention, nonverbal and preverbal communication, social reciprocity, affective understanding and imitation [6].

According to American Psychological Association, the first symptoms of Autism fall into four categories: (a) socialization, (b) sensory functioning, (c) language, and (d) cognitive functioning [3].

Children with Autism often exhibit high levels of aberrant behaviors such as screaming, hitting, and biting [35]; thus, creating substantial obstacles for individuals charged with their education and well being [12]. The Autistic children have a rigid pattern of interests and activities and an obsessive desire to cling to routines and order which is also reflected in food behaviour. Repetitive eating patterns are common and food choices are specific for texture, colour and brand packaging [32,8].

Autism is a profound developmental disability that can severely impair a child's abilities. Generally, children with Autism do not show symptoms of ASD at six months of age but that a plateauing or loss of social skills is evident after six months and before they reach their first birthday. In a study that compared the social behaviors of 25 infants with ASD and 25 typically developing infants, it was concluded that the two groups showed no difference in social behavior at 6 months of age but by 12 months the majority of children with ASD failed to gain new social skills or had lost previously acquired ones [30].

Parents of children with Autism noted several features that were markedly deficient in their children during the first two years of life. The symptoms were poor eye contact and poor coordination of eye gaze with vocalization or gesture, no pointing to or showing of objects, less babbling, no reciprocity in vocalizing or imitation, and an inability to follow another's focus of attention through eye gaze or gesture [33]. Children with Autism have unique abilities and needs which require special considerations in designing, implementing and evaluating their educational programs. Educators need a better understanding of the educational approaches and program structures that are effective for these children. In recent years, research in neurobiological, behaviorist, and developmental approaches has emphasized the critical period of major brain development in the first five years of life when development has more plasticity and stimulation plays an important role. This has led to an interest in the concept of "Early Intervention" (EI) throughout the world [16,34].

The field of (EI) for children with special needs is considered relatively young when compared to the field of special education. (EI) refers to an environmental variable and children and their families are the recipients of several kinds of social support that can and often do function as a form of (EI) [11].

In the past, parents of young children with disabilities had to face major challenges in seeking help and supports from professionals, because society viewed children with disabilities as unworthy people that made parents feel devalued, services available to children with disabilities during that period were short in supply and low in quality [14].

In addition, the shortage of well-trained professionals, those trained within an interdisciplinary framework in particular, raised problems for families at every turn. The (EI) has from its origin a marked assistance, rehabilitative and compensatory character. At the beginning, one worked with children that presented deficiencies in the development and, later on, the situations of high risk were included, for biological factors or deprivation social ambiental. The Early intervention is understood as "the group of interventions directed to the population in the first childhood (0 -6), to the family and the environment that have for objective to give answer as soon as possible to the transitory or permanent necessities that the children present with disfunctions in their development or that they have risk of suffering them. These interventions are planned with global character and interdisciplinary" [25].

Also (EI) defined as Services designed to meet the developmental needs of infants and toddlers with disabilities in one or more of these developmental areas: Nphysical, cognitive, communication, social/emotional [22,27]. The (EI), like a model from attention to the children from 0 to 6 years, it is an essential element for the prevention, detection and intervention in the alterations of the infantile development. He/she appears as social answer toward this population's necessities that it has grown significantly in the last years. The infantile school is a privileged place to carry out the prevention, and the intervention at the same time in the difficulties of the development that they allow to carry out a compensatory education in those children that live in a context of mental vulnerability and they can see committed its development for the difficulties / illnesses of its relatives or for not receiving the appropriate cares [9].

The (EI) services means developmental services that: (1) Are provided under public supervision; (2) Are selected in collaboration with the parents; (3) Are provided at no cost, except, subject to…; (4) Are designed to meet the developmental needs of an infant or toddler with a disability and needs of the family to assist appropriately in the infant's or toddler's development, as identified by the IFSP Team, in any one or more of the following areas, including: (i) Physical development; (ii) Cognitive development; (iii) Communication development; (iv) Social or emotional development; (v) Adaptive development[29]. (EI) applies to children of school age or younger who are discovered to have or be at risk of developing a handicapping condition or other special need that may affect their development. Early intervention consists in the provision of services such children and their families for the purpose of lessening the effects of the condition. (EI) can be remedial or preventive in nature-remediating existing developmental problems or preventing their occurrence.

