

The Effectiveness of Counseling Group Program for Prevention of Mental Retardation among Students of Counseling and Special Education at Ajloun National University/Jordan

فاعلية برنامج ارشادي جمعي في الوقاية من الاعاقة العقلية لطلبة الارشاد والتربية الخاصة في جامعة عجلون الوطنية/الاردن

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ABSTRACT: *The study aimed to identify the effectiveness of counseling group program for prevention of mental Retardation among students of Counseling and Special education at Ajloun National University ,and to achieve that, it was chosen a sample consisted of (42)students from counseling and special education at the 2nd year. The sample divided into two groups: the control group consists of (21) and the experimental group consists of (21). It was used the counseling group program that contains identifying Mental Retardation, its causes and the ways of prevention, it was used a scale of (pre-test, post-test) &(the mental retardation exam) that consists of (11) items that measure the skills of identifying Mental Retardation, its causes and the ways of prevention, it was used (T. test) and ANCOVA at the statistical treatment, and the results showed:*

- *the effectiveness of the program of prevention from mental retardation at the experimental group without the control group.*
- *There were statistically significant differences at ($\alpha \leq 0.05$) in favor to females at the (post - exam) scale of prevention from mental retardation.*
- *There were statistically significant differences at ($\alpha \leq 0.05$) in favor to special education at the (post - exam) scale of prevention from mental retardation.*

KEYWORDS: Counseling, Mental Retardation, Students, Counseling, Special Education, Ajloun National University, Jordan

INTRODUCTION

Different professional categories were interested in studying mental retardation phenomena , so many specialists in medicine and education tried to recognize mental retardation regarding to its nature, its causes, the methods of prevention, and the best ways to take care of persons with mental disabilities, the expansion of the services which were provided for the mentally disabled lead communities to put the controls and criterions that determine the eligibility of the individual to take benefits of those services, and to identify the conditions that must be required in the necessary services.

The development made the retardation issue a social topic that leads the interested people to form regulations and various laws relating to the mentally handicapped and the organization

of provided services to them, also the parents who are interested to receive their children with disabilities the appropriate services.

The concept of mental retardation

It is difficult to define mental retardation accurately and comprehensively, and accepted by various groups of scientific and professional different disciplines, it may be appropriate to show the most prominent different definitions of mental retardation to achieve the definition which is more acceptable to others.

Doll's definition was the early definitions of mental retardation which could be described as precisely and clarity in brief definition that the person who is mentally retarded is characterized by:

- * The lack of enough social development.
- * lack of mental capacity.
- * mental retardation appears during the period of growth, and continues through the stage of maturity.
- * mental retardation is relating to the building factors.
- * mental retardation can't be treated.

We find that (Doll's definition) that emphasizes the concept of adequacy of social development as a basis to rule the mentally retarded individual. whereas (Hieber) presented a definition which was accepted by the American Mental Retardation Association and it said that:

"That mental retardation indicated to a general decline in the performance of mental retardation that appears during the stage of growth and the deficiency in the adaptive behavior, it was shown that this definition showed the low degree of intelligence as an essential part of mental retardation" .

There is no doubt that those definitions used to enrich the scientific research and increase the possibility of defining the concept of mental retardation and its nature. In addition to this, despite its diversity ,it helped to reach the definition which is adopted by the American Mental Retardation Association, which is considered the most acceptable and common definitions among various scholars in this field. And this definition proposed by Crossman who said that:

Mental retardation : is the case of decline in mental functions Assembly appears during the period of growth and accompanied by decline in the adaptive behavior" (Crossman, 1977).

The study problem

Mental retardation forms 3% of children, and the surveys had demonstrated that this percentage increased in the poor countries and decreased in developed and modern countries because of awareness ,the methods of prevention and care for pregnant mothers and children during and after childbirth, the provision of counseling programs greatly contributed in raising the awareness of the target groups (counseling and special education students) .

So the problem of this study came from studying the extent of counseling and special education students' knowledge at Ajloun National University of the methods of prevention of mental retardation and the effectiveness of an counseling group program in increasing the knowledge and skills for the target.

The study importance

Major efforts have been made to the prevention of mental retardation, because there were (about 75%) of cases could not determine the cause of them, but medical care and using of appropriate prevention and health awareness made significant differences between the proportion of mental retardation in developed countries such as Sweden to be 0.04% , whereas in poor countries, the rate is reaching 3.8% while the rate in Latin America reached 11.3% (Hallahan & Kauffman, 2003).

(Al-khatib, 2012) believed that there were family - cultural causes of mental retardation and they include the disordered and poor environment, and the biological - Medical causes of mental retardation such as infections, poisoning , injured factors , physical disorders ,cerebral diseases, disorders of pregnancy and chromosomal disorders and psychological disorders.

