

# Classroom Remediation Intervention Impacts on Mentally Retarded Adolescents Females Self Care Practice, their Mothers' Stress and Family Cohesion

Wafaa Hassan Alseraty<sup>1,2</sup>, Madiha Mahmoud Makhlof<sup>3</sup>

<sup>1</sup>Associate Professor of Pediatric Nursing, Al Dawadmi Applied Medical Science Collage, Shaqra University, KSA

<sup>2</sup>Assistant Professor of Paediatric Nursing, Faculty of Nursing, Tanta University, Egypt

<sup>3</sup>Professor of histology and cell biology at Al Dawadmi Applied medical science collage, Shaqra University, KSA

**Abstract:** ***Study aim:** Assess impacts of classroom remediation intervention on mentally retarded adolescents self care practice, their mothers' stress and family cohesion. **Sample & Setting:** 35 mentally retarded adolescents' females at 7<sup>th</sup> secondary school and 5<sup>th</sup> preparatory school of Al Dawadmi, Saudi Arabia was included. **Results:** about two thirds of the adolescents aged from 12-14 years and about half of them are in first year of preparatory school also more than four fifth from studied subjects' teachers' had experience in working with mentally retarded for more than 5 years old. Post the intervention, nearly all studied students was always responsible, do requested activities, cooperative, had self control, has initiation and good communication also studied adolescents' hygienic care practice were improved significantly post intervention. Regarding family cohesion it was improved significantly post the intervention. **Conclusion:** Post intervention adolescents become more responsible, self control, able to provide self care practice and significant differences was found post intervention and also their families' cohesion were improved post the intervention which decrease mothers' stress level in dealing with the adolescents and maintain good relation with them. **Recommendation:** Adolescents and mothers' need good preparation to deal with the disease; satisfy needs and maintain family cohesion.*

**Keywords:** Classroom remediation intervention, mentally retarded, stress and family cohesion

## 1. Introduction

Mental retardation (MR) is a generalized neuro-developmental disorder characterized by impaired intellectual and adaptive functioning. It is defined by an Intelligence quotient (IQ) under 70 and deficits in two or more adaptive behaviours. It begins during childhood and involves deficits in mental abilities, social skills, and activities of daily living it may be mild ID (IQ 50–69), moderate ID (IQ 35–49), Severe (IQ 20–34) or Profound ID (IQ 19 or below) <sup>(1)</sup>. MR is a condition of arrested or incomplete development of the person mind, which characterized by sub normality of intelligence <sup>(2)</sup>. About 5% of cases are inherited and the most common causes were genetic conditions, pregnancy or birth problems, exposure to disease or toxins, iodine deficiency and malnutrition. With appropriate support and teaching, most individuals can learn to do many things. Management include; psychosocial, behavioural, cognitive-behavioural treatments, and family-oriented strategies <sup>(3)</sup>.

MR causes distress to all family members due to financial problems and various degree of distress. Family members may report strong emotions as fear and anxiety regarding symptoms and cost of treatment. Family's cohesion is an important supporting factor for all family members. Having a mental retarded child will lead to sympathy, emotionality, independence, better understanding of individual's differences, high self-confidence, accepting responsibility, and much more cohesion <sup>(4)</sup>. Self-management is one of several necessary strategies which help mentally retarded students for being more self-determined and appropriately take control of aspects of their life. Self-care skills are the

capabilities, competencies or ability of a person's brain to solve problems related to daily care routine as dressing, grooming and meal time activities <sup>(5& 6)</sup>. Stress is consequence of having a slow paced child. It starts when demands are more than abilities. It is perceived as challenges between duties and existing capacities of parents. Stress impairs the social, psychological and physical functions of parents <sup>(7&8)</sup>.

Adolescence is a time of reorganization and pursuit of autonomy <sup>(9)</sup>. Adolescents' abilities in adapting himself with others and doing acceptable social activities determine his level of popularity among peers and family <sup>(10)</sup>. Accepting a mentally retarded constitute a challenging to parents. Some families may cope very well and remain cohesive. Family functioning can be adversely affected by stress which comes from various sources and affects the family differently. Some research shows negative effects of raising a adolescents' with a disability as, parental depression & suicide, marital problems and other research shows a positive as; greater family cohesion, greater social skills and higher levels of cooperation <sup>(11)</sup>. Families who have healthy levels of cohesion interact with one another and create a balance between adolescents' independence and demanding family togetherness. Cohesion is emotional bonding family members have with each other it evaluates the level at which the members of the family are separated or connected to each other and they can support each other <sup>(11 & 12)</sup>.

