

Original Article

Psychosocial And Academic Adjustment Among Visually Impaired And Sighted Female Adolescents.

Azza Medhat Mansy ⁽¹⁾ Zeinab Abd El Halim Osman ⁽²⁾ Enayat Abd El Wahab ⁽²⁾

- 1 Lecturer At Psychiatric Nursing Department, Faculty Of Nursing, Damanhour University. Egypt
- 2 Professor Of Psychiatric Nursing Department, Faculty Of Nursing, Cairo University. Egypt
- 3 Professor Of Psychiatric Nursing Department, Faculty Of Nursing, Cairo University. Egypt

*Corresponding author: Azza Medhat Mansy, Lecturer At Psychiatric Nursing Department, Faculty Of Nursing, Damanhour

Abstract

Healthy adolescent development is a complicated and dynamic process that calls for loving and supporting communities, peers, and families. Blindness can affect adolescent's quality of life, as a temporary or ongoing physical, mental health, intellectual, or sensory disability, Well-adjusted teenagers are those who don't jeopardize their health and safety, feel comfortable with family members and peers, have reasonable positive self-esteem. This study designed to evaluate psychosocial and academic adjustment among visually impaired and sighted female adolescents. A descriptive comparative design was used in this study in two settings El-Noor and Amal school for the Blind female and El Sanya prep /secondary school. A purposive sample of 120 female adolescents (60 with visual impairment and 60 sighted adolescents) was selected. Two tools were used to measure the current study variables Structured Adolescents general profile questionnaire and adolescents' adjustment scale. Statistical significance differences were found between the studied VI and sighted female adolescents as regards total adjustment and it's subscales except for personal and family adjustment. This study clearly concludes that adjustment during adolescents. Also, visual impairment has no impact on adolescents' adjustment. Educational programs should be done for fostering adjustment.

Key words: Adolescence, Adjustment, Blindness

Introduction

Because adolescence is a crucial developmental stage, it is highlighted that there is a strong correlation between self-esteem and a sense of disability. This interaction has a substantial impact on blind teenagers' psychological and social adjustment as well as their academic accomplishment. Adolescence is defined as the time of psychological development when commitment to one's friends, family, and community as a whole develops. It is a time of physical and psychological maturation as well as social adjustment ⁽¹⁾. When teenage growth is effective, the outcome is a physiologically mature person who is able to build strong connections and has the cognitive and psychological capabilities to handle the rigors of adult life ^{(2).}

Vision is a vital mean of acquiring information from the environment. Lack of vision can severely limit a person's ability to experience the world, leading to dependency that have an impact not only on the person with the impairment but also on their family and the community. (3) Blindness is defined clinically as the absence of sense of light. Legal blindness is a condition that can range from having no ability to see light to still having some vision. ⁽⁴⁾ Adolescent female students who are blind are clearly at a disadvantage since it is difficult for them to grow normally in terms of their social, emotional, and cognitive capacities. They suffer several losses, including those related to their sense of self-worth, bodily integrity, mobility, activities of daily life, leisure, careers, and personal independence, in addition to social competence. ⁽⁵⁾

Visual impairment is highly prevalent all over the world. Over 40 million people globally have worsening vision, and 80 percent of them reside in developing nations. In the United States, there are about 65 million blind people.



45 million of the 314 million visually impaired persons on the planet are blind. ⁽⁶⁾ In Egypt the prevalence of low vision in all ages is 3.1% that is nearly equal to 2.3 million of people. Blindness affects 1.1% of the population, or roughly 737 000 individuals. By 2020, there will be over a million blind people in Egypt if appropriate measures are not taken.⁽⁷⁾ According to WHO estimates from 2012, 148 million people would be blind worldwide and 110 million people with limited eyesight would be at risk of being blind. Around 90% of those who are blind or visually impaired live in poor nations.⁽⁸⁾

Blindness can limit an adolescent's ability to carry out one or more essential daily tasks due to physical, mental health, intellectual, or sensory impairment. Whether temporary or permanent, these impairments can have a significant impact on an adolescent's quality of life.⁽³⁾ Thus, it is challenging for blind females to develop normally on the levels of social, emotional, and cognitive development.⁽⁵⁾In addition, low self-esteem, lack of independence, and missed opportunities in the workplace and in education.⁽⁹⁾ Thus, students with Visual impairment need identifiable instructions to encourage the development of social skills, independence, perceived competence, self-determination and adjustment. ⁽¹⁰⁾

Adjustment to vision loss involves modifying one's self concept and aspirations to take into account the practical limitations imposed by the condition, as well as learning new skills that are consistent with one's personal resources. Adjustment is linked to reduced levels of depression and particular personality traits, such as more conscientiousness and lower levels of neuroticism. It is also linked to the severity of visual loss, social support, extraversion, and cordiality.⁽¹¹⁾ Adjustment to visual impairment is believed to come after these initial phases of grief or to be a continuous process rather than a definitive conclusion.⁽¹²⁾ Accordingly, adjustment supports self-initiated growth and development in terms of the intellectual, emotional, social, physical, and vocational components. Personal and emotional adjustment, home adjustment areas.⁽¹³⁾

