

# Emotional Intelligence Differences between the Normal, the Blind and the Deaf in Adolescence in a Jordanian Sample

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## Abstract

This study aimed to identify the Emotional intelligence differences between the normal, the blind and the deaf in a Jordanian sample, in addition to the impact of the gender and type of disability on the level of the emotional intelligence. The sample of the study consisted of 150 male and female students who are normal, deaf and blind in the adolescence. The researcher collected data using Bar-On Emotional intelligence scale which is developed by Alia Al-Oweidi and it is consisted of 60 items distributed into six domains. Results showed the highest mean of emotional intelligence level was for the normal students, the deaf and the blind respectively. The results also showed that there were statistical significant differences attributed to the type of the disability variable but there were no statistical significant differences attributed to the gender variable.

**Keywords:** emotional intelligence, the normal, the blind, the deaf, adolescence.

## 1. Introduction

The concept of emotional intelligence has attracted the psychologists' attention since it has appeared and because it is one of the modern concepts, the researchers paid much attention to check the originality of this concept, to identify its components and its difference from other concepts. This concept has appeared as a result for the control of IQ in the educational field for a long time. The idea of emotional intelligence comes from Socrates' will where he mentioned the concept "know yourself" which indicates the necessity for human to be aware of their feelings (Mohammad, 2005). But the concept of emotional intelligence appeared when Thorndike (1920) addressed the concept of interpersonal intelligence and defined as "the ability to behave wisely in the human relations". A study later presented by Gardner (1983) introduced his theory of multiple intelligence (MI) where two domains of the multiple intelligence theory were linked with the emotional intelligence which was intrapersonal and interpersonal domains. Then, the emotional intelligence and its theory was developed by Goleman (1983) who composed a series of books and articles that addressed the theoretical aspects of the emotional intelligence and its applications in the educational, organizational and interpersonal fields which showed that success in the interpersonal or professional life does not depend on the individual's mental abilities only, but on other abilities called "emotional intelligence". Based on this idea, educators started looking for the relation between the high of the individual intelligence and the degree of the emotional intelligence measured by the tests of emotional intelligence. So they tried to build scales and measurements for the individuals' emotional intelligence within different age categories and Bar-On was the first one who built a scale that measures emotional intelligence in 1988 when he tried to build for emotional intelligence in his PhD dissertation.

Since the deaf and blind students belong to people with special needs, they need emotional and cognitive care that suit their capabilities and mainly the concentration is on the students with special needs in terms of the cognitive, academic and interpersonal aspects without paying any attention to their emotional side despite the fact that this category does not have the same emotional characteristics that others have as the ability to have interpersonal relations with others, the concept of self and expressing feelings, ...etc.

Awad & Shreit (2002) stated through addressing some studies' results that were conducted in the field of visual disability that the individuals with visual impairment:

- 1- Suffer from high behavioral problems and they are less than their peers in academic efficiency and cooperation.
- 2- Suffer from shortage of verbal and non verbal interpersonal skills.
- 3- Suffer from shortage of intrapersonal and interpersonal compatibility.
- 4- Have problems of interpersonal adaptability with their sighted peers.
- 5- Suffer from a decline in self concept and interpersonal maturity plus to an increase in the level of worry and a shortage in the interpersonal competency compared to their visualized peers.

While the individuals with hearing impairment have specific emotional characteristics as: their tendency to have social relation with peers and this explains the deaf success in different societies in establishing their own clubs plus to their marriage from the same category as studies showed that at least 85% of the deaf are engaged to other deaf people; their tendency to isolation and to the individual games that do require groups' participation or specific participation as table tennis. The emotional side should be given sufficient attention because the emotional growth affects positively the other aspects of the personality and so this study tries to answer the following questions:

### *1.1 Problem & Questions of the Study*

The problem of the study is represented by the following two questions:

1. Are there differences in the performance of the normal, deaf and blind students in the Jordanian image of bar - on emotional intelligence: youth version for the age categories of (7-18 years) in a Jordanian sample?
2. Are there differences in the emotional intelligence levels between the deaf, blind and normal students in the adolescence attributed to type of disability and gender variables?

### *1.2 Significance of the study: theoretically and practically*

1. Revealing the emotional intelligence aspects of the deaf and blind students in the adolescence.
2. Identifying the emotional characteristics of the deaf and blind students in the adolescence to their teachers and parents according to the gender and age variables.
3. Providing the teachers with basic information about the components of the students' emotional intelligence at school level to help them dealing with normal, blind and deaf students in the adolescence.
4. Helping the supervisors and teachers to develop strategies and programs to improve and raise the emotional competency of the deaf and blind students.
5. Developing the teachers' training programs so as to include the components of the emotional intelligence in order to help them identifying the nature of the emotional intelligence and its factors and to utilize the different situations and activities to improve the students' skills of emotional intelligence.

### *1.3 The study's justifications*

- 1- Scarcity of the available scales in Jordan concerning the emotional intelligence of the deaf and the blind which have reliability and validity indicators and standards of performance levels.
- 2- Scarcity of the Arab and Jordanian studies and researches that addressed the emotional intelligence scale and its application on the deaf and blind students.

