



## THE IMPACT OF USING INDIVIDUAL EDUCATIONAL PLAN IN ALLEVIATING OF BEHAVIORAL PROBLEMS AMONG INTELLECTUALLY DISABLED

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### ABSTRACT

The current study aims at investigating the impact of using the individual educational plan in alleviating some of the behavioral problems among the educable intellectually disabled students in Rafha Province. To achieve this aim, the researcher developed an individual educational plan that includes a group of activities inside and outside the school. The activities include behavior and social skills. The researcher explained and discussed the plan with a group of experts involved in applying it. The study sample consists of an experimental group and a control group. Each group consists of six educable intellectually disabled students who attend a special education school in Rafha Province in the Kingdom of Saudi Arabia. The IQ of the members of the two groups varied between (55-69) on the Wechsler scale. They aged (7) to (10) years according to the school's records. Their mean is (8.75), and the standard deviation is (1.13). Before applying the individual educational plan, the researcher used Burks scale (Alqareoti and Jarar, 1987). Then the researcher applied the scale after (8) weeks of implementing the plan. The plan was conducted during the second semester of the academic year 2020. After examining the study's hypotheses using the Wilcoxon test and Mann-Whitney test and finding the Z-Value, it was found that there are statistically significant differences in the gravity of the behavioral problems between the grades' mean rank of the experimental group before and after applying the individual educational plan in favor of the post-test.

**Keywords:** Individual Educational Plan, Behavioral Problems, Educable Intellectually Disabled Students

### INTRODUCTION

The individual educational plan seeks to identify the special educational objectives for each child independently, depending on his weaknesses and strong points. The teacher may teach one or more students at the same time. Alzuriqat (2010) confirms that the individual educational plan aims at deriving the educational benefits and facilitating the emotional and social growth of the intellectually disabled student. The system of the individual educational plan ensures that education has academic objectives, and the instructional procedures and decision making will be more beneficial. This can be obtained through the requirements of the individual educational plan. Batinon and Blackburn point out the importance of individualization of education, which is considered as one of the foundations of special education. Individualization of education takes into consideration the individual differences of the students with special needs since the general education programs do not meet their needs. Many studies have been done on behavioral problems (Ghasemi et al., 2018; Olexyuk et al., 2018; Almutairi et al., 2019). Since the intellectually disabled children share the behavioral problems, most of the scientists and researchers recommend following specific educational

methods that mitigate these problems to enable the children to adapt to the community and benefit from the available learning resources. Accordingly, various intervention methods are applied to solve this problem. Kirk, Gallagher & Anastasiow, (2003) define the behavior problem as a deviation from the age-appropriate behavior, which affects the child's growth and development in addition to its influence on others. Ibrahim & Aldakheel and Ibrahim (1993) believe that children in the Arab world are suffering from many behavioral problems and psychological disorders, which stem from the social changes in Arab societies in addition to the lack of specialized psychological services.

In terms of the behavioral problems' prevalence among children, Tuma's study (1989) shows that 11% of the children are suffering from mental and behavioral disorders. The percentage of children suffering from these disorders is higher if children with milder disorders, which do not need medical interference, are included. The intellectually disabled children with learning problems represent a large proportion of intellectually disabled children. According to previous literature on intellectually disabled people, they suffer from behavioral issues more than others. Alsabah (1993) shows that the intellectually disabled children have different types of undesirable behavior patterns. Alkhatib (2003) confirms that the intellectually disabled are suffering more than others from behavioral problems. This is because they cannot determine the aspects of the socially accepted behavior, and they have poor language skills that make them resort to aggression instead of verbal expressions to express their emotions. In addition to that, their frequent failure experiences, the depression they feel because of the surrounding social attitude, and their weak intellectual abilities increase their inability to determine the aspects of the socially accepted behavior.

Alrosan (2001) sheds light on some common behavioral characteristics of intellectually disabled people who are more exposed to behavioral problems in comparison with others. Some of the most significant features are; the apparent lack of learning ability, attention deficiency, depression, sense of failure, memory problems, and the apparent lack of transfer learning. Mursi (1999) mentions that the intellectually disabled child lacks many skills, which contribute to aggravating some behavioral problems and emotional disorders such as; negativity, anxiety, stress, and social withdrawal. Suliman (2002) asserts the importance of training the intellectually disabled people in general and highlights the necessity of designing behavior training programs that fit their capacities and potentials. Such programs alleviate the severity of the behavior problems and help the disabled to develop skills that enable them to face the demands of daily life and adapt to society. Alyamani (2006) also indicates that behavioral intervention is a crucial element in treating the intellectually disabled children. The strategies suggested by Alyamani include; using positive reinforcement, teaching problem-solving and positive communication skills, and respecting the children's abilities.

Hence, the educational institutions must provide services to the intellectually disabled through designing an individual educational plan for each student. This approach meets the educational needs of intellectually disabled students. Dealing with those students as one unit is difficult since they have heterogeneous needs. Even if they belong to the same category, they differ in abilities and aptitudes, they do not learn at the same speed, and they cannot learn on their own (Alwabli, 2000).