It was shown that these causes must be known as the factors that lead to mental retardation ,and then to identify the methods of prevention, therefore, this study came to know the extent of the effectiveness of counseling group program for prevention of mental Retardation among students of Counseling and Special education at Ajloun National University.

The Study Questions

- 1- What is the extent of the effectiveness of counseling group program for prevention of mental Retardation at cognitive skills among students of Counseling and Special education at Ajloun National University?
- 2- What is the extent of the effectiveness of counseling group program for prevention of mental Retardation at cognitive skills for the experimental group at the gender variable?
- 3- What is the extent of the effectiveness of counseling group program for prevention of mental Retardation at cognitive skills for the experimental group at the specialization variable?

The study Delimitations:

The study has restricted to study a sample of students of Counseling and Special education at Ajloun National University, at the north of Jordan.

The study terms

(procedural) The effectiveness of counseling group program for prevention of mental retardation: a proposed program to develop the skills of knowledge among students of Counseling and Special education at Ajloun National University, prepared by the researcher in this study.

Academic specialization (procedural) : a description of a student qualification that he/she studied in the university.

The theoretical literature

The causes are the main entrance to identify the methods of prevention , therefore it's necessary to identify the causes of mental retardation as factors that lead to a mental retardation, and it was classified by scientific references.

Mental Retardation Causes

The possible causes of the mental retardation can be classified according to its occurrence:

- **The pre-natal causes:** factors occurred to the fetus during pregnancy:

A-Drugs ,chemicals &alcohol

B-X-Ray & radiations

- **Peri-natal causes:** include obstetric difficulties:

A-Asphyxia (lack of oxygen for the fetus)such as placental separation

B. the birth operation that faced difficulties such as the length of childbirth and a lack of oxygen for the fetus

C- the wounds occurs for the child during childbirth

D- birth Room equipment were unsterilized.

- **The post- natal causes:** factors that affect brain damage ,and they include :

1.Malnutrition which contains the lack of food after birth, where the good nutrition is a main factor in brain cells' growth

2. - physical trauma such as cars accidents , direct injuries on head.

3. diseases and infections: they include diseases and infections that occurred to children at the first years of their age, such as Mumps, Measles, Meningitis, Chicken pox, and Brain infections.

- It can also be reclassified to:

Genetic causes :

These causes represented a group of genetic factors that are affecting the fetus at the moment of conception, and it included the outcomes of the interaction between the genetic characteristics were taken from the father and mother, and the indirect genetic factors which cause mental retardation is the phenyl keton Uria (PKU) which is transferred to the fetus by the lack in some responsible enzymes for digestibility of protein such as (PKU)disorders , and other indirect genetic factors which may lead to mental retardation is that the Rhesus factor (Rh) is incompatible with the blood of the spouses.

B. Environmental causes:

It is non- genetic-factors that affect the health and growth of the fetus like a contagious disease, such as:

A. German Rubella:

It is one of the serious diseases to the fetus, especially if the pregnant had German Rubella during the first three months of pregnancy (Al-Khatib, Al -Hadidi, 2012)

B. Malnutrition:

Malnutrition does not mean the shortage of food only, but also it deal with having insufficient amount of food that the body need(Al-Khatib, Al -Hadidi, 2012), and the drinking alcohol by pregnant leads to massive distortions to the fetus (Fetal Alcohol Syndrome) ,declined mental abilities and increased mortality rate and problems in growth (Furey, 1982) .

There are many hereditary diseases which are resulted of a defect in the chromosomes in the cell, therefore the chromosomes are a very important factor in the fetus mental retardation or being safe of diseases, and the incidence of any defect in the gathering or division of the chromosomes lead to have mental retardation, and there are some factors that cause irregular chromosomes ,thus pregnant could avoid it, such as Down's Syndrome (Mongolism), Turner Syndrome klinefelter's Syndrome.

(Down's Syndrome or Mongolism)

This disease is a result of increasing chromosome in the pair of the twenty-first (fragile chromosome) (fragile x) which became representative of the three chromosomes instead of two chromosomes, and this increasing was caused by no separation of the pair of the physical chromosomes(No. 21) as a natural fractionation in one of the parents during the meiotic division, and the infected person is described with mental retardation, short ,fat, a circular face, their noses are compressed ,and eyelids like Mongolian eyelids ,and it is noted that these children were born to mothers of advanced age.

(Turner's Syndrome)

This syndrome is resulted of the empty oogenesis from the chromosome (x) combined with Sperm carried chromosome (x) The chromosomal type of individual is (XO) ,and the total of its chromosome is (45) ,phenotype of this syndrome was female rarely reached to sexual maturity ,and the secondary characteristics weren't prominent , and female was characterized by shortness & mental retardation. If the empty oocyte combined with the chromosome (Y),the zygoite developed to genetic style (oy) ,and its life ended in a short period(Al-Nawasrah, 2012).

