Awareness and Precautions of University Students about Cyberbullying

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ABSTRACT

Background: The phenomenon of cyberbullying emerged alongside the technological advancements with it numerous disadvantages, particularly at the academic level for students. Therefore, students' awareness of cyberbullying's dangers contributes to their adoption of precautionary measures to protect themselves and efficiently handle cyberbullying incidents
Objectives: The study aimed to examine the awareness and precautions of university students about cyberbullying
Methods: A non-probability (convenience sample) of 450 students was selected from colleges of medicine ,nursing ,pharmacy and dentistry at University of Kerbala, Iraq, according to specific criteria. The data were collected through questionnaire by using the cyberbyllying awareness scale developed by Ayas, T., Aydın, F. & Horzum, M. B. (2015) and the precaution against cyberbullying scale developed by the authors. Data were analyzed through use application of Statistical Package for Social Sciences (SPSS.26). **Results**: students are highly aware of cyberbullying as reported by 71.1% of them (M±SD= 92.34±13.670) they also have good precautions to avoid cyberbullying as reported by 72.9% of them (M±SD= 50.77±6.376), in addition there is strong positive significant relationship between students' precautions and their awareness about cyberbullying at p-values ≤ 0.001. **Conclusion**: the student's awareness of cyberbullying is crucial for building up precautionary measures in order to keep themselves safe and avoid any negative consequences while browsing the internet.

Keywords: **Cyberbulying; Awareness; Precautions; University students**
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INTRODUCTION

The pervasive presence of the Internet in almost every aspect of life, combined with its continual accessibility through mobile technologies, highlights the need to immediately handle the issue of cyberbullying (CB) among young people to offer effective assistance for preventing it's occurrences (Çimke S, Cerit E 2021). The persistent use of social media platforms brings many disadvantages such us CB which is the act of sending a message, uploading a video, or leaving a comment on any of the various social media sites with the intent to hurt and offend a specific victim (AlHarbi, B. Y., et al.,2020).The widespread prevalence of the modern technological period has led to the familiar occurrence of cyber bullying and victimization among a large number of individuals in contemporary society. (Ding et al., 2020). And a source of worry for college students (Khine et al., 2020) hence incidence of CB is increasing, with 10% to 40% of internet users reported being subjected to CB. (Mahat, M.,2021). Adolescents' awareness and understanding of the potential hazards of CB in the online realm play a crucial role in their adoption of protective steps to safeguard themselves and effectively deal with CB incidents (Altundağ & Ayas, 2020). In order to effectively combat CB among teenagers, it is essential to analyze the underlying motivations that compel them to participate in such behaviour, considering its harmful impacts. Cyber CB bullying occurs for multiple motives, such as amusement, comedy, revenge, jealousy, retaliation, moral detachment, endorsement of bullying, pursuit of elevated peer status, and demonstration of technological prowess. Moreover, certain adolescents fail to recognize CB as a manifestation of bullying. (Yurdakul & Bütün Ayhan, 2021).

Cyberbullying is a different form of traditional bullying since it has no boundaries and offers the advantage of being unknown in the cyberspace (Das et al., 2020). it has emerged as a malicious alternative to traditional bullying and has attracted significant attention in academic, cultural, and legal contexts. Its detrimental impact on the mental and emotional well-being of its victims is widely acknowledged (Ullah et al., 2020). Unlike traditional bullying, CB can occur at any time , place with different people (Paat & Markham, 2021). Face to face communication subject to societal and moral

customs which is missing in social media therefor cyber harassment and cyber risks widely occur besides of easy access to victim regardless time and space and being anonymous this significant feature that make them difficult to tracking, in conclusion CB is more dangerous than traditional bullying (Shaikh, F. B., et al., 2020). Young people who use the internet excessively are more vulnerable to engage in CB since the frequent use of social media sites exposes the users to CB (Barlet, et al 2019) hence nonphysical communication makes it hard to understand what's going on inside the others minds therefore users develop strategies to use internet more carefully so they can feel safe when interring the digital world and connect with their friends easily (Zorlu E., 2023). Since there was no legal limitations on users , reports of intimidations are raised as the rapid technological progress that lead to booming of online threatings such gap as inappropriate security of the private data and lack of limitations has become more obvious (Avcı and Oruç, 2020).s Additional research is required to examine the characteristics of CB in Arab communities due to its substantial influence. The youth in the Arab world commonly experiences several forms of bullying in silence, mostly due to societal and cultural norms (Abaido, 2019) . It's necessary to take action against CB among university students because of its harmful effects on their mental health , academic achievement (Sayed,S et al., 2023)

It is worth noting that the Ali, S. H et al., 2023suggests that the prevalence of CB in Iraq could be reduced by the implementation of government regulations aimed at monitoring and controlling the activities and operations of social media platforms. The harmful impact of CB on individuals' personalities is deemed inappropriate under societal norms .