On that basis, this study is conducted to investigate the impact of using the individual educational plan on alleviating some behavioral problems among the intellectually disabled



children. That is due to the positive effects of these programs on the child's educational and family environment.

- **The Problem Statement:**

The intellectually disabled children are more vulnerable to behavioral problems which are caused by many factors, such as; their inability to adapt to the demands of their society, their poor mental and sensory perception of the surrounding stimulators and their lack of understanding of these stimulators in a way that fits the normal social framework. These problems can affect the process of acquiring the necessary education skills. It can also affect the child's adaptation to his family and community environments. The civilized societies raced to find solutions for these problems. The current study aims at answering the following questions:

1. What are the most significant behavioral problems that face the educable intellectually disabled students?
2. What is the impact of using the individual educational plan in alleviating the behavioral problems among the educable intellectually disabled students?

- **The Significant of the Study:**

The importance of this study stems from the new results it adds about the impact of the individual educational plan in alleviating the behavioral problems among the educable intellectually disabled students. As well as providing the special needs centers in the Kingdom of Saudi Arabia with an individual educational plan which is expected to contribute to alleviating these problems.

- **Study Objectives:**

The current study aims at examining the impact of using the individual educational plan in alleviating some of the behavioral problems among the educable intellectually disabled students.

- **The Study Sample:**

The study sample consists of 12 educable intellectually disabled students studying in the special education schools in Rafha Province. The students' IQ ranged between 55-69 on the Wechsler scale, and they aged 7-10 years according to the official records. The study sample is divided equally into experimental and control groups. It is selected after being nominated by the school's psychologist and diagnosed with some behavioral problems on the Burks scale.

- **Study Tools:**

The following tools are used in the current study:

- The individual educational plan (designed by the researcher).
- The Burks scale (Alqareoti and Jarar , 1987).
- The observation checklist: This is used to observe the children's behavior directly (designed by the researcher).



- **The Methodology of the Study:**

The researcher is going to use the two groups (experimental and control) experimental design with pre- and post-tests.

- **The Study Hypotheses:**

1. There is no statistically significant difference between the grades' mean rank of the experimental group on the pre- and post-tests upon Burk's behavior rating scale.
2. There is no statistically significant difference between the grades' mean rank of the control group on the pre- and post-tests upon Burk's behavior rating scale.
3. There is no statistically significant difference between the grades' mean rank of the experimental and control groups after applying the individual educational plan.

- **The Study Terminology:**

**The Individual Educational Plan:**

It is a plan designed for a particular group of students to meet their educational needs. It includes all the goals expected to be achieved following specific standards during a specified period. It also describes what the student must learn and what the teacher must teach (Yahia, 2006).

It is procedurally defined as a plan developed for the intellectually disabled children in the schools that apply the plan according to the obtained official information.

**Behavioral Problems:**

Which include any behavior that causes complaints or grievance by the student, his parents, or any member of his family or educational institution, especially his teachers. These are the behaviors that motivate those people to seek help and guidance from experts to get rid of these behaviors. Behavioral problems are the problems worthy of the educational and clinical attention due to their up-normal levels such as; vandalism, theft, hyperactivity, non-compliance with the instruction, shyness, etc. (Safwat Mukhtar,1999)

**The Educable Intellectually Disabled Students:**

They are the students with IQ between (55-69) points. They are unable to benefit from regular curricula under normal circumstances. However, they have the ability, and the aptitude for learning the academic, motor, and social skills, that keep pace with their developmental characteristics provided that the curricula are modified or particular individual educational plans are developed for them (Albustami, 1415).

- **The Theoretical Framework**

**The Individual Educational Plan:**

Alosan (1989) defines the individual educational plan as the plan that is specially designed for a single student to enable him to address his needs. The plan includes the goals expected to be achieved under particular standards during a specified period. This plan is set by a committee that consists of any person related to the subject. Following up on the individual educational plan and assessing it at the beginning of each semester is part of the duties of this Committee.



**The Concept of the Individual Educational Plan:**

The administrative concept: It is the drawing of a map of cooperation that clarifies the communication channels and the roles played by the elements of the educational process (the child, the training team, and the family) in addition to the entities involved in the program of the intellectually disabled child.

The educational concept: The diagnosis, measurement, assessment, and evaluation of the intellectually disabled child's needs and the supporting services needed by the case. An academic team designs the plan. (Northern and Downs,2002)

**The Goals of the Individual Educational Plan:**

1. It is considered the basis of all the training activities and the educational procedures due to their importance in the process of teaching and educating the intellectually disabled child. The educational legislations assert the importance of preparing an individual educational plan for every child who receives special education services.
2. The individual educational plan is considered as a source of protection for the rights of the intellectually disabled child since it contains steps and procedures that guarantee the child's right to receive the adequate education service and other related supporting services (Haroon, 2004).
3. The individual educational plan helps in providing a planned and organized education. The objectives, which are intentionally written, help in achieving good effective teaching.
4. The individual educational plan serves as a base for assessment as it helps the pre-established educational goals in determining the teacher's efficiency and mastery.
5. The individual educational plan enhances the communication process between the members of a Multidisciplinary team, especially between the teacher and the parents (Alkhatib, 1994).