Klinefelter's Syndrome)

the chromosomal forming of this syndrome (xxy) resulting from the combining of oocyte (x) with the sperm (xy) or of the combining of oocyte (xx) with the sperm (y) to form zygoite (xxy) which developed to abnormal male ,and this person ordinarily suffered from infertility despite the presence of small genital condoms , this person may appear some feminine attributes such as prominent breasts and lack of hair growth on the skin, this person is often tall (Macmillan,D,1995).

It is necessary to present that these genetic disorders caused by a defect in the chromosomes ,and there is no effective ways to prevent them, but the mother's age at childbearing caused these disorders especially at Down's Syndrome(Al-Nawasrah, 2012).

Genetic Consultations

The scientist of genetics can determine to the spouses or who wanted to marry the possibility of the characteristics of their sons who are expected to be born ,and whether it is advisable to have children or not, the genetic consultant resembles the doctor who tries to diagnose the disease which is elusive, so the genetic consultations help to disclose many genetic defects , mental diseases, enzymes, chromosomes' nature and their number, so testing chromosomes at birth help at diagnosis to identify the disease or genetic defect especially those diseases that are resulting from no separation of the chromosomes as a natural separation ,and it may be possible to treat some cases early.

And marriage between relatives lead to isolate pure characteristics, if these characteristics were desirable, the result would be good, if these qualities were undesirable, the result would be bad. So it is not recommended of relatives' marriage that lead to the appearance of the resessive genes.

It is also important to examine the status of a fetus before birth, especially in cases that the fetus acquired of a hereditary disease or other, in this test, the fetus place , the placenta echo and recording high-frequency of voiced waves to the womb through endometrium of pregnant, after that it was stitched needle to reach the head to Amniotic Fluid to examine it, some Embryo separated Cells usually exist in this fluid. Then the doctor, inspect the fluid and cells to ensure the safety of the fetus.

The doctor is interested in examining the fetus to know the proper number of Chromosome generally, and the number of sexual chromosomes particularly, the existence or non-existence of some enzymes that may be its absence is a serious threat to the individual life later, and anything the pregnant had taken during pregnancy lead to provide the fetus through the placenta where taking drugs and pharmaceuticals such as Thalidomide that caused distortions in the embryo, and also taking drugs ,alcohol and tobacco, and it can also some microbes transition through the placenta such as Diphtheria, so the pregnant must preserve her health and prevent herself from diseases during pregnancy (Al-Nawasrah, 2012).

Retardation Prevention Definition:

It is a set of procedures and intended &organized services which aims to reduce the incidence of defect that is leading to the deficit in the physiological & psychological functions , and to reduce the effects of the deficits, and providing the individual with opportunities to in order to achieve the maximum possible degree of effective interaction with its environment, and enable them to achieve nearly life to the ordinary people, so those procedures and services had a social, educational or rehabilitative nature(Al Rusan, 2012).

Target groups in the program of the prevention of mental retardation

- pregnant.
- Parents who have a history of genetic patients.
- Those who wanted to Marry.
- Children with the established risk condition , children who have been officially diagnosed ,and it was shown there were medical disorders that include specific disabilities

were resulting from chromosomal defects, such as Down syndrome, enzymes disorders such as PKU disorder ,metabolic disorders ,congenital deformities and neurological disorders.

- Children with biological risk are those who have a patient history before birth or during the situation or after birth because of the seriousness of the biological risk at the growth of the central nervous system which increased the possibility of the presence developmental problems or the inability or hindrance in the future.

- Children with an environmental risk :The quality of the early experiences and environmental conditions which children live in lead to a negative impact at the socialization which lead to the presence of behavioral and emotional problems in the future risk which include:

- The quality of the mother care.
- Malnutrition.
- The lack of medical care.
- Poor Family environment (economically and culturally)
- Developmentally Delayed Children : This category includes children who have developmental delayed at the first two years of age in two or more fields of kinesthetic emotional, social, mental and behavioral growth (al-Khatib & Al-Hadidi, 1998).

And preventive process doesn't achieve its purposes, only if all efforts combined to put all its items under implementation by:

- The family and the society of all its members, and the state of all relevant institutions of preventive process.
- Researchers, scholars, the planners of preventive programs of specialists (Al-Khatib & Al-Hadidi, 1998).

The most important principles of prevention of retardation as follows:

- Identify the causes and prevention.
- Raising the social and economic level of the families.
- Family awareness through the family counseling, genetic counseling, health counseling (Al-Khatib & Al-Hadidi, 1998).
- **Methods of prevention of retardation**

The prevention of retardation can be through prevention of factors and the causes that lead to the incidence of retardation, these include (pre-natal prevention, peri-natal prevention and post-natal prevention).