RESEARCH METHODOLOGY

Study design A quantitative descriptive study was done to ascertain the Awareness and Precautions of University Students regarding Cyberbullying during the period of the study from 10/10/2023 to 20/6/2024**.**

Ethical Considerations:
The research ethics committee at the University of Kerbala /College of nursing provided an ethical permission for the secrecy and anonymity of the participants' identities. Participants were informed of the study's overall goals and instructions for filling out the questionnaire to establish their informed consent and make clear that their participation was voluntary. The researchers assured participants that their information would be kept confidential.

Study Setting:
The research conducted at University of Kerbala ,Colleges of Medicine, Nursing , Pharmacy and Dentistry.

Study Sample:
Convenience sampling was used to select 450 students for the study to determine the awareness and precautions of students regarding Cyberbullying

Study Instrument:
Following a comprehensive review of literature, the researchers find a questionnaire to assess the awareness and precautions of students regarding Cyberbullying . The questionnaire comprises three sections: First section: Socio demographic Information: This section includes age, sex, marital status, academic specialty ,academic year , residence, daily use of social media sites, purpose of social media use and if they experience cyberbullying or being victims of it . second section is the Cyberbyllying Awareness Scale developed by Ayas, T., Aydın, F. & Horzum, M. B. (2015) with 26 items after reviewing by experts, 24 items were used 5-Likert scale and scored as follows: never (1), rarely (2), sometime (3), often (4), and always (5). The overall score of awareness was estimated by calculating the range score for mean of total score after calculating the range from minimum score and maximum score; the range score rated into three levels and scored as follow: Low= 10 – 23.33, Moderate= 23.34 – 36.66, and High= 36.67 – 50. The third section is Precaution Against Cyberbullying scale A 3-Likert scale was developed by the authors which contain 21 item and scored as follows: never (1), sometimes (2), and always (3). The overall score of precautions was estimated by calculating the range score for mean of total score after calculating the range from minimum score and maximum score; the range score rated into three levels and scored as follow: Poor= 21 – 35, Moderate= 35.1 – 49, and Good= 49.1 – 63.

RESULTS

Table (1): Distribution of Students according to their Socio-demographic Characteristics (N=450)

List	Characteristics		f	%
1	Age	> 20 year	55	12.2
		20 – 21 year	209	46.4
		22 – 23 year	134	29.8
		24 – 25 year	30	6.7
		25 and more	22	4.9
2	Sex	Male	150	33.3
		Female	300	66.7
3	Marital status	Unmarried	422	93.8
		Married	22	4.9
		Divorced/Widow(ed/er)	6	1.3
4	Residency	Urban	374	83.1
		Rural	76	16.9
5	College	Nursing	134	29.8
		Pharmacy	127	28.2
		Medicine	94	20.9
		Dentistry	95	21.1
6	Academic stage	First	48	10.7
		Second	77	17.1
		Third	150	33.3
		Fourth	153	34
		Fifth	22	4.9

f: Frequency, %: Percentage

Table (2): Distribution of Students according to Factors related to Social Media Use (N=450)

List	Characteristics		f	%
1	Daily use of social media	< 2 hours	52	11.6
		2 – 4 hours	134	29.8
		5 – 6 hours	141	31.3
		6 <	123	27.3
2	Purpose of social media use	Communication	116	25.8
		News & Events	81	18
		Get Information	56	12.4
		Sharing photos & videos	12	2.7
		Entertainment	185	41.1
3	Experiencing cyberbullying	Yes	77	17.1
		No	373	82.9
4	Being cyber victimized	Yes	53	11.8
		No	397	88.2

f: Frequency, %: Percentage

This table indicates that daily use of social media among students refers to 5-6 hours as reported by the highest percentage of them 31.3%. Regarding purpose of social media use, 41.1% of the students use social media for entertainment, 25.8% uses for communication with family and friends, while 18% uses for exploring news and events. The cyberbullying experience is seen among only 17.1% of students while the higher proportion of them has no experience. Only 11.8% of students reported that they being a cybervictimized