**The Importance of the Individual Educational Plan:**

1. The individual educational plan acts as a written document that pools the efforts of the specialists to educate and train the intellectually disabled student. It deals with a comprehensive report about each child.
2. The individual educational plan gives sufficient guarantees to involve the parents of the intellectually disabled child in the educational process since they are a source of information about the child.
3. The individual educational plan is set and designed by educational experts whose specialties are appropriate for the child's disability. This process needs the involvement of the parents.
4. The individual educational plan includes the identification of the existing abilities of the intellectually disabled child and his current level of performance.
5. It sets out the responsibilities of each expert concerned in the implementation of special education services.
6. The individual educational plan is considered as a real test of accountability regarding the relevance and efficiency of the services provided to the intellectually disabled child.



7. The individual educational plan includes the educational objectives and the expected period of achieving them. It consists of the services that must be provided to the child to improve his abilities in the lights of the objectives set forth (Haroon, 2004)

#### **The Elements of the Individual Educational Plan:**

1. The educational objectives: the objectives are considered the bases for the design of the individual educational plan.
2. The strategies: The principles that facilitate the process of acquiring, storing, and applying what has been learned in various situations, must be identified. The selection of the strategies depends on the creativity of the teacher and based on the child's case.
3. Equipment: The necessity of providing the needed equipment that contributes to facilitating the education process.
4. Skills: Focusing appropriately on the child's strengths, such as his skills.
5. Learning Resources: such as; audio-visual material, board games, and picture-cards.
6. Assessment: This is considered the primary stimulus of the individual educational plan. The plan is flexible and ongoing.
7. The time-table: Those who apply the individual educational plan must be aware of the time management strategies.
8. The various updates: include the child's situation, those who surround him, the teacher, his methods and strategies, the environment, and what happened in it.
9. Evaluation: This is linked to the specified educational goals, such as the educational results and outputs. If the "educational goals" represent the first element in designing the individual educational plan, the "evaluation" is the last element in the implantation process of the plan. Since the assessment process precedes the evaluation process, this proves that the designing of the plan is a flexible, collaborative, and parallel process (Moore, 2001)



#### **The Contents of the Plan:**

The content of the individual educational plan is divided into two main parts; the student's personal information and the individual educational plan's elements. The plan's elements include; identifying the student's present performance level, identifying the long-term and short-term objectives, identifying the educational and support services, and identifying the beginning and the end of the needed services. It also includes; identifying the appropriate spatial educational alternatives, identifying the service delivery methods, identifying the objective standards for performance measurement, identifying the procedure of evaluating the plan and its dates, identifying the participants in designing, implementing, evaluating and following-up the plan and identifying the educational and non-educational supplies (Hallahan and Kauffman 2009).

#### **The Requirements for the Preparation, Implementation, and Evaluation of the Individual Educational Plan:**

The plan's team is headed by the principle of the educational institution or his deputy and has the following members; the special education teacher, the teacher of the general education classroom, the parent, and any specialist who can help in the preparation of the plan.

Following the recommendations of the diagnostic and measurement teams, the team writes the plan in a clear way for each student. After completing the diagnosing procedures, the plan is prepared within two weeks. After its preparation, the individual educational plan is carried out within a week. Then the plan is evaluated to find out its efficiency in meeting the student's needs. This evaluation is carried out continuously by applying several tests such as; direct observation, interviewing parents, or exams (Abuwajdi and Ali, 2010).

### **Behavioral problems:**

#### **The meaning of behavior:**

Behavior includes all the organic responses, whether visible to the observer or not. Behavior can be classified into two types. First; the overt behavior which can be noticed by anyone. It includes; the human's actions, manners, walk and talk. Second; the covert behavior, which can be a physiological activity such as; an increased heart rate or an emotional experience which is described by the person himself, such as thinking, imagination, sadness, and anxiety (Alhaj, 1977). Also, Behavior is any activity, language, or movement of the human being, whether desired or undesired. In addition to that, the behavior is a group of coordinated movements related to a specific function that enables the person to reach material and moral ends (Alazza, 2002).

#### **The Definition of Behavioral Problems:**

Bower's 1969 definition of behavioral problems are considered the most accepted definitions. This definition refers to the existence of one or more of the following characteristics; learning difficulties, hardships in building and maintaining social relations, the appearance of inappropriate behavior patterns under normal circumstances, the general feeling of depression and unhappiness, and the development of physical illness symptoms and personal and academic worries (Yahia, 2003).

Also, Kauffman identifies the people who have behavior problems as "those who interact with their environment in a clear and chronic socially unaccepted or inappropriate way; however, they can be taught the social and personal accepted manners (Alqamsh and Alimam, 2006).

#### **To judge a particular behavior as being disturbed or abnormal, the authors and researchers invoked different criteria such as;**

- The behavior frequency: this refers to the number of times a behavior occurs during a particular period.
- The behavior duration, which refers to the length of time a specific behavior lasts.
- The behavior intensity: refers to the force with which behavior occurs. It either be undesired and very strong or desired and very weak (Alqamsh and Alimam, 2006).