### *1.4 Procedural definitions*

- Emotional intelligence: Bar-On defined it as: “a set of self emotional and interpersonal skills that affect the individual’s total capabilities to adapt to situations and surrounding environmental circumstances. (Bar-On, 2006). And in this study, the procedural definition of Emotional intelligence is: “it is the total grades which the examinee get concerning the emotional intelligence’ domains which include: interpersonal competency, personality, adaptation, and stress management. The degrees for each item range from 1-4 and the highest grade for the previous domains is respectively as follows: 40,24,40,56.

-The deaf: they are the students who lost their hearing ability and so they can communicate only through sign language and they are the students who are registered in the Holy Land Institute for the Deaf/As-Salt for the academic year 2013-2014 aged from 13 to 18.

-The blind: they are the students who can only read and write using Brail Method and they are registered in Abdulla Bin Maktoom Academy for the academic year 2013/2014 whose aged from 13 to 18.

-Adolescence: the period of time for the normal, blind and deaf students in the adolescence whose ages range from 13-18 in the public schools and centers in Jordan?

### *1.5 The study’s objectives*

-To identify the differences in the emotional intelligence between the deaf, blind and the normal students in the adolescence.

- To identify the impact of gender variable on the differences in the emotional intelligence between the deaf, blind and normal students in the adolescence.

- To identify the impact of type of disability variable on the differences in the emotional intelligence between the deaf, blind and normal students in the adolescence.

### *1.6 Limitations of the study*

-This study is limited to the blind students who enrolled Abdullah Bin Maktoom Academy.

-This study is limited to the deaf students who enrolled the Holy Land Institute for the Deaf/As-Salt and Al-Amal School for the deaf in Markah.

- This study is limited to the students whose age ranges from 12 to 17. The study is limited to the students who registered for the academic year 2013-2014.

## **2. Theoretical Frame**

Intelligence Quotient, IQ concept is linked with the cognitive capacities as the capability of linking between concepts, abstract thinking, conclusion and problem solving. But the concept of emotional intelligence is linked with the emotions, general

mood and feelings. And both of mental capability and emotional intelligence control the individual's daily behavior and when these types of intelligence work together efficiently, the performance of the emotional intelligence and the cognitive capability increases.

#### Development of the Emotional Intelligence Concept:

The concept of intelligence was exposed to many criticisms, for example, this concept relied on a set of test for mental capabilities and so the concentration of the critics of the psychometric trend was not for the existence of general factor or multi ones for the intelligence as much as it was on expanding the concept of intelligence so as to include other capabilities in the character and one of these critics was Thorndike(1920)who believes that describing the individual's intelligence needs investigation of three major intelligence which are: abstract intelligence, mechanical intelligence and the emotional one / other educationists consider Thorndike as the first one who pointed to the interpersonal intelligence as one of the aspects of the emotional intelligence as the capability to understand people and deal with them(Boyatis, Goleman& Ree,2000). Wechsler (1939) pointed to the meaning of the emotional intelligence through his conclusion of the existence of no-cognitive capabilities in addition to the cognitive ones as the moody, intrapersonal and interpersonal factors. Wechsler also showed that the non-cognitive capabilities can predict the individual's capability of success in life (Cherniss, 2000).

Seventeen years later, Guilford (1956) presented an advanced model for the Multiple Intelligence that includes linguistic, musical and intrapersonal intelligences. in 1967, this model was developed as he pointed to the behavioral content as a non-verbal information include interpersonal interaction that requires awareness of others' perceptions, ideas, feeling and emotions(Cherniss, 2000). This trend was supported by Gardner in his book "Frames Mind" (1983) where he showed that there was no specific kind of intelligence that was considered the critical factor of success in life but there were multiple intelligences and he pointed to other aspects for the intelligence which are: interpersonal and intrapersonal intelligence (Gardner, 1999).

Recently, a group of psychologists have come up with similar results as they agreed with Gardner that the traditional concepts of intelligence move around a set of linguistic and athletic skills which are beneficial for academic success and some of these psychologists were Sternberg and Salovey who tried to re-discover the concept of intelligence so as to be in compatible with life's requirements. In 1997, Sternberg called for expanding the concept to include the individual's daily life which was known as Interpersonal and Practical Intelligence and this kind of intelligence can predict the individual's performance in daily life better than the cognitive intelligence (Cherniss, 2000).

At the beginning of the 1990s, the psychologists started to be interested in feelings and their role in the individual's thinking and a set of theories appeared as Mayer &Salovey(1990), Goleman, and Bar-On (1997).

At the end of eighties and the beginning of the nineties is the real start of using the emotional intelligence and one of the pioneers who presented this concept was Greenspan (1989) who tried to present a unified model to learn the emotional intelligence in light of Piaget's theories of cognitive growth, psychological analysis, and the emotional learning and according to Greenspan, this learning passes through three levels which are:

1. Somatic Learning
2. Learning Consequence.
3. Representational – Structural learning (Mohammad, 2005).

While the emotional intelligence as Mayer & Salovey (1990) mentioned, it exceeds the concepts which Greenspan(1989) presented because they both did not only look at the emotional intelligence as a process to learn ideas, meaning and emotions but as a set of related capabilities to the emotional, and the process of the emotional information which should be revealed and developed.

