

Bullying Experience among Deaf and Dumb Students at Assiut City

Aml Abdel shafy Mohamed¹, Safaa Rashad Mahmoud², Heba Kedees Marzouk³ & Shadia Abd Elmoniem Syan⁴

¹ Lecturer of Community Health Nursing, Faculty of Nursing, Assiut University, Egypt

² Professor of Community Health Nursing, Faculty of Nursing, Assiut University, Egypt

³ Assistant Professor of Psychiatric Mental Health Nursing, Faculty of Nursing, Assiut University, Egypt

⁴ Lecturer of Pediatric Nursing, Faculty of Nursing, Sohag University, Egypt

Abstract

Background: Bullying is a widespread issue in schools all around the world. Students with disabilities as deafness or dumbness are overrepresented in bullying prevalence both perpetration and victimization. **Aim:** To assess the deaf and dumb students' experience regarding bullying at Assiut city. **Methods:** A cross-sectional descriptive design was used. **Setting:** The study was conducted in two preparatory schools for deaf and dumb at Assiut city. **Sample:** A purposive sample of 270 students (120 males and 150 females) was included in the study. **Tools:** two tools were used. **Tool (1):** A structure interview questionnaire sheet included two parts. **Part (1):** Personal characteristics of studied deaf and dumb students. **Part (2)** studied students' history of exposure to different types of bullying. **Tool (2):** A modified child adolescent bullying scale contains 20 items. **Results:** It was found that 91.1% of studied students exposed to bullying, the most common type was verbal bullying and males were exposed more than females by 66.7%, 59.5% respectively, there were statistical significance relation between deaf and dumb students' total mean score of bullying scale and their gender, failure in school and days of absenteeism. **Conclusion:** the majority of studied deaf and dumb students had bullying experience; nearly about half of them exposed to bullying in their classes, and more than one-third of them are exposed to bullying by their classmate students which affected their desire to go to school. **Recommendation:** A bullying prevention committee should be formed at school to explore various factors associated with bullying.

Keywords: Bullying; experience& deaf and dumb students.

Introduction

Bullying is a kind of violence that puts the safety of children, teens, and adults at threat. ⁽¹⁾ Bullying is defined as “a type of aggressive behavior in which someone else causes injury or discomfort intentionally and repeatedly to others. ⁽²⁾ According to the World Health Organization (WHO), bullying was assessed to be 8–30% frequent and exceed 50% in several studies. Bullying prevalence rates varied greatly amongst nations, with the Arab world having the highest prevalence rates. ⁽³⁾

Concerning the bullying problem in Egypt, an Egyptian study reported the prevalence of bullying among rural students and found it was about 78%. ⁽⁴⁾ In addition, A study conducted in 2019 reported that the prevalence of bullying behavior was high (77.8%) among the studied students. ⁽⁵⁾

There is no single cause associated with school violence; however, risk factors of bullying exist as a result of the interaction between the individuals and their environments including home, school, community and society. ⁽⁵⁾ Several studies investigated the characteristics of those who involved in bullying both bullies and victims. The result showed that preschool aggressiveness, low socioeconomic status and poor family relationships increase the probability of involvement in bullying cycle at later stages. ⁽⁶⁾

Bullying can have immediate psychological impacts like depression, anxiety and excessive tension, as well as bodily consequences like being hurt during a physical attack. Long-term effects include developing post-traumatic stress disorder, avoidant

personality disorder, lack of trust, feelings of insecurity and further health issues. ⁽⁷⁾

Any student may experience bullying at school. Deaf or dumb students exposed to bullying by both normal and other deaf students. Studies from high-income nations have shown that both hearing and deaf students bully or victimize more deaf than hearing students in regular school day. This is sometimes due to the hearing impairment of deaf students and the bullies' conviction that these students can't report what happened to them because of communication problems. ⁽⁸⁾ Students who are deaf or dumb are more likely to encounter peer rejection and struggle with social competency and problem solving. Regardless their disability, they may be exposed to bullying as a result of their physical appearance such as glasses, hair color and weight. ⁽⁹⁾

The school nurse is often the sole healthcare provider in an academic setting. She is ideally situated to work with other school-based professionals to facilitate bullying interventions. She can support evidence-based interventions to prevent and mitigate bullying in the school. The school nurse provides key leadership to promote and enhance student safety, wellness, engagement and learning. ⁽¹⁰⁾

Significance of the study:

Deaf and dumb students may experience a variety of mental health issues, such as sadness, loneliness, low self-esteem and difficulties in the school achievement. Importantly, bullying victims have been linked to low self-esteem, loneliness and anxiety so they are at high risk for bullying

exposure. ⁽⁷⁾ Studies on bullying have mostly focused on studying bullying among normal students in regular class rooms, or to differentiate between normal and students with disabilities. ⁽¹¹⁾ but limited studies concentrating on bullying among deaf and dumb students only, so the current study try to focus attention on bullying experience among deaf and dumb students.

Aim of the study:

The study aimed to assess the deaf and dumb students' experience regarding bullying at Assiut city.

Research Question:

What is the experience of deaf and dumb students regarding bullying?

Subjects and Methods

Study design

A cross-sectional descriptive design was used in the present study.

Study setting

The study was conducted in two schools at Assiut city (El-Amal preparatory school for deaf and dumb boys, and El-Amal school for deaf and dumb girls).

Study sample

A convenient sample of all (270) students from the previous settings were participated in the current study. The total number of females and males' students in both schools at preparatory level was 120 males and 150 females. According to the schools report during 2020/2021 academic year.

Tools of the study:

It was included the following two tools.

Tool (I): A structure interview questionnaire sheet developed by the researchers and it included two parts;

Part 1: Personal characteristics of the studied deaf and dumb students such as age, sex, number of siblings, birth order, failure of school and school absenteeism. **Part 2:** Students' history of exposure to bullying. Such as (types, causes, place of exposure, who bullied them, persons they told and their reaction to bullying exposure).

