Life Adaptation Program & Its Effect on Daily Living Skills of Autistic Children and Their Parents Stress

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Abstract

This study aimed to investigate the effect of life adaptation program on daily living skills (DLS) of autistic children and their parent's stress. A quasi -experimental design was utilized in this study. A purposive sample of thirty autistic children and their parents were recruited from Autism Day Care Unit-Beit El-shams- Child Psychiatry Clinic in El-Abbassia Mental Health Hospital. Three tools were used to conduct the current study, sociodemographic and medical data sheet, autistic child skills scale, and parent's stress scale. The results showed that, more than eighty percent of the studied children had low level of daily living skills, and slightly more than half of the studied parents had moderate stress level. Findings revealed that there was a highly statistically significant difference between pre-post program regarding daily living skills & there was a highly statistically significant difference between parents stress pre and post program. In conclusion, early intervention play significant role in the development of DLS of all ages, yet further researches are needed for developing and maintenance of DLS of autistic children.
Keywords: autistic disorder, daily living skills, parents stress.

Introduction

Autism spectrum disorder (ASD) is a neurodevelopmental and behavioral disorder expressed through impaired social communication, interactions, and restricted, repetitive, patterns of behavior, activities and interests (American Psychiatric Association, 2013). ASD is a perplexing disorder which can exert wide ranging neurological and systemic functions with rather similar behavioral and biological manifestations (Hu, 2013). The term "spectrum" describes how symptoms can range from mild to severe with broad variations in individual presentation and level of functioning. Medical (Chen et al., 2013; Matson & Goldin, 2013), neurological, and psychiatric morbidity commonly co-occur in this population of children, potentially exacerbating primary ASD features (Bauman, 2010) and adding to their need for health care service utilization (Tregango & Cheak-Zamorah, 2012).

The prevalence rate of autism in Egypt according to a study that carried out by Haffiz (2007), reported that, one child every 870 Egyptian children has autism, about 1 percent of the world population has autism spectrum disorder (CDC, 2014), the global median prevalence of autism is estimated at 17/10,000, while the prevalence in the United State is estimated at 1 in 68 birth (CDC, 2014).

Adaptive skills include (communication skills, socialization skills, daily living skills and motor skills) those skills are necessary for successful functioning at home, school, and work, and they represent a significant deficit among individual with ASD. The development of those skills is commonly disrupted in those with a diagnosis of autism (Estes, et al., 2013).

Daily living skills constitute a critical domain of adaptive behaviors, which are defined as behaviors necessary for age-appropriate, independent functioning in social, communication, daily living, or motor areas. Previous research suggested that, the development of daily living skills may be particularly challenging for individuals with ASD. Children with autism often have significant impairment in daily living skills (Liff, Harel, & Vein, 2011). Previous authors added that, due to deficits in these children's ability to function independently, many of them have poor adult outcomes. The implication of such deficits includes a consistent and ongoing reliance on caregivers for the completion of these basic tasks.

The overall impact of having a child with ASD in a family can create severe psychological stressors. From the initial diagnosis to the ongoing demanding day-to-day caretaker responsibilities, for some families, caretaking can be overwhelming. Parents of children diagnosed with ASD struggle with the many challenges associated with the disorder resulting in more stress (Bilgin & Kucuk, 2010).

The stressors involve problems associated with the characteristics of the disorder, which include social skills, communication, and in many cases, behavioral difficulties. Parents, mothers in particular, are more vulnerable to psychological and emotional problems due to the isolation and demanding day-to-day tasks of caring for a child with ASD (Sawyer et al., 2010).

Qian, Reichle, Bogenschutz (2012) suggested that, the issue of stigma pay a role in the delay to seek diagnosis. This is supported by evidence that negative attitudes regarding the disabled may lead to withdrawal from extended family gatherings and embarrassment for families further contributing to their reluctance to seek diagnosis and support (Crespo et al., 2013).

Parents raising children with ASD report feeling "isolated, frustrated and fatigued" (Carbone et al.,

2010) with the burden of coordinating their child's complex needs by themselves. These parents report less satisfaction with their child's school, community, and health services (Guillermo & Halterman, 2011). Difficulties managing challenging behaviors, impaired social communications, and co-morbid physical symptoms can place significant burdens on the family (Silva & Schalock, 2012). Considerable worry, financial hardship, difficulty locating specialty programs, and dissatisfaction with service provision are described as well (Hall & Graff, 2010). Parents raising children with ASD report significantly more stress, and lower levels of personal and marital well-being than parent's raising children with other developmental disorders, and those without (Harper, Dyches, Harper, Roper, & South, 2013).

