



Proceeding Paper Pilot Study on Cyberbullying among Visually Impaired Youths ⁺

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Abstract: Social networking has dominated the modern technological era, with youths being the main users. However, technological advancement has instilled a form of online violence called cyberbullying. Visually impaired Malaysian youths are no exception to cyberbullying incidents; however, this aspect has been understudied in Malaysia. This study examined the associated factors of cyberbullying among visually impaired Malaysian youths. A total of 30 participants were included in the Braille/pen-and-paper and voice-over online survey. We found that only aggressive behavior was positively associated with cyberbullying ($\beta = 0.544$, p = 0.002). The distinctiveness of the study can help to draw public attention to the issue of cyberbullying.

Keywords: aggressive behavior; cyberbullying; technological exposure; visually impaired youths

1. Introduction

Social networking, or social media, has dominated the modern technological era and is especially popular among youths [1,2]. In the past, the tools of communication were limited and slower, especially over long distances. However, globalization has significantly revolutionized the nature of communication to fill in the void and meet the needs of individuals via the advancement of information technologies [3]. Wok and colleagues have stated that globalization has led Malaysians to change their internet usage patterns to adapt to and fit into the Information age [2]. Today, the advancement of information technologies has facilitated opportunities for effective communication and has afforded more convenience with the accessibility of the Internet [4,5]. Moreover, according to Hruška & Maresova, social media outlets have become important tools for acquiring and spreading information in different domains (e.g., entertainment, politics, social science, etc.) [6]. Given the accessibility of the internet, previous studies have shown that the youth population are the main users and subscribers of social media [1,7]. Recently, The Star reported that there were approximately 28 million social media users (86% of the total Malaysian population) as of January 2021 [8]. Additionally, the outbreak of the COVID-19 pandemic has increased people's dependency on the Internet and social networking platforms to stay connected for work and education [9]. Several studies have found that visually impaired youths are also active Internet users, and they have been observed as spending more time accessing the Internet than non-visually impaired individuals [10–12].

Undeniably, the Internet and social media have made life easier for people by providing different platforms for effective communication and learning [4]. However, these technological advancements have also instilled terror in some populations who use the Internet via an activity known as "cyberbullying" [1,5,13]. Various studies have defined "cyberbullying" as a form of online violence with the intention to harass, threaten, or harm a victim repeatedly over time via the Internet [5,14,15]. According to [16], cyberbullying has been found to be more threatening due to three factors: the anonymity of the cyber perpetrators, the breadth of potential targets, and the difficulty of escaping from it. Chan and



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Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). colleagues' recent study proposed that cyberbullying is an extension of traditional bullying, with the exception that cyberbullying occurs in cyberspace via access to the Internet [5]. However, Wang and colleagues argued that cyberbullying is an overlap of traditional bullying, emphasizing aggressive behavior through indirect and verbal aggression [17]. The definition of "cyberbullying" is still open for scholarly debate and continues to evolve.

Cyberbullying is an ongoing phenomenon which has been a concern of youth advocates and which has dominated the headlines as a serious issue facing youths today [18]. Several studies have been conducted on the Malaysian youth population. A study by the Global Youth Online Behavior Survey conducted with 7600 Malaysians found that 1 out of every 3 respondents reported having been a cyber victim [19]. A 2016 MCMC study reported that there had been 1524 cyberbullying cases in Malaysia over five years [20]. Based on these statistics, Malaysia was counted among the countries with the highest number of cyberbullying cases recorded in 2018, ranking 6th among 28 other countries. In 2020, Malaysia ranked as second among all Asian countries in the number of cyberbullying cases reported among youths [21]. However, it is unfortunate that many people view this issue lightly and perceive its effect to be less severe [22]. Cyberbullying is associated with many negative effects on mental health (depression, low self-worth, hopelessness, and loneliness) and suicidal ideation [18,22–24]. Yusuf and colleagues found that youths are more vulnerable to the involvement of cyberbullying [20].

