

The Effect of a Skills-Based Behavioral Program on Raising the Self-Concept of Individuals with Mild Intellectual Disability in UAE

Dr. Ousha Almheiri
UAE University, College of Education

Abstract

This study aimed at examining the effect of a behavioral program on raising the level of self-concept among individuals with mild intellectual disability. To achieve this goal, the researcher prepared a skills-based behavioral training program that is geared towards individuals with mild intellectual disability. Subjects were assigned randomly in groups (experimental and control). The results indicate that there were significant differences between the two groups in favor of the experimental group.

Keywords: Self-concept, mild intellectual disability, behavioral program

The Effect of a Skills-Based Behavioral Program on Raising the Self-Concept of Individuals with Mild Intellectual Disability in UAE

Self-concept refers one's awareness of his abilities and characteristics. This concept is formed by the individual's surroundings and his relationships with others, such as family, school, friends and the environment. Particularly, family is considered to be the basic source of delivering positive or negative concepts to the child. So the obstacles that children with disabilities face in their daily lives and the concept of the family and the society, would define the concept they form toward themselves. Self-concept is considered, relatively, one of the modern concepts that includes the awareness of a child's cognitive abilities such as reading, writing, etc., and their social abilities such as making friendships and interacting with others, and children with different disabilities just like their peers, in the formation of self-concept. But the surrounding circumstances may adversely affect their perception of themselves, and they feel the weaknesses rather than focusing on the strengths. Supportive communities for children with disabilities can stimulate and motivate them to release their abilities, depending on the reflection of a self-perception the child gets, despite his health problems (Al Ganadi, 2013; Azzak, 2009).

Researchers studied the relationship of self-concept and behavioral problems that children in general endure and children with disabilities in particular. For example, some researchers (e.g. Alzyoudi, 2007; Elbaum & Vaughn, 2001) conducted intervention behavioral programs for those children to improve their adaptability in their communities and raise their self-confidence to make them more capable to face difficulties and obstacles. In the Arab world, Suleiman (2002) recommended for people with intellectual disabilities the importance of training, in general, and the need to develop special behavioral programs commensurate with their abilities, and their potential to alleviate behavioral problems and to raise the self-confidence level, which can help them to acquire the necessary personal skills to cope with daily life requirements and to adapt to society. According to Yamani (2006) behavioral intervention is an important element in treating children with Attention Deficiency and Hyperactivity as it raises the level of self-confidence by creating positive concepts about it. And the most important self-supporting strategies include the

use of positive reinforcement, teaching problem-solving, communication, and treating children as respected individuals in both school and home environments.

A study by Dubies and Alsmaduni (1998) revealed the effectiveness of behavioral program, which is based on training a group of mentally disabled who are willing to learn at the level of self-confidence and provide verbal instructions to oneself to increase the focus of attention. A study conducted by Qasim and Abdul Rahman (2003) aimed at developing a recreational program and to identify its impact on some of life and psychological skills, and motor abilities of children. They used an experimental approach for one group on a sample of 30 children with mild intellectual disability. The results of the study revealed that the proposed recreational program had a positive impact on the improvement of some of the life skills and reduce the intensity of any behavior and build a positive self-concept, and helped adaption of the surrounding community.

One important study, in this area, conducted by Trull et al. (1997) aimed at examining the negative self-concept and its relationship to poor psychological and social compatibility on a group of primary school students ($n=89$). The study showed a strong relationship between low self-esteem and the presence of obvious defect in personality. The study also recommended creating a behavioral treatment and entertaining programs for students, in order to raise the level of self-confidence rather than relying on traditional methods in education.

Makin (2000) carried out a study on children in kindergarten and child care centers, which showed that threat affects self-concept among kindergarten children. Teachers need to better understand their children's characteristics; especially students with disabilities or health problems. It encouraged them not to discriminate among them to make them feel secure which helps in smooth transition when they enter school which affects positively on their view of themselves.

Behavioral trends that proved effective in treating behavioral problems of children with mild intellectual disability, including low self-concept are scarce in the United Arab Emirates, are training programs aimed at raising the level of self-confidence of children with mild intellectual disability as well as consideration of how this affects both the child's educational and family environment. Also affected are children's acquisition of necessary educational and training skills which can help them be integrated in their community. This study was conducted to design a behavioral training program which could raise the level of self-confidence of children with intellectual disability in rehabilitation centers in the United Arab Emirates.