Tool (II): A modified Child Adolescent Bullying Scale (CABS) which developed and evaluated by (Strout et al., 2018) ⁽¹²⁾ to identify children and youth who are at risk of being bullied. It consists of 20-items. Every item is scaled in a three-point Likert type agree, neither agree nor disagree, disagree to be more simple for the deaf and dumb students.

Scoring system: (Zewiel et al.,) ⁽¹³⁾ Each response coded numerically from 1 to 3, where one corresponds to disagree and three corresponds to agree. CABS scale scores are computed by summing numeric scores for each item. The summed CABS scores can range from 20 to 60.

A high score on the CABS represents a high level of bullying exposure and vice versa. The total score was analyzed and classified as follows:

Little = less than 50%.

Fair =50–75%.

Much= more than 75%

Reliability: The internal consistency reliability of the CABS scores was evaluated through Cronbach's coefficient alpha. It was 0.97, suggesting great reliability.

Validity of the tools:

Tools of the study were checked and revised by panel of five experts of Community Health Nursing and Pediatric Nursing Departments, faculty

of nursing, Assiut University who reviewed the tools for clarity, relevance, comprehensiveness, understanding and applicability. Corrections were done according to the modifications needed.

Pilot study:

It was conducted before beginning of data collection to test the feasibility, clarity and practicability of the data collection tool. It was carried out on 27 students represented (10%) which included in the study because there were not modifications in the form.

Ethical considerations

All the relevant principles of ethics in research were followed. The study protocol was approved by the pertinent authority. There was no risk for the students during application of the research. Consent was obtained from administration department of special education, schools' administration and all students who were willing to participate in the study. Confidentiality and anonymity were assured.

Students had the right to refuse to participate or withdraw from the study without any rationale at any time. Study subjects' privacy was considered during collection of the data.

Fieldwork

All the needed approvals were obtained from Faculty of Nursing, Assiut University and undersecretary of the ministry of education, department of special education and school directors to obtain permission to conduct the study after the purpose was explained. Data was accomplished during the academic year 2020/2021. It took three months from February to April 2021. During the interview the total students answers questions about

personal data and bullying scale then they asked whether they had exposed to different types of bullying if answer (yes) they completed their answers on bullying experience. Data collection was implemented by the researchers and they seek help from psychologist & social workers who presented in the studied schools because of their experience in dealing with students using sign language to facilitate communication with the students. The researchers collected the data 2day/week. During each interview 10-12 students filled the questionnaire which took from 40- 45 minutes. The average time taken for completing each questionnaire was around 40-45 minutes depending on the students' responses.

Statistical analysis:

Data entry and data analysis were done using SPSS version 22 (Statistical Package for Social Science). Data were presented as number, percentage, mean and standard deviation. Chi-square test and Fisher Exact test were used to compare between qualitative variables. Independent samples t-test was used to compare quantitative variables between two groups and ANOVA test was used. P-value considered statistically significant when $P < 0.05$.

Results:-

Table (1): Shows personal characteristic of studied deaf and dumb students. It was observed that 81.9% of students their age more than 15 years with Mean \pm SD (16.64 ± 1.22) and 55.6% of them were females. Concerning number of siblings, it was observed that 39.6% of deaf and dumb students had 4-5 siblings. In addition. Regarding days of school absenteeism,

it was found that 34.8% of students absent for 4-5 days.

Table (2): Presents deaf and dumb students' responses to bullying scale. It was found that 43.3% of students agreed on getting bullied at school. Moreover, 43% of them agreed on didn't want to go to school because of being bullied. Also, 46.7% of deaf and dumb students were neither agreed nor disagreed on other students share their secrets, or spread rumors about them. In addition, 26.7% of students agreed on the statement of students leave me out or reject me. Moreover 45.2% of them disagreed on "Students at my school joke or tease me in a way that bothers me ". Regarding worried about bullying and cannot pay attention at school, it was observed that 38.9% of students were agreed. Unfortunately, 70.7% of students agreed on they bothered when students on their school tease them.

Table (3): Discloses there were statistical significance relation between deaf and dumb students' total mean score of bullying and their gender, failure in school and days of absenteeism p values= 0.000, 0.000 and 0.028 respectively.

Table (4): Presents that 43.5% of deaf and dumb students stated their causes of bullying exposure due to their Physical disability and 15.6 of them didn't aware the definite cause. Regarding their feeling, it was observed that 33.7% and 30.1% of students felt angry and depression respectively and males were depressed more than females. Unfortunately, 29.3% of the studied deaf and dumb

students exposed every day to bullying and 48% of them exposed to bullying less than 5 times.

Table (5) Clears 37.8% of studied deaf and dumb students exposed to bullying by students older than them. Whether classmate student and relatives were 33.3% and 21.5% respectively. As regard to, their action taken, it was obvious that 51.2%, 39.4% and 28% of deaf and dumb students told someone, verbally interaction and physically action respectively. Also, the current table shows that 43% of the students told their parents about bullying exposure & 29.2% told their teachers.

Figure (1):Views distribution of studied deaf and dumb students according to their bullying exposure, it was found that 91.1% of studied students exposed to bullying.

Figure(2):Illustrates types of bullying among the exposed males and females deaf and dumb students, it was observed that the most common type was verbal bullying and males were exposed more than females by 66.7%, 59.5% respectively. Also, it followed by social bullying with rate of exposure 65% were males and 59.5% were females.

Figure(3):Illustrates that the most common place of bullying exposure among deaf and dumb students was their classes (47.5% males, 46% females), followed by the street when they went back from the school where females were greater than males by 33.3% and 22.5% respectively. Moreover, 31.7% of male students and 23% of females exposed to bullying in the playground.