Pre-Natal Prevention Group

It includes the prevention of genetic factors such being away of relatives' marriage , the prevention of chromosomal disorders, and pregnancy at(18- 40), also getting rid of non-

genetic factors include diseases that afflict the pregnant ,and affect the fetus especially at the first three months of pregnancy like German rubella, syphilis ,Toxoplasmosis and Diabetes, which leads to high blood sugar because of the lack of insulin, and also, pregnant must be fed enough to have all the elements of integrated food ,where lack of food items damage the nervous system growth ,and the pregnant must be protected from X-ray that used at diagnosing diseases, and protect her from radiation of wars and disasters. Also she must avoid drugs and alcohol that affected the nerve cells of the fetus, so mothers who drinks alcohol so much advised not to be pregnant and they must ask the physician before having any medicine , therefore the pregnant must avoid toxic gases such as carbon monoxide, steam and mercury, sulfur dioxide because of its harmful effects at the respiratory system of pregnant ,and lack of adequate oxygen for fetus, pregnant need comfort and care in order to protect her from early birth, and thus avoiding the birth of a child(Al-Rusan, 2010) and (al-Khatib & Al-Hadidi, 1998).

Peri-Natal Prevention Group

It includes birth in hospital which is equipped with all the necessary tools to the mother and the prevention of shortage of oxygen during birth and through providing mother with adequate oxygen, also the fetus must be protected from physical shocks especially when using suction device that caused defect at the nerve cells, the fetus must be protected from the viruses and bacteriological infections that cause defect at nerve cells at the central nervous system (Al -Rusan, 2010) and (Al-Khatib,Al-Hadidi, 1998).

Post Natal Prevention Group

The environmental factors that followed the birth is responsible for a large percentage of the cases of mental retardation, especially simple mental retardation, so the child must be protected from:

Malnutrition

The food of the child after birth must include the basic necessary elements for the body growth such as protein, Carbohydrate, minerals and vitamins which are the important factor at the cerebral cells growth, the child must be protected from the lack of hormones, especially the thyroxin hormone which lead its shortage to a sluggish mental abilities.

Physical Trauma

the child need a protection from the car accidents, direct strikes on the head and trauma, and protection from diseases such as mumps disease ,measles ,rubella, chicken pox, meningitis brain infections, and high temperature, and also children need the protection from drugs and medicines because they're poisonous materials such as sleeping pills ,tranquilizers, which lead to the mental abilities disorder, traffic accidents ,neurological disorders , drugs, opium and heroin that lead to defect the nerve cells, and alcoholic drinks that lead to psychological and mental disorders, and smoking which leads to the diseases at the respiratory system , blood pressure and nervous disorders(Al-Rusan, 2010)&(al-Khatib & Al-Hadidi, 1998).

Levels of mental retardation prevention:

The levels of mental retardation prevention divided to three levels,

1.Primary prevention:

It is the actions and measures were to be taken before the occurrence of the problem, and to prevent their occurrence by providing services for the integrated , healthy, social and cultural care at socially and economically poor environments and families, immunizing against infectious diseases, improving the level of pregnant care, and awareness about the causes of retardation.

2.Secondary prevention:

The procedures and measures were helped individual to be recovered of some injuries, and it stopped infection through early detection.

3.The Tripartite Prevention:

The procedures and preventive measures which reduced the problems of mental retardation, and it improve the level of the functionality of the individual, and it helped to reduce the psychological, social effects when the retardation happened (Al-Khatib & Al-Hadidi, 1998).

Previous studies

Although the mental retardation is a symptom which is accompanying many situations, but the medical research did not reach more than about 25 % from the causes of mental retardation, this means that 75 % of the causes of mental retardation remains unknown. But Macmillan (Macmillan, 1989) indicated that 50% of cases of retardation can be avoided and prevention through disclosure of the factors that are causing and the period they occur.

In a study carried out by (Crandall, Barbara, 1974) entitled "genetic counseling and mental retardation" where the cases of deaths in hospitals were studied during the past five years, it was found that 42 % of child deaths in hospitals genetically for the same reasons, it was classified the genetic defect to the non- chromosomes ,genetic mutations ,metabolic and non metabolic , genetic and environmental factors, so genetic counseling at presenting the results of the spouses sampling to enable them know the risks of a particular disease inside the family it was shown that the clinical diagnosis showed the disease ,the possibilities of prevention , treatment and the , scientific advice ,necessary information and genetic character transferring.

(Al-kilani, 1983) held a study that included 200 children at the age (14-16 years) that 80% of the families of disabled children were of low-income , 81% were at the low level of education, and 70% of them had patiently history, 85% of them were at marriage of relatives, and 24% of mothers of children had been afflicted to health problems at birth, and 79% of them have been afflicted to the fall , inflammations and German rubella (Al Rusan, 2003).