Later, Mayer & Salovey (1997) developed this concept to include the ability to realize the emotions, expressing them and integrated them in the thinking process in addition to the emotions' organization (Mayer & Salovey, 1997). Whereas Bar-On (2006) defined the emotional intelligence as: "a set of self and interpersonal emotional skills that affect the individual's total capabilities to adapt with the surrounding circumstances". Goleman (1998) defined the emotional intelligence as: "the individual's ability to realize his own feelings and others' and the ability to monitor his emotions in an appropriate was whether they were related to him or to others". According to Goleman, this concept includes five fields:

- Self Awareness
- Self Regulation
- Motivation
- Empathy
- Interpersonal Skills (Goleman, 1998).

Dulewicz & Higgs (1999) conducted a study to analyze the content of many researchers' concepts of the emotional intelligence as Goleman, 1983 and Mayer & Salovey, 1997 so as to know the actual meaning of this concept. They concluded that the emotional intelligence pointed to: "identifying feelings and employing them to improve performance and achieve organizational goals accompanied by sympathy and understanding of others' feelings which leads to have a successful relation with them" and they believe that concept of emotional intelligence includes five components: "self awareness(individual's knowledge of his feelings and their use in taking decisions), self regulation(the individual's control of his feelings and the ability to postpone fulfilling his desires), motivation (the individual's use of his values and preferences so as to motivate his self and to guide it towards achieving its goals), sympathy (feeling with others, understand others' feelings and to monitor others feelings and conflicts), and interpersonal skills (the individual's ability to understand and control others

emotions through his relation with them and showing love and interest towards them, using the skills of negotiation, building trust and having successful relations plus working within effective teams” (Dulewicz & Higgs, 1999).

It is noted that the concept of emotional intelligence includes a set of abilities which are possible to be changed into competencies as our emotional intelligences pointed to our potential abilities to learn these sub abilities while the emotional competency means the amount which can be transferred from our potential capabilities into a behavior in our life. It is also noted, the concept of emotional intelligence was discussed in terms one of the following trends:

1<sup>st</sup> trend: the emotional intelligence is a as a set of abilities and this trend was adopted by Mayer & Salovey.

2<sup>nd</sup> trend: the emotional intelligence is a as a set of skills and this trend was adopted by Bar-On.

3<sup>rd</sup> trend: the emotional intelligence is a as a set of competencies that can be developed through training and this trend was adopted by Goleman (Ciarrochi, Caputi & Roberts, 2001)

Emotions development:

Human emotions are developed according to age levels as follows:

First: from birth -18 months

The baby starts in the first three or four weeks to smile when he feels safe and comfortable and this is represented by confidence which the child acquires because of his relation with his mother. And before the eight week, he starts to smile to others and in the fourth month he begins to laugh while in the sixth month till the eighth, he learns ways of expressing his feelings as happiness, anger and fear. But in the age (12-15 months), the baby has strong relation with one or two people who take care of him as mother and father. In this period of time, the child feels worry when he is with strangers. It is difficult to the child to control his emotion if his desires are based on things he cannot get so his parents’ role to decrease the number of these depressed situations through creating other situations where the child can achieve his desire. It is important in this stage that the child has the appropriate meaning of self (Di Leo, 1996).

Second: 18 months – 3 years.

In this stage the child starts to be independent to some extent. He starts to recognize things around him, sees results of his behavior. In the second year, the child feels more independent and pays attention to his peers and therefore he starts to be cooperative or aggressive with other children. Rimawi(2003) stated that the child whose age is less than two year has few words to express his emotions and feelings but at the same time he starts to realize the relation between facial expressions and feelings. It is possible for parents in this stage to help the child through talking about their feelings in some situations. And in age 2-3, the child begins expressing his feelings using his own words.



### Third stage: 3-5 years

The child starts doing self- initiations. He learns and develops some interpersonal skills, becomes more aware of his feelings, ideas, time, interpersonal relation and the language. Moreover, he tries to test new abilities in new and different situations. It is worth mentioning here that the child has the ability to play with his peers who can help him facing some challenges with more safety but the child's ability to make friends is considered one of the greatest challenges as he starts creating friendships and developing the ability of distinguishing and favoring the children from the same sex in playing the favorite games. The child has a sense of humor and he starts to feel with others (Di Leo, 1996).

It is possible to sum up the child's emotional growth in this stage, as follows:

1. The child can understand the emotional concepts as anger and embarrassment.
2. The child develops sense of self and positive and negative feelings.
3. The child's ability of self organization is developed and this ability can help the child to share others through controlling and guiding emotional expressions.

### Stage four: 5-12

Adas (2006) states that in this stage the emotional growth includes a number of emotional responses, for example, the child starts to have some emotional reactions towards some values as brotherhood and respecting others. In this stage, the child starts to know about the controls that guide businesses, the concept of justice and therefore, it is possible for the child of six who passed naturally by the previous stages to have a health relation with his parents which is mainly free of anxiety and frustration. The child in this stage has a well understanding of feelings and emotions plus the ability to express them as well.