### Study Significance

Adolescents females with mental retardation facing many stressors to practice self care, dealing with others in school and home which has great impacts in family cohesion and

maternal stress. So this study aimed to prepare mild mentally retarded adolescent females to provide their self care practice which; alleviate their mothers stress, maintain teachers & students channel of communication, improve adolescents' self care management practice and maintain high level of their families' cohesion.

### Operational definitions

- **Classroom remediation intervention:** Is an intervention which maintains correction of observed difficulties and improve weaknesses in performance.
- **Cohesion:** Is the emotional bonding family members have with one another.
- **Family cohesion:** is feeling of connectedness between family members also include affective characteristics of family relationships such as support, affect, and helpfulness.

### Subjects & methods

**Study aim:** To study the impacts of classroom remediation intervention on mentally retarded adolescents' females self care practice, their mothers' stress and their families' cohesion.

**Research hypothesis:** The researchers hypothesized that;

- 1) Studied adolescents' self-care practice will be improved significantly post the intervention.
- 2) Family cohesion will be improved post the intervention.
- 3) Adolescents' mothers' stress level will be improved post the intervention.

**Study design:** A quasi- experimental pre and post intervention was carried out.

**Setting:** The study was conducted and followed up at 7<sup>th</sup> secondary school and 5<sup>th</sup> preparatory school, Al- Dawadmi governorate, Saudi Arabia.

**Sample:** A purposive sample of all mild mentally retarded adolescents' females from above mentioned setting meeting inclusion criteria their number was 35 students.

**Inclusion criteria:** Mothers' acceptance for participation, mild retarded adolescent female, educable, able to communicate and free from others medical or psychological problems.

**Exclusion criteria:** Mothers' rejection of participation, unable to communicate, uneducable & uncooperative, irritable adolescent or has any others medical or psychological problems.

### Tools:

- 1) Questionnaire sheet has 3 parts: 1<sup>st</sup> part assess social characteristics of studied adolescents' as; age, grade and teachers' age, education and daily working hours. 2<sup>nd</sup> part assess adolescents; responsibility, self trust, do requested activity, cooperation, self control, initiation, and how to communicate with other. All items were assessed pre and post intervention, 3<sup>rd</sup> part assess studied adolescents' self care practice ( as teeth care, mouth care, face care, hair care, hand washing post toilet and before taking

breakfast, taking breakfast probably and hand wash post taking breakfast) was assessed pre and post the intervention. Part 2 and part 3 reliability was tested; Cronbach's Alpha;  $r=0.80$ .

- 2) Stress Scale (Berri and Jones, 1995) <sup>(13)</sup>. It used to assess mothers' stress level pre and post the intervention. It has 18 items self report scale. Mothers' expressions are paying attention to positive and negative aspects of mothers' duties. Positive items as emotional benefits & personal development and negative items as demands on resources and restrictions themes of mothers' duties. Mothers' agree or disagree in terms of their typical relationship with their daughters. Five Points scale ranged from strongly disagree - strongly agree. Total score was summed from 0-30 mean low stress level, from 31-60 mean mild stress level and 61-90 indicate higher stress level. Mothers' were requested to answer each expression, based on normal relationship with their daughter. Seven expressions 1, 2, 5, 6, 7, 17 and 18 were scored reversely, and the rest were directly scored. It was translated into Arabic language by English language specialist and post translation its validity was tested by mental health nursing professor necessary. Scale reliability was tested; Cronbach's Alpha;  $r=0.84$
- 3) Family cohesion scale designed by Bloom and Naar (1994) <sup>(14)</sup> has 16 items divided as two subscales which reflect family cohesion (7 items) and family expressiveness (9 items) . Answer ranged from never - always in 5 point likert scale ranged from 1-5. If mothers' answer with never given 1 – if with always given 5. Total score was summed; low family cohesion was indicted if the total ranged between 0- 26 mean, 27- 52 mild family cohesion and if the total score 53- 80 indicated high family cohesion. Scale was translated into Arabic language by English language specialist post translation its validity was tested by mental health nursing professor necessary modification was done and its field validity was test on 3 adolescents' through pilot study. Scale reliability was tested it was; It was Cronbach's Alpha;  $r=0.95$ .