Emotional adjustment implies an individual's capability to communicate his feelings appropriately and at the appropriate moment. as emotions play an important role in controlling and directing one's behaviour and providing a definite shape in his personality make up this requires individual's balanced emotional development and proper training in the outlet of emotions.⁽¹⁴⁾ Social adjustment is attaining balance in interpersonal interactions, which is frequently made possible by the effective use of social skills. A person's attempt to fit in with the norms, values, and requirements of a society in order to be accepted is referred to as social adjustment.⁽¹⁵⁾

Academic adjustment is defined as the ability of student to achieve adjustment with learning environment and reaching a state of satisfaction on his performance, colleagues, teachers and the environment as a whole. ⁽¹⁶⁾ Adolescents confront particular difficulties in fostering a supportive school environment and culture that fosters students' academic growth. ⁽¹⁷⁾ Positive academic behaviors including attendance, involvement in class, and homework completion may be influenced by social norms and academic norms, that represents group agreement on the frequency and perceived appropriateness of positive behavioral involvement in school. ^(18&19)

Family adjustment can be defined as solving familial setbacks and the extent of bliss. The ability to adjust, cope and relate with family members that may detect the extent of satisfaction, warmth, support, motivation and cooperation within family. Members of the family have the correct opportunity to meet their requirements when the home and family environment is peaceful, cordial, and welcoming, encouraging, loving and peaceful family environment help the adolescents for their home adjustment. ⁽²⁰⁾

For nurses; to better comprehend the process of adjusting to vision loss, it will be helpful to identify the variables connected with adjustment and their respective roles. Identifying such factors will help psychiatric mental health nurse to recognize adolescents who may experience psychosocial burdens as a result of reduced adjustment as well as helping to spot any possible barriers to the successful implementation of interventions for visually impaired adolescents. Additionally, it is believed that the results of this study would advance nursing practice and research by establishing evidence-based data and enhancing the quality of adolescent care.



Nurses must identify the stress management techniques used by young people with visual impairment, as well as ways to help them cope more effectively. As a part of in-service education, organize seminars, workshops, and other educational programs for staff nurses to increase their knowledge of coping mechanisms for teenagers with visual impairment and to assist blind children in choosing the appropriate courses of study and careers based on their learning preferences. ⁽²¹⁾ Profiling role with the same disability who consider themselves to be excellent athletes and sharing information about those people who assist alleviate feelings of isolation by educating kids about others who have the same handicap. ⁽²²⁾ Also, observing the young person's mood, behavior, and interactions with peers, family, friends, and other people to achieve a comprehensive assessment of the factors contributing to the current difficulties experienced by the young person and their family. ⁽²³⁾

Aim of the study

This study aimed to assess psychosocial and academic adjustment among visually impaired and sighted female adolescents.

Research Questions

- 1. What's the level of psychological adjustment among visually impaired and sighted female adolescents.
- 2. What's the level of social adjustment among visually impaired and sighted female adolescents.
- 3. What's the level of academic adjustment among visually impaired and sighted female adolescents.
- 4. What's the difference between psycho social and academic adjustment among visually impaired and sighted female adolescents.

Research design

A descriptive comparative design was utilized in this study. A descriptive comparative research design is usually field study in which the independent variable is already in existence, and the sample is selected on the basis of the independent variable. The comparative design is distinguished from the quasi ex-perimental design by not having researcher manipulation of the independent variable (24).

Setting

The study was conducted in two settings. The visually impaired female adolescents were recruited from El-Noor and Amal school for the Blind female which follow El-Noor and EL-Amal Association, affiliated to the Ministry of Social Solidarity which sited in Masr algedida at Cairo governorate. The school follow the ministry of education.

Sighted female adolescents were recruited from governmental preparatory and Secondary School (El Sanya prep /secondary school) at El Sayeda Zeinab, affiliated to The Ministry of Education.

Subjects

A purposive sample of 120 female adolescents (60 with visual impairment and 60 sighted adolescents) was selected from the above-mentioned settings.

Visually impaired female adolescents was selected according to the following criteria, age from 12-19 years, visually impaired (total blind and low vision) and excluding students with additional disabilities or chronic illness.

Sighted female adolescents inclusion criteria was: age from 12-19 years, without any vision problems, and excluding those with chronic illness and disabilities.

Tools of data collection

Three tools were used to measure the current study variables.

1- Structured Adolescents general profile questionnaire



It was used to obtain the required data from the selected adolescents such as age, year of education, type and onset of visual impairment, living condition, place of residence, number of family, family rank, parental education and family income etc...

2-Adolescents adjustment scale.

The scale was developed by researcher After reviewing literature. It was designed specifically to measure adolescents' adjustment. The scale consists of 72 items, divided into 5 subscales, (personal and emotional, physical, family, social, school) adjustment.

A- Personal and emotional adjustment

Consists of 16 items ordered from (1-16) which reflect self-esteem, happiness, hopefulness, anxiety and nervousness, problem solving ability, response to painful situations.

B- Physical adjustment

Consists of 13 items ordered (17-30) which reflect general health, body fitness, body image, existence of any habits, any symptoms that reduce her activity.

C- Family adjustment

Consist of 8 items ordered as (31-38) which reflect relation with family, cooperation, proudness, happiness, satisfying with family, and it's economic status.

D- Social adjustment.

Consists of 14 items ordered as (38-51) that reflect social relationship, love and belonging to friends, social and recreational engagement with others, socialization and Competition ability with colleagues.