Table (3) Overall Assessment of Students' Awareness about Cyberbullying

Awareness	f	%	M	SD	Ass.
Low	6	1.3			
Moderate	124	27.6			
High	320	71.1	90.09	13.439	High
Total	450	100			

f: Frequency, %: Percentage, M: Mean for total score, SD: Standard Deviation for total score, Ass: Assessment

Low= 23 – 53.66, Moderate= 53.67 – 84.33, High= 84.34 – 115

This table manifests that students are highly aware of cyberbullying as reported by 71.1% of them (M±SD= 90.09±13.439).

Table (4): Overall Assessment of Students' Precautions about Social Media use Addiction, Cyberbullying, and Cybervictimization

Precautions	f	%	M	SD	Ass.
Poor	10	2.2			
Moderate	112	24.9	49.32	6.346	Good
Good	328	72.9			
Total	*450*	*100*			

f: Frequency, %: Percentage, M: Mean for total score, SD: Standard Deviation for total score, Ass: Assessment

Poor= 21 – 35, Moderate= 35.1 – 49, Good= 49.1 – 63

This table indicates that students have good precautions to avoid social media addiction, cyberbullying, and cybervictimization as reported by 64.4% of them (M±SD= 50.77±6.376).

Table (5): Correlation among Students' Awareness about Cyberbullying, and Precautions

Correlation		Awareness about SMA	Awareness about cyberbullying	Precautions
Awareness about cyberbullying	Pearson Correlation	.434**	1	.279**
	Sig. (2-tailed)	.001	-	.001
Precautions	Pearson Correlation	.239**	.279**	1
	Sig. (2-tailed)	.001	.001	-

**. Correlation is significant at the 0.01 level (2-tailed).

The result reveals that there are strong positive relationships among students' precautions with their awareness about cyberbullying as indicated by high significant relationship at p-values= .001

Table (6): Relationship among Students' Awareness about Cyberbullying and their Demographic Characteristics

Variables		Awareness				Significant relationship
		Low	Moderate	High	Total	
Age	> 20 year	0	14	41	55	r^s = .076 P-value= .105 Sig= N.S
	20 – 21 year	6	62	141	209	
	22 – 23 year	1	45	88	134	
	24 – 25 year	0	8	22	30	
	25 and more	1	9	12	22	
	Total	8	138	304	450	
Sex	Male	5	52	93	150	r^*= .097 P-value= .039 Sig= S
	Female	3	86	211	300	
	Total	8	138	304	450	
Marital status	Unmarried	7	128	287	422	r^s = .064 P-value= .177 Sig= N.S
	Married	1	8	13	22	
	Divorced/Widowed	0	2	4	6	
	Total	8	138	304	450	
Residency	Urban	7	114	253	374	r^*= .031 P-value= .507 Sig= N.S
	Rural	1	24	51	76	
	Total	8	138	304	450	
College	Medicine	1	41	92	134	r^s = .010 P-value= .834 Sig= N.S
	Nursing	3	38	86	127	
	Pharmacy	2	33	59	94	
	Dentistry	2	26	67	95	
	Total	8	138	304	450	
Academic stage	First	1	14	33	48	r^s = .044 P-value= .349 Sig= N.S
	Second	1	23	53	77	
	Third	5	44	101	150	
	Fourth	1	48	104	153	

Fifth	0	9	13	22
Total	8	138	304	450

r^s: Spearman Correlation coefficient, r: Biserial correlation coefficient, P: Probability, Sig: Significance, N.S: Not Significant, S: Significant, H.S: High Significant*

This table indicates that there is significant relationship between students' awareness about cyberbullying and their sex at p-value= .023.