Problem and Significance of the Study

Surrounding environment like, family, school and friends contribute to shaping the child's concept of himself. Some obstacles, children with disabilities, face in their daily lives and society's trends treatment of them determine the features of their conceptions about themselves. Note that self-concept is relatively modern, and children with disabilities, are the same as their peers in forming this concept. That is why it is so important to support and motivate them to adapt to the surrounding social environment, and unleash their capabilities to be receptive and interactive despite of their abilities (Al Janadi, 2013). Therefore, this study was conducted to identify the effectiveness of the programs offered to people with disabilities, to improve self-

concept they have toward themselves by trying to answer the main research question: "What is the effectiveness of a behavioral program in raising the level of self-concept among a group of people with mild intellectual disability?. This study seeks to achieve the following objectives:

1. Identify the level of self-concept among people with intellectual disability
2. Raise the level of self-concept in people with intellectual disability
3. Investigate the effect of the behavioral training program dimensions of self-concept among people with intellectual disability

Study Hypotheses:

1. There were no statistically significant differences between the children's mean scores of the experimental group in both pre and posttests of self- concept dimensions.
2. There were no statistically significant differences between the performance of students in the control group between both pre and posttests of self- concept dimensions,
3. No statistically significant differences between the performance of the experimental group and control group of students on self- concept dimensions

Study Limitations

The study was limited by the time period which took three months with an experimental sample consisting of 14 students with mild intellectual disability. They were enrolled in the rehabilitation centers of people with disabilities affiliated with the Ministry of Social Affairs in the United Arab Emirates, in the first semester of the academic year 2014 / 2015.

Statistical Procedures

Statistical procedures were used by the modern version of SPSS program according to the following tests in order to examine the null hypothesis: Mann-Whitney test, Wilcoxon Test and Z value.

Terms of the Study: (Glossary)

- Self-concept is a total sum of individual self-perceptions. It is a complex image composed by the individual thinking about himself, his achievement, his physical, mental, and personal characteristics and about his attitude toward himself, and others' perspectives of him and what kind of person he prefers to be. The researcher has adopted this operational definition of self - concept in this study which is represented through students' scores on reliance of the self- concept scale of people with intellectual disability.
- Intellectual disability: is a sub-average intellectual ability equivalent to or less than an IQ of 70 that is accompanied by significant deficits in abilities (e.g. communication or self-care) necessary for independent daily functioning. This disability is usually present from birth or infancy, and is manifested especially by delayed or abnormal development, by learning difficulties, and by problems in social adjustment (DSM V, 2013).

Theoretical framework and previous studies:

Humaidhi's (2004) study aimed to identify the effectiveness of a behavioral program to develop some social skills and self - concept for a sample of children with mild intellectual disability. After the application of the study on two samples (experimental and control group), results showed statistically significant differences in the levels of social skills scores for the sample in the experimental. Furthermore, Hussein and Abdul Ghaffar (2006) conducted a study aimed to determine self-concept of children who suffer attention deficit hyperactivity disorder. The study found low self-concept among this category of children as well as children who have behavioral problems, aggressiveness in particular. The study recommended the need to design behavioral programs for these students that will improve their level of self-concept and thus reduce the severity of behavioral problems.

Another study was conducted by Grossi and Habsh (2000) which aimed to improve social skills scores for kindergarten children, on the basis of a relationship between behavioral problems they have such as aggression, impulsivity, and self-concept. The sample of the study was divided in two groups, experimental and control. The experimental sample received a behavioral and social training program to improve the level of social skills. After six weeks of applying the program, a significant improvement appeared with regard to self-concept of the experimental group compared to the control sample, the level of social and behavioral skills has elevated. In another study by Elbaum and Vaughn (2003) aimed at analyzing a set of studies that have been conducted about interventions based on the school environment in improving the level of self-concept among students with learning difficulties through the analysis of results of previous studies to identify the effect of the intervention of different training programs at the level of self-concept when compared before applying those programs. The results showed that students who have shown low levels of self-concept are the only ones who have benefited from these training programs, and the study has applauded the importance of identifying the level of self-concept of the students in order to identify the extent of their need for training programs that can help them raising the level of self-concept.