The life adaptation program will focus on those skills that are needed for successful day-to-day functioning for autistic children in their environment. Areas of daily living skills include self-help skills, home or school skills, community skills and leisure skills. Self-help skills are those skills enabling individuals to take care of their own bodies; this is a large deficit area for individuals diagnosed with autistic disorder. If the individual learn self-help skills, then he/she will become more independent, thereby allowing caregivers to focus on other areas to teach (Wood, 2006).

Nurses at all practice levels, regardless of the setting in which they work, are frequently asked about issues related to the health of children. Nurses are in a partner position with children and families so that they can help advocate for, educate, and adequately manage the care of children with ASD. Managing the care of a child with ASD can be a complex endeavor for parents and professionals. Following diagnosis, parents may wish to see sub specialists, but with the number of children now diagnosed with ASD, the role of primary care providers and nurses is expanding (Inglese, 2009).

Significance f the study

In Egypt, No epidemiological studies have been done but indirect estimation of autistic children in Egypt expected to be one in 500 children were diagnosed with ASD (Egyptian Autistic Society, 2013). Although, in 2007 Haffiz reported that, one child every 870 Egyptian children has autism.

This study encompassing aiding children diagnosed with autism to live more independently in their environment and to develop the skills necessary to become a successful member of the community. Increasing the skill level of those children's benefits not only the individual and his/her family, but additional benefits exist for society as a whole.

One of the most important recommendations of researcher's master theses was to develop program for early intervention and prevention of severe problems' behavior to enhance children's benefit from skill acquisition programs for adaptive (i.e., daily living skills) by reducing behaviors that interfering with skill acquisition (Hamdy, 2011).

Finally, to truly promote success of the life adaptation program for improving daily living skills with children diagnosed with autistic disorder, services must be ongoing, and include parental training as a large component to allow for the maintenance and generalization of skills, empowering parents to teach their children the skills necessary to further develop will allow for more successful adults and reducing parents suffering and stress as well.

Aim of the study

The aim of this study was to investigate the effect of life adaptation program on daily living skills of autistic children and their parents stress.

Research Hypotheses:

H1. Autistic children who will receive life adaptation program will have higher score of daily living skills immediately by the end of the program and after one month follow-up than before the program.

H2. Parents of autistic children who will receive life adaptation program will have lower stress level immediately by the end of the program and after one month follow-up than before the program.

Subject and Methods

Design

The selected design for the current study was a quasi-experimental (pre-post test) design.

Sample

A purposive sample of (30) autistic children and their parents were selected according to the following inclusion criteria: both genders, aged less than 7 years, diagnosed with autism. Exclusion criteria were as follows: Children with mental retardation, physical handicapping or neurological disorders as well.

The sample size of (30) participants was calculated using a power analysis. A Power of .80 ($\beta = 1 - .80 = .20$) at alpha. .20(one-sided) was used as the significance level, because these levels have been suggested for

use in the most areas of behavioral science research (Ellis, 2010), in addition, high effect size (.5) was used in this study.

Setting
The study was conducted at Autism Day Care Unit-Beit El-shams- Child Psychiatry Clinic in El-Abbassia Mental Health Hospital.

Tools for Data Collection
The following tools were used:
1-Sociodemographic and Medical data questionnaire: This tool was developed by the researcher and divided into two parts:
- First part. Child information it includes: child code, age, gender, number of siblings, order of child between siblings, type of preferred reinforcement.
- Second part. Include Medical Data: degree of autism disability, Intelligence Quotient, family history of autism, & when duration of autism disability.

2- Autistic Child Skills Scale.
The scale was developed by Suleiman, (2005) and used to assess the skill development among autistic children aged from 3 to 8 years old, it consists of 40 items divided into four subscale as follows: Daily Living Skills, Social Skills, Motor Skills, & Attending Skills. Responses were measured on a 3 point Likert scale, where (Zero) indicates never occurs, (1) sometimes occurs, (2) always occurs. In order to assess the internal consistency of this tool, the alpha obtained was 0.853 indicating a high degree of internal consistency by using Cronbach's Alpha. The higher the score the higher level of managing the skills.