(Al-Turmsani, 1994) showed the causes of mental retardation in Jordan ,it was shown that these causes are distributed according to the stage, he showed that the pre- birth is forming 69% of the mental retardation causes in Jordan which include: genital diseases, addiction and trauma , the lack of PKU ,malnutrition , yellow fever ,German rubella , RH, Endocrine Glands and reproduction before the age of 18, X-rays, Hemorrhage during pregnancy , incomplete childbirth (premature babies) , the bad psychological situation of the mother during pregnancy ,age of mother over 40 years ,drugs, family genetic factors and chromosomal disorders. The stage during birth is forming 19% included brain bleeding, the

use of the pregnancy tools , clip, difficult childbirth and suffocation because of the shortage of oxygen The stage of post birth is forming 12% include malnutrition, disruption of the endocrine, brain fever (inflammation of the White crust brain) , trauma of children and meningitis (Al-Turmsani, 1994)

In a study carried out by(Cornel, 2002) entitled (from Knowledge to Implementation) at the prevention of congenital deformities magazine ,it was shown after a review of the modern medical literature that was annually born from (3 -9 million children in the world , (2 - 6 %) of children have congenital deformity and genetic diseases , and mental retardation formed (1%) of congenital deformities and genetic diseases ,so the primary prevention would be possible through medical genetics .

(Jellife & et al,2003) presented a study about mental retardation among morally deformity children ,the study indicated the scarcity of studies that are studying this subject, the sample was (119556) Children were born in 1993 from 8 provinces in California, it was found that mental retardation that are resulting from congenital deformity except the anomaly non-chromosome at the age under 7 is increasing seriously compared with (MR) that is resulting from the non-chromosome. It also showed that the (MR) happens with developmental disabilities such as cerebral paralysis , epilepsy and growth disorder, it also indicated that the rate of spreading mental retardation between morally deformities is (26.8%).

(Anonymous,2004) assured in a study entitled midwifery and childbirth .It was reviewed 300 research and study in the maternity and child centers, it was shown that the lack of adequate care for the mother during childbirth is forming (37.2%)of risk factors which cause mental retardation ,these factors include (prematurely membranes torn(24.8 %),lack of oxygen for fetus (14.6%) ,high blood pressure(7.7 %) ,bleeding during childbirth (7.3 %), late intrauterine growth (2.1%), and that the risks of the cesarean operation: (sharp bleeding, blood clots, intestinal blockage breathing difficulties and asthma).

(Brosco &et al, 2006) showed after a review of medical ethics over 50 years in the United States, I was shown that there are several methods of prevention and early intervention for the prevention of mental retardation (MR) such as prevention of congenital syphilis, meningitis and the thyroid gland deficit ,Moral German Rubella, RH disorder , it showed the low total percentage of these cases in 1950 where it was 16.5% between these cases.

In a study presented by(Al-Jalamdeh,2007) aimed to identify the level of the parents' knowledge of mentally disabled children in Karak of the causes of mental retardation and investigating the effectiveness of an educational program in improving the level of the parents' knowledge of mentally disabled children, the sample was formed of 200 parents, 60 of them volunteered to participate in the educational program, they have been distributed randomly to two groups , the educational program was formed of 10 meetings were distributed to 5 weeks, the study showed that the level of the parents' knowledge of mentally disabled children of causes of mental retardation is low, and there were statistically significant differences regarding to the program in favor to experimental Group, there were statistically significant differences at the experimental group at the parents' knowledge scale of mental retardation causes at gender variable in favor of females and educational level variable in favor of the highest educational level.

(Al-Samaheen, 2007) aimed to identify parents' awareness of prevention methods of mental retardation in Jordan, the sample was formed of 180 families, it was used a questionnaire

prepared by the researcher, therefore, the results showed there were statistically significant differences at the level of parents' awareness of prevention methods of mental retardation regarding to economic income variable of the family, also, the results showed there were statistically significant the differences of the parents' awareness of prevention methods of mental retardation regarding to the cultural level of the family.

(Adair & et al, 2008) assured in a study entitled mother under nourishing ,child nutrition and its consequences at the adults' health ,it was studied and analyzed the data , the medical records in five poor countries (Brazil, India, Guatemala, the Philippines, South Africa), after studying the systematic of these data ,it was shown that there are indicators such as the proportion of mixed blood fats , cardiovascular diseases , lack of lung efficiency , the weakness of the functions of the immune system, cancers , osteoporosis and mental diseases which associated with each of the undernourished ,it was found that there is a relation between undernourishment and mental retardation ,and low birth weight indicated a risk of previous cases.

Discussion of the previous studies

After the presentation of previous studies that are correlated to the study variables, it was found the studies' attention of the causes and factors that lead to mental retardation, and most of the studies followed descriptive curriculum among children who have risk factors, and (Al-Jalamdeh,2007) study showed the effectiveness of educational program at improving the Knowledge extent of mental retardation causes among parents of disabled in Jordan, the study showed that there were statically significant differences at ($\alpha \leq 0.05$) in favor of the experimental group ,there were statically significant differences at the experimental group regarding to gender in favor of mothers, and also there were statically significant differences at the experimental group regarding to high educational level. Whereas,(Al-Samaheen,2007)study assured that there were statically significant differences at the parents' awareness level of the methods of prevention of mental retardation , and there were statically significant differences at the parents' awareness of the methods of prevention of mental retardation regarding to educational level variable.