Table (1): Distribution of studied deaf and dumb students according to their personal characteristics, at Assiut city (2021)

Items	No. (270)	%
Age: (years)		
≤ 15	49	18.1%
> 15	221	81.9%
Mean ± SD (Range)	16.64 ± 1.22 (13.0-18.0)	
Gender:		
Male	120	44.4%
Female	150	55.6%
Number of siblings:		
1-3	105	38.9%
4-5	107	39.6%
>5	58	21.5%
Order:		
Older	93	34.4%
Youngest	65	24.1%
Other	112	41.5%
Failure in any school year:		
Yes	17	6.3%
No	253	93.7%
No. of failure years: (who fails only N. 17)		
Once	14	82.4%
Twice	3	17.6%
Days of absenteeism		
Do not miss any hour	33	12.2%
2-3 days	58	21.5%
4-5 days	94	34.8%
About two weeks	62	23.0%
More than two weeks	23	8.5%

Table (2): Distribution of studied deaf and dumb students according to their responses to child adolescent bullying scale (n=270)

Items	Agree		Neither agree nor disagree,		Disagree		Mean ± SD*
	No.	%	No.	%	No.	%	
Students make fun of me to make me feel bad getting bullied at school	26	9.6	84	31.1	160	59.3	1.50 ± 0.67
There are times that I do not want to go to school because I am being bullied	117	43.3	120	44.4	33	12.2	1.69 ± 0.68
One or more students at my school refer to me	116	43.0	114	42.2	40	14.8	1.72 ± 0.71
Students at my school try to turn others against me	50	18.5	149	55.2	71	26.3	1.92 ± 0.67
∞ Students at my school talk behind my back, share my secrets, or spread rumors about me	94	34.8	85	31.5	91	33.7	1.99 ± 0.83
Students leave me out or reject me because they better than me	40	14.8	126	46.7	104	38.5	1.76 ± 0.69
Students at my school joke or tease me in a way that bothers me	72	26.7	127	47.0	71	26.3	2.00 ± 0.73
I wish I could go to another school because I am being bullied	36	13.3	112	41.5	122	45.2	1.68 ± 0.70
Students at my school ignore me on purpose	129	47.8	96	35.6	45	16.7	1.69 ± 0.74
I have been threatened by another student in a mean or hurtful way	178	65.9	49	18.1	43	15.9	1.50 ± 0.76
I worry about bullying so much that I cannot pay attention at school	106	39.3	95	35.2	69	25.6	1.86 ± 0.80
Students try to make me feel bad on purpose	105	38.9	96	35.6	69	25.6	1.87 ± 0.79
Pretending to be sick ,so could stay at home because I am being bullied	90	33.3	115	42.6	65	24.1	1.91 ± 0.75
I have been hurt by another student on purpose	28	10.4	109	40.4	133	49.3	1.61 ± 0.67
Students post or text mean or hurtful messages, comments, or photos about me on line	164	60.7	65	24.1	41	15.2	1.54 ± 0.74
I have had upsetting memories of being bullied	69	25.6	133	49.3	68	25.2	2.00 ± 0.71
I am bothered when students at school tease me	63	23.3	128	47.4	79	29.3	1.94 ± 0.72
Students have tried to get me in trouble	191	70.7	45	16.7	34	12.6	1.42 ± 0.71
I have had my stuff taken or damaged on purpose by another student	78	28.9	100	37.0	92	34.1	2.05 ± 0.79

*CABS :is a three-point Likert type (agree (3), neither agree nor disagree (2), disagree (1))the Mean ± SD for these category .This scale to measure high risk children and adolescent to bullying in clinical setting here in school where deaf and dumb students despite of having the same disability they found another way to bully each other.

∞ talk here: mean using sign language to communicate with each other.

Table (3): Relation between total score of bullying and deaf & dumb students' personal characteristics

	Score of bullying		P-value
	Mean \pm SD	Range	
Age: (years)			
≤ 15	36.49 \pm 5.80	24.0-50.0	0.143
> 15	35.18 \pm 5.64	24.0-48.0	
Gender:			
Male	37.86 \pm 5.14	24.0-50.0	0.000*
Female	33.46 \pm 5.34	24.0-44.0	
Number of siblings:			
1-3	34.53 \pm 6.06	24.0-50.0	0.104
4-5	36.18 \pm 5.95	24.0-50.0	
>5	35.60 \pm 4.12	28.0-46.0	
Order:			
Older	35.39 \pm 5.31	24.0-46.0	0.998
Youngest	35.42 \pm 5.87	24.0-50.0	
Other	35.44 \pm 5.92	24.0-50.0	
Failure in any school year:			
Yes	41.88 \pm 6.48	27.0-50.0	0.000*
No	34.98 \pm 5.36	24.0-50.0	
Days of absenteeism:			
I did not miss an hour	34.64 \pm 4.22	28.0-43.0	0.028*
2-3 days	34.47 \pm 6.11	24.0-50.0	
4-5 days	35.36 \pm 5.82	24.0-50.0	
About two weeks	35.52 \pm 5.50	24.0-46.0	
More than two weeks	38.87 \pm 5.39	28.0-46.0	