3- Parent Stress Scale (PSS).
It was developed by Hosny, (2006). The Parent Stress Scale was used as a self-report instrument to measure level of stress directly associated with the parenting role. The PSS has a 72 items, consists of six subscales: somatic symptoms, psychological symptoms associated with child disability, psychological stress resulting from child communication problems, psychological stress resulting from child behavioral disturbance, psychological stress resulting from child social skills deficit and psychological stress resulting from financial aspects and are scored using the following 5 point Likert scale: where (zero) Never occurs, (1) rarely occurs,(2) sometimes occurs, (3) often occurs, (4) always occurs. Reliability of the instrument was 0.93 indicating a high degree of internal consistency. The higher the score the higher the level of stress.

Description of the Program:
This program will be designed to help autistic child to develop daily living skills (i.e. dressing, undressing, eating, drinking, and hand wash) necessary to live at the most successful level of independence within their environment and to reduce parent's burden and stress. The program will be held on 15 sessions, once weekly with 60-90 minutes for each. Each skill will take at least three sessions, and will be reviewed every three weeks to ensure acquisition of the previously learned skill. Subjects will be divided into three groups, and every group will consist of 10 autistic children and their parents. Content validity of the program will be tested by expert in psychiatric nursing.

At the beginning of the program, the researcher will model the appropriate techniques that could be employed to teach daily living skills to the autistic children while their parents observe the researcher for two sessions. As the parent becomes independently able to do the techniques at least (80%) properly based on the assessment checklist, they will begin to participate in the actual teaching sessions for their children; the researcher will provide immediate feedback to parents while they are engaged in the teaching session.

Within the program, there are three measurable skill areas. Each task within each skill area will be task analyzed to determine the sequence in which each component of the task will be taught. Mastery criteria involve the child completing the task independently across three programming days. Children with ASD are very different from one another's reflecting differences in the severity of autism, any additional disorder, the level of intelligence, the level of language ability, impaired fine motor skills and tendency to insist on sameness, mastering or acquiring life skills can be especially challenging for those on the autism spectrum. So, it is individualized for each child to determine time needed to master each skill (Jordan, R., Jones, G., & Morgan, H., 2013).

Procedure
- An official permission was obtained from the concerned hospital authorities to conduct the proposed study. Then the researcher contacted with autistic children's and their parents who met the inclusion criteria for their informed consent.

- Each child mother was interviewed individually, after explaining the purpose of the study and getting agreement of the mother to participate in the study. The investigator assured the voluntary participation and confidentiality to each subject who agreed to participate. The questionnaire was read, explained to the participant were choice was recorded by the researcher.
- For more validation of the mother's information the child's files was revised to complete the needed information.

Ethical consideration
- A primary approval was obtained from the Ethics Committee of Scientific Research of Faculty of Nursing - Cairo University in March, 2015 and Ethics Committee of Scientific Research - El-Abbassia Mental Health Hospital in Dec, 2015.
- All subjects signed and received a copy from the informed consent and were informed that participation in the current study is voluntary, no names were included in the data collection sheets and anonymity and confidentiality for each participant was protected by the allocation of a code number for each child. Mothers were informed that, they can withdraw at anytime during the study without giving reasons.
- Subjects were informed that in case of withdrawal, this will not affect the care they are receiving as well as their relationship with the investigator. Confidentiality was assured and subjects were informed that the results of the study will be used for the research purpose only.
- All consents were revised after completing data collection by the Ethics Committee of Scientific Research of Faculty of Nursing - Cairo University and final approval was obtained in   September, 2016.

Results
Section I: Socio-demographic and Medical data
a.   Socio-demographic data of the studied children
Table (1) Distribution of studied children according to their socio-demographic data (n=30)

Items	N	%
Age in years		
3-<4	10	33.40
4-<5	12	40.00
5-6	8	26.60
Mean $\pm$ SD	4.25$\pm$ 0.81	
With whom child is coming		
Mother	30	100.00
Father	00	00
Type of preferred reinforcement		
Token economy	9	30.00
Psychological support	10	33.30
Both	11	36.70

Table (1) revealed that, age range was 3 to 6 years with a mean of 4.25$\pm$ 0.81. As well, 40.00% of the studied children were in the age ranged between 4 to less than five years. In relation to place of residence, 100.00% of the studied children were lived in urban areas. Also, 100.00% of them were coming with his/ her mother. Concerning type of preferred reinforcement, 36.70% of the studied children preferred both token economy and psychological support.
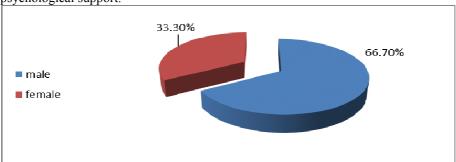