Between age (7-8), the child's awareness of his life increases and he becomes more close to his ideas and emotions. He starts comparing himself to his peers and becomes more interested in his abilities concerning what he can or cannot do.

The emotional growth in this stage can be summarized as follows:

- The child's sense of self is developed; the child of 8 tends to use psychological descriptions as preferences for example, he starts to love and hate a specific thing or he describes his feelings towards a situation.
- The child's ability of interpersonal cognition and interpersonal and emotional growth is increased through his school where there are opportunities to improve characteristics that relate to the interpersonal fields through schools activities.

It should be pointed to the importance of the school's role in the child's emotional growth by teaching him the competition, developing his sense of self and self-esteem and the teacher can develop the child's emotions by presenting his experience to the child.



Fifth stage: adolescence (12-18)

Undoubtedly, the adult lives a strong emotional life that due to the Physiological and physical changes that he passed through in this period of his life.

In the age of 12, the adult acquires independency and he has the ability of solving problems. There is interest in the adult's ability of controlling himself in this age. The adult's self confidence can change rapidly when his id exposed to colleagues' pressure or to other people influence that he considered as a model in his life so he becomes very sensitive to any indicator implies people's rejection to him (Di Leo, 1996).

In the same context, Adas (2006) pointed that adults varied in their behaviors and this due to the difference of their physical growth; an adult could behave as a mature in one situation and a child in another one.

The adult tries to plan for his future so he becomes less care of others' criticism, advice and words and his tolerance ability increases. Furthermore, he has more confident in his opinions and ideas and his interpersonal behavior's skill increases plus he can control himself and organize his affairs. The adult is influenced by his friends more than his parents and he may face some emotional problems as: low self-esteem, worry and stress (Rimawi, 2003).

Concept of visual disability:

Visual disability:

The degree of the government's care of the disabled people including the blind is considered an indicator of the society development through education and rehabilitating them and integrating them in their society. The disability as an idiom means the person's lack of ability to respond or to adapt to the environment as a result of behavioral, or mental, or physical problems which limits his ability to perform his natural role in the society compared to others from the same age and sex (Hassan, 1995:54). Disability represents a form of deficiency types so who has this disability feels the loss of one of his organs or an important ability (Minshawi&Abdkareem, 1995:51). There are other educational definitions that stress the necessity of presenting educational services to the people with visual disability including preparing curriculum that suit them plus teaching methods that are appropriate to these curriculum as Braille method (Hallahan. D, Kuffeman. J, Pullen, 2009).

Emotional characteristics of people with visual disability:

Bibilawi (2001) mentioned a set of emotional characteristics that distinguish the people with visual disability from others as:

- The disability affects negatively their concept of self and their psychological health.
- Bad intrapersonal and interpersonal compatibility.
- Feeling of shortcoming and depression
- Lack of feeling of security and safety.

- Suffering from psychological problems as stress.
- The use of different defensive tricks.
- Lack of self-confidence.

Concept of hearing disability:

Hearing disability can be defined from different points of views:

- Medical point of view:

The person with hearing disability is the individual whose auditory system is damaged and a physical disorder prevents him to use it in the public life normally and this means that the damage has affected the outer, or the middle, or the inner ear.

- Educational point of view:

The person with hearing disability is the person who cannot rely on hearing sense to learn the language or to get benefit of different educational programs presented to the normal who can hear and he is in need to teaching methods help him to compensate the hearing sense. This person's ability to talk with others is affected if the disability happened before learning a language.

- Hearing –impaired person: is the person who has lost the hearing ability that could be compensated using auditory aids that enable him to learn just the same as the normal people
- According to the National Association for the Deaf in USA:

Person with hearing disability: is the individual who has lost 70 DB and more from his hearing ability that prevent him to use his auditory system in learning or understanding the language.

Person with impaired hearing: he is the individual who suffers from the loss of less than 70 DB and more than 34 DB from his auditory ability and he needs to other teaching methods to enable him understand the speech and specialized educational services to learn with or without using auditory aids(Dirbas,2007).

Emotional characteristics of the people with hearing disability:

Marschar(1997) pointed to a number of emotional characteristics that distinguish the deaf from others as :

- Show a high degree of egocentrism.
- Misunderstand others' behaviors so they become aggressive.
- Ignore others' feelings.
- Suffer from emotional stability.
- Negativity and lack of desire and interest in life.

- Doubting others and not trusting the people who can hear.
- More depressed.

### 3. Previous studies

The studies which were reviewed by the researcher could be classified into domains:

1<sup>st</sup>: Arab and foreign studies that relate directly to the subject of this study which is the relation between the emotional intelligence and the blind and deaf students'. Concerning this issue, the researcher found two Arab studies.

2<sup>nd</sup>: Arab and foreign studies that relate indirectly to the subject of this study which is the emotional intelligence and the programs that based on this type of intelligence.