Visually impaired Malaysian youths are no exception to the trend in cyberbullying incidents. International studies have reported that visually impaired youths are at a higher risk of cyberbullying involvement due to their disabilities; however, this aspect has been understudied in Malaysia. Heiman & Olenik-Shemesh found that visually impaired youths reported twice as much cyber victimization as compared to sighted individuals [14]. Many of the assumptions about visually impaired youths involve a lack of access to the Internet, especially when information is presented in a visual form [25,26], and therefore they are assumed to be immune to cyberbullying. However, what is not known is that visually impaired youths are equally engaged in internet use [11]. Inventions have been made available for the visually impaired to access the Internet and improve the readability of webpages, for instance, computer-based assistive devices, such as screen-reading software [27]. Thus, their access to the Internet is undeniable and prominent. They, too, have been introduced to playing audio games as well, thus making them susceptible to online behaviors such as cyberbullying. Moreover, cyberbullying behaviors can occur in the form of sending audio messages or making disturbing calls [28], as the study reported hate speech as a negative online behavior. This would include, for instance, calling someone "stupid" and others continuing to comment hatefully. Therefore, to address the gap, the objectives of this study are:

- 1. To examine the relationship between technological exposure and cyberbullying among visually impaired Malaysian youths, and
- 2. To examine the relationship between aggressive behavior and cyberbullying among visually impaired Malaysian youths.

2. Materials and Methods

Approval from the institutional ethics board for the study has been obtained (Ethics Approval No.: PGSUREC2021/028). A quantitative approach has been employed as the research methodology for this study so as to test the following research hypotheses:

Hypothesis 1. There is a significant positive relationship between technological exposure and cyberbullying.

Hypothesis 2. *There is a significant positive relationship between aggressive behavior and cyberbullying.*

The proposed research model is shown in Figure 1.

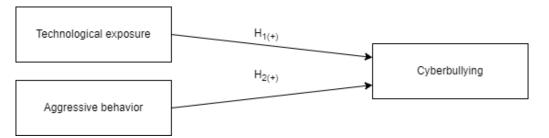


Figure 1. Proposed research model.

Using a stratified sampling technique, 30 visually impaired participants from Malaysia were chosen to participate in this study via both Braille/ pen-and-paper and online voiceover survey questionnaires. The participants used NonVisual Desktop Access (NVDA) (NV Access Limited, St Lucia, Australia) as a screen-reader tool to assist them in completing the online survey.

A four-section questionnaire was developed in both English and Bahasa Malaysia, utilizing three existing surveys and including demographic questions. The Social Networking Usage Questionnaire, the Aggression Questionnaire, and the Cyber Bullying Behaviors and Victimization Experiences measure were used to examine the potential factors (technological exposure and aggressive behavior) contributing to cyberbullying. Section A assessed participants' social networking usage in four dimensions—academic, socialization, entertainment, and informativeness, using the Social Networking Usage Questionnaire of 19 items using a Cronbach's alpha coefficient of 0.83 [29]. The Social Networking Usage Questionnaire measured responses on a 5-point Likert Scale: 1 = never, 2 =rarely, 3 =sometimes, 4 =often, and 5 =always. Section B assessed how aggressive participants were based on four aggression factors—physical aggression, verbal aggression, anger, and hostility—using the Aggression Questionnaire of 29 items with a Cronbach's alpha coefficient of 0.89 [30]. The anchors in the Aggression Questionnaire were 1 = extremely uncharacteristic of me, 2 = somewhat uncharacteristic of me, 3 = neither uncharacteristic nor characteristic of me, 4 = somewhat characteristic of me, and 5 = extremely characteristic of me. Section C assessed participants' frequency of involvement in cyberbullying and victimization experiences using the Cyber Bullying Behaviors and Victimization Experiences measure of 8 items with a Cronbach's alpha coefficient of 0.86 [31]. The anchors of the Cyber Bullying Behaviors and Victimization Experiences measure were 0 = never, 1 = once or twice, 2 = a few times, 3 = many times, and 4 = every day. Section D included demographic questions (e.g., age, gender, frequency of Internet usage, etc.).

Data were analyzed using Statistical Package for the Social Sciences (SPSS) version 26 (IBM, Armonk, NY, USA) to conduct descriptive, reliability, correlation, and regression analyses. The total score for all scales was used for analysis.

3. Results

3.1. Demographics

A total of 18 males and 9 females took part in this study, with a mean age of 17.85 (SD = 11.80). Some participants preferred to remain completely anonymous by not providing any personal information. Therefore, the cases with missing values were excluded, and the demographics of the participants have been reported in a list (Table 1). The majority of the participants (93.3%) actively used the Internet. Only 5 participants (16.7%) identified themselves as cyber victims, and only one participant (3.3%) reported himself/herself to be a cyber perpetrator, while only 11 participants (36.7%) identified themselves as cyber witnesses.