## 2. Methods

### 1) Preparatory Phase:

A scientific review of related literatures for various aspects of the study was conducted. Validity of the study tools were ascertained by 3 experts; one assistant professor of psychiatric nursing, faculty of nursing and 2 professors of psychiatric medicine, Faculty of medicine, Assuit University whom revised 3 tools for; clarity, relevance, comprehensiveness and ease for implementation, according to their opinion modifications were applied . Pilot study carried out on 3 adolescents to test the feasibility and applicability of tools and time needed to complete the tools; necessary modifications were done and they were excluded from the study. Study was conducted from September - November 2018.

### 2) Assessment phase

Post finalization of the study tools the researchers assess the studied adolescents' to; complete pre-test format, assess their educational needs, their readiness to learn also assess mothers' stress level when dealing with them.

**3) Development phase:**

The intervention was developed based on needs and demands to improve adolescents' self care practice, decrease mothers' stress and improve family cohesion. Its' contents were formulated covering the study aim and researchers designed a plan for the intervention implementation.

**4) Implementation phase**

- a) Post explaining the study aim; consent was attained from mothers, official permission was taken from schools heads and the study was accepted by school ethical committee. The researchers implement the intervention for the adolescents in their class through 10 sessions for each school, 3 sessions weekly; it was completed in about one month for each school. First session used for pre-test format and maintains therapeutic relation with adolescents; the intervention contents were given in 8 sessions, each session about one hour and divided as 10 minutes for speaking with students to gain their cooperation, 20 minutes for theoretical part and 30 minutes for practical part. At the beginning of each session, researchers apply brain storming by asking adolescents some questions to become familiar with the subject.
- b) Care practice demonstration was done in front of adolescents' and their teachers in their class, contents were illustrated gradually in clear, simple language using; illustrative pictures, videos, discussion, practice and feedback through positive verbal words. At the end of each session summary for the main points was done. Each session included displaying simple training videos for practical self care demonstration using audiovisual aids. Students were trained with their teachers to; practice all items of self care for two continues weeks, to do their self care practice correctly until they completely can achieve their care practice and teachers become satisfied about students care practise also the students were assessed for two weeks in their homes from their mothers to practise quality and continuity of self care practice.

**5) Evaluation phase**

The intervention was evaluated post one month from ending ninth session during the 10 session post test was done using same pre-test format to assess the impacts of the intervention.

**Classroom remediation intervention:**

- a) It aimed to correction of observed difficulties or weaknesses in adolescents' self care practice performance, consists from programmed instructional procedures, according to adolescents' level of understanding and readiness to learn. It provides teaching to students to be more independent, and responsible for their own behaviour and maintain their hygienic self care practice so they can become more self-directed and less dependent on others.
- b) Each activity was broken down into simplest steps. Each step was demonstrated by the researchers, followed by teachers' demonstration and finally students' demonstration. Activities were changed frequently and proceeding from simple to complex to prevent

adolescents' disinterested in activity, researchers provide pupils with simple introduction. It provide independent practice opportunities for adolescents' self-care practice under supervision of the researchers while performing the behaviour within the actual situation and also assess students' mastery of the self-management practice for independent practice within the actual situation when they reached of 90 % to achieve the practice alone through three consecutive sessions in the classroom.

**Statistical analysis**

The Statistical Package for the Social Sciences (SPSS) version 21 was used. Descriptive statistics including frequencies & percentages were calculated for each item. T-test was used to compare between students; practice, maternal stress and family cohesion pre and post intervention. The level of significant was adopted at  $p < 0.05$ .