1<sup>st</sup>: Studies relate directly to the subject of the study

Al-Ajami's study (2006) aimed at revealing the differences in the intrapersonal, emotional and interpersonal intelligence between the blind students and low achievers in the Gulf countries. The sample of the study consisted of 108 blind students whose ages range from 10 to 15 years. To achieve the study's objectives, the researcher developed an instrument measures the intrapersonal, emotional and interpersonal aspects. He checked out the validity and the reliability of this instrument. Results showed statistical significant differences in the emotional and intrapersonal intelligence in favor of the males and statistical significant differences according to the interaction between gender and achievement in favor of the males.

Al-Farah's study (2006) entitled by: "the emotional compatibility of the people with visual, physical and hearing disability and its relation to gender and sex variables", aimed to identify the level of emotional compatibility of the sample and its relation to gender and age variables. The researcher developed a scale to measure the emotional compatibility and applied it on sample consisted of 210 people with disability. Results showed the people with visual disability have better degrees of positive emotional adaptability than people with physical and hearing disability. Results also showed significant differences between the people with hearing and visual disabilities in the depression degrees in favor of the people with physical disability, the females' degree of anxiety was higher than the males and the males' degrees of feeling happy and self-esteem was higher than the females.

The study of Al-Dahir(2012) aimed at identifying the differences in the emotional intelligence between the deaf and the blind adults and teenagers. The members of the study consisted of 104 male and female adult and teenagers. The researcher built a scale consisting of four sub-fields (intrapersonal competency, interpersonal competency, emotional guidance and control, sympathy). The scale was applied after its validity and reliability had been checked. Results showed lack of statistical significant differences at the level of significance ( $\alpha \geq 0.05$ ) in the emotional intelligence between the deaf and the blind, lack of statistical differences at the level of significance ( $\alpha \geq 0.05$ ) in the emotional intelligence between the deaf

and the blind attributed to gender variable, lack of statistical differences at the level of significance ( $\alpha \geq 0.05$ ) in the emotional intelligence between the deaf and the blind attributed to age variable, lack of statistical differences at the level of significance ( $\alpha \geq 0.05$ ) in the interaction of the emotional intelligence between the type of disability and age or between the gender and age or between the type of disability and gender and age variables. But the results also showed statistical significant differences of the interaction between the type of disability and the gender in favor of the females.

Second: studies with indirect relation to the subject of the study:

Bar-On & Orme (200-) conducted a study aimed to show the ability of the emotional intelligence to predict the students' academic success. The researchers applied Bar-On Emotional intelligence: youth version on a sample consisted of 231 students and measured the students' academic achievement in two ways: self-evaluation through asking respondent to provide an evaluation to his academic level and teachers' evaluation of the students through estimating the students' academic level so as to identify and determine the ability of emotional intelligence to predict the academic performance. Results showed significant relations between emotional intelligence and the academic achievement (0.88). Results also showed the emotional intelligence ability to differentiate between the distinguished and normal students and between the students with learning difficulties according to teachers' estimations and the scale that has the highest ability of prediction was the total degree of the emotional intelligence.

Radi's study (2001) aimed at identifying the emotional intelligence and its relation to academic achievement and the ability of creative thinking of the university students in Egypt. The sample of the study consisted of 289 male and female students. The researcher prepared a test of emotional intelligence and used a test of creative thinking ability. Results revealed statistical significant differences concerning all the domains of sympathy, relations' perception and motivation in favor of the females and there was a correlation between academic achievement and the total degree of emotional intelligence.

While Al-Yasin's study (2002) aimed to detect the difference in the emotional intelligence efficiency between the excellent and the no distinguished students in cognitive field. The study was applied on a sample consisted of 313 female students in the secondary stage in Kuwait. The researcher used Bar-On scale of emotional intelligence. Results revealed lack of statistical significant differences between the groups of the study in the emotional intelligence and its dimensions.

Al-Qobaisi's study (2007) aimed to examine the effect of a training program in the psychological and interpersonal assistance in developing the blind's creative thinking. The sample of the study consisted of 30 blind male and female students whose age ranges from 11 to 13. The researcher prepared the scale and the training program of the psychological and interpersonal assistance while the creative thinking skill of the blind was prepared by Kheirallah. Results showed statistical significant differences between the means of the students in the pre and post test of the creative thinking in favor of the pretest and there were statistical significant differences between the male and females in the pretest of the creative

thinking skill in favor of the males whereas there were no statistical significant differences between the males and females according to the originality domain and there were no statistical significant differences between males and females in the post test according the creative thinking skill test. Results also showed statistical significant differences between the means of the males before and after creative thinking domains' program in favor of the post application of the program and there were statistical significant differences before and after the application of the program concerning the creative thinking test's domains in favor of the pre-application. Additionally, there were statistically significant differences between the female's degrees before and after the program concerning the domains of the interpersonal and psychological assistance's scale in favor of the post application of the scale while there were no statistical significant differences between the females' degrees before and after the program regarding the domain of friends' assistance but their differences.