E- School adjustment

Consists of 21 items ordered as (52-72), which reflect to what extend the students help, appreciate, love his colleagues, how students perceive their teachers, materials, achievements, school activities.

Each item of the questionnaire rated by the student on three-point Likert scale from 1 (no), 2 (sometimes), 3 (yes). And reversely for the negative statements (13,14,15,16,23,24,25,26,27,28,29,30,47,48,49,50,51,56,58,66,69,72).

Validity and reliability

Five members of a team of professionals in psychiatric nursing and medicine received the instruments. The tool was changed in response to the panel's assessment of the suitability of the content, the grouping of statements regarding each subscale, and the precision of the scoring and recording items. In order to evaluate the study tools' internal consistency and reliability, Cronbach's alpha coefficient was computed. Reliability of adjustment tool was 0.92 which is high. Reliability of emotional intelligence tool was 0.96 which is high.

Pilot study

The tool was tested on 10% of the total sample which was 12 cases at the beginning of the study. Subjects who shared in the pilot study was excluded from the studied subjects. Pilot study consisted of 12 observations, reliability of adjustment tool was 0.92 which is high, so no questions were changed, and reliability of emotional intelligence tool was 0.96 which is high so no questions were changed.

Ethical Consideration

A primary approval to carry out the current study was obtained from the Ethical Committee and Research at The Faculty of Nursing Cairo University. A complete description of the purpose and the nature of the study was made to all subjects (parents and students) and they were informed that participation in the current study is voluntary and that



anonymity and confidentiality of each subject was protected by the allocation of a code number for each participant. They was also assured that they can withdraw at any time from the study, participation is without risk and withdrawal will not affect the care they received. A written consents obtained from the parents of adolescents were revised after complete data collection by the Ethical Committee and Research at The Faculty of Nursing Cairo University and final approval was obtained to conduct the current study in Appendix.

Procedure

To familiarize oneself with research difficulties and create study materials, a review of the past, present, and Arabic- and English-related literature that addresses various elements of the issue was conducted. Textbooks, articles, periodicals, journals, and the internet were all used in this process. The researcher employed the back translation technique and adhered to it to confirm the translated scale used in this investigation.

In this procedure, the investigator translated the Arabic format into English language, rendered the same Arabic formats to bilingual experts for more verification of the translation of the English format.

The resulting Arabic tools were translated into Braille format which was done under supervision of the AL Noor and Al Amal School and revised by a specialized expert in the school. Study tools were tested for validity and reliability.

A letter from the nursing faculty to the ministry of education's central office for public mobilization and statistics resulted in the official approval of the request. In the ministry of education, the letter is issued to the directorate of Al Noor and Aml School for Blind and the (Preparatory/ Secondary School El Sanya prep /secondary school) to conduct the study.

All visually impaired and sighted adolescents who fit the criteria for inclusion were approached. At that time the purpose and the nature of the study was explained to them to gain their acceptance and cooperation, assured them about confidentiality and anonymity and finally invited them for participation. Semi structured interview was used with each participant to fulfil the study tools.

Each individual gave their verbal and written consent prior to data collection. Data were gathered between 1-2-2016 and 1-6-2016, a period of 4 months. Depending on the individuals' level of comprehension and responsiveness, it took an average of 40 to 50 minutes to complete the tools. For the purpose of removing systematic mistakes and providing additional validation of the information provided by adolescents, the questionnaires were read, explained to the study subjects, and the responses were recorded by the investigator

Results

Part (I): Socio-demographic characteristics of the studied visually impaired and sighted female adolescents.

Table (1) reveals that, the studied subjects consist of 120 female girls (60 blind & 60 sighted) female adolescents, their mean age were 15.1 ± 2.1 and 15 ± 1.6 respectively. Among the studied VI female adolescents (43.3%) were at preparatory education and (56.7%) were at secondary education compared to (48.3%) were at preparatory education and (51.7%) were at secondary education of the studied sighted female adolescents.



Items	•VI female adolescents		Sighted female adolescents	
Mean Age ±SD	15.1±2.1	15.1±2.1		
	No	%	No	%
Education				
Preparatory school	26	43.3	29	48.3
Secondary school	34	56.7	31	51.7

•VI: Visually impaired

As regards father's education, **Table (2)** shows that (20%) of the studied VI female adolescents, their fathers were read and write, (45%) were secondary and (33.3%) were university education compared to (28.3%, 25% &40%) of the studied sighted female adolescents fathers. This table also reveals that (38.8%) of the studied VI female adolescents, their fathers were employee, (11.7%) work in private sector, (41.7%) had freelancers and (8.3%) were day laborers compared to (65%) of the studied sighted female adolescents' fathers were employees.

Items	●VI fema	le adolescents	Sighted t adolesce	
	No	%	No	%
Father's education				
Illiterate	1	1.7	4	6.7
Read and write	12	20.0	17	28.3
Secondary	27	45.0	15	25.0
University	20	33.3	24	40.0
Father's occupation				
Employee	23	38.3	39	65.0
Private sector	7	11.7	3	5.0
Freelancer	25	41.7	12	20.0
Day laborer	5	8.3	6	10.0

Table (2): Father's (education and occupation) of the studied visually impaired and sighted female adolescents.