A study by Jalili, Becky, Fathi Zhadan and Hassanana (2011) aimed to examine the effectiveness of aerobics on the self-physical concept of children with mental and physical disabilities, aged between 8-10 years. Basically, the study was applied to a group of forty children, distributed evenly into two sample groups, experimental and control. After measuring the self-concept before and after applying the training program, which lasted for 12 weeks, the results showed statistically significant differences in the level of self-concept among the children of the experimental group and that for the interest of the posttest measurement. The study showed the effect of aerobics on the self-concept of children with mental and physical disabilities, and the impact of such programs on the mental state of these children.

Through a study conducted by Ittyerah and Kumar (2007) to investigate the level of self-concept among children and adolescents with disabilities has been verified, in terms of body image, abilities, skills, life experiences, and social interaction. The results showed that children have a positive concept more than adults. It also showed that males have a higher self-concept than females, as the social interaction and abilities have achieved higher scores than the levels of body image and life experiences. It was found that a positive self-concept is derived from internal factors and are related to what extent an individual responds and interacts with those around him.

Negative self - concept is associated with external factors like negative attitudes toward disability.

Another study that was conducted by Daou and Hammoud (2014) aimed to analyze the impact of training on a sample of students with and without disabilities in building self-esteem on their social and academic skills in the inclusive environment. The sample was randomly selected from school students in Lebanon. Then the sample was divided into three groups, including two experimental group consisting of (68) students, and a control group consisting of (48) students. The results showed differences between students on self-esteem scale which is for the benefit of the experimental samples. Training program and inclusion not only helped raising the level of self - esteem of students with disabilities, but also showed they helped in improving academic achievement and behavioral problems.

Methodology and Procedures

Methods and Sampling

The study sample consisted of 14 students with mild intellectual disability enrolled in the rehabilitation centers for people with disabilities. The sample of the study was divided into two groups: experimental and control.

Study Tools

Self-concept scale

The scale of the study was prepared by the Department of Welfare and rehabilitation center of people with disabilities at the Ministry of Social Affairs (2014) in order to measure the level of self-concept of people with intellectual disability. The scale consists of 25 questions divided into five main dimensions, so that each of the five questions represent one dimension. The respondent is supposed to express the answer for each question through two pictures, one representing the positive perception of self, the other representing the negative perception.

The child with intellectual disability is required to choose the picture that he feels expresses him and his daily life as if the child dropped his feelings on the picture instead of using spoken language. The scale questions were distributed on the following domains:

- **Physical Self-Concept:** Physical self-concept reflects the individual with disability's sense of his physical potentials, and his ability to do a variety of kinesthetic tasks. It also reflects his general health, in addition to physical appearance compared to others around him.
- **Independence Self -Concept:** Independence Self-Concept reflects the individual's view of himself as someone who is capable of performing independent skills and relies on himself in all life skills such as eating, dressing, using health facilities and moving safely and smoothly.
- **Social Self -Concept:** Social Self-Concept reflects the view of the child with a disability to himself as a social creature, communicates and interacts with the surrounding environment, and is capable of making friends.

- **Cognitive Self-Concept:** Cognitive self-concept reflects the concept of the person with disability about his mental abilities like memory, attention, concentration and thinking. It also reflects his awareness of the surrounding environment, his ability to analyze and interpret daily phenomena, in addition to the basic concepts such as reading, writing and arithmetic.
- **Behavioral Self-Concept:** Behavioral Self-Concept reflects the concept of a person with disability to himself as he is capable of not only controlling emotional reactions like feelings and realizes the right thing to do in such situations.

Instrument Validity

The Ministry of Social Affairs has examined the validity of the instrument through two ways:

1. Content validity, the instrument has been checked by six faculty members at the College of Education at UAE University and by expert academic supervisors, who have long experience in dealing with people with disabilities, in rehabilitation centers affiliated by the Ministry of Social Affairs, in order to judge the adequacy of the instrument in terms of the representation of the five sub-dimensions. In addition to reviewing research and educational studies which were conducted to address self-concept issues, in order to determine the sub - areas related to self-concept among children. Different aspects and areas were expressed through variety of sentences and phrases, in addition to modifying two sub-dimensions and adjusting the related pictures based on the feedback made by the experts.