Most previous studies showed that the risk factors (which cause mental retardation) are including thyroid gland deficit, German rubella , syphilis , congenital deformity non-chromosome, malnutrition of the mother and the child, and hereditary diseases and the risks of the cesarean operation, so the study came to determine the effectiveness of counseling group program for prevention of mental Retardation among students of Counseling and Special education at Ajloun National University.

The study Procedures

First: the study sample

The sample of the current study formed of 42 students (male and female)of the second year at Ajloun National University randomly distributed into two groups ;control group consisted of 21 students and experimental group consisted of 21 students, then it was applied the test of prevention of retardation (the test measures the cognitive skills of the students), students were providing pre- test , then post- test after application of counseling group program at the two groups (experimental and control).

The hypothesis of the study

1. There are statistically significant differences at ($\alpha \leq 0.05$) at the impact of the counseling group program at the prevention of mental retardation at the experimental group more than control group of the students of the psychological counseling and special education at Ajloun National University.
2. There are statistically significant differences at ($\alpha \leq 0.05$) at the impact of the counseling group program at the prevention of mental retardation at the experimental group of the students of the psychological counseling and special education at Ajloun National University regarding to gender variable (male, female).
3. There are statistically significant differences at ($\alpha \leq 0.05$) at the impact of the counseling group program at the prevention of mental retardation at the experimental group of the students of the psychological counseling and special education at Ajloun National University regarding to the type of specialization.

Secondly: Study Tools

The researcher used two tools for this study

1. Test of the prevention of retardation, it is consisting of (11) constitutive questions which measure the cognitive skills that the counseling program has been prepared to develop them at counseling students.

Test Components

This exam consists of four skills :

- The concept of mental retardation
- The causes of mental retardation (genetic and environmental causes)and (prenatal , peri-natal and post natal cause).
- Genetic consultation
- Methods of prevention of environmental factors and prenatal , peri-natal and post natal prevention.

The test was showed to a group of professors and specialists at the counseling and special education Department of at Ajloun National University, National Islamic sciences University who recommended the addition of a paragraph concerning Down syndrome causes.

It was adopted the indications of the arbitrators validity (95%)of the test paragraphs and indications of the its reliability through re-testing ,the reliability coefficient (0.8), the highest degree for the test is 60, the least degree of the test is 0 , and the questions contains all components of the proposed program.

2. The proposed program for developing the cognitive skills among students of the second year in counseling and special education at Ajloun National University which is prepared by the researcher.

After revising the theoretical frameworks that took interest in the prevention of mental retardation and its causes and how to prevent it (Al Rusan, 2010), and revising the previous studies that interested in the causes of mental retardation; studies of (Al-Turmasani,1994),(Broso, 2006), (Jellite, 2003) ,(Adair,2008) and (Crandull, 1974), it was prepared the initial picture of the proposed program to the develop cognitive skills at the program for the prevention of mental retardation, these skills include: knowing and understanding mental retardation, genetic and environmental causes ,pre-natal, peri-natal and post natal causes and prevention methods, and the program was showed to the members of the teaching staff of counseling and special education at Ajloun National University, National Islamic Sciences University /Jordan. They indicated that the program is ready to be applied according to its appropriateness of the type of activities , the way of implementation and the duration of the implementation of the activity.

The general objective of the program

The program aims to develop the cognitive skills among counseling and special education students of the second year at Ajloun National University.

The program content

- 1- Configuration activities which begins the training sessions and through them the student was prepared for skill through the use of teaching activities.
- 2- The main activities: activities which the researcher based on them at the training, where he proposed the use of cognitive & emotional activities, and the application of each activity took half of the session.

The program's sessions

The program was applied into (8) sessions as applied with the experimental group in groups ,each group consists of (4 - 5) Members , the session duration is(45 – 50) minutes.

The group counseling session include as follows:

1. The objective of the session(meeting) is the skill which is taught during the meeting.
2. The duration of the session to achieve the objective and application configuration activities and major activities
3. Used Activities: Identify and describe the type of the main activity that will be chosen according to the student wishes.
4. The way of the application includes the steps that have been followed in the student training at the skill through used activity.
5. The assessment of the objective: to identify the criteria which will achieve the aim of the meeting

The way & the period of the program application

The application program took (six weeks) included:

- The identification and evaluation period, its duration is one week to identify the students and distributed them into two groups(experimental & control).
- The implementation period of the program for four weeks distributed according to the skills that they have to be taught, the sessions were(8) meetings (grouped counseling), two meetings per week because the duration of each session (45 - 50) minutes.
- The post -assessment period is one week, where assessing students in group(post -test of prevention of retardation).