Table (7): Relationship among Students' Awareness about Cyberbullying and Factors Related to Social Media Use

Variables		Awareness				Significant relationship
Daily use of social media	< 2 hours	0	15	37	52	r^s = .053 P-value= .263 Sig= N.S
	2 – 4 hours	2	41	91	134	
	5 – 6 hours	1	44	96	141	
	> 6	5	38	80	123	
	Total	8	138	304	450	
Purpose of social media use	Communication	0	38	78	116	r^s = .002 P-value= .962 Sig= N.S
	News & Events	5	19	57	81	
	Get Information	1	15	40	56	
	Sharing photos & videos	0	6	6	12	
	Entertainment	2	60	123	185	
	Total	8	138	304	450	
Experiencing cyberbullying	Yes	1	22	54	77	r^* = .001 P-value= .982 Sig= N.S
	No	7	116	250	373	
	Total	8	138	304	450	
Being cyber victimized	Yes	1	15	37	53	r^* = .013 P-value= .783 Sig= N.S
	No	7	123	267	397	
	Total	8	138	304	450	

r^s: Spearman Correlation coefficient, r: Biserial correlation coefficient, P: Probability, Sig: Significance, N.S: Not Significant, S: Significant, H.S: High Significant*

This table reveals that there is no significant relationship is reported among students' awareness about cyberbullying and their variables related to social media use.

Table (8): Relationship among Students' Precautions and their Sociodemographic Characteristics

Variables		Precautions				Significant relationship
Age	> 20 year	1	16	38	55	r^s = .022 P-value= .641 Sig= N.S
	20 – 21 year	5	75	129	209	
	22 – 23 year	2	47	85	134	
	24 – 25 year	1	8	21	30	
	25 and more	1	4	17	22	
	Total	10	150	290	450	
Sex	Male	1	63	86	150	r^* = .150 P-value= .001 Sig= S
	Female	9	87	204	300	
	Total	10	150	290	450	
Marital status	Unmarried	10	141	271	422	r^s = .076 P-value= .108 Sig= N.S
	Married	0	7	15	22	
	Divorced/Widowed	0	2	4	6	
	Total	10	150	290	450	
Residency	Urban	9	124	241	374	r^* = .026 P-value= .589 Sig= N.S
	Rural	1	26	49	76	
	Total	10	150	290	450	
College	Medicine	3	51	80	134	r^s = .010 P-value= .825 Sig= N.S
	Nursing	2	28	97	127	
	Pharmacy	2	42	50	94	
	Dentistry	3	29	63	95	
	Total	10	150	290	450	
Academic stage	First	1	12	35	48	r^s = .040 P-value= .396 Sig= N.S
	Second	1	29	47	77	
	Third	4	50	96	150	
	Fourth	4	54	95	153	
	Fifth	0	5	17	22	
	Total	10	150	290	450	

r^s: Spearman Correlation coefficient, r^*: Biserial correlation coefficient, P: Probability, Sig: Significance, N.S: Not Significant, S: Significant, H.S: High Significant

This table displays that there is significant relationship between students' precautions and their sex at p-value= .046.

Table (9): Relationship among Students' Precautions and Factors related to Social Media Use

Variables		Precautions				Significant relationship
Daily use of social media	< 2 hours	1	13	38	52	r^s = - .187 P-value= .001 Sig= H.S
	2 – 4 hours	5	29	100	134	
	5 – 6 hours	3	55	83	141	
	6 <	1	53	69	123	
	Total	10	150	290	450	
Purpose of social media use	Communication	4	32	80	116	r^s = -.298 P-value= .037 Sig= S
	News & Events	1	23	57	81	
	Get Information	2	14	40	56	
	Sharing photos & videos	1	7	4	12	
	Entertainment	2	74	109	185	
	Total	10	150	290	450	
Experiencing cyberbullying	Yes	0	27	50	77	r^* = .034 P-value= .478 Sig= N.S
	No	10	123	240	373	
	Total	10	150	290	450	
Being cyber victimized	Yes	0	18	35	53	r^* = .005 P-value= .923 Sig= N.S
	No	10	132	255	397	
	Total	10	150	290	450	

r^s: Spearman Correlation coefficient, r^*: Biserial correlation coefficient, P: Probability, Sig: Significance, N.S: Not Significant, S: Significant, H.S: High Significant

This table indicates that there is high significant negative relationship between students' precautions and their daily hour use of social media at p-value= .005.

DISCUSSION

The results reveals that majority of students 46.4% included in the study were within the age group 20-21 year approximately This result is resemble with studies of Çimke, S., & Cerit, E. (2021); Lee, M. H. L et al. (2023) and López Rosales, F et al. (2020) who found that the mean age (20.09-21.98) as the participants are college students .

According to the current findings, the sex distribution of the study's sample showed that half of them were females 66.7% while 33.3% were males. However this result is even with studies of Thumronglaohapun S,et al . (2022) and Al-Darawsheh, A.et al. (2021)) who found that half of participants are female 53% and 54.59% respectively.