•VI: Visually impaired



Table (3) reveals that (3.3%) of mothers of the VI female adolescents were illiterate, 26.7% read and write, 51.7% were secondary and 18.3% were university education compared to (6.7%, 36.7%, 40%&16.7%) of the studied sighted female adolescents' mothers respectively.

Items	●VI female	•VI female adolescents		female ents
	No	%	No	%
Mother's level of educ	ation			
Illiterate	2	3.3	4	6.7
Read and write	16	26.7	22	36.7
Secondary	31	51.7	24	40.0
University	11	18.3	10	16.7

Table (3): Mother`s education of	of the studied visually	impaired and sighted	l female adolescents.
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•VI: Visually impaired

Table (4) reveals that the family size mean score was 5.2 ± 1.3 and 5.5 ± 1 among the studied VI and sighted female adolescents respectively. As regards residence of the studied VI female adolescents (86%) of them live with their families and (13.3%) live in organization of Al-Noor and Al Amal association.

Table (4): family size and ranking in family among the studied visually impaired and sighted female adolescents.

Items	•VI female adolescents	Sighted female adolescents
Family size	Mean=5.2 ±1.3	Mean=5.5 ±1
Ranking in family (between brothers and sisters)	Mean=1.8 ±1.2	Mean=1.9 ±1

•VI: Visually impaired

Part (2) : Adjustment as perceived by the studied VI and sighted female adolescents.

Table (5): Personal and emotional adjustment as perceived by the studied visually impaired and sighted female adolescents.

As regards personal and emotional adjustment **Table (5)** reveals that statistical significance difference was found between the studied VI and sighted female adolescents as regards their optimistic feeling in general where t = 2.24 at p = 0.02. However, they receive themselves as confident, useful and important persons and looking forward to a bright future as indicated in the highest mean score. Additionally, they perceived themselves as cooperative with others, closed to the god worship and compatible with life as indicated in the highest mean scores. Statistical significance difference was found between the studied VI and sighted female adolescents as regards their being nervous to some extent where t=2.72 at p=.007.

Items	●VI female	Sighted female		
Personal and emotional adjustment	adolescents	adolescents	T value	P value
- -	Mean ±SD	Mean ±SD	-	
I'm confident in myself	1.73±0.52	1.70±0.50	0.36	0.71
I'm optimistic in general	1.62±0.56	1.38±0.58	2.24	0.02*
I talk about myself and my achievements	1.15±0.66	1.08±0.56	0.60	0.55
I face my problems strongly and with courage	1.55±0.53	1.60±0.53	0.52	0.60
I feel that I'm a useful and important person	1.78±0.42	1.77±0.43	0.22	.829
I'm looking forward to a bright future	1.83±0.38	1.88±0.32	0.78	.436
I'm happy and cheerful in my life	1.63±0.49	1.62±0.52	0.18	0.85
I can control my emotions	1.27±0.58	1.12±0.52	1.49	0.13
I like others and cooperate with them	1.87±0.34	1.87±0.34	0.00	1.0
I'm close to the God worship	1.83±0.38	1.72±0.45	1.53	0.12
I'm successful and compatible with life	1.70±0.46	1.63±0.52	0.74	0.45
I feel psychologically secured, tranquil, and in good shape	1.60±0.49	1.48±0.54	1.24	0.21
I feel despaired and lose my vitality	1.37±0.64	1.35±0.66	0.14	0.88
I feel anxious from time to time	1.13±0.57	1.05±0.50	0.85	0.39
I consider myself nervous to some extent	1.38±0.67	1.07±0.61	2.72	0.007*
I tend to avoid painful situations by escaping	0.85±0.76	0.75±0.75	0.73	0.46

Table (5): Personal and emotional adjustment as perceived by the studied visually impaired and sighted female adolescents.

As regards physical adjustment, **table (6)** reveals that statistical significance differences were found between the studied VI and sighted female adolescents as regards their ability to enjoy good health and feel that they are physically strong where t=2.19 at p=0.03, their heart beats fast when they do any work where t=4.18 at p=0.0001, feel perspiration or trembling during work where t=4.21 at p=0.0001, and their backache prevent them from performing their work where t=4.47 at p=0.0001 respectively. Also, table (8A) reveals that the studied VI and sighted female adolescents reported that they are satisfied with their appearance, has unique talents and abilities and give themselves enough time for sleep and exercise to maintain their health.



Item	●VI female	Sighted female	Т	Р
	adolescents	adolescents	value	value
-	Mean ±SD	Mean ±SD	_	
My life always is filled with vigor and vitality	1.50±0.62	1.68±0.50	1.77	0.07
I have unique abilities and talents	1.58±0.56	1.68±0.47	1.06	0.29
I enjoy good health and feel that I'm strong	1.63±0.52	1.42±0.56	2.19	0.03*
I'm satisfied with my appearance	1.85±0.36	1.77±0.50	1.05	0.29
My health status helps me do business successfully	1.58±0.50	1.72±0.49	1.48	0.14
I give myself (enough time for sleep or for exercise practice) to maintain my health	1.40±0.67	1.22±0.67	1.50	0.13
I suffer from some habits like nail-biting or eye winking	1.53±0.75	1.50±0.75	0.24	0.80
I feel a headache or pain in my head from time to time	1.17±0.46	1.05±0.39	1.51	0.13
I suffer from problems and eating disorders (dyspepsia – voraciousness	1.48±0.79	1.32±0.75	1.19	0.23
My heart beats fast when I do any work	1.53±0.54	1.17±0.42	4.18	.0001*
I feel perspiration or trembling when I work	1.73±0.52	1.32±0.57	4.21	.0001*
My backache prevent me from performing my work	1.73±0.48	1.32±0.54	4.47	.0001*
I sometimes feel difficulty in speech and talk	1.58±0.67	1.52±0.60	0.58	0.56
I feel forgotten (or unable to concentrate) from time to time	1.02±0.54	0.87±0.62	1.41	0.16

Table (6): Physical adjustment among visually impaired and sighted female adolescents.