Independent samples t-test

ANOVA test

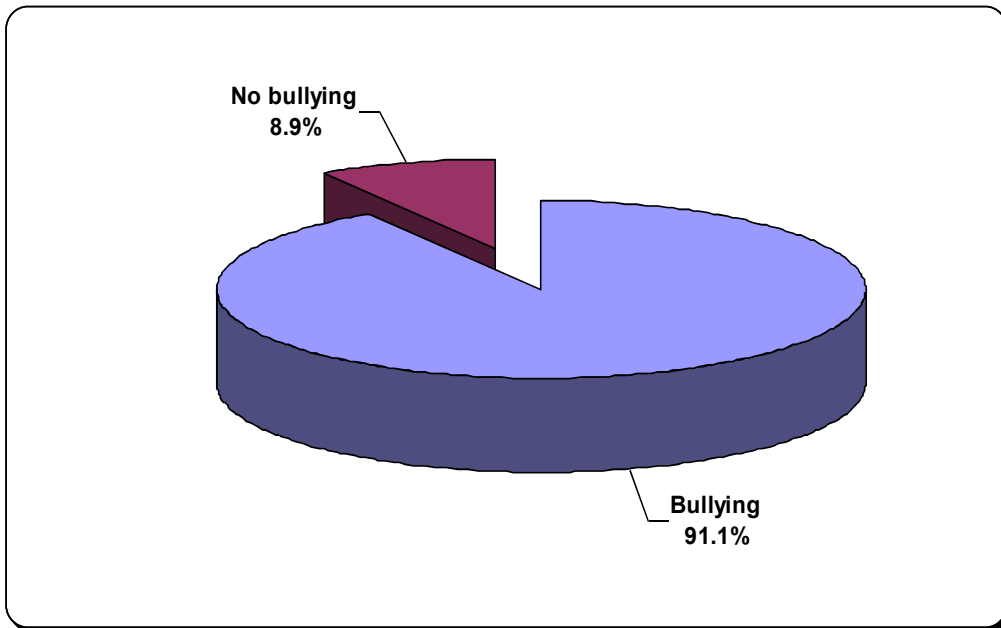


Figure (1): Distribution of studied deaf and dumb students according to their bullying exposure (n=270)

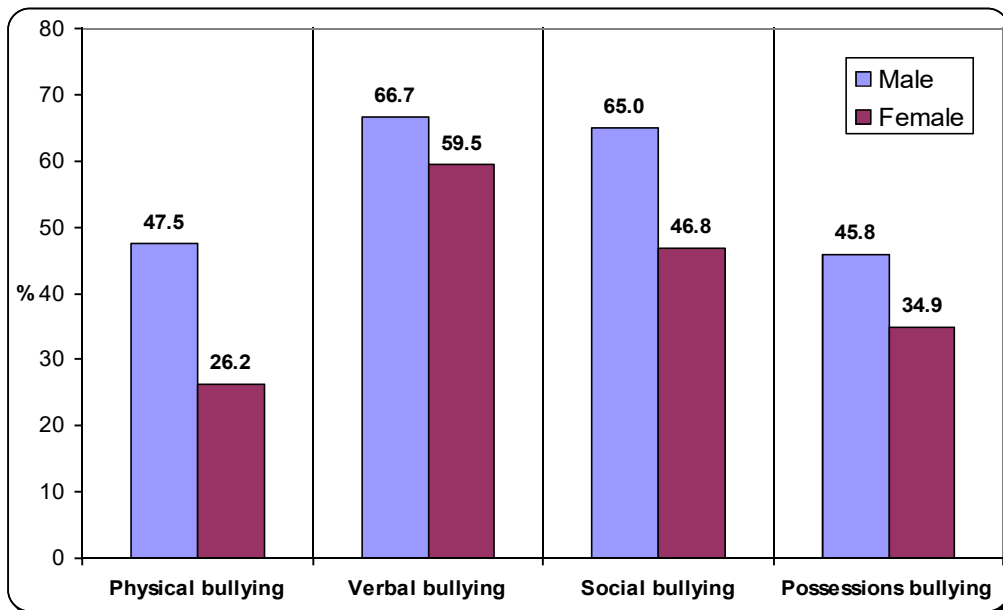


Figure (2): Types of bullying among the bullying exposed deaf and dumb students (n=246)

Table (4): Distribution of studied exposed deaf and dumb students according to causes, feeling, time and frequency of bullying experience,(n=246)

Items	Total (n= 246)		Male (n= 120)		Female (n= 126)		P-value
	No.	%	No.	%	No.	%	
Cause of bullying exposure:≠							
Physical appearance	88	35.8%	54	45.0%	34	27.0%	0.003*
Academic level	46	18.7%	27	22.5%	19	15.1%	0.136
Suffering from disease	62	25.2%	31	25.8%	31	24.6%	0.824
Physical disability	107	43.5%	48	40.0%	59	46.8%	0.280
No definite cause	39	15.6%	7	5.8%	32	25.4%	0.000*
Feelings:≠							
Fear	51	20.7%	23	19.2%	28	22.2%	0.555
Depression	74	30.1%	45	37.5%	29	23.0%	0.013*
Shy	12	4.9%	3	2.5%	9	7.1%	0.091
Sadness	51	20.7%	15	12.5%	36	28.6%	0.002*
Anger	83	33.7%	46	38.3%	37	29.4%	0.137
Time of exposure:							
Every day	72	29.3%	38	31.7%	34	27.0%	0.102
During the past week	47	19.1%	26	21.7%	21	16.7%	
About a month ago	41	16.7%	22	18.3%	19	15.1%	
During the past year	38	15.4%	13	10.8%	25	19.8%	
More than a year ago	19	7.7%	5	4.2%	14	11.1%	
I did not remember	29	11.8%	16	13.3%	13	10.3%	
Frequency of exposure:							
< 5	118	48%	61	50.8%	57	45.2%	0.384
5 – 10	76	30.9%	38	31.7%	38	30.2%	
> 10	52	21.1%	21	17.5%	31	24.6%	