#### **The factors leading to behavioral problems:**

The behavioral problems are caused by many factors, the most important of which are:

##### **▪ Biological factors:**

The biological factors are responsible for many behavioral problems, especially the intensive and very intensive ones. Many studies prove that there is a relationship between biological



factors and behavioral problems. The researchers assert the existence of an organic cause for some problems such as; schizophrenia, bulimia, and other problem.

- **Environmental factors which include:**

- a) **Family:**

Many studies and research papers that tackle the role of family and its effect on upbringing children indicate that negative relations between the family members and the wrong parenting methods cause severe behavioral problems among children. Particularly in the early stage of their life, which is the assimilation stage. The assimilation stage has a significant impact on constructing the individual personality. For example, pampering and overprotecting the child may lead to disobedience and dependency. Also, the fluctuated parenting style may create a state of fear and anxiety in children. The parental favoritism promotes hatred and rejection that can be expressed through aggressive behaviors against oneself or others. In addition to that, the family size, the parent's sickness and the wrong models in the child's family play a vital role in creating the behavioral problems among children (Alqubali, 2008)

- b) **School:**

The school has a significant impact on the students' adaptation. The different methods (authoritarian, permissive, fluctuated, or democratic) applied by teachers affect whether the students adapt or not. The authoritarian, permissive, and fluctuated methods do not meet the social and psychological needs of the students while the democratic approach does so. Also, the curriculum, the general atmosphere, and the relationship between the teachers and the school's administration influence the student's social conformity. Teachers have a significant impact on the students through their interaction with them since the teacher's expectations affect the questions asked, the type of reinforcement, and the number and nature of interaction with the students. Also, some times teachers may cause behavioral disorders or increase the disorders' intensity when an untrained teacher runs the class or when the teacher does not consider the individual differences, which results in the emergence of aggressive frustrated responses. Also, some educational environments are deemed unsuitable for some children, and some children resort to disordered behaviors to cover other issues such as learning difficulties. Kauffman suggests five methods by which schools have to deal with the students to prevent the development of the behavioral problems among them, the methods are:

1. Taking into consideration the individual differences in terms of interests and abilities.
2. Having realistic expectations of the children's behavior and academic achievement.
3. Dealing with the child's behavioral problems with constancy. Since extreme flexibility and excessive firmness increase the behavioral issues.
4. Rewarding the desired behavior and ignoring the undesired one.
5. Taking into considerations the child's educational needs through making the study areas as appealing as possible (Alqubali, 2008)

- **Cultural factors:**

The culture of the society, its habits, values, and traditions are factors that help in creating behavioral problems. The individual's culture impacts his emotional, social, and behavioral evolution. The culture includes values, behavioral standards, needs, and taboos. Culture also includes mass media, which plays a role in encouraging violence, alcohol, and drug. Also, the influence of peers is significant. It is worth mentioning that the way of treating children





according to the culture of society causes behavioral problems. Such ways include; discrimination in the treatment of males and females, as seen in our community, and the social code that encourages male's aggressive behavior while disapproves females' aggressive behavior (Abuishma, 2009).

#### **The Classification of Behavioral Problems:**

There are many classifications for behavioral problems such as Quay's dimensional classification, which is considered one of the best classifications. Quay's classification is based on the parent's and teachers' assessment of the behavior, the case history, and the child's response. It consists of the following four dimensions;

1. Conduct disorder like mistrust of others.
2. Personality disorder such as withdrawal, anxiety, and depression.
3. Immaturity such as short periods of attention, submission, and dreams.
4. Social Aberration such as theft, carelessness, law violation, and deviant peer groups.

The behavioral problems are generally described as externalizing or internalizing behaviors. The externalizing behaviors are directed at others, such as aggression, cursing, theft, and hyperactivity. Meanwhile, the internalizing behaviors are manifested as social withdrawal behaviors like; anorexia, bulimia, depression, social withdrawal, and phobias (Yahia, 2003).

#### **The Prevalence of the Behavioral Problems among the Intellectually Disabled:**

Behavioral problems exist in varying degrees among children. Behavioral problems are more common among intellectually disabled children since 11% of children with mental and behavioral disorders suffer from behavioral problems.

Alrosan sheds light on a group of behavioral characteristics shared by the intellectually disabled that make them more vulnerable to the behavioral problems in comparison with others. Most importantly, the apparent lack of learning ability, the issues of attention deficiency, depression, sense of failure, memory problems, and the apparent lack of transfer learning.

- **Previous studies:**

The educational studies and research papers state that intellectually disabled people suffer from behavioral problems.