The application procedures

- Preparing the test of the prevention of retardation and the verification of its validity and reliability through the arbitrators' validity, and re-testing reliability.
- the study sample has been divided into two group (experimental & control) were distributed into two equal groups according to gender and age .
- creating a good atmosphere for students for pre-test & the program generally, and the application of the pre- test (pre-measurement) at the two groups.
- Applying the proposed program to develop cognitive skills at methods of prevention of retardation at experimental group.
- Re-applying the test of prevention of retardation (post-measurement) at the members of the two groups (experimental & control) to verify the effectiveness of the proposed program in this study.
- Correcting the lists ,and analyzing the data statistically to verify the validity of the study hypothesis.
- Having conclusions , discussing them and forming recommendations in the light of the results of the study.

The Used Statistical methods in the study

To answer the hypothesis of study ,it was found arithmetic averages, standard deviations of the two groups individuals (experimental & control) ,it was used (T test) to adjust the difference in degrees between the two groups individuals at pre-test, and to adjust the differences in degrees among the individuals of the group itself at both variables (gender & specialization), and then it was used the covariance analysis (Ancova)and Eta square(η^2) to know the extent of the impact.

The results of the study

The equalization of groups: Pre-Test of the prevention of mental retardation

To verify the equalization of the groups ,it was extracted the arithmetic averages, standard deviations of the pre- test according to group variable (experimental ,control), and it was used "T. test" to find Statistical differences between the arithmetic averages as shown in table (1):

Table (1) Arithmetic averages, standard deviations and "T" test according to the group variable at pre-test of the prevention of mental retardation

	The Group	The number	Arithmetic	standard deviation	value of the "T"	Degree s of freedom	Statistica l Significance
Pre-test	Experimental	21	25.19	7.359	2.903	40	.006
	control	21	18.62	7.311			

Table(1) showed that there were statistically significant differences at ($\alpha \leq 0.05$) regarding to the group variable (experimental ,control), and this result indicated the unequal groups at pre-test.

● ***The results of the First Question : What is the extent of the effectiveness of counseling group program for prevention of mental Retardation at cognitive skills among students of Counseling and Special education at Ajloun National University?***

The answer this question, it was found arithmetic averages, standard deviations and modified averages of the performance of the students at the second year at test the prevention of mental retardation regarding to the group variable (experimental, control) as shown in table (2) .

Table (2) Arithmetic averages, standard deviations modified arithmetic averages of the performance of the second year students at the test of the prevention of mental retardation regarding to the Group variable

The Group	Pre-test		Post-test		Modified Average	The number
	Arithmetic	The standard deviation	Arithmetic	The standard deviation		
Experimental	25.19	7.359	39.29	10.130	35.87	21
Control	18.62	7.311	25.52	11.125	28.94	21
The total	21.90	7.972	32.40	12.607	32.40	42

Table (2) showed clearly variances in arithmetic averages, standard deviations and modified averages of the performance of the second year students at the test of the prevention of mental retardation regarding to the group variable (experimental ,control) , and to disclose the significance of the statistical differences between the arithmetic averages ,it was used the covariance analysis(Ancova) as shown in table (3).

Table (3). The results of the covariance analysis (Ancova) of the impact of the group at the students' performance of the second year at the prevention of mental retardation test regarding to the group variable

The source of the Variance	Total boxes	Degrees of freedom	The boxes average	The value of the Statistical (P)	Statistical Significance (h)	The size of the impact
Pre-test (the accompanying)	2331.491	1	2331.491	41.406	.000	.515
The Group	415.575	1	415.575	7.380	.010	.159
Wrong	2196.033	39	56.309			
The modified total	6516.119	41				

It was shown at table (3) that there was a statistically significant difference ($\alpha \leq 0.05$) regarding to the impact of the group , where the value of the p was 7.380 ,and its statistical significance was 0.010,and the differences came in favor of the experimental group .It was found In order to disclose the extent of the effectiveness of the indicative program of education in the prevention of mental retardation, then find Eta square (η^2) to measure the impact size that was (0.159), this means that 15.9% of the variance at the students' performance regarding to counseling program while the remaining variance regarding to other factors that aren't controlled.

● ***The results of the second question: What is the extent of the effectiveness of counseling group program for prevention of mental Retardation at cognitive skills for the experimental group at the gender variable?***

To answer this question, it was found arithmetic averages and standard deviations of the experimental group' performance at the prevention of mental retardation test regarding to the gender variable (male, female), and to disclose the statistical differences between the arithmetic averages ,it was used (T- test) as shown in table (4)

Table (4). Arithmetic averages, standard deviations and "T –test" regarding to the gender variable at the performance of the Experimental Group at the prevention of mental retardation test

Gender	The number	Arithmetic	The standard deviation	The value of "T"	Degrees of freedom	Statistical Significance
Said	11	34.82	10.796	2.903	40	.006
Female	10	44.20	6.877			

Table (4) that there were a statistically significant differences at ($\alpha \leq 0.05$) regarding to gender variable in favor of females.