And may focus on the child alone or on the child and the family together. Early intervention Services may be center-based, home-based, hospital-based, a combination [1,2]. Services designed to meet the developmental needs of infants and toddlers with disabilities in one or more of these developmental areas: physical, communication,

social/emotional, and adaptive. These services encompass a wide range of options and include family training, counseling, and home visits; special instruction; speech language pathology and audiology services; occupational and physical services; psychological services; service coordination; medical services; early identification; screening, and assessment; health services; social work services; vision services; assistive technology services; and transportation and related costs that enable children and families

to participate in services [17].

Services range from identification--that is, hospital or school screening and referral services--to diagnostic and direct intervention programs. Early intervention may begin at any time between birth and school age; however, there are many reasons for it to begin as early as possible. There has been a growing body of evidence that intervention needs to begin early for children with Autism in order to have a significant and positive impact on their future functioning and independence. In 1987 and 1993, Lovaas and colleagues published two ground breaking articles describing the "recovery"of almost 50% of a group of young children with autism, who were treated intensively with applied behavioral analysis for two years [24,30].

These articles suggested an entirely new way of thinking about autism: as a disorder marked by considerable plasticity, for which there was the hope of recovery given appropriate intervention. The articles have had a tremendous impact on public and private service agencies that provide intervention for all children with disabilities, resulting in the development of specialized intervention programs for children with autism that differ markedly for those of children with other developmental disorders [33]. Studies show that some countries are developing early intervention plans for social services for families with children with disabilities in order to increase the chances that these children are educationally and socially integrated. The role of the family in promoting early social and emotional attitudes and appropriate behavior is crucial for stimulating the potential of children with disabilities [5]. In this sense, an assessment tool of early intervention parental self-efficacy, EIPSES, was developed, which refers to the individual's own perception on a performed task, in this case the ability to be effective in parenting skills and tasks [15].

Some researches took into account parental beliefs on the effectiveness of their protective and educational interventions in relation with the role of the environment on child's development [31]. The term perception has been used widely to indicate a psychological state that people possess toward people or objects. Several authors have provided the definition of perception as follows:Perception refers to a selective process, dependent on such factors as acuity of sensory equipment, physical point of view, psychophysical condition, past experience, and present needs and purposes [36].

Perception refers to our awareness of the world and its contents through sensory experience. The analysis of perception and the attempt to deal with skeptical arguments about perceptual knowledge are central philosophical topics. Perception involves both our capacity to be sensorily affected by external objects and our ability to bring these objects under concepts, although other capacities might also have a role to play. What we perceive and how these objects of perception are related to us and to physical objects are matters of continuing concern. People's perception related to children with Autism is important. Those perceptions may have positive or negative impact on children. Perceptions of professionals and parents are even more important to children with Autism because they can be indicators to improve services for those children. For example, if the perceptions of parents on their child with Autism are negative, the parents may not want to have this child or do not pay attention on how to increase the child's ability. Likewise, if the professional is positive about the child, they will be keep on looking for more effective intervention to respond to the child's unique needs Parents are recognized by law as significant member of the team effort to develop appropriate and effective programs that provide early intervention and education to their children.

A number of research studies exists documenting parent perceptions of children with disabilities and services available to their children [21]. The perception of parents has a positive relationship with their child's future outcome and also the first standard of their child's success. Especially if a child has disabilities, the perception of parents on their child's future outcome is an important issue [19].

A mother's perceptions and expectation about their child's future development have an effect on actual outcome of child development [10]. It is important to investigate and understand how parents perceive their child's disabilities in order to develop appropriate educational services. Moreover, The attitudes and perceptions of service providers are also influenced by understanding of parent's perceptions. parents' perceptions are more imperative to the development of their children in the academic areas than are teachers' perceptions[33]. The early childhood (from birth to age 5) is the time when parents' belief about their children's abilities is shaped and when children's own academic selfconcepts begin to form [18].