≠ More than one answer

Chi-square test

Fisher Exact test

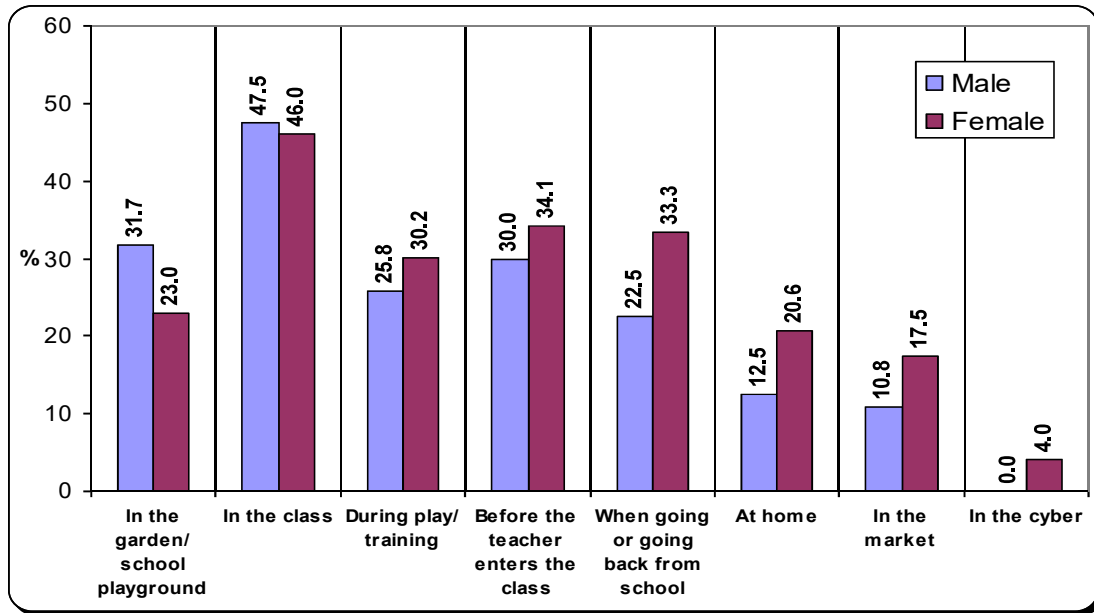


Figure (3): Distribution of bullying exposed deaf and dumb students regarding places of bullying exposure (n=246)

Table (5): Distribution of studied bullying exposed deaf and dumb students according to their reaction to bullying (n=246)

Items	Total (n=246)		Male (n= 120)		Female (n= 126)		P-value
	No.	%	No.	%	No.	%	
Violent Person:≠							
A student older	93	37.8%	44	36.7%	49	38.9%	0.719
A student in the same age but not classmate	82	33.3%	33	27.5%	49	38.9%	0.058
Classmate student	82	33.3%	40	33.3%	42	33.3%	1.000
Relatives	53	21.5%	22	18.3%	31	24.6%	0.232
Not relative (outside school)	82	33.3%	33	27.5%	49	38.9%	0.058
Action took:≠							
Telling someone	126	51.2%	52	43.3%	74	58.7%	0.016*
Verbally interaction	97	39.4%	57	47.5%	40	31.7%	0.011*
Physically action	69	28%	44	36.7%	25	19.8%	0.003*
Turning into a joke	23	9.3%	15	12.5%	8	6.3%	0.098
Did not do anything	17	6.9%	2	1.7%	15	11.9%	0.002*
The person told:≠							
Class teacher	72	29.2%	41	34.2%	31	24.6%	0.099
Colleague at the school	69	28%	25	20.8%	44	34.9%	0.014*
The coach	25	10%	12	10.0%	13	10.3%	0.834
The parents	106	43%	51	42.5%	55	43.7%	0.855
Brothers or sister	41	16.6%	17	14.2%	24	19.0%	0.305
Did not tell anyone	13	5.2%	4	3.3%	9	7.1%	0.182

≠ More than one answer Chi-square test Fisher Exact test

Discussion

Although few, studies have focused on bullying incidents among deaf children in mainstreamed or residential school settings, the experiences of professionals working in the field for many years indicate that bullying does, in fact, take place even at day or residential school programs where deaf children are educated

only with other deaf children. It is not difficult to hypothesize that deaf children may find other differences to target for teasing and that the same developmental qualities of hearing (non-deaf) victims and the students who bully them exist regardless of hearing status and personal histories **Fobi et al, 2022.**⁽¹⁴⁾ For that, the current study aimed to assess the deaf and dumb students' experience regarding bullying at Assiut city.

Regarding the studied deaf and dumb students' age, it was observed that majority of studied students their age was more than 15 years. This may be explained by the sample was taken from preparatory school and this category of students had permission to enter the primary school with older age than normal school. This finding agreed with **Biswas et al, 2020**⁽¹⁵⁾ who reported that studied sample age range between 12-17 years. Concerning deaf and dumb students' gender, the present study found that 55.6% were female. This finding supported by **Biswas et al, 2020**⁽¹⁵⁾ who reported 48% were males and 52% were females.

Concerning deaf and dumb students' responses to child adolescent bullying scale, the current study mentioned that worrying about bullying so much that cannot pay attention at school were

agreed in more than one third of deaf and dumb students which was consistent with **Hana et al, 2005**⁽¹⁶⁾ who revealed that bullying impairs concentration and subsequent academic achievement in victims specifically. Moreover, a study conducted by **Al-Raqqad et al, 2017**⁽¹⁷⁾ reported that bullied students unable to follow or to pay attention for their study well and even they might do not like to go to school.

In addition, the present study reported that about one quarter of deaf and dumb students reported that they have been threatened by another student in a mean or hurtful way and one ten of them pretended to be sick to absent from the school. These results supported by **Block, 2014**⁽¹⁸⁾ who investigated bullying impact on student's ability to academically succeed and found that bullied students have feel of fear from coming to school because they feel that they are unsafe; therefore they are unable to concentrate which affect negatively on their academic success.