Alzahrani (2011) conducts a study entitled "a Comparative Study on the Behavioral Problems among the Intellectually Disabled Children in Riyadh Province". The study aims at identifying the ability of the integrated programs in the public schools to reduce many behavioral problems among the integrated students with mild intellectual disabilities and comparing them with the students who attend the institutes of intellectual education. The study also aims at investigating the differences between the behavioral problems among the classes within the institutions and their counterparts in the programs. It also examines the most notable behavioral problems that may emerge among the children with special needs in integrated and special programs. The study sample consists of 100 male and female students. It uses a scale for behavioral problems. The scale includes the following seven primary dimensions; aggressive behavior, hyperactivity, indiscipline, social behavior problems, immoral behavior,



lack of motivation, and emotional disorders. The results show that there are apparent statistically significant differences between the students with special needs who study at the special education institutions and those who study in the integration classes in the elementary public schools regarding the behavioral problems. The problems are in four of the basic dimensions of the scale, which are; aggressive behavior, hyperactivity, behavioral issues, and social conduct. The results also show the existence of statistically significant differences between the students with special needs who study at the special education institutions and those who study in the integration classes in the elementary public schools in the counterpart classes. The differences are in all the scale's dimensions and favor of the integrated children with special needs. The study indicates that the most significant problems among the special needs students are; aggressive behavior, hyperactivity, discipline issues, and social conduct.

The study of Totsika, Toogood, Hastings & Lewis (2008) indicates that the problematic behavior appears in the early life stage of the intellectually disabled children and lasts during their lives. By tracking the behavioral problems among the children above the age of eleven, the study shows that the most common behavioral problems are; chronic physical aggression, self-harm, and stereotypic disorder.

Mackenzie - Davies & Mansell (2007) conduct an evaluation study of the different levels of the therapy units dealing with the intellectually disabled people. It aims at finding out the frequency of these problems during the last twenty years. It is found that the expected behavioral problems which were identified in the previous twenty years are still existing.

The study of Karen, Marielle, Frank & Hans (2007) aims at recognizing the evolutionary nature of the psychological disorders among the normal children and the intellectually disabled children aged between (6-18) years. The results reveal that the intellectually disabled children have higher levels of behavioral problems at different ages in comparison with normal children.

The results also indicate that there are significant differences between the two samples in their aggressive behavior and attention problems.

Hogue, Mooney, Morrissey, Steptoe, Johnston, Lindsay & Taylor's (2007) study (172) intellectually disabled boys from different reformatory institutes that have different levels of protection. After applying the conduct scale, it was clear that those who have a higher level of protection obtained high points in the physical aggression criterion in comparison with those who have less protection level. No differences appeared between the two groups in terms of externalizing behavior, such as verbal aggression, disobedience, and hyperactivity. Meanwhile, those who are attending the higher protection program obtained significant points in the internalizing behavior criterion such as anxiety, depression, and self-esteem.

Mus'ad (2005) investigates the efficiency of family counseling in reducing the attention problems and hyperactivity among the intellectually disabled children. The study consists of ten educable intellectually disabled children divided into experimental and control groups. The study's results show a significant improvement in enhancing the attention of intellectually disabled children and in reducing the hyperactivity and impulsiveness of the children of the experimental group.

The study of Qasim and Abdulrahman (2003) aims at designing a recreational program and finding out its impact on some of the life skills, psychology, and motor ability of the educable intellectually disabled children through applying the experimental approach on one-group



sample which consists of 30 intellectually disabled children. In addition to that, the results reveal that the suggested recreational program has a positive impact on improving some life skills, reducing the gravity of the behavioral problems, and adapting with oneself and the surrounding community.

Suliman (2002) asserts the importance of training for the intellectually disabled category in general. The study highlights the necessity of designing special behavior training programs that fits their capacities and potentials. Such programs alleviate the severity of the behavior problems and help the disabled to develop skills that enable them to face the demands of daily life and adapt to society.

This was also concluded by the study of hash (2001) about the impact of a social skills development program in alleviating behavioral disorders among the intellectually disabled children. The results reflect differences in favor of the experimental group on the pre- and post-tests.

Bakhsh's study (1997) aims at finding out the impact of a training program in lessening the level of hyperactivity among the intellectually disabled children. After implementing the training program, the study finds statistically significant differences between the averages of the experimental group before and after implementing the program in terms of the total mark and the sub-skills.

This conforms with Alhumithi's (2004) study that investigates the efficiency of a behavior program to develop some social skills for a sample of the intellectually disabled children. After applying for the training program on an experimental and a control group, it is found that there are statistically significant differences in the marks' averages of the social skills among the educable intellectually disabled children of the experimental group.

Dailey's (2002) investigates the relationship between the individual educational plan and the academic achievement of the fifth-grade students who are attending the special education classes. The study also aims at discovering the attitude of the special education teachers towards the individual educational plan. The study sample consists of (45) students with special needs. The results indicate that there is a positive relationship between the students' marks and the individual educational plan. The teachers note that the individual educational plan helped a lot in improving the students' achievement and meeting their academic needs. The teachers also state that the individual educational plan is the best tool to assess the students with special needs.

Thomas, M. et al. (2001) aim in their study entitled "Prevalence of Functional Psychiatric Illness among a Community-Based Population Aged between 16 and 64 Years" to estimate the prevalence of the behavioral disorders in a community-based sample suffering from behavioral disorders. The study also aims at identifying the factors that cause behavioral Disorders. The study sample consists of 120 intellectually disabled people from South Wales in Britain who aged between 16 and 64 years. The data were collected through personal interviews with the sample members and their care providers. The study reveals the existence of behavioral disorders among 60.4% of the sample members, 18% of them suffered from severe behavioral disorders like; violence, destruction, and self-harm. The most prominent factors of the behavioral disorders are; gender (females more than males), the intensity of the intellectual disability, and suffering from cramping episodes.