A line of research has emerged examining the perception of parents of children with disabilities on services for their children. The existing body of literature illustrates that many

early intervention components were considered to be major influences on the development of children with disabilities. Most studies were conducted to investigate the perceptions of parents on their children with disabilities and services available for these children, but research on parents' perceptions related to children with Autism is in short supply.

Very Little research study was conducted to investigate what parents perceived about early intervention and related services available in Saudi and Egypt. This research has double purposes, The first purpose was to investigate the perceptions of parents whose child has been diagnosed with Autism of early intervention services. The study focused on services from both public and private organizations. The second purpose was to examine how parents' perceptions of early intervention services for their children with Autism differ across parents' Region, Age, Income, Education, and Gender. The following research questions were used to guide this investigation:

1- What do parents perceive about early intervention services for their children with Autism?.

2- Are there any significant differences in parents' perceptions that can be attributed to their regions?

3- Are there any significant differences in parents' perceptions that can be attributed to their age?

4- Are there any significant differences in parents' perceptions that can be attributed to their income?

5- Are there any significant differences in parents' perceptions that can be attributed to their educational level?

6- Are there any significant differences in parents' perceptions that can be attributed to their gender?

II. RESEARCH METHODOLOGY

2.1. Study Methodology:

The researcher used in this study descriptive Curriculum approach to reach a realistic assessment of parents perceptions of early intervention services for their children with Autism.

2.2. Participants:

Two hundred and ninety-seven parents participated in this study. Both mothers and fathers of children with Autism aged 1 to 8 years in Saudi and Egypt were recruited to participate in the study.Participants were recruited through one online community website (http://www.t7di.net/vb/) where parents and their families dealing with Autism share their experiences and useful information on the Internet as a member of this website. The Table 1 show the Demographic information of parents which participated in this study.

Table 1
Demographic information of parents which participated in this study

Parents Demographics		N	%
Region	Saudi	194	65.3
	Egypt	103	34.7
Age	Less than 25	84	28.3
	25 – 35	124	41.8
	Older than 35	89	29.9
Income	Lower	98	32.9
	Middle	185	62.3
	Upper	14	4.8
Education	Under high	18	6.06
	Undergraduate	34	11.44
	Graduate	245	82.5
Gender	Male	95	31.9
	female	202	68.1

2.3. Instrumentation:

The researcher used two questionnaires in this study, The following explanation for this.

2.3.1. Demographics Questionnaire (DQ):

Demographic questionnaire (Appendix A) which consists of 10 items was developed to collect the information about parents' characteristics as follows (a) parent's region, (b) parent's Age, (c) parent's income, (d) parent's Education, and (e) parent's gender. Researcher saw no need for rationing of this questionnaire because the aim is to collect information only.

2.3.2. Parents' Perceptions of Early Intervention services Questionnaire (PPEISQ):

The purpose of this questionnaire (Appendix B) was to investigate parents perceptions of early intervention services for their children with Autism in Saudi and Egypt. This questionnaire consists of 32 items spread over 5 major dimensions. Earliest start to intervention, Individualization of services, Systematic plan of teaching, Intensity of engagement, and Family involvement. Parents' Perceptions of Early Intervention services questionnaire developed based on (a) a review of the literature, (b) Previous studies, (c) surveys on perceptions of parents whose children have Autism or any disability, and (d) the experience of the researcher in working with children with Autism. A 5-point

likert scale were used in this section (i.e., 5 = strongly agree, 4= agree, 3= neutral, 2= disagree, and 1= strongly disagree).

2.3.2.1. validity.

2.3.2.1.1. Face validity:

The questionnaire content were reviewed by two experts from the Department of Special Education at Jazan University (Saudi) and two experts from the Department of Mental Heath at Benha University (Egypt). And all of them have expertise in the field of early intervention, special education and specifically autistic children.

2.3.2.2. Reliability.

2.3.2.2.1. Test-Retest:

Questionnaire was applied to a sample of 20 parents and then re-apply the questionnaire again an interval of two weeks between the two applications and existing reliability coefficient is 0.902 which is statistically significant at the level of 0.01.