Concerning deaf and dumb students' response to the statement of students at school try to turn others against me, the present study found that about one third of deaf and dumb students agreed on it. Also, the item of students leave me out or reject me because they better than me was agreed in more than quarter of them. these results were consistent with **Pinto et al, 2019**⁽¹⁹⁾ who revealed that children with disability have lower levels of peer acceptance and are generally less integrated into peer groups, scoring lower in social participation. Also **Menesini, E., Salmivalli, 2017**⁽¹¹⁾

revealed that bullying experience disabled students a particularly devastating combination of social isolation and particularly difficult and troubling in school.

As regard to deaf and dumb students' response to the statement of "students at my school make fun of me to make me feel bad ". The current study illustrated that about one ten of studied deaf and dumb students were agreed. These results were in the same line with **Guerra et al, 2011** ⁽²⁰⁾ who reported that students describe bullying exposure because of others made fun of them.

Regarding relation between total score of bullying and deaf & dumb students' age, the present study showed that there wasn't statistical significant association between student's age and bullying. This finding was inconsistent with **Menesini, E., Salmivalli, 2017 and Espelage et al, 2012** ^(11,21) who revealed that bullying tends to increase throughout the elementary years, peak during early adolescent middle school years and decline somewhat during later adolescent.

In contrast, this finding wasn't in the same line with some studies which reported a significant association between age and peer victimization in deaf students **Broekhof et al, 2019, Pinquart & Feiffer, 2015 and Terlektsi et al, 2020** ^(22,23,24)

Regarding relation between total score of bullying and deaf & dumb students' gender .The current study results revealed a significant statistical difference P value= 0.000. These results supported by some studies which reported that boys are involved (as both perpetrator and victim) of

bullying more than girls **Guerra et al, 2011, Swearer et al, 2010 and Olweus, 1993** ^(20,25,26) .Moreover, females than males exposed to bullying as reported by **U.S. Department of Health and Human Services , 2018** ⁽⁹⁾. Concerning, the relation between total score of bullying and deaf & dumb students' failure during school years. The present study found that there was a significant statistical association P value = 0.000. These results were consistent with **Ahmad et al, 2017** ⁽²⁷⁾ who reported that there was a significant association between students' final grade last year and bullying behavior (p= 0.023). They found that bullying has negative impact on academic performance. In addition, **Glew et al, 2015** ⁽¹⁶⁾ revealed that lower achievement scores were associated with being a victim or bully-victim.

As regard to bullying and days of students' absenteeism, the study results revealed a significant association between students' absenteeism and bullying with P value =0.028. This finding agreed by a study done by **Schwartz, et al, 2002** ⁽²⁸⁾ who reported that rejected children had less promising school perceptions, significantly higher levels of school avoidance and high level of absent.

The current study found that the vast majority of studied students exposed to bullying this may be explained by most students live on school campus during the week and then return to their families for the weekends and holidays. In addition, the long contact of deaf students of various ages, educational levels, and socioeconomic backgrounds placed together, these

conditions contribute to bullying behaviors. These results supported by **Swearer et al, 2012** ⁽²⁹⁾ who found that students with observable disabilities, such as hearing differences and physical disabilities, were significantly more likely to be involved in bullying (89.9%). These results disagreed with **Fobi et al, 2022** ⁽¹⁴⁾ who reported that 55.1% of deaf students reported bullying victimization. Moreover, **Hancock et al, 2017** ⁽³⁰⁾ reported that 42.5% of deaf adolescents exposed to bullying, **Terlektsi et al, 2020** ⁽²⁴⁾ found that 76.7% of deaf students reported one or more incidents of being bullied **Hancock et al, 2017** ⁽³¹⁾ reported that 38.7% of deaf students suffered from bullying.

Regarding types of bullying, the current study found that verbal and social bullying were reported in more than two thirds of males and in nearly two thirds of females deaf and dumb students. These results supported by most studies that find verbal and social bullying occurs most often, followed by physical bullying **U.S. Department of Health and Human Services, 2018, Kowalski et al, 2012, Olweus, 2013 and Salmivalli et al, 2013** ^(9, 32, 33, 34)

Moreover, the current study found that physical bullying was reported in less than half of males and more than quarter of females deaf and dumb students. These results were inconsistent with **Williams & Guerra, 2007** ⁽³⁵⁾ who found that males were more likely to report physical bullying than females. In addition, these results supported by **Berchiatti et al, 2022** ⁽³⁶⁾ who revealed that students with disability showed statistically

significantly higher values in terms of physical violence.

Regarding causes of bullying as reported by bullying exposed deaf and dumb students, the current study showed that about more than two fifth of studied students reported that bullying occurs due to physical disability. These results were consistent with **Olweus, 1993** ⁽²⁷⁾ who revealed that about 26.9% of students with hearing problems reported bullying as a result of their disability. Moreover, this finding supported by **Sentenac et al, 2011** ⁽³⁷⁾ who reported a strong association between physical disabilities and bullying among students. In addition, the present study reported that about one sixth of bullying exposed deaf and dumb students reported no definite cause. This result was consistent with **Rose & Monda-Amaya, 2012** ⁽³⁸⁾ who did not find any definite causes for bullying behaviors.

Regarding feeling experience between bullying exposed deaf and dumb students, the current study found that slightly less than one third and one third of studied students reported feelings of depression and anger respectively. These were consistent with **Cosma et al, 2017** ⁽³⁹⁾ who showed that youth who have been bullied were more likely to report lower levels of confidence and happiness and higher levels of psychological symptoms.

Regarding time of exposure to bullying, the current study found that more than one quarter of bullying exposed deaf and dumb students were bullied every day. This finding wasn't in the same line with **U.S. Department**

of Health and Human Services, 2018 ⁽⁹⁾ who revealed that the students who experience bullying (4.2%) of them were bullied daily.