**3. Results**

Table 1 represent social characteristics of the studied adolescents and their teachers. Regarding table one; about two thirds from the students aged from 12-14 years (63.0%) and about half of them are in first year of preparatory school (48.5%) also about four fifth from teachers; aged from 41 years and more (88.6%), had experience in working with mentally retarded for more than 5 years old (94.3%) and had daily working hours 4-5 hours (91.4%).

Table 2 demonstrates percentage distribution of intervention impacts on the studied adolescents' general characteristics. Regarding table 2; all studied adolescents' were always responsible, do requested activities, cooperation, self control, has initiation and good communication post the intervention compared only with 5.7%, 14.3%, 11.4%, 14.3%, 11.4%, and 5.7% for the above mentioned items respectively with significant difference was found pre and post intervention due to the impact of the intervention.

Table 3 demonstrate percentage distribution of studied adolescents' hygienic care practice pre and post intervention. Studied students' hygienic care practice were improved significantly post intervention where the majority of them post the intervention do correct practice regarding teeth care, mouth care, face care, hair care, wash hands post toilet, wash hands before taking breakfast, take breakfast properly and wash hands post breakfast (85.7%), (82.8%), (94.2%), (85.7%), (77.2%), (94.2%), (85.7%), (85.7%) respectively for the above mentioned items post the intervention compared only with less than one fourth of them pre intervention with significant differences was found pre and post the intervention.

Table 4 represent studied adolescents' families' cohesion pre and post intervention. Regarding family cohesion and responsiveness it was improved significantly post the intervention as reported by studied adolescents' mothers (85.7%) had high level of cohesion and (94.2%) had high family expressiveness post the intervention compared only with 2.9%, 2.9% pre the intervention with significant difference were found.

Figure 1 represent adolescents' total score of cohesion pre and post intervention; studied adolescents' total score of family cohesion level was improved post the intervention; 86% from them has a high cohesion level post intervention compared only with 3% pre the intervention which reflect the impact of the intervention on family cohesion level among studied adolescents. Table 4 Mothers' stress level pre and post intervention; majority of mothers complain from stress during dealing with their adolescents' pre intervention which improved significantly post the intervention; 91.4% from mothers complain from high stress level pre intervention compared with none of them post the intervention.

**Table 1:** Social characteristics of the studied adolescents and their teachers

Items	No=35	%
<b>1. Adolescents' age in years:</b>		
a) 12-14	22	63.0*
b) 15-18.	4	11.4
c) 19- 21	9	25.6
<b>2. School:</b>		
a) 7 <sup>th</sup> secondary school.	11	31
b) 5 <sup>th</sup> preparatory school.	24	69
<b>3. adolescents' education level:</b>		
a) 1 <sup>st</sup> secondary.	7	20
b) 2 <sup>nd</sup> secondary.	1	2.9
c) 3 <sup>rd</sup> secondary	3	8.6
d) 1 <sup>st</sup> preparatory.	17	48.5*
e) 2 <sup>nd</sup> preparatory	7	20
<b>4. Teachers' age in years:</b>		
a) 20-30	2	5.7
b) 30-40	2	5.7
c) 41-	31	88.6*
<b>5. Teacher s' years of experience:</b>		
a) 1-5.	2	5.7
b) <5	33	94.3*
<b>6. Teacher daily working hours:</b>		
a) 1-3	1	2.9
b) 4-5.	32	91.4*
c) 6-7.	2	5.7