2.3.2.2.2. Retail midterm :

Calculate the correlation coefficient between grades 2/2 scale, and found that the correlation coefficient is 0.942 which is statistically significant at the level of 0.01, followed by the account reliability coefficient measure and is equal to = (2 × correlation coefficient) / (1 + correlation coefficient) = 0.97 which is statistically significant at the level0.01.

2.2.2.2.3. Cronbach's alpha coefficient:

Correlation coefficient alpha (0.725), reflecting the enjoyment scale with a high degree of Reliability.

2.4. Study procedures:

The study was conducted in 7 steps:

(1)- Build a theoretical framework and reviews some previous studies relevant to the present study.

(2)- see some of the previous measurements of Parents' Perceptions of Early Intervention to build the current Questionnaire in its initial form.

(3)- Application of the Questionnaire on a sample survey to get a preliminary picture of the Questionnaire.

(4)- Account of validity and reliability of the Questionnaire to get the final image of the Questionnaire.

(5)- searching online communities and posting flyer on websites.

(6)- Directly emailing to participants.

(7)- Implementation of appropriate statistical processes to get to the results.

This data was collected during four weeks from Nov 12,2013 to Dec 11, 2013.

III. RESULTS

3.1. Procedure of Data Analysis.

All of the data were analyzed using the Statistical Package for the Social Science (SPSS 16.0 for Windows). The data were coded in numerical value before entering into the SPSS database. Prior to analysis, all questionnaire data were examined for accuracy of data entry and missing values. Of the 311 participants who accessed the questionnaire, there was close to complete data for 302 participants. Of the 302 participants, 5 participants were excluded for reasons of homogeneity. Thus, 297 participant's data were coded into SPSS16.0 for analysis.

3.2. Question No 1:

What do parents perceive about early intervention services for their children with Autism ?... To answer this question, The researcher calculates the arithmetic mean and a standard deviation of the total scores obtained by the Participants on the Parents' Perceptions of Early Intervention services Questionnaire, Researcher calculates the frequencies of total scores. Table 2 shows the current mean and standard deviation of total scores that the 297 parent respondents reported and the frequencies of total scores.

Table 2
Arithmetic mean and standard deviation of total scores that the 297 parent respondents reported and the frequencies of total scores

Statistics

N	Valid	297
	Missing	0
Mean		43.9192
Std. Deviation		2.1829E1
Minimum		32.00
Maximum		96.00

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	32	171	57.6	57.6	57.6
	34	48	16.2	16.2	73.7
	38	9	3.0	3.0	76.8
	60	9	3.0	3.0	79.8
	64	18	6.1	6.1	85.9
	79	3	1.0	1.0	86.9
	88	6	2.0	2.0	88.9
	93	9	3.0	3.0	91.9
	96	24	8.1	8.1	100.0
	Total	297	100.0	100.0	

Table 2 shows the current means and standard deviations of total scores that the 297 parent respondents reported. The total mean score of parent perceptions was 43.9192 with a standard deviation of 2.1829 based upon a Likert scale of 1

to 5. This mean was low which means a low level of parents perceive for early intervention services.

3.2. Question No 2: Are there any significant differences in parents' perceptions that can be attributed to their regions ?. To answer this question, The researcher calculates the difference between the arithmetic mean of scores for Saudis and arithmetic mean of scores for Egyptians on the Parents Perceptions of Early Intervention services Questionnaire Through the use T-Test. Table 3 shows the result.

Table 3

Means, standard deviation, T-Test for Saudi and Egyptians parents' perception of early intervention on the Parents Perceptions of Early Intervention Questionnaire

Group	N	Mean	Std.Deviation	t	Sig
Saudi	194	43.11	21.27	-.873	0.11
Egypt	103	45.33	22.8		

Table 3 shows there is no statistically significant difference between the arithmetic mean of Saudis Scores and arithmetic mean of Egyptians Scores on the Parents Perceptions of Early Intervention services Questionnaire.

3.3. Question No 3: Are there any significant differences in parents' perceptions that can be attributed to their age?....To determine the effect of parent's age levels a one-way MANOVA was conducted on the Parents Perceptions of Early Intervention services Questionnaire. Table 4 shows the result.