Regarding the place of bullying exposure, the current study reported that nearly half of males and females deaf and dumb students reported that they were bullied in the class. This finding was consistent with **Raskauskas & Model, 2011** ⁽⁴⁰⁾ who found that students in special day classes were bullied more often than those students in inclusive settings. While the current study reported that cyber bullying only reported in (0.4%) of deaf and dumb students. This may be explained by the characteristics of these students who experience social isolation and don't like to be in public places. This finding was in the same line with the results of two meta analyses studies that reported cyber bullying is considerably less prevalent than the other forms of bullying **Modecki et al, 2014** ⁽⁴¹⁾.

Regarding the person that the bullying exposed deaf and dumb students told about bullying action, the current study showed that less than one third of students told their class teacher. This finding was consistent with **Barboza et al, 2009** ⁽⁴²⁾ who reported that disabled students are more likely to seek their teachers for help when they are aware of bullying or are being bullied themselves. This confirms the important role of a warm and close student–teacher relationship in the first years of school for students' future adaptation and development **Wanders et al, 2020** ⁽⁴³⁾.

Conclusion: The majority of studied deaf and dumb students had bullying experience; nearly about half of them exposed to bullying in their classes and more than one-third of them are exposed to bullying by their classmate students which affected their desire to go to school. There were statistical significance relation between deaf and dumb students' total mean score of bullying and their gender, failure in school and days of absenteeism p values= 0.000, 0.000 and 0.028 respectively.

Recommendations:

1. A bullying prevention committee should be existing at school that included all school personnel, to explore various factors associated with bullying.
2. Educational materials including brochures, handouts and booklet should be available in schools contain information pertaining bullying behaviors and how to deal with.
3. Other studies that find the correlation and factor analyses could be done to examine the various factors that increase or decrease bullying behaviors.

Limitation

The results of this study are not generalizable since it was conducted in one geographic location with small size and there was difficult during data collection because of the students' busy schedule of school days to meet them.

Acknowledgments:

The authors of this study expressed their sincere gratitude to all the participated deaf and dumb students in addition to schools' psychologist and

social workers who shared in this work, without them the valuable information elicited in this study would not be available.

References:

1. **Markkanen I, Välimaa R , Kannas L** . Forms of bullying and associations between school perceptions and being bullied among Finnish secondary school students aged 13 and 15. *International Journal of Bullying Prevention* .2021;3 :24–33
2. **American Psychological Association** (
3. disabilities: effective strategies for classroom teachers, *Intervention in School and Clinic*.2012;48(2):99-107.
4. **Cosma A, Whitehead R, Neville F** . Trends in bullying victimization in Scottish adolescents 1994-2014: changing associations with mental well being ,*Int J Public Health*. 2017; 62:639-46.
5. **Raskauskas J, Model S**. Modifying Anti-Bullying Programs to Include Students With Disabilities. *Teaching exceptional children*.2011;44; **60(2020)**: Bullying. Accessed on 2020 <https://www.apa.org/topics/bullying>.
6. **National Center for Educational Statistics**. Student Reports of Bullying and Cyberbullying: Results from the 2015 School Crime Supplement to the National Victimization Survey. US Department of Education; 2016. Retrieved from <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2016056>
7. **NCCM and UNICEF Egypt, 2015**:(National Council for Childhood and Motherhood (NCCM) and UNICEF. Violence against Children in Egypt. A Quantitative Survey and Qualitative Study in Cairo, Alexandria and Assiut. Cairo.
8. **Galal Y, Emadeldin M , Mwafy M** .Prevalence and correlates of bullying and victimization among school students in rural Egypt, *Journal of the Egyptian Public Health Association* .2019; 94(18):2-12.
9. **Mundy LK, Canterford L, Kosola S, Degenhardt L, Allen NB, Patton GC**. Peer victimization and academic performance in primary school children, *Academic Pediatrics*, 2017;17(8):830-36.
10. **Khalil NA, Elsaadany AZ, Mohasseb MM**. Bullying among early adolescent Egyptian school students, *JHIPH*,2021;51(2): 90-97.
11. **Bauman S, Pero H**. Bullying and Cyber bullying Among Deaf Students and Their Hearing Peers: An Exploratory Study, *The Journal of Deaf Studies and Deaf Education*, 2011; 16 (2): 236–253.
12. **U.S. Department of Health and Human Services (2018)**. Warning signs of bullying. Retrieved from <https://www.stopbullying.gov/at-risk/warning-signs/index.html>
13. **National Association of School Nurses (2016)**: Framework for 21st century school nursing practice. *NASN School Nurse*, 31(1), 46-53. doi: 10.1177/1942602X15618644.
14. **Blake, J. J., Kim, E. S., Lund, E. M., Zhou, Q., Kwok, O., Benz, M. R**. Predictors of bully victimization in students with disabilities: A