● ***The results of the Third question: What is the extent of the effectiveness of counseling group program for prevention of mental Retardation at cognitive skills for the experimental group at the specialization variable?***

To answer this question, it was found arithmetic averages and standard deviations of the experimental group' performance at the prevention of mental retardation test regarding to the specialization variable (counseling, special education), and to disclose the statistical differences between the arithmetic averages ,it was used (T- test) as shown in table (5).

Table (5). Arithmetic averages, standard deviations and T-test of the "T" regarding to the specialization variable at the experimental Group' performance at the prevention of mental retardation test

specializa tion	The number	Arithmeti c	The standard deviation	The value of the "T"	Degrees of freedom	Statistical Significan ce
Counselin g	13	36.62	11.110	-1.599	19	.126
Special education	8	43.63	6.844			

Table (5) showed that there weren't any statistically significant differences at($\alpha \leq 0.05$) regarding to a specialization variable.

DISCUSSION AND INTERPRETATION OF RESULTS

The interpretation of the results of the first imperative

The current study showed that there were statistically significant differences at the cognitive skills among the experimental group' individuals and control group' individuals at post- test in favor of experimental group' individuals, this means the effectiveness of the counseling grouped program to develop cognitive skills at the prevention of retardation among the counseling and special education students at the Ajloun National University . The results of this current study agreed with (Al-Jalamdeh,2007) study that showed there were statically significant differences between the averages of the two group(experimental & control) at the parents' awareness scale of mental retardation causes regarding to educational program in favor of experimental group, and regarding to the educational level in favor of high educational level.

These results confirmed that the counseling grouped program helped students in improving the cognitive skills at the prevention of retardation ,it was shown in Table (2) which assured that the arithmetic average of the Experimental Group was ((25.19) at pre-test ,and it became (39.29) and to remove the inequality of the groups at pre- test ,it was used the covariance analysis (Ancova).

There were some cognitive skills that are developed during the program such as the concept of mental retardation, the factors and the causes that lead to mental retardation according to(Al-Rusan, 2010) are the pre-natal , peri-natal and post natal causes, and environmental & genetic causes. It was also noted the development of cognitive skills fields at the factors that

lead to the incidence of retardation such as (Malnutrition disorder, chromosome disorder and pregnancy disorder) and it was showed the development of cognitive skills regarding to the mental prevention ways the pre-natal, peri-natal and post natal stages.

The interpretation of the results of the second imperative:

The current study showed that there were statistically significant differences at the cognitive skills among the experimental group' individuals at post- test regarding to gender variable in favor of the female of the counseling and special education students at Ajloun National University, and table (4) reflected that the arithmetic average at females (44.20 – 60), while males (34.82), the value of $T = (2.90)$, this study agreed with (Al-Jalamdeh, 2007) which assured that there were statically significant differences between averages of the experimental group individuals at parents' awareness scale of mental retardation regarding to gender in favor of mothers. And The current study interpreted this because the females have more attention and desire to develop cognitive skills than male attention.

The interpretation of the results of the third imperative:

The current study showed that there were statistically significant differences at the cognitive skills among the experimental group' individuals at post- test regarding to the academic specialization in favor of special education, the arithmetic average of special education's students is (43.63 - 60), and the arithmetic average of counseling's students is (36.62 - 60) these results confirmed that the students of special education have some cognitive skills of subjects that they had learnt at the university in comparison with students of counseling who do not have these skills and they don't study them at the university, and students of special education have a tendency to develop cognitive skills in the prevention of retardation more than the students of the counseling.

The researcher didn't find any experimental studies at the prevention of mental retardation except (Al-Jalamdeh, 2007), but all studies about mental retardation causes are descriptive survey, thus this study came to develop the cognitive and emotional skills toward the prevention of mental retardation according to the descriptive surveys such as (Brosco, et al, 2006) study, which demonstrated that the prevention of syphilis, lack of the thyroid gland, German rubella lead to reduce mental retardation by 16.5%, (Jellife, et al, 2003) study referred to the impact of congenital deformities in the incidence of disabilities, (Cornel, M, 2002) & (Adair, et al, 2003) studies which showed that the relationship between the lack of nutrition for mothers and children and mental retardation among children.

(Grandal, Barbara, 1974) study assured that the role of the genetic consultation and giving information for the prevention of mental retardation, (Anonvovs, 2004) showed the importance of attention and enough care for the mother at birth for the prevention of retardation.

Therefore, the current study is trying to recruit the cognitive information to develop cognitive skills among the counseling and special education's students, who represent the most attention at the counseling and the prevention of retardation generally, and mental retardation particularly.

The researcher recommends at the current study with the need for further studies that aimed at other categories of society need preventive counseling of mental retardation and other disabilities, such as physical and Autism, emotional, cognitive and audio-visual.

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