2. In terms of validity, the initial measure was applied to a sample of 145 students with intellectual disability, enrolled in rehabilitation centers at the Ministry of Social Affairs, between the ages of 7-12 years. Teachers were asked to assess each child, according to the five sub-areas of self-concept. Document their remarks on the answer sheet either by the existence of the behavior or without by “yes” or “no”. Based on that, correlation coefficients have been calculated among teachers’ answers about children’s behaviors. Results of the coefficients are as follows: physical self-concept, 0.29; social self-concept, 0.28; behavioral self-concept, 0.29; cognitive self-concept, 0.29; independence self – concept, 0.31

Reliability

The reliability of the instrument coefficients were calculated by the replication of the instrument, where the instrument was used was re-implement to a sample of 45 boys and girls with intellectual disability, in an interval of 15 days between the first application and the second. The difference between the two correlation coefficients was (0.77), which is a statistically significant coefficient at the level of (0.01).

The Second Tool: Activities Behavioral Training program:

This is a pedagogical training program based on teaching by applying internal and external activities like, kinesthetic, performing and expressive to develop personal and social skills and to help the child to identify himself and gain strategies to express himself and communicate with others. The following are the basic components of the program and its mechanism and application:

1. This program has been prepared by teachers who have long experience in teaching students with intellectual disability, selecting big groups of games and activities suitable for children, and then wording the executive procedures with the cooperation with the researchers for each game and writing the goals that it performs. These activities have been presented for a one week trial period on a group of students from the center and feedback was received about their responses and interactions with the activities by recording points for each activity. Then the points were added and the 10 activities that gained the highest scores have been chosen as the most influential on the student from the teacher's point of view. The varieties of the goals the activities perform like expressive, discharge, communicative and social are also exploratory for capabilities and skills that the child possesses.

2. Technicalities and tools used: a lot of behavioral management technicalities have been used in order to reinforce the intensity of the severity of positive behaviors, and reduce the severity of the behavior of excess movement. The most important technicalities are: reinforcement, punishment, and differential reinforcement of alternative behavior, modeling, and exclusion. The researcher has used a lot of assisting methods during the activities like sport games, mazes, maps, puzzles, puppet show, stories, role playing, and action figures. In addition to all of that, the tools are available in the students' local area.

3. Teaching style: elements of entertaining, achieving concentration, and body discharge have been taken into consideration when applying the activities, also developing the capability of the student to express himself and explore his physical and cognitive abilities, and give him the self-confidence through the participation with others. And those activities represent an important challenge by raising the motivation of the students to reach the goal. It is worth mentioning that each activity has its own rules that should be adhered to which let the student gain the capacity of patience, endurance, and adhere to the instructions. All kinesthetic activities are held in the games hall which has been especially designed with floors, walls, and protective pillows to meet the needs of students with disabilities, and provides safety elements and immediate supervision from the teacher, in addition to the cognitive, communicative and social activities that take place in the classroom.

4. The session time: The children of the experimental group were given the chance to play one game per day out of these games over the period of the program application, and the session duration time was (45) minutes.

Strategies adopted in the training program based on the activities:

Kinetic Games Strategy, are ten games as follows:

1. Climbing Game: Allows children to climb walls freely and safely to reach a particular goal and compete with other children, and explore their physical abilities.

2. Hamad says, the child is asked to order the rest of the children to do particular things, or refer to something specific in their bodies or the surrounding environment. This skill develops the ability of attention, concentration and fast reaction and self-knowledge.

3. Mazes: The child is placed in a maze and asked to get out according to certain signs so a competition, among students, takes place. This game mainly relies on cognitive skills.

4. Map game: Each child or group of children is given a map with particular symbols, then they are asked to find the treasure, as they read some statements, and make some simple calculations and follow the instructions. This game develops social and cognitive skills.

5. Ground puzzle: Students are to attach certain pictures or phrases by putting them together. This skill develops concentration and attention under time pressure.

6. Bowling: This game is based on throwing the balls toward the goal. The goal and the distance are changed through the game, so the competition gets high among students. This game allows the child to explore his skills.

7. Steps game: In this game the child is asked to do a particular thing, according to specific written steps or explained through a video. This skill improves the ability to imitate and listen to the instructions.

8. Trampoline: Free jumping and performing the required motions according to certain musical rhythms, and the child is asked to achieve the desired balance while jumping, and discharging physical and emotional energy.

9. The web ladder: Climbing up the ladder to reach the top of the pyramid, and going down requires balance with a high level of competition between students. This game develops the physical abilities of the child and his competitive spirit.