- longitudinal examination using a national data set. *Journal of Disability Policy Studies*,2016; 26(4): 199–208.
15. **Strout TD, Vessey JA, DiFazio RL, Larry H.** The Child Adolescent Bullying Scale (CABS): Psychometric evaluation of a new measure, *Res Nurs Health* .2018 ; 41(3) :252-64.
 16. **Zewiel M, El Sayed Z, Sharkawy M, El salamony M.** Effect of Educational Program on Level of Self -Esteem of School Age Children and Adolescents Exposed to Bullying, *International Egyptian Journal of Nursing Sciences and Research* .2022; 2(2): 98-106.
 17. **Fobi D, Quarshie E, Fobib J, Appaub O, Honu-Mensah C, Acheampong E , Abu sadat R.** Bullying victimisation among deaf adolescents: A School-Based Self-Report Survey in Ghana, *international Journal of Disability, Development and Education*.2022; 69(1): 253-66.
 18. **Biswas T , Scott J, Hannah M, Huda M. Hasan M, David T , Baxter J Mamuna A.** Global variation in the prevalence of bullying victimisation amongst adolescents: Role of peer and parental supports, *EClinicalMedicine*.2020;20:1-8.
 19. **Glew, G., Fan, M., Katon, W., Rivara, F. , Kernic, M.** Bullying, psychosocial adjustment, and academic performance in elementary school, *Arch Pediatr Adolesc Med*.2005;159(11):1026-31.
 20. **Al-Raqqad H, Al-Bourini E, Al Talahin F , Aranki R.** The Impact of School Bullying On Students' Academic Achievement from Teachers Point of View, *International Education Studies*.2017; 10 (6): 44-50.
 21. **Block N (2014).** The Impact of Bullying on Academic Success for Students With and Without Exceptionalities. Master degree thesis of Teaching Department of Curriculum, Ontario Institute for Studies in Education, Toronto University .
 22. **Pinto, C., Baines, E, Bakopoulou, I.** The peer relations of pupils with special educational needs in mainstream primary schools: The importance of meaningful contact and interaction with peers, *British Journal of Educational Psychology*.2019; 89(4):818–37.
 23. **Guerra, N. G., Williams, K. R., Sadek, S.** Understanding bullying and victimization during childhood and adolescence: A mixed methods study. *Child Development*.2011; 82(1): 295-310.
 24. **Espelage, D. L., Green, H., Polanin, J.** Willingness to intervene in bullying episodes among middle school students: Individual and peer-group influences, *The Journal of Early Adolescence*. 2012; 32(6): 776-801.
 25. **Broekhof E, Bos M, Camodeca M, Rieffe C.** Longitudinal associations between Bullying and emotions in deaf and hard of hearing adolescent, *J Deaf Stud Deaf Educ*.2018;23:17–27.

26. **Pinquart M , feiffer J.** Bullying in students with and without hearing loss, *Deafness Educ Int* .2015;17:101–10.
27. **Terlektsi E, Kreppner J, Mahon M, Worsfold S, Kennedy CR.** Peer relationship experiences of deaf and hard-of-hearing adolescents, *J Deaf StudDeaf Educ*. 2020; 25:153–66.
28. **Swearer, S. M , Espelage, D. L., Vaillancourt, T., Hymel, S.** **What can be done about school bullying?:** Linking research to educational practice, *Educational Researcher* .2010; 39(1):38-47.
29. **Olweus, D. (1993).** *Bullying at school: What we know and what we can do.* Oxford, UK: Blackwell. pp 140.
30. **Ahmad J .Abdulsalam, Abdullah E.AIDalhani , Konstantinos F.** Prevalence and Associated Factors of Peer Victimization (Bullying) among Grades 7 and 8 Middle School Students in Kuwait, *International Journal of Pediatrics*.2017; (3):1-8.
31. **Schwartz, D., Farver, J. M., Chang, L., Lee-Shin, Y.**Victimization in South Korean children's peer groups, *Journal of Abnormal Child Psychology*.2002; 30:113–25.
32. **Swearer, S., Wang, C., Maag, J, Siebecker, A ,Frerichs, L.** Understanding the bully dynamic among students in special and general education. *Journal of School Psychology*. 2012;50: 503-20.
33. **Hancock KJ, Brennan-Jones CG, Vithiatharan R.** Mental health problems among 4-17-year-olds with hearing problems: results from a nation-ally representative study, *Hear Balance Commun*.2017;15: 145–55.
34. **Warner-Czyz A, Loy B, Pourchot H, White T, Cokely E.** Effect of hearing loss on peer victimization in school-age children, *Except Child*. 2018;84:280–97.
35. **Kowalski, R. M., Morgan, S. A., Limber, S. P .** Traditional bullying as a potential warning sign of cyberbullying ,*School Psychology International*.2012; 33(5): 505-19.
36. **Olweus, D.** School bullying: Development and some important changes. *Annual Review of Clinical Psychology*.2013; 9:751-80.
37. **Salmivalli C., Sainio, M., Hodges, E.V.** Electronic victimization: Correlates, antecedents, and consequences among elementary and middle school students, *Journal of ClinicalAdolescentPsychology*.2013 ;42:442-53.
38. **Williams, K. R., Guerra, N. G.** Prevalence and predictors of Internet bullying. *Journal of Adolescent Health*, 2007; 41 (6): 14-21.
39. **Berchiatti M , Ferrer A ,Galiana L ,Ribera L ,Longobardi C .**Bullying in Students with Special Education Needs and Learning Difficulties: The Roleof the Student–Teacher Relationship Quality and Students' Social Status in the Peer Group, *Child & Youth Care Forum* .2022;51: 515–37.
40. **Sentenac M ,Gavin A, Arnaud C, Molcho M .**Victims of Bullying Among Students With a Disability

- or Chronic Illness and Their Peers: A Cross-National Study Between Ireland and France, *Journal of Adolescent Health* .2011;48(5): 461-66.
41. **Rose, C. , Monda-Amaya, L.** Bullying and victimization among students with -67.
42. **Modecki, K. L., Minchin, J., Harbaugh, A. G., Guerra, N. G., Runions, K. C.** Bullying prevalence across contexts: A meta-analysis measuring cyber and traditional bullying , *Journal of Adolescent Health*.2014;55: 602-11.
43. **Barboza, G. E., Schiamberg, L. B., Oehmke, J., Korzeniewski, S.J., Post, L. A., Heraux, C. G.** Individual characteristics and the multiple contexts of adolescent bullying: An ecological perspective, *Journal of Youth and Adolescence*.2009; 38: 101-21.
44. **Wanders, F. H., Van der Veen, I., Dijkstra, A. B., Maslowski, R.** The influence of teacher-student and student-student relationships on societal involvement in Dutch primary and secondary schools, *Theory & Research in Social Education*. 2020; 48(1) :101–19.