Table 4

Means, Standard Deviations, of Parent Perceptions of Early Intervention Services for Children with Autism across Parent's Age

Group	N	Mean	Std. Deviation		Sum of Squares	Mean Squares	F	sig
Lower Age (25 - 35)	84	56.76	27.56	Between Groups	19333.415	9666.708		
Age (Order than 35)	124	38.58	16.58					
	89	39.16	16.7	Within Group	121712.645	413.989	23.35	0.01

Table 4 shows there is Significant differences on parent's perception of Early Intervention services across parents age level

3.4. Question No 4:

Are there any significant differences in parents' perceptions that can be attributed to their income?....To determine the effect of parent's income levels a one-way MANOVA was conducted on the Parents Perceptions of Early Intervention services Questionnaire. Table 5 shows the result.

Table 5

Means, Standard Deviations, of Parent Perceptions of Early Intervention Services for Children with Autism across Parent's Income

Group	N	Mean	Std. Deviation		Sum of Squares	Mean Squares	F	sig
Lower	98	43.65	21.722	Between Groups	26558.124	3798.018		
Middle	185	41.31	19.56					
Upper	14	80.85	18.6	Within Group	19214.09	213.489		
							17.77	0.01

Table 6

Means, Standard Deviations, of Parent Perceptions of Early Intervention Services for Children with Autism across Parent's educational levels

Group	N	Mean	Std. Deviation		Sum of Squares	Mean Squares	F	sig
Under high	18	32.00	0.00	Between Groups	25731.59	3675.942		
Undergraduate	34	32.00	0.00					
Graduate	245	46.44	23.267	Within Group	106359.018	448.772	8.191	0.01

Table 5 shows there is Significant differences on parent's perception of Early Intervention services across parents Income.

3.5. Question No 5:

Are there any significant differences in parents' perceptions that can be attributed to their educational level?. To determine the effect of parent's educational levels a one-way MANOVA was conducted on the Parents Perceptions of Early Intervention services Questionnaire. Table 6 shows the result. Table 6 shows there is Significant differences on parent's perception of Early Intervention services across parents educational levels.

3.6. Question No 6:

Are there any significant differences in parents' perceptions that can be attributed to their gender ? ..To answer this question, The researcher calculates the difference

between the arithmetic mean of scores for males and arithmetic mean of scores for females on the Parents Perceptions of Early Intervention services Questionnaire Through the use T-Test. Table 7 shows the result.

Table 7
T-Test for The difference between the arithmetic mean of scores for males and arithmetic mean of scores for females on the Parents Perceptions of Early Intervention Questionnaire

Group	N	Mean	Std.Deviation	t	Sig
Males	95	43.28	21.40	-0.343	0.502
Females	202	44.21	22.07		

Table 7 shows there is no statistically significant difference between the arithmetic mean of males Scores and arithmetic mean of females Scores on the Parents Perceptions of Early Intervention services Questionnaire.

IV. DISCUSSION AND CONCLUSION

Studies show that some countries are developing early intervention plans for social services for families with children with disabilities in order to increase the chances that these children are educationally and socially integrated. The role of the family in promoting early social and emotional attitudes and appropriate behavior is crucial for stimulating the potential of children with disabilities. In this sense, an assessment tool of early intervention parental self-efficacy, EIPSES, was developed, which refers to the individual's own perception on a performed task, in this case the ability to be effective in parenting skills and tasks.

When an infant or toddler has a diagnosed disability or developmental delay, parenting can become more complex because of the child's developmental needs, regardless of maternal age. The Individuals with Disabilities Education Improvement Act (IDEIA) includes regulations for referral, eligibility, and service provision, including services from developmental specialists (DS), speech and language pathologists (SLP), and physical therapists (PT) to address the children's developmental strengths and needs. A Service Coordinator (SC) also works with families to locate and coordinate resources and prepare for children's transition at age three to services in the public school (e.g., pre-kindergarten classroom or early childhood special education classroom).