Al-Mola's study (1969) aimed to identify the extent of difference in the interpersonal intelligence and study readiness between the deaf and normal hearing students. The sample of the study consisted of 120 deaf and normal students aged (3-6 years) of the low and moderate interpersonal and economic level. The researcher applied Vinland Interpersonal Maturity Scale and Hiskey – Nebraska. Results revealed differences between the deaf and normal hearing students in the interpersonal maturity and interpersonal and psychological readiness in favor of the post application.

#### Summary of the previous studies

- The number of the studies that related directly to the subject of this study was very few.
- Most studies addressed emotional and intrapersonal intelligence and the emotional compatibility.
- Most studies addressed the relation between the emotional intelligence and the academic success.
- Most studies addressed the normal and talented and students with learning difficulties.

This study varies from other studies in addressing the people with visual and hearing disability and comparing between them in the emotional intelligence in the adolescence. This study also examines the effect of gender and types of disability variables in the emotional intelligence as most previous studies addressed the emotional intelligence subject of the normal, talented and students with learning difficulties.

## **4. Method procedures**

### Population & sample of the study

The population of the study consisted of:

- All the students with hearing disability who are registered in Holy Land Institution of the Deaf at As-salt city and Al-Amal school for the deaf at Marka. The sample of the study which consisted of 0 male and female students were teenagers whose ages ranges (14-18).
- All the blind students in the Blind Academy whose number is nearly 200 aged (14-18)
- 150 normal students enrolled in Al-Karama Secondary school for girls and Yarqa Secondary school for boys for the year 2014/2015. The sample consisted of 50 male and female students. Table 1 illustrated the distribution of the sample of the study according to the variables.

**Table 1.** Frequencies and percentages according the study's variables

	Categories	Few.	Percent.
Type of disability	Normal	50	33.3
	Blind	50	33.3
	Deaf	50	33.3
Gender	Male	75	50.0
	Female	75	50.0
	Total	150	100.0

#### The study's instrument

Bar-On scale (Jordanian copy of Dr. Alia Awedi) appendix (1) was used. The instrument was built through the following steps:

##### 1. Preparing the initial copy of the scale:

The scale of translated into Arabia and both copies (English & Arabic) were presented to twp experts in the fields of psychology and special education to express their opinions towards the first copy of the scale. The scale was also presented to a specialized female in Arabic language to check it in terms of language and grammar. Her notes were taken into account.

#### Validity & reliability of the scale of its original and translated copy:

To check validity and reliability of the original copy of the scale, a sample consisted of 9172 was chosen. Construction validity was check through the relation between the emotional intelligence scale consisted of 60 items and the abbreviated one consisted of 30 items, the two scales are applied on a sample consisted of 49 respondents in two separate sessions with a week in-between and correlation coefficient between the two scales ranges (0.56 -0.88). The reliability coefficients of the scale were checked using Cronbach Alpha (0.65-0.87) and the test was applied again on a sample consisted of 60 respondents after three weeks of the first test and its correlation coefficient was between (0.77-0.88). Concerning this study, Bar-On scale of emotional intelligence (translated & abbreviated copy) was used as an equivalent instrument to Bar-On of emotional intelligence: Youth copy which consisted of 60 items.

#### Validity & reliability of the scale (Jordanian copy)(on a pilot study:

To check the validity of the scale, the researcher applied the scale on a sample consisted of 116 students. The test's validity was checked through Content, Discriminate, internal and arbitrators' validity. The researchers also calculated reliability of the scale (Jordanian copy) by Cronbach Alpha and retesting methods. Moreover, the researcher calculated the reliability of the scale applied on the sample of the study (the deaf and the blind), and the results were as follows:

#### The instrument's reliability

To check the instrument's reliability, (Test – Retest) method was used and applied after two weeks on a group of students out of the sample of the study consisted of (30) students. Pearson correlation coefficient of the students' estimations was calculated twice on the instrument as whole. Reliability was also calculated using Cronbach Alpha for internal consistency and table 1 illustrated internal consistency according to Cronbach Alpha and reliability of retesting of the fields and the instrument as a whole and all the values were considered appropriate for the purpose of the study.

**Table 2.** Internal consistency of Cronbach Alpha & retesting of the fields and the total degree

Field	Retest	Internal consistency
Intrapersonal competency	0.84	0.75
Emotional competency	0.87	0.73
Adaptability	0.83	0.72
Stress management	0.88	0.70
General Mood	0.86	0.78
Positive impression	0.84	0.73
Total degree	0.86	0.84

#### *The procedures*

Bar-On scale (Jordanian copy) was applied on the sample of the study with the help of the researcher at Abdullah Bin Maktoom Academy for the Blind. The purpose and the scale were introduced and the items of scale were read for the blind that were given the sufficient time to record their answer with the help or some supervisors. The scale was applied on ten students daily for a week. And according to the deaf, the purpose of the study and the items of the scale were introduced and clarified through the sign translators at the school. The scale was applied for a week. Regarding the normal students, the teacher of the class introduced the scale and its items.

#### *The design*

The means, standard deviations, T test to reveal effect of variables, ANOVA and Scheffe ' Test for Hoc Comparisons.



## 5. Results

First question: Are there difference in the performance of the normal, deaf and blind students on the Jordanian copy of Bar-On scale: Youth Vision for the age categories (7-18) in a Jordanian sample?