*Significant level at p<0.05 •VI: Visually impaired

Table (7): Family adjustment among visually impaired and sighted female adolescents.

Regarding family adjustment as perceived by the studied VI and sighted female adolescents, **table (7)** reveals that, they perceive themselves as proud with their belonging to their families, satisfied with the economic state and cultural condition of their families and feel happy while be with their families as indicated in their mean scores. However, there were no statistical significance differences were found between the studied items.

Table (7): Family adjustment among visually impaired and sighted female adolescents.

Items	•VI female adolescents	Sighted female adolescents	T value	P value
	Mean ±SD	Mean ±SD	-	



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I feel I were cooperative with my family	1.73±0.52	1.73±0.58	0.00	1.000
I feel happy in my life when be with my family	1.83±0.38	1.85±0.40	0.23	0.81
I have an active and important role in my family	1.72±0.52	1.72±0.56	0.00	1.000
I`m proud of belonging to this family	1.90±0.40	1.95±0.22	0.85	0.39
satisfied family's economic and cultural conditions	1.88±0.32	1.87±0.34	0.27	0.78
My family encourages me to show my talents	1.55±0.75	1.63±0.52	0.71	0.47
My family encourages me to exchange visits with neighbors and friends	1.55±0.65	1.48±0.65	0.56	0.57

•VI: Visually impaired

As regards social adjustment, **table (8)** reveals that statistical significance differences were found between the studied VI and sighted female adolescents regarding their keening on social and recreational positive engagement with Others where t=2.42 at p=0.01, feeling a responsibility towards the development of society where t=2.43 at p=0.01, and saying sorry for their friends if delayed on them where t=2.25 at p=0.02. as regards their keening on the rights of others as much as caring for own rights as t= 2.58 and p=0.01. This table also reveals that the studied VI and sighted female adolescents find great fun in the exchange of visits with friends and neighbors and it's difficult for them to enter into competition with others as indicated in the mean scores.

Items	•VI female adolescents	Sighted female adolescents	T value	P value
	Mean ±SD Mean ±SD	Mean ±SD		
I'm keen on social and recreational positive engagement	1.78±0.49	1.55±0.57	2.42	0.01*
I feel a responsibility towards the development of society	1.80±0.40	1.58±0.56	2.43	0.01*
I respect my colleague's opinions and commit right one	1.87±0.34	1.80 ± 0.40	0.98	0.33
Others appreciate my business and my achievements	1.60±0.53	1.48 ± 0.60	1.14	0.25
I say sorry for my friend if I delayed on him	1.78±0.49	1.57±0.56	2.25	0.02*
I feel loyalty and belonging to my friends	1.90±0.40	1.90±0.35	0.00	1.00
I feel happy participate in concerts and social events	1.73±0.45	1.65±0.48	0.98	0.32
I'm keen on the rights of others as much as my rights	1.78±0.45	1.55±0.53	2.58	0.01*
It's funny to exchange visits with friends and neighbours	1.80±0.44	1.75±0.47	0.60	0.55
I lack trust and mutual respect with others	1.77±0.43	1.67±0.51	1.17	0.24
I hardly enter competition even with of same age	1.33±0.51	1.30±0.65	0.31	0.75
I'm ashamed of the face of a lot of people or confused during the conversation In front of them	1.22±0.52	1.10±0.75	0.99	0.32



I give up advising colleague to avoid annoy	ing them 1.22±0.72	1.12±0.72	0.77	0.44
I haven't the ability to help others, even if s things	imple 1.20±0.51	1.37±0.49	1.82	0.07
*Significant level at p<0.05	VI: Visually impaired			

Regarding school adjustment **table (9)** reveals that, statistical significance differences were found between the studied VI and sighted female adolescents as regards feeling that the teachers are doing their duties to the fullest where t=4.71 at p=.0001and some teachers not appreciate the students own private circumstances where t=2.04 at p=&.043. otherwise, they prefer to be away from their colleagues while performing any project, avoid wayward colleagues, share their colleagues in solving problems and ask their teachers to explain unclear points in topics as indicated in the highest mean scores. However there was no statistical significance difference between the studied items. Also, they prefer to participate in school activities rather than to attend lecture where t=3.35 at p=0.001, enjoy the exercise of school activities where t=3.40 at p=0.001 and keep school appointment where t=2.66 at p=0.009.

Table (9): School adjustment as perceived by the studied visually impaired and sighted female adolescents.