10. Role-playing games: In this game, the child plays the role of a character he likes such as a teacher, a doctor, a policeman, or any other character. It requires the child to reenact the character with the other party, thus reflecting his desires and inclinations.

Classroom-learning based on narrative style and role - play strategy:

This is a strategy based on delivering information to be implemented by the experimental group teacher, during cognitive classes. She is keen to achieve the educational goals planned for each child using the narrative style. For example: when teaching colors, the teacher reads a story about colors. At the end of the story she asks the children to reenact the roles of the story characters. Here the child gets the opportunity to freely express his mind according to his personal demands and the color he likes.

The same thing applies in the calculations skill, when the teacher asks the child to give the specific number of red balls, or do 10 jumps. The teaching principle counts on translating the cognitive goal into a story in which the children resurrect its characters and live its atmosphere through social, self-expressive and emotional atmosphere.

The study methodology:

The researcher used the experimental design of the two tests pre and post, with two groups (experimental and control). The study variables were determined as follows:

Independent variable: The training program based on activities

Dependent variable: A measure of self-concept illustrated for people with intellectual disability.

Study application procedures

The researcher selected a homogeneous group of students, in terms of age and mental abilities based on the psychological and social files of students. Consulting the psychologist in the center, those whose IQ scores ranged from 55-69 on the Wechsler test, ages between (7-10) years, with a mean (8.75) and a standard deviation (1.13) were chosen.

Results

In this study, the researcher tried to answer the research questions and investigated the validity of its hypotheses, each hypothesis separately, to examine the efficacy of a behavioral program in raising the level of self-concept of children with mild intellectual disability.

The results of the first hypothesis:

There are no statistical differences among the mean scores of the children in the experimental group, between pre and posttests, on the dimensions of the self-concept scale.

In order to examine this hypothesis, the Wilcoxon Test was applied on the test associated samples and the results are as follows (*see* Table 1)

Table 1
Results of Wilcoxon Test

Dimensions of adaptive behavior scale	ranks	number	Ranks mean	Total ranks	Significant level	Value of Z
Physical self – concept	negative	6	3.50	21.00	0.023*	2.271-
	positive	0	0.00	0.00		
	equality	1				
	Total	7				
Social self- concept	negative	5	3.00	15.00	0.038*	2.070-
	positive	0	0.00	0.00		
	equality	2				
	Total	7				
Behavioral self – concept	negative	6	3.50	21.00	0.026*	2.232-
	positive	0	0.00	0.00		
	equality	1				
	Total	7				
Cognitive self – concept	negative	3	2.00	6.00	0.083	1.732-
	positive	0	0.00	0.00		
	equality	4				
	Total	7				
Independence self – concept	negative	7	4.00	28.00	-2.392	*0.017
	positive	0	0.00	0.00		
	equality	0				
	Total	7				

As shown in Table 1, there were significant differences between the mean averages of the children of the experimental group ranks, over the pre and posttests, on illustrated self –concept scale in favor of the posttest. The differences were found on these dimensions (physical, social, behavioral, and independence) while there were no significant differences at the cognitive concept. The researcher explained that by the low level of mental abilities of the children in the experimental group makes it hard to make progress in their cognitive abilities in terms of calculations, linguistics, and general awareness concepts proposed by the training program, which requires the ability to memorize, sort and associate groups of variables.

This result is consistent with the results of a study conducted by Humaidhi (2004) in terms of the presence of the evolution in the perception of social self - concept among children like the experimental sample, the study of Elbum and Vaughn (2003) found that the students who showed low levels of self-concept have benefited from these training programs, as well as that of the study of Qasim and Abdul Rahman (2003), which demonstrated a positive effect in the experimental group in the areas of life skills, reducing behavioral problems, building a positive self-concept, and adapting to the surrounding community.

Second Null hypothesis: There were no statistically significant differences between the levels of performance of students in the control group over the two, pre and posttests, on the dimensions of illustrated self-concept for people with intellectual disability.