Research has shown that the time between birth and age 36 months is a critical developmental period in a child's life. These months offer a window of opportunity that will not be available later. Early intervention programs minimize and in some cases prevent delays in development of infants and toddlers with disabilities. They can decrease the need for special education and related services when a child enters school, and increase independence. Children whose special needs are identified and addressed during these crucial early years have a greater chance of reaching their full potential. In this sample of parents, we found low levels of perceptions of early intervention services for children with Autism in Saudi and Egypt.

The findings of the present study also indicate that Saudi and Egyptian parents don't know the importance of early intervention for their children with Autism. There is an absolute necessity for adopting the governments of these countries clear policies about early intervention for children with Autism. We must all government ministries will cooperate in this matter. Including the Ministry of Social Affairs and the Ministry of Higher Education.

REFERENCES

[1] Abdo, D. (2012). The Early Intervention. Riyadh, Zahra Publishing and Distribution.

[2] Alrwass, A. (2008). Role of a doctor rehabilitation of children in early intervention services. Eighth Forum of the Gulf Disability

Society, 18-20 March, 1-7.

[3] American Psychiatric Association (APA). (2000). Diagnostic and statistical manual of mental disorders (4th edn, text rev.). Washington, DC: Author.

[4] American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders (4th ed.). Washington, DC: Author.

[5] Bailey, D. B. & Bruder, M. B. (2005). Family outcomes of early intervention and early childhood special education: Issues and considerations. Washington, D.C.: Office of Special Education Programs, Early Childhood Outcomes Center.

[6] Baron-Cohen, S. (1987). Autism and symbolic play. British Journal of Developmental Psychology, 5, 139-148.

[7] Center for Disease Control and Prevention (CDC). (2012). Prevalence of Autism. Available at : http://www.cdc.gov/media/releases/2012/p0329.

[8] Cornish, E. (1998) A balanced approach towards healthy eating in autism. J. Hum. Nutr. Dietet. 11, 501–509.

[9] Cuevas, P.; Romero, C. & Guinea, C. (2012). Early child Intervention, fostering resilience's and formative competence in vulnerability context. Procedia - Social and Behavioral Sciences, 46,5910 – 5913

[10] Diamond, K. E., & LeFurgy, W. G. (1992). Relations between mothers' expectations and the performance of their infants who have developmental handicaps. American Journal on Mental Retardation, 97(1), 11-20.

[11] Dunst, C. (2000). Revisiting "Rethinking early intervention." Topics in Early Childhood Special Education, 20, 95-104.

[12] Durand, V.M., & Merges, H. (2001). Functional communication training;A contemporary behavior analytic intervention for problem behaviors. Focus on Autism and Other Developmental Disabilities,16,110-119.

[13] Elkholy, H. (2010). Autism : Positive silent. Dar Alstafa Printing, Publishing and Distribution.Egypt.

[14] Gorham, K. A., Des Jardines, C., Page, R., Pettis, E., & Scheiber, B. (1975). Effects on parents. In N. Hobbs (Ed.), Issues in the classification of children (pp. 154-188). San Francisco: Jossey-bass.

[15] Guimond, A. B., Wilcox, M.J., Lamorey, S.G. (2008). The early Intervention Parenting Self-Efficacy Scale (EIPSES). Journal of Early Intervention, 30, 4, 295-320.

[16] Guralnick, M. (2005a). Early intervention for children with intellectual disabilities: Current knowledge and future prospects. Journal of Applied Research in Intellectual Disabilites, 18, 313-324.

[17] Hanson, M. & Bruder, M. (2001). Early intervention: Promises to keep. Infant & Young Children, 13(3), 47-58.

[18] Harter, S. (1999). The construction of self: A developmental perspective. New York: Guilford.

[19] Ivey, J. K. (2004). What do parents expect? A study of likelihood and importance issues for children with autism spectrum disorders. Focus on Autism & Other Developmental Disabilities, 19(1), 27-33.

[20] Kashif, E. (2012). A better understanding of autism disorder. The Journal of Speacial Education, 1, 22-36.

[21] Kohprasert, K. (2008). Parent perceptions of early intervention and aother related services for young children with Autism spectrum disorder in Thailand. A dissertation submitted to the faculty of The University of North Carolina at Charlotte in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Special Education, Charlotte.