The previous studies indicate that the intellectually disabled suffer from different behavioral problems that vary in intensity and impact on their psychological and social adaptation and how these problems will affect their performance later on. These studies also highlight the verity of methods and programs applied to deal with these problems such as the counseling, medical, environmental, and behavior programs.

#### STUDY PROCEDURES:

- **Study Sample and Population:**

The study sample consists of 12 educable intellectually disabled students studying at Haroon Al-Rashied elementary school in Rafha Province. The students' IQ ranged between 55-69 on the Wechsler scale, and they aged between 7-10 years according to the official records. The study sample was divided equally into experimental and control groups. The sample is selected upon the nomination of the school's psychologist and after being diagnosed with some behavioral problems according to the Burks scale (Alqariwiti and Jarar, 1987).

- **Study tools:**

1. The Burks scale: This is a behavior scale designed to discover the disordered behavior patterns among children with behavior problems. The Burks' behavior rating scale has (110) items covering (19) behavior problems that represent the scale's sub-areas. Five of these problems are selected since they are the most common behavioral problems among intellectually disabled children, which are, care; attention, emotion control, anger, and social conformity. Some of the essential purposes of this scale are; identifying the patterns of the problematic behavior among children, assisting in the planning of the appropriate individual educational plan to develop specific behavior areas, revealing the extent of the changes undertaken at the behavior patterns in different periods and evaluating the effect of the treatment programs. The scale's reliability and validity are checked, and the scale has a high and appropriate correlation coefficient in all the sub-areas (Alqareoti and Jarar, 1987). The scale is filled by the psychologist, parents, or anyone with a direct relationship with the child by giving each item a mark from 1 to 5. After marking the answers, the scale clarifies if the behavioral problems are significant, insignificant, or highly significant.
2. The individual educational plan: It is a plan designed by the researcher to alleviate the behavioral problems faced by the students. It contains a program which is composed of (13) activities conducted inside and outside the school. The activities are; role-playing, acting, puppets and puppet theatre, performing leadership tasks in the school, agricultural activities in the garden, helping the teacher in the class, participating in the school morning announcements, social visits, participating in the school's committees, extra sports activities, watching videos related to certain behavior patterns and being involved in workgroups and social committees.

This plan is based on the researchers' expertise and the suggestions of the experienced teachers and the experts working in the intellectually disabled schools. It is also based on therapeutic teaching mechanisms that target the student's with attention and hyperactivity problems and include skills offered to students outside the classroom environment. The individual



educational plan is reviewed by a group of Ph.D. holders and field-based experts who add some modifications related to the students' tendencies and attitudes according to their age and focusing on the physical activities and gestures outside the classroom environment.

- **The Methodology of the Study:**

The researcher uses the two groups (experimental and control) experimental design with pre- and post-tests. The study's variables are divided as following; the independent variable, which is the individual educational plan, and the dependent variable, i.e., the behavioral problems. The study also relies on the following tools: The individual educational plan prepared by the researcher and the Burks scale (Alqareoti and Jarar, 1987).

- **The Procedural Steps:**

After consulting the school's psychologist and reviewing the psychological and social files, a homogeneous group of children in terms of age and mental abilities is tested by the researcher. Their IQ ranged between (55-69) on the Wechsler scale, and they aged between (7-10) years. The mean is (8.75), and the standard deviation is (1.13). Burk's behavior rating scale is applied to the experimental and control groups to identify the most critical behavioral problems and their level of intensity among the intellectually disabled children. This is done to monitor the most acute behavioral issues, and it shows that both groups suffer from significant behavioral problems. The following are the results of the Mann-Whitney test (see table 1).

The individual educational plan, which is based on the social, motor, and emotional activities, is developed to be applied to the children of the experimental group. After this, the psychologist, the class teacher, the activities teacher, the physiotherapist, the social worker, and the vocational trainer are trained on how to implement the program and its various activities. The plan is applied to the children of the experimental group five days a week for (8) weeks. The children, who show commitment to their tasks, are verbally reinforced using words of praise. Also, social and materialistic reinforcements are used. The study procedures also include holding weekly meetings between the teacher and the psychologist to find out the frequency of the undesired behavior during the week, to discuss the flexibility of the activities and the reinforcements, to avoid the problems that may occur, and to give appropriate feedback to the teachers and the experts participating in the plan. By the end of the individual educational plan, the researcher applied the Burks scale again on the experimental and control groups. Finally, the statistical differences between the pre- and post-tests of the experimental and control groups are compared to check the impact of the individual educational plan in alleviating these behavioral problems among the educable intellectually disabled students.