In order to examine this hypothesis, the researcher found and recovered the real grades for the performance of students with intellectual disability. She used the Wilcoxon test for the associated samples to the tests, as shown in Table (2):

Table 2

Results of Wilcoxon Test for control group children for the pre and posttests

Dimensions of adaptive behavior scale	ranks	number	Ranks mean	Total ranks	Value of Z	Significant level
Physical self – concept	negative	2	3.00	21.00	0.157	1.414-
	positive	0	0.00	0.00		
	equality	5				
	Total	7				
Social self- concept	negative	2	3.00	15.00	0.157	1.414-
	positive	0	0.00	0.00		
	equality	5				
	Total	7				
Behavioral self – concept	negative	2	3.00	21.00	0.180	1.342-
	positive	0	0.00	0.00		
	equality	5				
	Total	7				
Cognitive self – concept	negative	2	3.00	6.00	0.180	1.342-
	positive	0	0.00	0.00		
	equality	5				
	Total	7				
Independence self - concept	negative	3	6.00	28.00	0.102	1.633-
	positive	0	0.00	0.00		
	equality	4				
	Total	7				

Data from Table 2 shows the lack of statistically significant differences at the level (0.05) between the mean ranks degrees of the students of the control group on the pre and post-tests, which applies to all areas of self-concept. This evidence indicates no change in the level of self-concept among students, which is attributed by the researcher that the traditional way of teaching does not focus enough on developing the social and psychological areas of the child. The traditional ways of teaching only focuses on the child self-care aspects and carrying out the tasks of everyday life skills freely and independently.

This finding agreed with the study of Trull and others Trull Conforti and Doan. (1997) which recommended the importance of finding behavioral and entertaining intervention programs for students in order to raise their self-confidence level rather than relying on traditional methods in teaching that did not prove its effectiveness in solving these problems. Additionally, the results supported Grossi and Habich's (2000) findings and the study of Jalili, Becky, Fathizdan and Hossini (2011), which did not show any improvement of self-concept among students with intellectual disability in the control group not examined by the training and behavioral programs.

Third Null hypothesis III: No statistically significant differences between the performance of the experimental group and control group students, on the dimensions of illustrated self-concept for people with intellectual disability

Table 3

The Results of Mann-Whitney Test results. There are differences between the experimental and control groups after the application of the training program.

Significant level at (0.05)

Area	mean		Mean score		Total Score		U	w	z	Significant level
	experi mental	control	Experi mental	Control	experi mental	Control				
Physical self - concept	1.857	0.009*	2.615-	33.00	5.00	72.00	33.00	10.29	4.71	3.142
Social self - concept	1.857	0.039*	2.061-	37.00	9.00	68.00	37.00	9.71	5.29	3.000
Behavioral self - concept	2.142	0.013*	2.475-	34.00	6.00	71.00	34.00	10.14	4.86	3.428
Cognitive self - concept	2.000	0.653	0.450-	49.50	21.50	55.50	49.50	7.93	7.07	2.142
Independence self - concept	2.000	0.004*	2.859-	31.00	3.00	74.00	31.00	10.57	4.43	3.571

As can be shown in Table 3, there are statistically significant differences at the level (0.05) of self-concept between the ranks averages of the experimental group and control group scores after the application of the training program, consisting of children with intellectual disability. It has also shown a rise in the level of self-concept (physical, social, behavioral, and Independence) at the experimental group, while there were no statistically significant differences in self-concept of cognitive differences.

The researcher attributes the reason for these findings to a series of training activities that were applied to children with intellectual disability, which focused on various dimensions of self-concept, drawing children's attention by playing, having dialogues, drawing or playing roles. Providing an opportunity for the children to practice positive roles in and out the classroom reinforced by the teacher and appraised by the peers, gave a sense of pride among students and pride in their abilities and skills on the physical, social, behavioral and independence levels. But the failure of students to grasp a lot of the cognitive concepts occasionally, and their inability to succeed in many of cognitive exercises, due to the speed of forgetfulness and their inability to analyze and interpret, all that did not help to emerge differences in the level of cognitive self-concept.

This result coincided with the results of Grossi and Habsh's study (2000) study in terms of the clear improvement in self-concept experimental sample when compared with the control sample, particularly, the level of social and behavioral skills. The results of this study have also coincided with the results of Jalili, Beiki, Fathizadan, and Hossini (2011), which demonstrated a statistically significant differences in the level of physical self-concept for students with intellectual disability for the experimental group. In addition, the results of the study of Daou and Hammoud's (2014) study showed differences on the self- concept scale for the experimental samples, especially in social and behavioral aspects.