		n (%)
	15–18	13 (43.3%)
Age $(n = 27)$	19–24	14 (46.5%)
-	Missing value	3 (10.0%)
	Male	18 (60.0%)
Gender (<i>n</i> = 27)	Female	9 (30.0%)
	Missing value	3 (10.0%)
	Malay	11 (36.7%)
	Chinese	14 (46.7%)
Ethnicity $(n = 28)$	Indian	2 (6.7%)
-	Other	1 (3.3%)
	Missing value	2 (6.7%)
	Yes	28 (93.3%)
Internet usage $(n = 28)$	No	-
U U	Missing value	3 (6.7%)
	Almost every day	27 (90.0%)
Frequency of Internet usage $(n = 28)$	3–4 times a week	1 (3.3%)
	Missing value	2 (6.7%)
	Yes	5 (16.7%)
$\mathbf{U}_{\mathbf{r}} = \mathbf{v}_{\mathbf{r}} + $	No	9 (30.0%)
Have you experienced cyberbullying? ($n = 20$)	Maybe	6 (20.0%)
	Missing value	10 (33.3%)
	Yes	1 (3.3%)
A reason a symbol h_{1} ($\mu = 20$)	No	16 (53.3%)
Are you a cyberbully? $(n = 20)$	Maybe	3 (10.0%)
	Missing value	10 (33.3%)
	Yes	11 (36.7%)
Have you witnessed a cyberbullying incident?	No	7 (23.3%)
(n = 20)	Maybe	2 (6.7%)
	Missing value	10 (33.3%)

Table 1. Demographic information.

3.2. Reliability Analysis

Reliability analysis was performed to assess the consistency of the results based on each variable presented, and all variables have achieved a Cronbach's alpha score of 0.7 or above, which indicates high reliability (Table 2).

Table 2. Reliability analysis.

Variables	Items	Cronbach's Alpha (α)
Technological exposure	19	0.905
Aggressive behavior	29	0.913
Cyberbullying	8	0.737

3.3. Descriptive Statistics

A total of 30 participants participated in this pilot study. The mean, standard deviation, skewness, and kurtosis of the variables are shown in Table 3.

Table 3. Information on the descriptive statistics.

Variables	Mean	Std. Deviation	Skewness	Kurtosis
Technological exposure	60.07	14.65	-0.836	0.428
Aggressive behavior	81.00	20.84	0.006	-0.370
Cyberbullying	6.83	4.32	0.174	-0.888

3.4. Correlational Analysis

A preliminary analysis was run prior to the final analysis. Pearson correlational analysis was performed to determine the variables' relationships based on the empirical research model in this study. Table 4 shows that there was no significant relationship between technological exposure and cyberbullying, and therefore H₁ was not supported. There was a significant positive relationship between aggressive behavior and cyberbullying (r = 0.583, p < 0.01), and thus H₂ was supported.

Table 4. Correlation analysis.

Variables	1	2	3	
Cyberbullying	-			
Technological exposure	0.293	-		
Aggressive behavior	0.583 **	0.262	-	

3.5. Regression Analysis

Regression analysis was performed to identify the association between cyberbullying and technological exposure and aggressive behavior. The results are presented in Table 5. We found that cyberbullying was positively associated with aggressive behavior ($\beta = 0.544$, p = 0.002), but it was not associated with technological exposure ($\beta = 0.150$, p > 0.05). In our model, aggressive behavior and technological exposure explain a 31.4% variance in cyberbullying, which achieves a small-effect size [32].

Table 5. Results from the regression analysis.

Variables		Cyberbullying				A directed D Courses	
variables	β	Р	t	SE	95% CI	Adjusted R Square	
Technological exposure	0.150	0.354	0.942	0.047	(0.052, 0.141)	- 0.314	
Aggressive behavior	0.544	0.002	3.411	0.033	(0.045, 0.180)	0.014	

Note. Predictors: (Constant); Aggressive behavior, Technological exposure.

4. Discussion

The evolution of new technologies has made life easier for people and has yielded various benefits, for instance, convenience in acquiring information [6,33]. The dependency of people on the Internet has been reflected in the findings of this study, revealing that a majority of the participants (93.3%) actively engaged in Internet and social media use. Previous studies have found that increased time spent on the Internet and social media can potentially increase the risk of cyberbullying in cyberspace [7,15,22]. The findings of this study show that cyberbullying is present in the Malaysian visually impaired youth community, with 16.7% of participants reporting experiences as cyber victims, 3.3% of participants as cyber perpetrators, and 36.7% of participants as cyber witnesses. Although the findings help us to ascertain the presence of cyberbullying, the findings still showed that the majority of the participants did not report being cyberbullied nor as having cyberbullied others, in comparison to only being cyber witnesses. This is consistent with [14], who found that more people with low vision reported being a cyber witness; in the same study, they also found that people with low vision were more likely to know others who had suffered from being cyberbullied compared with their sighted counterparts. Therefore, we suggest that visually impaired Malaysian youth are highly aware of cyberbullying, while they are also well-versed in preventing themselves from being cyberbullied.