Regarding to the marital status the results showed that 93.8% of students are still unmarried and only 4.9% of them are married, this result is consistent with Thumronglaohapun S,et al. (2022) in which the most participants were singles 81.6% and only 18.4% were with partners .

The result of present study regarding, the academic stage refers to fourth stage among the highest percentage of students reported by 34% followed by third academic stage reported by 33.3%, this is consistent with the studies of Xiang, C. S., & Hasbullah, M. (2023) and Zorlu, E. (2023) in which the majority of respondents 36.4% 28.2% respectively at fourth stage,. The present study displays that the daily use of social media among students was 5-6 hours as reported by the highest percentage of them 31.3%, this finding is similar to studies of Thumronglaohapun S, et al (2023), Zorlu, E. (2023) and Lee, M.H.L.;et al., (2023)

The purpose of social media use, 41.1% of the students use social media for entertainment, 25.8% uses for communication with family and friends, whereas 18% uses for exploring news and events, this finding is inconsistent with the previous literature that results showed contact with friends (36.2%), entertainment (16.7%) (López Rosales, F et al., 2020)

The study reveals that students are highly aware of cyberbullying as reported by 71.1% of them (M±SD= 92.34±13.670), this result is consistent with Thumronglaohapun et al., (2022) and Zorlu E. (2023).

The cyberbullying experience is seen among only 17.1% of students whereas the higher proportion of them has no experience, this result is consistent with studies of Albikawi, Z. F., (2023); Lee et al., (2023) and Çimke, S., & Cerit, E., (2021). Students have good precautions to avoid cyberbullying as

reported by 72.9% of them (M±SD= 50.77±6.376). Taking into account the difference in methodology and poor literature the author relies on the existing results that mention the precautions in the field of technology , study of Van Schaik, P et al., (2018) found that the extent of precautionary behaviour were greater for privacy risks related to regulation of information-sharing in addition, this study shows that the precautionary behaviour is a more sensitive measure. From researcher point of view, this may be related to precautionary behaviour for a particular Facebook setting requires that Facebook users are aware of the setting, this result is compatible with the students high level of awareness ,when the individuals are aware of hazards they tend to avoid them by developing precautionary behaviours .

There are strong positive relationships among students' precautions with their awareness about cyberbullying as indicated by high significant relationship at p-values .001. This result is consistent with Xiang & Hasbullah (2023) who discovered a significant positive relationship between social media use awareness and cyberbullying (r=0.166, p<0.05).This is because adolescents who use social media extensively may be exposed to peers and social norms that provision various forms of cyberbullying like cyber-aggression (Craig et al., 2020). Another study of Haunschild,I.M.,& Leipold, B.(2023). Found that the higher intensity of security measures taken by the user restricts the VSD (voluntary self-disclose) of data. Such results can be attributed to many factors as follows: increased awareness through campaigns and workshops on cyberbullying by various institutions, parental control and monitoring, especially in case of women.

There is significant relationship between students' awareness about cyberbullying and their sex at p-value= .023, female participants were found to possess higher levels of cyberbullying awareness compared to male participants, this finding is similer to findings of Thumronglaohapun S, et al. (2022) by which women were more aware of cyberbullying than men (92.1% vs. 82.7%; *p* <0.001) and Zorlu E. (2023)   The study demonstrate no significant relationship among students' awareness about cyberbullying and their variables related to social media use. Similarly, study of Zorlu E. (2023) that revealed lack of any statistically significant difference between college students' levels of cyberbullying awareness and their daily internet use (p>.05) .whereas Study of Tosun, N., & Akcay, H. (2022) reported that individuals who have cyberbullying awareness are less luckily to full into the trap of cybervictimization.   According to the present study findings, there is a high significant negative relationship between students' precautions and their daily hour use of social media at p-value= .005,this is supported by the study of Van Schaik, P et al., (2018), those who spent 30 or 45 minutes per Internet session (and who may therefore be deemed less experienced social-media users) acting with more precaution than those spending several hours

CONCLUSION

An effective measures of students' precautions and their awareness about cyberbullying leads to prevent cyberbullying and protect their privacy and information as they browsing the internet.

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Conflict of Interest

The authors affirm that they do not possess any identifiable conflicting financial interests or personal affiliations that may have seemed to impact the research presented in this article.

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