Figure (1): Distribution of the studied children according to their gender (n=30)
Figure (1) illustrated that, 66.70% of the studied children were males and 33.30% of them were females.
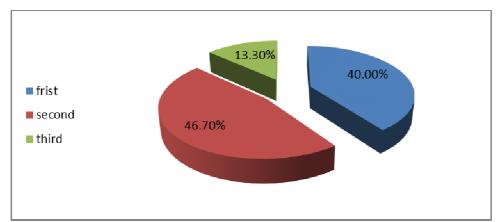
Figure (2): Distribution of the studied children according to their birth order (n=30)

Regarding to birth order, figure (2) showed that, 46.70% of the studied children were the 2nd child and 13.30% of them were the 1st child.

B. Medical data

Table (2): Distribution of the studied children according to their medical data (n=30)

Items	N	%
Degree of autism		
Mild	3	10.00
Moderate	16	53.30
Severe	11	36.70
Duration of autism disability		
1-<2	5	16.70
2-<3	24	80.00
3-4	1	3.3
Mean ± SD	1.86± 0.43	
Intelligence quotient		
Borderline	13	43.30
Below average	11	36.70
Average	6	20.00
Mean ± SD 1.76± 0.77		
Family history of autism		
positive	4	13.30
negative	26	86.70

Table (2) illustrated that, 53.30% of the studied children had moderate degree of autism. As well, 80.00% of them were diagnosed with autism from two to less than three years ago and 43.30% of them had borderline intelligence quotient. Also, 13.30% of the studied children had a positive family history of autism.

Section II: Daily living skills

a. Daily living skills pre and post program

Table (3): Distribution of the studied children according to their daily living skills (n=30)

Levels of daily living skills	Pre-program		Immediately post program		One month post program	
	N	%	N	%	N	%
Low	25	83.30	0	0	0	0
Medium	4	13.30	27	90.00	20	66.70
High	1	3.30	3	10.00	10	33.30
Mean ±SD	3.40±3.75		11.90±1.47		12.80±1.18	

Table (3) reported that, 83.30% of the studied children had low level of skills pre-program, compared to 90.00% of them had medium level of skills immediately post program. While 66.70% and 33.30% of them had medium and high level of daily living skills one month post- program respectively.

Table (4): Paired t-test comparing daily living skills pre and post program (n=30)

Comparison	Mean	SD	t	P-value
Pre-program & immediately post program	-8.50	4.12	-11.286	0.001***
Pre-program & one month post program	-9.40	3.77	-13.640	0.001***
Immediately post program & one month post program	-0.90	1.44	-3.407	0.002**

*Significant at P<0.05
**Significant at P<0.01
***Highly significant at P<0.001

Table (4) referred that, there were a highly statistical significant differences between daily living skills pre and immediately post program and after one month later (p= 0. 000)

Table (5): Paired t-test comparing hand washing skill pre and post program (n=30)

Comparison	Mean	SD	t	P-value
Pre-program & immediately post program	-1.16	0.74	-8.558	0.001***
Pre-program & one month post program	-1.23	0.72	-9.280	0.001***
Immediately post program & one month post program	-0.06	0.36	-1.000	0.326

*Significant at P<0.05
**Significant at P<0.01
***Highly significant at P<0.001

Table (5) showed that, there was a highly statistical significant difference between hand washing skills pre and post program (p= 0. 000). However, there was no statistical significant difference between immediately post program and one month post program.

Table (6): Paired t-test comparing dressing and undressing skill pre and post program (n=30)

Comparison	Mean	SD	t	P-value
Pre-program & immediately post program	-2.90	0.84	-18.801	0.000***
Pre-program & one month post program	-2.93	0.63	-25.116	0.000***
Immediately post program & one month post program	-0.03	0.61	-0.297	0.76

*Significant at P<0.05
**Significant at P<0.01
***Highly significant at P<0.001

Table (6) revealed that, there was a highly statistical significant difference between dressing and undressing skills pre program and immediately post program (p= 0. 000) as well as pre program and one month post program (p= 0. 000). However, there was no statistical significant difference between immediately post program and one month post program.