**Table 1: The results of the Mann–Whitney test that show the non-existence of differences between the experimental and control groups before applying the individual educational plan.**

Area	Mean		Mean Rank		Sum of the ranks		U	W	Z	Significance
	Experimental	Control	Experimental	Control	Experimental	Control				
Attention deficiency	19.33	19.66	6.25	6.75	37.5	40.5	16.5	37.5	-0.248	0.804
Low capacity of action control	19.16	18.66	7.17	5.83	43.0	35.0	14	35	-0.659	0.510
Weak ability to restrain anger	14.83	14.33	6.67	6.33	40.0	38.0	17	38	-0.165	0.869
Stubbornness and Resistance	19.16	18.66	7.25	5.75	43.5	34.5	13.5	34	-0.744	0.457
Weak social conformity	22.83	22.66	6.33	6.67	38.0	40.0	17	38	-0.162	0.871

The previous table (table 1) presents the most significant behavior problems among the intellectually disabled children in the experimental and control groups. These results are consistent with the studies of Ross & Cornish (2002), Karen, Marielle, Frank & Hans (2007), and Hogue, Mooney, Morrissey, Steptoe, Johnston, Lindsay & Taylor (2007). These studies conclude that aggression and attention deficiency among the intellectually disabled are prevalent. The table shows that there are no statistically significant differences between the experimental and control groups before applying the individual educational plan, which indicates that both groups are homogeneous in terms of the behavioral problems. This also justifies using the individual educational plan and asserts the impact of the plan on the two groups.

- **Statistical methods:**

The Wilcoxon test and Mann–Whitney test is used to verify the authenticity of the hypotheses also the Z-Value is calculated.

## **RESULTS AND DISCUSSION:**

### **The results of the first hypothesis:**

There is no statistically significant difference between the mean ranks of the experimental group's grades on the pre- and post-tests on the Burks behavior rating scale. To test this hypothesis, the Wilcoxon test is used for its statistical significance between the mean rank of the experimental group's on the pre- and post-tests on the Burks scale.



**Table 2: the results of the Wilcoxon Test and its statistical significance between the mean ranks of the experimental group's grades regarding the pre- and post-tests on the Burks scale.**

The dimensions of the Burks scale:	Ranks	Number	Mean Rank	Sum of the ranks	Z-Value	Significance Level
Attention deficiency	Negative	5	3.90	19.50	-1.892	0.058
	Positive	1	1.50	1.50		
	Equal	0				
	Sum	6				
Low capacity for action control	Negative	6	3.50	21.00	-2.264	0.024
	Positive	0	0.00	0.00		
	Equal	0				
	Sum	6				
Weak ability to restrain anger	Negative	5	3.00	15.00	-2.032	0.042
	Positive	0	0.00	0.00		
	Equal	1				
	Sum	6				
Stubbornness and Resistance	Negative	6	3.50	21.00	-2.232	0.026
	Positive	0	0.00	0.00		
	Equal	0				
	Sum	6				
Weak social conformity	Negative	6	3.50	21.00	-2.207	0.027
	Positive	0	0.00	0.00		
	Equal	0				
	Sum	6				

Table (2) illustrates that there are statistically significant differences in the behavioral problems between the mean ranks of the experimental group's grades before and after applying the individual educational plan on the educable intellectually disabled students in favor of the post-test. The individual educational plan alleviates the intensity of some of the Burks scale's behavioral problems. These problems are; the ability to control actions, the ability to restrain anger, stubbornness, and resistance, and the ability of social conformity, while the plan does not affect the attention deficiency problem.

The researcher attributes this to the fact that the plan's activities widely depend on motor and social activities, such as; farming, physical exercises, participating in the social committee and the morning assembly committee, and performing leadership tasks in the school. These activities help in reducing hyperactivity and improving the emotional decompression, which lessens the tantrums, in addition to the positive impact of social involvement, discipline, and following the school's rules and regulations. However, this does not examine the attention deficiency since the plan did not aim at addressing this aspect.

This result agrees with the results of Qasim and Abdulrahman (2003) that prove the positive impact of these programs on alleviating the behavioral problems and enhancing the child's

adaptation with himself and the surrounding community. It also concurs with the study of Shash (2001) about the impact of a social skills development program on alleviating the behavioral disorders among the intellectually disabled children.

The results of the current study do not agree with Mus'ad's study (2005) in terms of the efficiency of the behavior program in enhancing the student's attention. The researcher attributes this disagreement to the differences of the nature, content, and mechanisms of the behavior training programs applied in these studies.

- **The results of the second hypothesis:**

There is no statistically significant difference between the average grades level of the control group on the pre- and post-tests upon Burk's behavior rating scale. To test this hypothesis, the Wilcoxon test is used to find the statistical significance between the mean rank of the control group's grade on the pre- and post-tests on the Burks scale.