**Table 2:** Percentage distribution of intervention impacts on studied adolescents' general characteristics

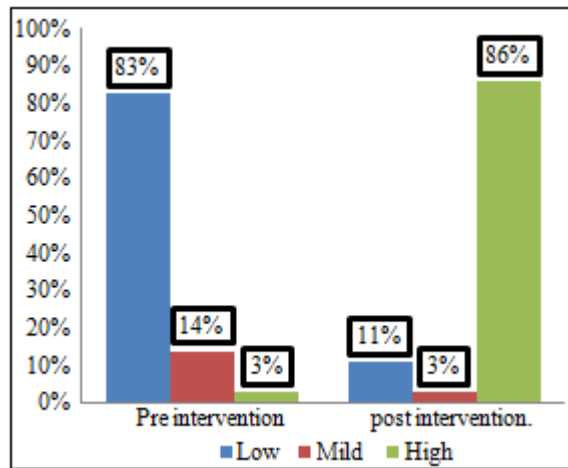
General characteristics	Pre intervention (%)	Post intervention (%)	T test	P value
1) Responsible :				
• Always.	5.7	100*	30.946	.000*
• Most of time.	8.6	0		
• Sometimes.	85.7	0		
2) Has Self trust:				
• Always.	20	94.3	18.392	.000*
• Most of time.	80	5.7		
3) Do requested activities:				
• Always.	14.3	100*	30.946	.000*
• Most of time.	85.7	0		
4) Cooperative :				
• Always.	11.4	100*	16.233	.000*
• Most of time.	88.6	0		
5) Has self control:				
• Always.	14.3	100*	30.946	.000*
• Most of time.	85.7	0		
6) Has initiation:				
• Always.	11.4	100*	14.75	.000*
• Most of time.	8.6	0		
• Sometimes.	80	0		
7) Has good communication :				
• Always.	5.7	100*	19.16	.000*
• Most of time.	11.4	0		
• Sometimes.	82.9	0		

**Table 3:** Percentage distribution of the studied adolescents' hygienic care practice pre and post intervention.

Hygienic care practice	Do practice Pre intervention			Do practice post intervention			T test	P value
	Correct	Incorrect	Not do	Correct	Incorrect	Not do		
	(%)	(%)	(%)	(%)	(%)	(%)		
1) Teeth care.	8.6	80.0	11.4	85.7*	5.7	8.6	34.62	.001*
2) Mouth care.	11.4	85.7	2.9	82.8*	8.6	8.6	24.15	.000*
3) Face care.	14.3	80.0	5.7	94.2*	2.9	2.9	26.24	.000*
4) Hair care	8.6	8.6	82.8	85.7*	8.6	5.7	28.30	.000*
5) Wash hands post toilet	2.9	14.3	82.8	77.2*	17.1	5.7	18.40	.000*
6) Wash hands before breakfast.	5.7	11.5	82.8	94.2*	2.9	2.9	19.20	.000*
7) Take breakfast properly.	5.7	14.3	80.0	85.7*	11.4	2.9	18.40	.000*
8) Wash hands post breakfast	11.4	74.3	14.3	85.7*	2.9	11.4	34.60	.000*

**Table 4:** Studied adolescents' families cohesion pre and post intervention (.N=35).

Items of cohesion	Pre intervention		post intervention		T test	P value
	No	(%)	No	(%)		
1) Family cohesion:						
o Low.	23	65.7	3.0	8.6	19.653	.000*
o Mild.	11	31.4	2.0	5.7		
o High.	1	2.9	30	85.7*		
2) Family expressiveness						
o Low.	28	80.0	1	2.9	26.239	.000*
o Mild.	6	17.1	1	2.9		
o High.	1	2.9	33	94.2*		



**Figure 1:** Studied adolescents' total score of cohesion pre and post the intervention.

**Table 4:** Mothers' stress level pre and post intervention (N=35).

Maternal stress level:	Pre intervention		post intervention		T test	P value
	No	(%)	No	(%)		
1) Low.	2	5.7	2	5.7	19.044	0.0
2) Mild.	1	2.9	33	94.3		
3) High.	32	91.4*	0	0.0*		

#### 4. Discussion

The current study aimed to assess impacts of classroom remediation intervention on mentally retarded adolescents female self care practice, mothers' stress and family cohesion. Regarding table 2; nearly all girls was always responsible, self trust, do requested activities, cooperative, has good self control, has initiation and good communication post the intervention. The current finding supported with Sandjojo, et. al., in 2018, <sup>(15)</sup> whom found intervention group had a significant increase in independence and self-reliance, in contrast to the comparison group. Regarding Cihak and Wright in 2010, <sup>(16)</sup> found improvement in students' task engagement during baseline was 29% and increased to a mean of 94% intervals of task engagement due to the intervention also Adeniyi and Olayinka in 2016, <sup>(17)</sup> found improvement in social skills among the studied subjects post the intervention. Alavi et.al., in 2013; <sup>(18)</sup> support the above mentioned finding and indicate the importance and the role of the social skills training intervention in having desirable relation with peers, parents, mothers and the society and also agree with current results Heydari, et. al., in 2018; <sup>(19)</sup> reported a significant difference improvement of state of confidence in the studied adolescents' post mental skills training which leads to improve the state of confidence between subjects.