Table (7): Paired t-test comparing eating and drinking skills pre and post program (n=30)

Comparison	Mean	SD	t	P-value
Pre-program & immediately post program	-3.30	1.82	-9.919	0.001***
Pre-program & one month post program	-3.36	1.60	-11.469	0.001***
Immediately post program & one month post program	-0.06	0.82	-0.441	0.66

*Significant at P<0.05
**Significant at P<0.01
***Highly significant at P<0.001

Table (7) demonstrated that, there was a highly statistical significant difference between eating and drinking skills pre program and immediately post program (p= 0. 000) as well as pre program and one month post program (p= 0. 000). Also, there was no statistical significant difference between immediately post program and one month post program.

Section III: parent stress

Table (14): Distribution of the studied parent according to their stress level (n=30)

Parent stress levels	Pre-program		Immediately post program		One month post program	
	N	%	N	%	N	%
Mild	0	0	8	26.70	30	100.00
Moderate	16	53.30	22	73.30	0	0
Severe	14	46.70	0	0	0	0
Mean +SD	190.76+29.53		111.56+25.92		66.96+7.67	

Regarding to parents stress, table (8) showed that, 53.30% of the studied parents had moderate stress level and 46.70% of them had severe stress level pre program. While, 26.70% of them had mild stress level immediately post program and 100.00% of them had mild stress level one month post program.

Table (9): Paired t-test comparing parent stress pre and post program (n=30)

Comparison	Mean	SD	T	P-value
Pre-program & immediately post program	79.20	47.16	9.197	0.001***
Pre-program & one month post program	123.80	29.36	23.091	0.001***
Immediately post program & one month post program	44.60	30.81	7.927	0.001***

*Significant at P<0.05

**Significant at P<0.01

***Highly significant at P<0.001

As shown from Table (9) there were a highly statistical significant differences between parents stress pre and post program and one month post-program (p= 0. 000).

Discussion

a. Socio-demographic and medical characteristics.

In relation to age of the studied children the study finding (table 1) revealed that, approximately three fourths of the studied children their age ranged between 3-5 years. As well, Sounders (2012) mentioned that, autism typically appears in the first three years of life. Moreover, American Psychiatric Association (2013) reported that, autism symptoms are evidenced in the second years of life 12-24 months of age.

The present study result showed that one hundred percent of carers accompanying children for follow up were mothers (table 1). This result is to some extent supported by the result of Mansour (2010) who revealed that, more than three fourths of the studied parents were mothers, while slightly more than fifth of them were fathers. In the same line, Abdel-Ghany (2011) found that, all family caregivers were mothers. This result might be due to that mothers in the Egyptian culture are the main caregiver. This reflected the fact that, the mothers are mostly able to tolerate the responsibility of caring for those children especially in early childhood.

Also the present study result showed that almost two thirds of the studied children were boys (figure 1). This result might be attributed to the nature and availability of the studied sample during data collection time. Moreover, it raised the possibility that societal pressures to seek treatment may be less significant for girls as they are more easily hidden from the external viewers which could be attributed to Egyptian culture. In the same line, Volkmar, Lord, Bailery,Schultz, & Klin (2010) stated that, autistic disorder is four times more frequent in boys than girls. The cause of the observed sex difference remains a topic of debate. It is possible that males have a lower threshold for expressing the disorder. As well, UNLV Center for Autism Spectrum Disorder reported that, 1 in 88 children will be diagnosed with ASD: 1 in 54 boys, and 1 in 252 girls.

In relation to the child's birth order, results of the present study indicated that, more than forty percent of the studied children were ranked the second child in their families (figure 2). This result could be interpreted as there is little proved evidence that autism can arise purely from social factors or child rearing behavior. In contrast, Larsson et al., (2011) reported that, birth order (especially first or last born) is a risk factor for autism and that difference in the number of unfavorable pre or peri-natal events between autistic children and siblings were attributable to differences in parity. Most substantiated causes appear to fall in the realm of neurobiology and genetics. However, this study result was in disagreement with Mahmoud, Ragab and Girrgais (2009), who mentioned that, the highest percentage of children with autism ranked the first child representing approximately two fifths of the studied children.

In light of the current findings, slightly more than half of the studied children had moderate degree of autism disability (table 2). This result might be due to the sample size that is too small to be informative for statistical analysis in this item. This finding was consistent with Mansour (2010) who revealed that, less than half of the studied children had moderate degree of autism disability. This was inconsistent with Hamdy (2011) who found that, half of the studied children had severe degree of autism disability.

Moreover, the current study findings indicated that, most of the studied children have borderline and below average intelligent quotient (table 2). Another factor leading to difficulty in diagnosis of autism in young children is the overlap between autism and mental retardation, particularly at the lower ranges of cognitive impairment using another different diagnostic criteria. These findings were in accordance with Hamdy (2011) reported that, most of the studied children had borderline and below average IQ.