To answer this question, the means and standard deviations of the levels of emotional intelligence between the normal, deaf and blind students were calculated, and the following table illustrated this.

**Table 3.** Means and standard deviations of the emotional intelligence levels of the deaf, blind and normal in adolescence are in a descending order according to means.

Rank	N	Field	Mean	Std	Level
2		Emotional competency	3.24	.370	
5		General Mood	3.24	.411	
3		Adaptability	3.07	.449	
6		Positive impression	2.91	.473	
1		Intrapersonal competency	2.76	.352	
4		Stress management	2.47	.470	
		Total degree	2.97	.275	

Table 3 showed that means ranged between (2.47- 3.24) as the emotional competency and the general mood fields got the highest means (3.24) while stress management field came last with a mean (2.47). The mean of the instrument as a whole was (2.97) (see appendix 1)

Second question: “Are there differences in the levels of emotional intelligence between the normal, deaf and blind students in the adolescence according to gender and type of disability variables?”

To answer the question, Means and standard deviations of the emotional intelligence levels in adolescence were calculated according to gender and type of disability variables, and table 4 illustrated this.

**Table 4.** Means and standard deviations of the emotional intelligence levels in adolescence were calculated according to gender and type of disability variables

		Male			Female			Total		
		M	Std	N	M	Std	N	M	Std	N
Intrapersonal competency	Normal	2.74	.382	25	2.76	.340	25	2.75	.358	50
	Blind	2.69	.234	25	2.75	.289	25	2.72	.262	50
	Deaf	2.71	.428	25	2.89	.399	25	2.80	.420	50
	Total	2.71	.354	75	2.80	.347	75	2.76	.352	150
Emotional competency	Normal	3.52	.199	25	3.47	.196	25	3.50	.197	50
	Blind	3.16	.224	25	3.01	.380	25	3.09	.318	50
	Deaf	3.01	.434	25	3.25	.367	25	3.13	.416	50
	Total	3.23	.369	75	3.24	.374	75	3.24	.370	150
Adaptability	Normal	3.27	.212	25	3.25	.222	25	3.26	.215	50
	Blind	2.83	.516	25	2.85	.410	25	2.84	.462	50
	Deaf	2.98	.531	25	3.23	.470	25	3.11	.511	50
	Total	3.03	.475	75	3.11	.420	75	3.07	.449	150
Stress management	Normal	2.69	.423	25	2.47	.458	25	2.58	.449	50
	Blind	2.60	.584	25	2.48	.418	25	2.54	.506	50
	Deaf	2.14	.249	25	2.41	.473	25	2.28	.397	50
	Total	2.48	.496	75	2.45	.445	75	2.47	.470	150
Mood General	Normal	3.43	.285	25	3.33	.280	25	3.38	.284	50
	Blind	3.35	.313	25	3.16	.504	25	3.25	.426	50
	Deaf	2.97	.435	25	3.18	.448	25	3.07	.449	50
	Total	3.25	.400	75	3.22	.423	75	3.24	.411	150
Positive impression	Normal	3.17	.485	25	3.09	.498	25	3.13	.488	50
	Blind	2.88	.386	25	2.83	.310	25	2.85	.348	50
	Deaf	2.69	.517	25	2.81	.470	25	2.75	.493	50
	Total	2.92	.501	75	2.91	.446	75	2.91	.473	150
Total degree	Normal	3.18	.155	25	3.09	.183	25	3.14	.173	50
	Blind	2.96	.190	25	2.87	.244	25	2.91	.222	50
	Deaf	2.76	.300	25	2.98	.332	25	2.87	.332	50
	Total	2.97	.279	75	2.98	.273	75	2.97	.275	150

Table 4 illustrated an apparent variance in the means and standard deviations of the levels of emotional intelligence in adolescence attributed to the difference of gender and type of disability variables. To reveal the significant differences between the means, MANOVA and ANOVA tests were used as it is illustrated in tables (5,6).

**Table 5.** MANOVA Test of the gender and type of disability variables' effect in all fields of emotional intelligence levels in adolsence

Source of variance	Fields	Sum of seq.	Fd	Mean of seq.	F	Siq.
Gender	Intrapersonal competency	.267	1	.267	2.168	.143
Hottelling =.051 =.314	Emotional competency	.005	1	.005	.044	.834
	Adaptability	.256	1	.256	1.482	.225
	Stress management	.017	1	.017	.081	.777
	General Mood	.023	1	.023	.148	.701
	Positive impression	.002	1	.002	.008	.928
Category	Intrapersonal competency	.149	2	.075	.605	.547
<b>Wilkes=</b> .506 =.000	Emotional competency	5.081	2	2.541	24.208	.000
	Adaptability	4.560	2	2.280	13.185	.000
	Stress management	2.704	2	1.352	6.541	.002
	Mood	2.405	2	1.202	7.736	.001
	Positive impression	3.807	2	1.904	9.418	.000
Error	Intrapersonal competency	18.009	146	.123		
	Emotional competency	15.322	146	.105		
	Adaptability	25.250	146	.173		
	Stress management	30.172	146	.207		
	Oo	22.694	146	.155		
	Positive impression	29.508	146	.202		
Total	Intrapersonal competency	18.426	149			
	Emotional competency	20.408	149			
	Adaptability	30.066	149			
	Stress managment	32.893	149			
	General mood	25.122	149			
	Positive impression	33.316	149			

Table 5 showed the following:

- Lack of statistical significant differences at ( $\alpha=0.05$ ) attributed to gender variable in all fields.
- There were statistical significant differences at ( $\alpha=0.05$ ) attributed to type of disability in all fields except intrapersonal competency field, and to reveal the statistical differences between the means, Scheffe' Test for Post Hoc Comparisons was used as it is illustrated in table 7.