The focus of the present study is to examine the relationship between technological exposure and cyberbullying, as well as the relationship between aggressive behavior and cyberbullying. our findings reveal that there is no significant relationship between technological exposure and cyberbullying, and therefore H_1 was not supported. Parenting styles regarding internet and social media usage may be a factor to take into account.

This is supported by [34], who found that Chinese parents' restrictions on children's screentime on technological devices can significantly predict children's social skills. Asian parents or guardians are more likely to restrict their children from the Internet because they fear that their children will be exposed to potential hazards on the Internet, for instance, pornography sites, scam sites, and money-laundering sites. Visually impaired youths are especially vulnerable in this regard as compared with sighted individuals. Moreover, in a short meeting with the guardians of a home for the disabled, they revealed that the visually impaired youths there were not exposed to computers because the guardians are concerned that the children might browse websites that could potentially cause harm to them. Moreover, the parents of visually impaired may face financial difficulties as they may spend more money on treatments for their visually impaired children, and this may cause them to be unable to provide and constrain access to the Internet.

Our study found that there is a positive relationship between aggressive behavior and cyberbullying, and therefore H_2 was supported. This finding is supported by several studies by [20,35]. Runions & Bak's study further suggests that online settings may facilitate cyber aggression and cyberbullying [36]. The anonymity afforded to Internet users provides a chance for individuals to carry out aggressive behaviors without the need to face any consequences [37], while some of them use it to take revenge on others with hostile intent [38]. Another study by [23] also supports the relationships by explaining the nature and extent of cyberbullying involving direct and indirect aggression. Cyberbullying, according to [15], is a variant of traditional bullying with similar aggression, as intentional and repeated acts of doing harm, except that cyberbullying occurs using electronic devices (e.g., smartphones and laptops) and online media (e.g., Facebook, Instagram, and WhatsApp). Several unique cyberbullying behaviors have been described by [39], including bombing, flaming, and happy slapping. "Bombing" occurs when an aggressor uses an automated program to collapse a victim's e-mail with simultaneous messages and block the e-mail account. "Flaming" occurs when an aggressor sends electronic messages with hostile and vulgar language. "Happy slapping" occurs when an aggressor attacks a person with images or videos [39]. Wrzesinska and colleagues also found that individuals who are visually impaired were at a higher risk of engaging in electronic aggression [40]. This might be caused by the type of discrimination that happens so often on the Internet, in which a minority group (e.g., visually impaired individuals) feel the need to defend themselves while enlarging their feelings of anger and aggression towards others.

Implications

This study reveals the presence of cyberbullying among visually impaired Malaysian youths, which draws the attention of researchers and the public to cyberbullying issues among individuals with disabilities in Malaysia. Although there are works of literature showing the negative effects and presence of cyberbullying among young adults, the subject of cyberbullying among visually impaired youths remains understudied. This problem is further reinforced by the fact that society fails to learn about how and to what extent visually impaired youth become cyber victims or cyber perpetrators. Therefore, the present study can provide a new understanding of the prevalence of cyberbullying among the community of visually impaired youths in Malaysia. The findings can further contribute to understanding the theoretical aspects of technological exposure and aggressive behaviors in cyberbullying.

Based on our findings, aggressive behaviors appear to be an important factor contributing to cyberbullying among visually impaired youths in Malaysia. It can serve as a basis for awareness among counseling practitioners and schoolteachers of the presence of aggression while intervening in cyberbullying cases. Therefore, those professionals are encouraged to identify the aspects of aggression among cyberbullies and counter them with appropriate methods. Additionally, schools should implement programs and interventions which aim to reduce aggressive behaviors in their curriculum. This will help to raise the awareness of the visually impaired youth to refrain from using violence and aggression to approach problems, but rather to resort to healthier coping strategies.