Inconsistent with the current study result Isaknkos et al., (2007), reported that, approximately 70% of children with autistic disorders showed some degree of mental retardation ranging from mild to profound. In addition, other studies reported that, about two thirds of the children were mentally retarded. This result may be due to the exclusion of all mentally retarded children from this study sample.

As regards family history of autism, results of the current study showed that, the minority of the studied children had positive family history of autism (table 2). In spite of this result, there is evidence for a genetic basis for autism. It also indicates the relation between autism and the familial transmission of autism as a biological factor. As reported by the Autism Society of America (2008), there is probably no single gene or genetic defect that is responsible for autism. These findings were also supported by Mahmoud, Ragab, and Girrgais (2009),

who mentioned that, the minority of the studied families had positive history of autism. However, the previous findings contradicted with those of Nakayama et al. (2006), who indicated that, polygenic factors are the causative determinants of the majority of cases of autism.

A- Daily living skills

In light of the study findings, the majority (83.30%) of the studied children had low level of daily living skills pre-program (table 3). This result might be due to that, children with autism were dependent on their caregiver and were unable to handle their daily living activities. While ninety percent of the studied children had medium level of daily living skills post program.

Results of the current study revealed that, there was a statistically significant difference between pre and post program regarding daily living skills among the studied children (table 4, 5, 6, 7). In agreement with the previous finding, Magiati et al. (2007) conducted a follow up study on preschoolers who received early intensive behavioral support group compares to an autistic specific preschool sample. The only statistically difference between the groups was in the VABS daily living skills domain.

C. Parents stress

In light of the current study findings, slightly more than half of the studied parents had moderate level of stress (table 8). This finding may be related to the mismatch between parents' expectations and their children skills deficits which created higher level of parental stress. This result was in accordance with findings of Smith et al. (2008) who found that, many caregivers of children with an ASD, experienced financial or mental health problems. On contrary, the prevalence of depressive mood has been reported to be lower among parents of typically developing children (Singer & Floyd, 2010).

In agreement with this finding, Karst & Hecke (2012) mentioned that, raising a child with an autism spectrum disorder (ASD) increase parent's stress, physical and mental health problems, family and couple problems, as well as decrease parents efficacy and worse their quality of life.

In this respect, Rao & Beidel (2009) found that, parenting stress has been one of the most widely investigated areas with regards to the impact of ASD on caregivers. Given the parents of children with ASD reportedly experienced higher levels of parenting stress as compared to parents of typically developing children.

Moreover, Estes and colleagues (2013) in their study compared mothers of typically developing (TD) children with those of children with ASD and developmental delay (DD) on reported levels of parenting-related stress. Analysis of variance indicated that mothers in the ASD group reported significantly higher levels of parenting stress than those in either the DD or TD groups. These results were consistent with a myriad of previous studies examining stress levels among mothers of children with ASD. Hayes and Watson (2013) conducted a comprehensive Meta analysis in which the literature on stress in parents with and without children with autism was evaluated. The mean effect size was 1.58, indicating a large and significant effect of raising a child with autism on parenting stress levels.

Result of the current study revealed that, there was a statistically significant difference between pre and post program regarding parent stress levels among the studied parents (table 9). In the same line, Necee (2013) reported that, parents of children with ASD showed reduction in parenting stress over the course of intervention. Moreover, Sutera et al. (007) stated that, increasing in daily living skills may predict better long term outcomes for young children with ASD, as well as lower parenting stress.

To conclude, Individuals with ASD showed slower development of DLS than individuals with other non spectrum diagnoses, likely a reflection of more impaired nonverbal cognition. Within the ASD group, although gains in DLS are made across childhood and into young adulthood, attainment is significantly affected by early cognitive and language skills, as well as severity of ASD symptoms. Early intervention may play a significant role in encouraging development of DLS. Nevertheless, results suggest that DLS should be a focus of treatment plans for individuals with ASD of all ages; even among young adults who have made the greatest gains, DLS were often considerably below age expectations.

The study recommend that, Regarding daily living skill interventions, this area has been neglected in the literature and there is a crucial need for more research in this area. Future research needs to focus more on generalization and maintenance of daily living skills. Future research is needed to investigate the relationship between interventions targeting specific aspects of DLS and DLS outcome DLS outcomes, particularly for adolescents and adults with ASD. And developing psycho education program for parents with autistic children and encourage parental involvement in program application.

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