Items	•VI female adolescents	Sighted female adolescents	T value	P value
-	Mean \pm SD	Mean ±SD	-	
I Share my colleagues in solving their problems	1.80±0.40	1.75±0.44	0.65	0.51
I Help my colleagues in understanding subjects	1.75±0.47	1.65±0.48	1.15	0.25
I Prefer spending spare time with my friends	1.63±0.52	1.55±0.50	0.89	0.37
I avoid wayward colleagues	1.85±0.44	1.78 ± 0.49	0.78	0.43
prefer isolating from colleagues while performing any project	1.88±0.32	1.77±0.43	1.69	0.09
I Ask the teacher to explain unclear points in topic	1.70±0.56	1.75±0.54	0.50	0.62
Some teachers not appreciate my private circumstances	1.57±0.59	1.08±0.53	4.71	.0001*
I like talking about my problems with a teacher	1.22±0.67	1.05±0.59	1.45	.151
Discuss the teachers in the school topics	1.67±0.60	1.63±0.55	0.32	.752
I feel that the teachers are doing their duties to the fullest	1.68±0.54	1.48±0.54	2.04	.043*
I see that I was studying interesting materials	1.38±0.52	1.45±0.65	0.62	.537
I think that the subjects develop a contact	1.48±0.54	1.55±0.57	0.66	.509
I feel good about the level of achievement in school	1.50±0.60	1.40±0.69	0.85	0.39
Committed to doing homework	1.72±0.49	1.55±0.53	1.78	0.07
Rather I miss school whenever you can	1.68±0.62	1.63±1.51	0.24	0.81
I feel that my way of studying materials is successful	1.28±0.52	1.37±0.66	0.76	0.44
I set the agenda for study stick to it	0.97±0.66	1.02±0.75	0.39	0.69
I participate in school activities to attend lecture	1.40±0.62	1.03±0.58	3.35	0.001*



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I Enjoy the exercise of school activities	1.60±0.62	1.23±0.56	3.40	0.001*
I Keep school appointments	1.75±0.51	1.47±0.65	2.66	0.009*
I hardely organize my time while overloading	1.17±0.53	1.10±0.68	0.60	0.55

•VI: Visually impaired

 Table (10) reveals that statistical significance differences were found between the studied VI and sighted female adolescents as regards total adjustment and it's subscales except for personal and family adjustment.

Table (10): Difference between the studied VI and sighted female adolescents as regards adjustment.

			t-value	p-value
Scores (%)		Mean ±SD		
Personal adjustment	●VI	75.94±15.68	1.47	0.14
	••S	72.08±12.83		
Physical adjustment	●VI	76.19±15.16	2.51	0.013*
	••S	69.76±12.74		
Family adjustment	●VI	86.90±19.20	0.14	0.88
	••S	87.38±16.76		
Social adjustment	●VI	81.37±11.86	2.47	0.015*
	••S	76.37±10.25		
School adjustment	●VI	77.82±14.91	2	0.047*
	••S	72.14±16.02		
Total adjustment	●VI	78.66±12.40	2.16	0.032*
	••S	73.97±11.24		
Significant level at $n < 0.05$ •V	· Visually impaired	S: sighted		

*Significant level at p<0.05 •VI: Visually impaired •• S: sighted

Discussion

Blindness is a physically debilitating affliction with significant emotional and financial effects. The blindness causes major changes in lifestyle, habits of blind female which may result in problems in physical, psychological and social adjustment. It has serious effect on the adolescents, family and community. The results of the present study will answer the following research questions.

- 1. What's the level of psychological adjustment among visually impaired and sighted female adolescents.
- 2. What's the level of social adjustment among visually impaired and sighted female adolescents.
- 3. What's the level of academic adjustment among visually impaired and sighted female adolescents.
- 4. What's the difference between psychosocial and academic adjustment among visually impaired and sighted female adolescents.

So, the discussion will be presented in the following sequence:

1-Socio demographic characteristics of the studied VI and sighted female adolescents.

2-Adjustment as perceived by the studied VI and sighted female adolescents.

1-Socio demographic characteristics of the studied VI and sighted female adolescents.



As regards the socio demographic characteristics of the studied visually impaired and sighted female adolescents, results indicates that, their age mean scores were similar for both groups. They are in preparatory and secondary education. This could be due to entry into the secondary school is a trajectory changing event that represent a convergence of physical, mental, social and familial development. Clearly, there is reason to be concerned about the wellbeing of adolescents.

As regards Fathers education, the current study's findings on visually impaired and sighted female adolescents show that more than half of the moms and fathers were highly and secondary educated for both visually and sighted female adolescents. These results indicate that parents' educations help to meet the needs of adolescents who are visually impaired and sighted. parent's ought to actively support and enhance any educational process that could affect sibling's adjustment. Students' adjustment is influenced more by their mother's education than their father's. Educated moms are better equipped to support their adolescent children at home, manage their difficulties, and help them develop the emotional confidence and competence that increase their adjustment.

As regard father's occupation, results of the current study reveals that they work as employee in private sectors and free lancers, except eight percent and ten percent of them work as day laborer for visually and sighted female adolescents. This finding may suggest that the student's father's employment may determine their economic status, which may have an impact on their adjustment, particularly family adjustment, as a low economic state may place an additional burden on parents, which may have an impact on their ability to parent and provide for their children's physical, emotional, academic, and social needs.

Similarly, a study by Backhaus revealed that Students from better socioeconomic backgrounds were more socially and intellectually balanced than those from lower socioeconomic ones. ⁽²⁵⁾ According to Elia (2015) study results which revealed that Barriers to higher education for individuals from low socioeconomic position include college choice, parental financial support, and realistic career plans. ⁽²⁶⁾

Adjustment as perceived by the studied visually impaired and sighted female adolescents and difference between two groups.