Studied adolescents hygienic care practice were improved significantly post intervention and majority of them do correct self care practice post intervention so the 1<sup>st</sup> research hypothesis was accepted this resulted from demonstration and redemonstration of skills by researchers and continuous training of students to provide effective self care practice until they completely do the practice correctly. This finding supported by Singh, et. al., in 2012, <sup>(20)</sup> whom found study group which receive effective

remediation education performed better than the control group regarding dressing skill also Adeniyi and Omigbodun in 2016, <sup>(17)</sup> found improvement in social skills after 8 weeks of a teacher facilitated classroom-based intervention. The study findings supported with Behera, 2001; <sup>(5)</sup> who mentioned mentally retarded children are capable of learning through efficient therapy intervention and found significant improvement in adolescents' self care skills.

Regarding table 4; family cohesion was improved post the intervention also in figure one adolescents' total score of cohesion level was improved post the intervention; 86% from adolescents had a high cohesion level post intervention compared only with 3% from them pre the intervention which reflect the impact of the intervention on family cohesion level so the second research hypothesis was accepted as the intervention improve adolescents family cohesion. Cohesion improvement among the studied adolescents resulting from improvement in their self care practice and dependency which improve their relations with their family members especially their mothers and finally improve family cohesion. Regarding mothers' stress the majority of mothers complain from high stress during dealing with adolescents' pre the intervention which improved significantly post the intervention where none of them complain from high stress level post the intervention as clear from table four so the intervention decrease mothers stress level this may be due to the impact of the intervention which increase students self dependency and improve mothers awareness about girls disabilities and effective methods to deal with them so the third research hypothesis was accepted and maternal stress level was decrease. Jalali, et.al., in 2016, <sup>(8)</sup> agree with the above finding and reported maternal stress decreased in post-test and de-stress training program significantly decreased stress in mothers which consequently improve family cohesion also Moghimi, et. al., in 2018, <sup>(21)</sup> support the current results and reported; the mean of mothers stress scores was decrease post the intervention and the intervention had a significant effect on reducing mothers' stress and increasing resiliency of mothers of educable mentally retarded children.

#### 5. Conclusion

Post intervention studied adolescents become more responsible, self trust, communication, self control and able to provide self care practice also their families' cohesion was improved significantly post the intervention which lead to decrease their mothers' stress and the adolescents deal with their mothers effectively.

#### 6. Recommendations

- Medical services should be offered to mentally retarded and their family, especially mothers as a main caregiver to help mothers to; provide support to adolescents, satisfy adolescents physical and emotional needs for normal growth & development, satisfy needs of all family members and finally decrease mothers' stress and maintain mothers' wellbeing.

- Further research on a large population for a longer period of time should be conducted.

**Study limitation:** It was conducted on a small sample size for only 3 months.

**Source of funding:** This researcher did not receive any funding.

**Conflict of interest:** The authors have no conflict of interest to declare.

**Ethical approval:** Consent was taken from mothers, official permission was taken from schools heads and the study was accepted by schools ethical committee.

**Authors' contributions:** Authors were responsible for the study conduction. They approved the final draft and are responsible for the study content.

**Acknowledgement:** The researchers would like to express their greatest thanks for schools heads whom accept study and all studied adolescents', their teachers and their mothers for their study participation.