[22] Kwassmah, K. (2012). The effectiveness of a training program in early intervention for the development of communication skills and attention to autistic children in Jordan. Journal of Benha college of Education, 91 (3), 31-64.

[23] Lovaas, O. (1987). Behavioral treatment and normal educational and intellectual functioning in young autistic children. Journal of Consulting and Clinical Psychology, 55(1), 3-9.

[24] McEachin, J.; Smith, T., and Lovaas, O. (1993). Long-term outcome for children with autism who received early intensive behavioral treatment. American Journal on Mental Retardation, 97(4), 359-372.

[25] Mc William, R (2010). Routines-Based Early Intervention. Supporting Young Children and Their Families. Baltimore: Brookes.

[26] Mental Health Socity (2012). National disaster 800 thousand autistic in Egypt, Available at http://www.drhossam.net/2012/03/31/%D9.

[27] Neitzel, J. (2004). Understanding parent and professional satisfaction with family-Centered early intervention services for young children with autism. A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the School of Education.

[28] Okas Journal (2012). Autism in Saudi, Available at http://www.okaz.com.sa/Con.htm.

[29] Ozaydin, L. & Gallagher, P. (2012). Georgias early intervention program: Recommendations for a system of early intervention in Turkey. Procedia - Social and Behavioral Sciences, 46, 5610 – 5621.

[30] Ozonoff, S., Iosif, A., Baguio, F., Cook, I. C., Hill, M. M., Hutman, T., Young, G. S. (2010). A prospective study of the emergence of early behavioral signs of autism. Journal of the American Academy of Child & Adolescent Psychiatry, 49(3), 256-266.e2

[31] Popa, M. ; Gliga, F. & Michel, T. (2012). The perception of parents on the issue of early intervention in child development. Procedia - Social and Behavioral Sciences, 33, 303-307.

[32] Raiten, D.J. & Massaro, T. (1986) Perspectives on the nutritional ecology of autistic children. J. Autism Dev. Disord. 16, 133–143.

[33] Shin, D. (2013). Parent Perceptions of Early Intervention for Young Children with Autism Spectrum Disorders in South Korea. A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of Master of Education in Special Education, Department of Educational Psychology, Edmonton, Alberta.

[34] Shonkoff, J. & Phillips, D. (2000). From neurons to neighborhoods: The science of early child development. Committee on Integrating the Science of Early Childhood Development. Washington, DC: National Academy Press.

[35] Sigafoos, J. (2000). Communication development and aberrant behavior in children with developmental disabilities. Education and Training in Mental Retardation and Developmental Disabilities, 35,168-176.

[36] Wakefield, B. (1976). Perception and communication. Speech Communication Association,VA: ERIC Clearinghouse on Reading and Communication Skills. (ERIC
Document reproduction Service No. (ED125022).

[37] Wetherby, A. & Prizant, B. (2000). Autism spectrum disorders: A transactional developmental perspective. Baltimore, MD: Brookes.

[38] Zwaigenbaum, L., Bryson, S., Lord, C., Rogers, S., Carter, A., Carver, L., &Yirmiya, N. (2009). Clinical assessment and management of toddlers with suspected autism spectrum disorder: Insights from studies of high-risk infants. Pediatrics, 123(5), 1383-1391.

Appendix A

Demographics Questionnaire (DQ)

[Researcher prepare]

Please read the questions and check your Information :

1- What is your gender ?

⓪ Male. ⓪ Female.

2- What is your nationality ?

⓪ Egyption. ⓪ Saudi.

3- What a country where you live now ?

⓪ Egypt. ⓪ Saudi.

4- How old are you ?

⓪ Less than 25. ⓪ 25-35. ⓪ Older than 35.

5-What is the highest degree or level of school you have completed?

⓪ No schooling completed.
⓪ Nursery school to 8th grade.
⓪ 9th, 10th or 11th grade.
⓪ 12th grade, no diploma.
⓪ High school graduate.
⓪ Some college credit, but less than 1 year.
⓪ 1 or more years of college, no degree.
⓪ Bachelor's degree.
⓪ Master's degre .
⓪ Doctorate degree.

6-What is your total household income?