As regards personal and emotional adjustment as perceived by the studied VI and sighted female adolescents, this study revealed that there is no statistical significance difference between the studied VI and sighted female adolescents. This result indicates that visual impairment has no impact on adolescents' adjustment. This result may be because a person who loss their sight go through significant behavioral-motivational, cognitive, and emotional changes. Additionally, empowerment programs offered to young people with vision impairments should strive to balance their self-concept.

In agreement with, the current study result, Kef (2010) found that the majority of visually impaired teenagers had high-self-esteem, were generally happy, and did not feel lonely and that most had accepted the implications of their impairment. Also, Adolescents with visual impairments had similar psychosocial results to those of their sighted counterparts in terms of things like self-esteem and psychological adjustment. Although those who were blind or had impaired vision were content and felt they received enough support from their parents and peers, sighted teenagers tended to have a bigger network of relatives and friends. ⁽²⁷⁾ Similarly, Griffin-Shirley & Nes (2011) also discovered no differences between sighted and visually impaired preadolescents in terms of self-esteem and empathy. ⁽²⁸⁾

In addition, study done by (Garaigordobil & Bernarás, 2009) indicated that there were no statistically significant differences between the teenagers with and without vision impairment in their perceptions of themselves or their level of self-worth. ⁽²⁹⁾ Similarly, *Lifshitz*, Hen & Weisse (2014) found that there are no differences in self-concept between sighted adolescents and those with visual impairments. ⁽³⁰⁾

Conversely, Kumar & Singh (2013) found that, sighted students possess better adjustment than visually impaired students. ⁽¹³⁾ Also, Gurb (2010) found that, Students with visual impairments lack confidence, which shows itself through behaviors like apathy, reliance, or a refusal to take charge. ⁽³¹⁾

Moreover, this study revealed that the studied VI female adolescents are higher than the sighted female adolescents in their optimistic feelings. This means that they have less level of worry. This result may be due to social interaction and interpersonal relationship may be a source for stress. Otherwise, blindness may has an impact on



socialization of blind this lead to little opportunity for exposure to external environment with its stressors and challenges of social problem solving which has an impact on their optimistic feelings. Also early psychological rehabilitation since childhood for the future challenges and difficulties that they will face through their life enhance the blind members' optimistic feelings although they have limited opportunity for getting a job and limited alternatives for learning as they are only allowed to attend theoretical faculties which is in agreement with. ⁽³²⁾

Similar results were found in a study conducted by Pinquart & Pfeiffer (2014), revealed that adolescents with visual impairment reported lower levels of worry than their sighted peers. The observed lower average levels of worry in adolescents with visual impairment as compared to sighted peers may, first, indicate that (some) young people with visual impairment ignore their worries in order to feel better or hide their concerns in order to create good impressions on other people. ⁽³³⁾

As regards physical adjustment as perceived by the studied VI and sighted female adolescents, this study reveals that there was statistical significance difference between the studied VI and sighted female adolescents where the studied VI adolescents were higher than the studied sighted female adolescents as regard their physical adjustment. These results indicate that visual impairment has no impact on physical adjustment during adolescence. These results stress the fact that accepting physical build and using body effectively is a major task that should be fulfilled during period of adolescence.

These results may be since visual impairment may affect the nature of physical activity performed by the blind adolescent, adolescents who losses their vision since birth don't realize the extent of deprivation they have which make them perceive their physical activity as accepted as they don't know what's ideal for them, this has an impact on their perception of physical adjustment. Also, these results may be due to persistent follow up that has been done for the studied visually impaired female adolescents other than the sighted female adolescents due to the larger number of sighted students other than blind siblings which affect all aspects of provided caring.

As regards family adjustment as perceived by the studied VI and sighted female adolescents, the current study reveals that there is no statistical significance difference between the studied VI and sighted female adolescents. Also the current study reveals that although the studied sighted female adolescents feel that their families encourages them to show their abilities and talents slightly more than the studied visually impaired group, the studied subjects were equally happy in their life with their families.

Moreover, the current study results reveal that, there is no statistical significance difference between the studied visually impaired and sighted female adolescents as regards family adjustment. Family is the first institution of learning in life and a source of wholesome relationships and distinctive ties among members. It is essential to human development on both the emotional and cognitive levels. ⁽³⁴⁾ In agreement with the current study results, a study done by Kef & Deković (2011) revealed that Parents and friends provided much greater social support to adolescents without impairments than to those with visual impairments. ⁽³⁵⁾

Also, Cimarolli & Wang, (2010) and Kef & Dekovic (2011). revealed that Adolescents, both those with and without impairments, benefit from social support from family and friends. ^(36& 35) In addition, a qualitative study of parental support by Chang and Schaller (2010) found that Teens with visual impairments were content with the level and nature of parental help they got. ⁽³⁷⁾

Conversely, Hadidi& AlKhateeb (2014) found that adolescents with visual impairments in Jordan perceived more support from the family, friends, and significant others than did sighted adolescents. ⁽³⁸⁾ Also, Kef (2010) & Schinazi (2011), revealed that although adolescents with visual impairments tended to have a smaller network of family and friends compared to sighted adolescents, they were satisfied and believed they were receiving enough support from parents and peers. ^(27& 39)

As Growth and development take place in interactions with other individuals who are significant to the adolescent, such as parents, siblings, family members, friends, and teachers, otherwise; adolescents with impaired vision or blindness may struggle to interact with others, which may have an impact on their mental development. ⁽⁴⁰⁾ Teenagers who are blind struggle more with independence than their sighted peers. To get where they wish to go, they must rely more on others. Teenagers who are reversely sighted can wander off on their own. ⁽⁴¹⁾ Blind adolescents are unable to observe the



non-verbal clues in conversation, exhibit special difficulties in communicating thus, are less likely to develop adequate social relations.