**Table 3: The results of the Wilcoxon test, and its statistical significance between the mean ranks of the control group's grades regarding the pre- and post-tests on Burks scale.**

The dimensions of the Burks scale:	Ranks	Number	Mean Rank	Sum of the ranks	Z-Value	Significance Level
Attention deficiency	Negative	3	2.50	7.5	0.00	1.000
	Positive	2	3.75	7.5		
	Equal	1				
	Sum	6				
Low capacity for action control	Negative	3	3.33	10.0	-0.707	0.480
	Positive	2	5.50	5.0		
	Equal	1				
	Sum	6				
Weak ability to restrain anger	Negative	4	2.63	10.5	-0.828	0.408
	Positive	1	4.50	4.5		
	Equal	1				
	Sum	6				
Stubbornness and Resistance	Negative	3	3.00	9.0	-0.447	0.655
	Positive	2	3.00	6.0		
	Equal	1				
	Sum	6				
Weak social conformity	Negative	2	3.00	6.0	-0.447	0.655
	Positive	3	3.00	9.0		
	Equal	1				
	Sum	6				





Table(3) illustrates that there are no statistically significant differences in the intensity of the behavioral problems between the mean ranks of the grades of the educable intellectually disabled students who are not subjected to the plan. It is revealed that the behavioral issues among the students of the control group are not affected. The researcher attributes the reason for this to the fact that the behavior modification mechanisms applied to the control group are depending on the verbal guidance and direction instead of allowing the child to carry out practical activities that break the learning routine. Thus the behavior is appearing again as soon as the verbal guidance ends.

- **The results of the third hypothesis:**

There are no statistically significant differences between the mean ranks of the grades of the experimental and control groups after applying the individual educational plan. To test this hypothesis, the Mann–Whitney test is used because of the differences between the experimental and control groups after applying the individual educational plan.

**Table 4: The results of the Mann–Whitney test that show the existence of differences between the experimental and control groups after applying the individual educational plan.**

Area	Mean		Mean Rank		Sum of the ranks		U	W	Z	Significance
	Experimental	Control	Experimental	Control	Experimental	Control				
Attention deficiency	17.00	19.66	5.25	7.75	31.5	46.5	10.50	31.5	-1.207	0.227
Low capacity of action control	12.66	18.33	3.50	9.50	21.0	57.0	0.00	21.0	-2.898	0.004
Weak ability to restrain anger	11.83	13.83	4.25	8.75	25.50	52.50	4.50	25.5	-2.201	0.028
Stubbornness and Resistance	18.50	18.50	3.67	9.33	22.0	56.0	1.00	22.0	-2.761	0.006
Weak social conformity	22.83	22.83	3.50	9.50	21.0	57.0	0.00	21.0	-2.887	0.004

As illustrated in the previous table (table 4), there are statistically significant differences in the intensity of the behavioral problems between the mean ranks of the grades of the experimental and control groups after applying the individual educational plan upon the experimental group, which consists of educable intellectually disabled students. It turns out that there are differences between the experimental and control groups in some of the behavioral problems that appeared in Burks scale, which are; the ability to control actions, the lack of restraining anger, stubbornness and resistance, and the lack of social conformity. Meanwhile, no differences are found between the experimental and control groups in terms of the attention deficiency problem.

The researcher attributes this to the fact that the individual educational plan broke the daily routine of the children in the experimental group since they are allowed to carry out several motor and social activities that are missed previously. Also, many behaviors linked to anger, hyperactivity, and lack of conformity are replaced with motor and social activities that satisfy the needs and interests of the experimental group's children. Meanwhile, the plan does not have any activity to enhance the children's focus and attention. This result concurs with the results of Shash (2001), Bakhsh(1997), and Alhumithi (2004) that prove the efficiency of the social skills training programs on alleviating the behavioral disorders among the intellectually disabled children in the experimental group.

In the current study, the researcher attributes the success of the individual educational plan used in alleviating the intensity of some behavioral problems among the educable intellectually disabled students to the plan's efficiency. Also, this success is because the plan follows more than one behavior therapy method such as sport, social activities, and motor activities. These activities play a vital role in drawing the attention of the experimental group.

#### **Recommendations:**

- To hold guidance meetings with parents to provide them with guidance and the information needed to interact with their children in a way that matches their intellectual capacities using methods far from physical or psychological punishment to reduce their behavioral problems.
- To urge the special education and rehabilitation workers to prepare preventive and therapeutic programs to reduce the behavior disorders problems among the students with special needs.
- To run training programs through the continuing education programs for the teachers who teach the intellectually disabled students. The training programs are offered to enhance the teacher's competence and improve their abilities in dealing with the student with special needs.
- To enhance the academic curriculum with topics about the intellectual disability to adjust the community's attitudes toward the intellectually disabled.
- To conduct more studies on a larger sample of the intellectually disabled to reach more comprehensive results.
- To unify the individual educational plans in all the public, voluntary, and private special education centers following the study's procedure.
- The need to conduct an annual assessment of the individual educational plan applied to the intellectually disabled to develop it.

#### **Proposed researches:**

- A comparative study of the parental treatment methods which are followed by parents when treating the normal and the intellectually disabled children.
- The effectiveness of integrating programs to include the educable intellectually disabled students in general education schools.
- Conducting surveys on the intellectual disability to find out the gravity and intensity of this problem.



- Conducting studies that develop preventive and therapy programs to treat behavioral disorders and to check its efficiency in alleviating behavioral problems.
- Conducting a comparative study to find out the differences in the behavioral disorders between the different categories of the intellectually disabled.

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