**Table 6.** Two Way ANOVA Analysis of gender and type of disability effect in the total degree of the emotional intelligence levels in adolescence

Source of variance	Sum of seq.	Fd	Mean of seq.	F	Siq.
Gender	.007	1	.007	.112	.738
Type of disability	2.012	2	1.006	15.824	.000
Error	9.281	146	.064		
Total	11.300	149			

Table 6 showed the following:

- Lack of statistical significant differences ( $\alpha=0.05$ ) attributed to the gender variable as F was (0.112) and siq (0.738).
- There were statistical significant differences ( $\alpha=0.05$ ) attributed to type of disability variable as F value was (15.824) with siq(0.000). To reveal the differences between the means, Scheffe' Test for Post Hoc Comparisons was used as it is illustrated in table 7.

**Table 7.** Scheffe' Test for Post Hoc Comparisons of the effect of type of disability

		M	Normal	Blind	Deaf
Emotional competency	Normal	3.50			
	Blind	3.09	*.41		
	Deaf	3.13	*.37	.05	
Adaptability	Normal	3.26			
	Blind	2.84	*.42		
	Deaf	3.11	.15	*.27	
Stress management	Normal	2.58			
	Blind	2.54	.04		
	Deaf	2.28	*.30	*.26	
Mood General	Normal	3.38			
	Blind	3.25	.13		
	Deaf	3.07	*.31	.18	
Positive impression	Normal	3.13			
	Blind	2.85	*.28		
	Deaf	2.75	*.38	.10	
Total degree	Normal	3.14			
	Blind	2.91	*.22		
	Deaf	2.87	*.26	.04	

\* significance at. ( $\alpha 0.05 =$

It is clear from the previous table the following:

- there are statistical significant differences at the level of significance ( $\alpha=0.05$ ) between the

normal in one hand and the deaf and blind on the other hand in favor of the normal people in the emotional competency, positive impression and the total degree.

- There are statistical significant differences at the level of significance ( $\alpha=0.05$ ) between the blind in one hand and the normal and the deaf on the other hand in favor of the normal and deaf people in adaptation.

- There are statistical significant differences at the level of significance ( $\alpha=0.05$ ) between the deaf in one hand and the normal and the blind on the other hand in favor of normal and the blind in stress management.

- There are statistical significant differences at the level of significance ( $\alpha=0.05$ ) between the normal and the deaf in favor of the normal in the general mood.

Results' discussion results concerning the first questions: "Are there differences in the performance of the normal and deaf and blind students in the Jordanian copy of bar –On scale: Youth version of emotional intelligence of the age categories (7-11) in a Jordanian sample?"

Results revealed differences infavour of the normal students with a higher mean than The deaf and blind students and this agrees with the results of the studies of (Al-Ajami,2006 & Al-Fatrah, 2006). This result is logical and it agrees with the previous Studies and the theoretical literature regarding the deaf and blind students' emotional And interpersonal intelligence; the deaf tend to isolation and they have less Interpersonal interaction with the normal compared with the deaf. Additionally, the Deaf are more vulnerable to psychological problems, anxiety and psychological stress than the blind which affect their performance in the emotional intelligence scale.

Results concerning the second question: "Are there any differences in the levels of emotional intelligence between the blind, deaf and the normal students in the adolescence attributed to the type of disability and gender variables?"

Results showed statistical significant differences attributed to ender variable in all the fields except the intrapersonal competency and this result agrees with study of Al-Mola(1996) as adolescence has its own privacy to the normal people in terms of physical, emotional and interpersonal changes for both sexes and in the case of losing any sense, the impact of this age of period is greater especially in the emotional intelligence aspect. Therefore, there were no differences in the level of emotional intelligence attributed to gender variable. This result disagrees with the result of Radi's study which was in favor of the females and this contrast is logical because the sample was normal university students while the current study's sample was the deaf in the adolescence. Moreover, this study agrees with Dahir's study(2012) in terms of lack of statistical significant differences attributed to the type of disability and gender variables as there was a compatibility in the sample (the deaf, the blind) regardless the difference of the instrument's domains that measures the emotional intelligence and the different levels of age.

## 6. Recommendations

- Conducting other studies related to emotional. Intelligence of the blind and the deaf.
- Preparing training programs concerning developing emotional intelligence of the deaf and the blind.
- Conducting studies concerning the deaf and the blind in the adolescence.

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