Recommendations

Based on the results of this study, the researcher recommends the following:

1. Pay attention to measuring self-concept of people with intellectual disability, in order to follow activities and programs that contribute to increase their development;
2. Design training programs based on motor, cognitive and social activities, which can be followed by the rehabilitation centers of people with intellectual disability, in order to develop self-concept in all its dimensions of students enrolled in these centers;
3. Focus on the complementarity of educational and rehabilitative programs offered to people with intellectual disability. Also, focus on the importance of the role of activity teachers due to their huge improvement of emotional and physical development;
4. Train special education teachers to design and create training programs for students with intellectual disability, which helps in raising the level of self – concept in all its dimensions;

5. Train psychologists who work with children with intellectual disability to implement appropriate psychological measurements, including illustrations of self – concept. And train them to follow up on the impact of the training program in terms of self–concept;
6. Involve parents in the application of activity programs in the family and provide them with training and support to help them transfer the training effect to the family.

References

- Al Humaidhi, A. (2004). The effectiveness of a behavioral program to develop some social skills among a sample of children with mild intellectual disability, unpublished Master Thesis, Naif Arab University for Security Sciences
- Al zak, Y. (2009). Perceived self-efficacy in Jordanian university students in terms of sex, college, and academic level variables. *Journal of Educational and Psychological Sciences*. Bahrain University. 10 (2). 37-58.
- Diagnostic and Statistical Manual of Mental Disorders Fifth Edition, DSM-5TM (2013). American Psychiatric Association, Washington, DC.
- Dubies, S.; Alsmaduna, A. (1998). The effectiveness of training on self-control in treating attention deficit disorder accompanied with excessive hyperactivity in children with intellectual disability, *Journal of Psychology*, No. 46, pp. 88-118.
- Elbaum, B. & Vaughn, S. (2003). For Which Students with Learning Disabilities Are Self-Concept Interventions Effective? *Journal of Learning Disabilities*, V (36). N 2, March/April.
- EL-Dawa, B. & Hammoud, H. (2014). The Effect of Building Up Self-Esteem Training on Students' Social and Academic Skills. *Procedia - Social and Behavioral Sciences* 190 (2015) 146 – 155
- Galal, A.; Aljunied, S. (2013). Bahrain's self-concept to test Illustrated self - concept for kindergarten children in the Kingdom of Bahrain "psychometric characteristics and criteria of rationing." *Journal of Educational and Psychological Sciences*, Vol. 14 Issue (1) March.
- Ganadi, M. (2013). Measure of illustrated self-concept of ordinary children and those with special needs, the Anglo-Egyptian library
- Grossi, K. & Habich, J. (2000). Leaping into social skill success. *Master degree dissertation*, Sain Xavier University, USA.
- Hussein, N.; Abdul G, Ghada (2006). Self-concept and aggressive behavior among people with attention deficit disorder, accompanied by hyper activity. *Arabic Studies in Psychology*. 5 (1). 45-78.
- Ittyerah, M. & Kumar, N. (2007). The Actual and Ideal Self-concept in Disabled Children, Adolescents and Adults, *Psychology and Developing Societies* 19, 1 (2007): 81–112.
- Jalili, F., Beiki, Y., Fathizadan, A., Hossini, F.(2011). The Effect of a Twelve -Week Aerobic Exercise Program on Self-Concept among 8 to 10Years Old Physically and Mentally Disabilities Children. Australian. *Journal of Basic and Applied Sciences*, 5(10): 1187-1190.
- Makin, L. (2000). Literacy and starting school: Views of parents and early childhood staff and issues for transition. *A report to the early literacy and social justice project*. New South Wales, Australia, 386.

- Ministry of Social Affairs (2014). Illustrated self-concept scale for people with intellectual disability, care and rehabilitation of the disabled Management, Dubai: United Arab Emirates.
- Qasim, N.; Fatima, A. (2003). The effectiveness of some recreational program on some life, psychological and motor skills of children with intellectual disability _ "mild". Faculty of Education, University of Alexandria
- Suleiman, A. (2002). The effectiveness of training program to increase the adaptive behavior in children with mild intellectual disability, Journal of Psychology, No. (62), the Egyptian General Book Authority, June, pp. 165-167
- Trull, T., Conforti, K. & Doan, B. (1997). Borderline personality disorder features in nonclinical young adults, 2 years outcomes. *Journal of abnormal behavior*, 106(2), 307-314.
- Yamani, Suad (2006). Hyperactivity disorder and Attention Deficit one of the most common neurological diseases among primary students. Al-riyadh newspaper. No. 0.13855, in May.