## References

- [1] Neil, K., (2015): Intellectual disability, Medline Plus, U.S. National Library of Medicine, archived from the original on October 28, 2016, retrieved October 27, 2016.
- [2] Daily, D., Ardinger, H., Holmes, G., (2000): "Identification and evaluation of mental retardation". *Am Fam Physician*. 61 (4): 1059–67, 1070. PMID 10706158. Archived from the original on 2010-12-04.
- [3] Mash, E., & Wolfe, D., (2013). *Abnormal child psychology*. (5th ed., pp. 308–313). Wadsworth Cengage Learning.
- [4] Hosseinkhanzadeh, A., Esapoor, M., Yeganeh, T., Mohammadi, R., (2013): A Study of The Family Cohesion in Families with Mentally Disable Children, *Procedia - Social and Behavioral Sciences*, 84 : 749 – 753.
- [5] Behera, A., (2001): The effectiveness of cognitive skill training on performance of dressing in the mentally retarded; *The Indian Journal of Occupational Therapy* : Vol. XXXIII: No. 2
- [6] Sears, M., (2006): Self-Management For Students With Disabilities: The Importance Of Teacher Follow-Up, *International Journal Of Special Education*, 94-108.
- [7] Asberg, K., Vogel, J., Bowers, C., (2008): Exploring correlates and predictors of stress in parents of children who are deaf: Implications of perceived social support and mode of communication. *J Child Fam Stud.*, 17(4):486–499.
- [8] Jalali, L., Hasanzadeh, S., Davae, M., and Afrooz, G., (2016): The Effect of De-Stress Training Program on the Stress of Mothers With Slow Paced Children, July; 8(3):e34593.
- [9] Zionch, A., (2014): Evaluation of Video Prompting To Teach Students with Intellectual Disabilities to Use a Cell Phone, University of Nevada, Las Vegas, Doctor of Philosophy:10-12.
- [10] Alavi, S., Savoji, A., & Amin, F., (2013): The effect of social skills training on aggression of mild mentally retarded children, *Procedia - Social and Behavioral Sciences* 84 (2013) 1166 – 1170.
- [11] Jefferson, M., (2006): Linkages between Family Cohesion and Sibling Relationships in Families Raising a Child with a Disability, Brigham Young University – Provo, Brigham Young University:5-10.
- [12] Olson, D., (2000). Circumplex Model of Marital and Family Systems. *Journal of Family Therapy*, 22, 144-167.
- [13] Berry, J., & Jones, W., (1995): The Parental Stress Scale: Initial psychometric evidence. *Journal of Social and Personal Relationships*, 12(3), 463-472.
- [14] Bloom, B., & Naar, S., (1994): Self Report Measures of Family Functioning: Extensions of a Factorial Analysis, <https://doi.org/10.1111/j.1545-5300.1994.00203.x>
- [15] Sandjojo, J., Zedlitz, A., Gebhardt, W., Hoekman, J., Dusseldorp, E., Den Haan, J., & Evers, A., (2018): Training staff to promote self-management in people with intellectual disabilities, *J Appl Res Intellect Disabil.*;31:840–850.
- [16] Cihak, D., & Wright R., (2010): Use of Self-Modelling Static-Picture Prompts via a Handheld Computer to Facilitate Self-Monitoring in the General Education Classroom, *Education and Training in Autism and Developmental Disabilities*, 45(1), :136–149.
- [17] Adeniyi, Y., and Omigbodun, O., (2016): Effect of a classroom-based intervention on the social skills of pupils with intellectual disability in Southwest Nigeria, *Child Adolesc Psychiatry Ment Health*, 10(29):1-12
- [18] Alavi, S., Savoji, A., Amin, F., (2013): The effect of social skills training on aggression of mild mentally retarded children, *Procedia - Social and Behavioral Sciences* 84 (2013) 1166 – 1170
- [19] Heydari, A., Soltani, H., and Nezhad M., (2018); The effect of Psychological skills training (goal setting, positive selftalk and Imagery) on self-confidence of adolescent volleyball players, on self-confidence of adolescent volleyball players. *Pedagogics, psychology, medical-biological problems of physical training and sports*, 2018;22(4):189–194. doi:10.1556/18189172.2018.0404
- [20] Singh, A., Agarwal, A., Singh, Y., (2012); Remediating Self-help skill Deficits of Mentally Retarded Children Through Computer Aided Instruction, <https://www.researchgate.net/publication/235622342>, Vol - 2, Issue -2 & 3.
- [21] Moghimi, M., Esmailpour, N., Karimi, Z., Zoladl, M., & Moghimi, M., (2018): Effectiveness of Resilience Teaching via Short Message Service on Stress of Mothers of Educable Mentally Retarded Children, *Iranian psychiatric and behaviour science journal*, E-ISSN:1735-9287.