If u Egyption : ⓪ 500-1000 LE. ⓪ 1000-1500 LE. ⓪ 1500-2000 LE.

If U Saudi : ⓪ 5000-10000 SR. ⓪ 10000-15000 SR. ⓪ More than 15000 SR.

7- Which area are you living ?

⓪ Rural area. ⓪ City.

8- Are you currently…?

⓪ Employed for wages.
⓪ Self-employed.
⓪ Out of work and looking for work.
⓪ Out of work but not currently looking for work.
⓪ A homemaker.
⓪ A student.
⓪ Military.
⓪ Retired.
⓪ Unable to work.

9- How old is your child now ?

⓪ 0 ~ 0.6 year.
⓪ 0.7 ~ 1 year.
⓪1.1 ~ 1.6 year.
⓪1.7 ~ 2 year.
⓪2.1 ~ 2.6 year.
⓪2.7 ~ 3 year.
⓪3.1 ~ 3.6 year.
⓪3.7 ~ 4 year.
⓪4.1 ~ 5 year.
⓪5.1~ 6 year.
⓪6.1~ 7 year.
⓪7.1~ 8 year.
⓪8.1~ 9 year.
⓪9.1~10 year.
⓪older than 10.1 year.

10- What is your marital status?

⓪ Married.
⓪ Divorced.

Appendix B

Parents'Perceptions of Early Intervention Questionnaire (PPEIQ)

[Researcher prepare]

Please read the questions and check your Answer:

1- your child has opportunities to play with typically developing peers in the early intervention program services.

⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

2- Workers in the centers of early intervention uses new methods to teach my childs behaviors and skills.

⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

3- The time allowed for the child in early intervention centers is enough.

⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

4-Early intervention services help autistic children.

⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

5-Early intervention services provided to children with Autism from birth to 6 years.

⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

6-Early intervention services before the age of 3 would be positive effect on my Autistic child development.

⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

7-Time between diagnosed and get the early intervention services was appropriate to your child.

⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

8- Early intervention services learn me how you can teach the skills for your child.

⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

9-IEP considered one of the most important early intervention services.

⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

10-IEP was planned based on family concerns,resources, and priorities.

⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

11-Early intervention services are made by a working group consisting of: a behavioral specialist, doctor, teacher, nurse, etc.

⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

12-Your Autistic child has opportunities to play with typically developing peers in the early intervention program.

⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

Early intervention services can start since pregnancy.13-

⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

14- Nutritionist has an important role in early intervention services.

⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

15- Early intervention services can be provided in the home.

⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

16-Appropriate curriculum is important factors for an effective early intervention services.

⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

17-Early intervention services have clear current goals and future goals.

⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

18- Early intervention services have effective approaches in order to teach your child.

⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

19-Early intervention services would be effective if it implemented more than 25 hours per week.

⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

20-Early intervention services in teaching your child is effective

⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

21-Workers in the centers of early intervention used appropriate tools to evaluate your child.

⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

22- Early intervention services learn you how I can deal with your child.

⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

23-Early intervention services include the provision of psychological and social guidance for parents.

⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

24- Finding early intervention services for your child is easy.

⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

21- Workers in the centers of early intervention uses appropriate methods to teach social interaction to your child.

⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

22-Early intervention services include early diagnosis which makes your child with Autism get early intervention earlier.
⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

23- Early intervention services for children with Autism should be implemented as soon as possible.
⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

24- The effectiveness of Early intervention services depends on team's ability.
⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

25-Early intervention services are prevention of disability.
⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

26- Based on your child's early intervention services, you received sufficient information and training as needed.
⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

27-Early intervention services give your questions answered truthfully.
⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

28-Early intervention services seek to prepare Autistic child for the primary stage of education.
⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

29- Workers in the centers of early intervention assesses your child based on child and family's strengths and needs before providing intervention services.
⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

30- Early intervention services should focus on your child's individual needs rather than typical developmental stages.
⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

31- Early intervention team Use many tools to assess the child's condition.
⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.

32- your child learns to interact with others in Early intervention services centers.
⓪ Strongly Agree. ⓪ Agree. ⓪ Neutral. ⓪ Disagree. ⓪ Strongly Disagree.