As regards social adjustment as perceived by the studied VI and sighted female adolescents, The current study results reveal that statistical significance difference was found between the studied VI and sighted female adolescents where the studied VI were higher than the studied sighted female adolescents. These results may be due to the fact that the studied VI female adolescents are practicing music and multiple activities for rehabilitation which are not available for the sighted female adolescents this may give them feeling that they have role in community equally as every individual in society, and give them source of confidence. also teaching and rehabilitation programs are done for parents of studied VI females periodically, which is not available for the sighted females related to the intensity of students in the governmental sighted schools as compared to the schools of blind.

Moreover, the current study results reveal that the studied VI female adolescents mean scores were higher than the studied sighted female adolescents as regards their keening on social and recreational positive engagement with other, feeling a responsibility towards the development of society, saying sorry for their friends if delayed on them and keen on the rights of others as much as caring about their rights. These results indicate that each individual must have role and responsibility in development of society and respect others, and social and recreational engagement with others.

These results indicate that visual impairment has no impact on social adjustment. These results may be due to the fact that, when adolescents either sighted or visually impaired don't get proper support from environment, some of their qualities become depressed and individual functioning become disturbed. This attitude not only disturbs blind but also sighted adolescents. Thus, proper support must be given according to the age demands despite of blindness to become a healthy part of society.

In agreement with the current study results, Lifshitz, et.al (2014). stated that Teachers and mothers are instructed to empower people with visual impairments and give them success stories. Students with visual impairments are encouraged to respect themselves independently of their handicap through the empowerment exercises, which aim to improve their self-concept and self-esteem. For the groups, similar self-concept characteristics were discovered. ⁽⁴²⁾

Conversely, a study conducted by by Pinquart & Pfeiffer (2011), revealed that adolescents with vision impairments struggled more than their sighted peers to fit in with their peer groups. ⁽⁴³⁾ Similar to this, Yildiz & Duy (2013) found that teenagers with visual impairments engaged in social activities with their friends much less frequently, were active in fewer activities, and had fewer friends than their sighted peers. ⁽⁴⁴⁾ Also, the results of Hadidi and Alkhateeb (2012) indicated that visually impaired students reported significantly higher degrees of loneliness than sighted students did. ⁽³⁸⁾

A regards school or academic adjustment as perceived by the studied VI and sighted female adolescents, the current study results reveals that statistical significance difference was found between the studied VI and sighted female adolescents as regards school adjustment where the studied VI were higher than the studied sighted female adolescents as regards feeling that the teachers are doing their duties to the fullest, some teachers not appreciate the students own private circumstances, preferring to participate in school activities rather than to attend lecture, enjoying the exercise of school activities and keeping school appointment.

Students with VI always receive instructions frequently for enhancing self-esteem, fostering positive attitudes toward the impairment by receiving accurate information about it, assisting people in feeling in control of their actions, assisting people in accepting their disability, and assisting people in growing their self-efficacy. This is not done for sighted students. Also teachers of the studied visually impaired adolescents always revise subjects with them before exam frequently. Students appeared to be closely related to their teacher which is not observed in the studied sighted school which may be due excessive capacity in school which may cause excessive burden on teacher, preventing them from providing effective caring for their students.

In addition, Nair& Anuradha (2014) indicated that, Magnifiers can be used to help the visually impaired; large print and high contrast colors are also very helpful to many persons who have limited vision. For people who have more severe impairments, there are numerous coping mechanisms available, including as Braille and huge raised lettering. In the classroom, students capture knowledge using Tap, save it to their personal computers, and then use it for studying later. ⁽³⁴⁾



Conclusion

This study clearly concludes that In today's culture, teenage adjustment is crucial because life for both VI and sighted adolescents is getting increasingly complicated and conflicted. As adjustment is a state of equilibrium which implies a balance in the person's own internal system which aim at tension reduction especially when the usual ways of meeting the needs are blocked. Disruption in social skills and lack of socialization affects educational achievements. Statistical significance differences were found between the studied VI and sighted female adolescents as regards total adjustment and it's subscales except for personal and family adjustment.

Recommendation

-Students should be assessed for their psychological mental as well as physical health, their problems, needs, and capabilities, any obstacles for learning, adjustment

-Educational programs should be done for promoting protective aspects that will increase the resilience and self-worth of teenagers, whether they are able or disabled, such as excellent problem-solving skills, appropriate coping mechanisms, and realistic expectations and demands.

-Educational programs should be done for parents, teachers about adolescence challenges and problems and how to deal with their adolescents during this period and to overcome stress associated with this period of caring.

Future researches

-Future studies are needed on large numbers of adolescents students either sighted and visually impaired on both gender

-Further studies are recommended to investigate factors affecting adjustment

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