5. Conclusions

The findings of the study give light to the presence of cyberbullying among the visually impaired Malaysian youth community. Furthermore, the current study examined the relationship between technological exposure and cyberbullying, as well as the relationship between aggressive behavior and cyberbullying. The findings show that cyberbullying is positively associated only with aggressive behavior. As studied, online settings have facilitated opportunities for cyber aggression and cyberbullying, with an added point on the power of anonymity of Internet users affording the opportunity of cyberbullying. Additionally, this study is particularly important and worthwhile as the phenomenon of cyberbullying is considered to be of global significance today. More awareness and attention from parents, peers, and teachers may be needed to reduce the probability of the association of cyberbullying with aggressive behavior. Particularly, visually impaired youths are categorized as a vulnerable community that is more likely at risk of exposure to cyberbullying. The distinctiveness of this study is its ability to shed light on the visually impaired Malaysian youth community in understanding the nature and extent of cyberbullying by acknowledging the risk factors and effects of cyberbullying.

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Institutional Review Board Statement: The study was conducted with the approval of the Institutional Review Board (or Ethics Committee) of SUNWAY UNIVERSITY (protocol code PGSUREC2021/028 with a date of approval of 2 September 2021) for studies involving humans.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Not applicable.

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References

- Hamm, M.P.; Newton, A.S.; Chisholm, A.; Shulhan, J.; Milne, A.; Sundar, P.; Ennis, H.; Scott, S.D.; Hartling, L. Prevalence and Effect of Cyberbullying on Children and Young People: A Scoping Review of Social Media Studies. *JAMA Pediatr.* 2015, 169, 770–777. [CrossRef]
- Wok, S.; Idid, S.; Misman, E. Social media use for information-sharing activities among youth in Malaysia. J. Mass Commun. 2012, 2, 1029–1047. [CrossRef]
- Goodman-Deane, J.; Mieczakowski, A.; Johnson, D.; Goldhaber, T.; Clarkson, P.J. The impact of communication technologies on life and relationship satisfaction. *Comput. Hum. Behav.* 2016, 57, 219–229. [CrossRef]
- 4. Abaido, G.M. Cyberbullying on social media platforms among university students in the United Arab Emirates. *Int. J. Adolesc. Youth* **2020**, *25*, 407–420. [CrossRef]
- Chan, N.N.; Ahrumugam, P.; Scheithauer, H.; Schultze-Krumbholz, A.; Ooi, P.B. A hermeneutic phenomenological study of students' and school counsellors' "lived experiences" of cyberbullying and bullying. *Comput. Educ.* 2020, 146, 103755. [CrossRef]
- Hruška, J.; Maresova, P. Use of Social Media Platforms among Adults in the United States—Behavior on Social Media. *Societies* 2020, 10, 27. [CrossRef]
- Ybarra, M.L.; Mitchell, K.J. Youth engaging in online harassment: Associations with caregiver–child relationships, Internet use, and personal characteristics. J. Adolesc. 2004, 27, 319–336. [CrossRef]
- 8. Malaysia has 28 million social media users as of January 2021, says Comms Ministry sec-gen. The Star, 22 September 2021.
- 9. Wong, A.; Ho, S.; Olusanya, O.; Antonini, M.V.; Lyness, D. The use of social media and online communications in times of pandemic COVID-19. *J. Intensiv. Care Soc.* **2021**, *22*, 255–260. [CrossRef]

- Martiniello, N.; Lehane, C.; Eisenbarth, W.; Johnson, A.; Wittich, W. Exploring the use of smartphones and tablets among people with visual impairments: Are mainstream devices replacing the use of traditional visual aids? *Assist. Technol. Off. J. RESNA* 2019, 34, 34–45. [CrossRef]
- 11. Wrzesińska, M.; Tabała, K.; Stecz, P. The online behavior of pupils with visual impairment: A preliminary report. *Disabil. Health J.* **2016**, *9*, 724–729. [CrossRef]
- 12. Wu, S.; Adamic, L. Visually impaired users on an online social network. In Proceedings of the CHI'14: CHI Conference on Human Factors in Computing Systems, Toronto, ON, Canada, 26 April–1 May 2014. [CrossRef]
- 13. Whittaker, E.; Kowalski, R.M. Cyberbullying Via Social Media. J. Sch. Violence 2015, 14, 11–29. [CrossRef]
- 14. Heiman, T.; Olenik-Shemesh, D. Cyberbullying Involvement of Adolescents with Low Vision Compared to Typical Adolescents, as Related to Perceived Social Support. *J. Aggress. Maltreatment Trauma* **2017**, *26*, 105–115. [CrossRef]
- 15. Smith, P.K.; Mahdavi, J.; Carvalho, M.; Fisher, S.; Russell, S.; Tippett, N. Cyberbullying: Its nature and impact in secondary school pupils. *J. Child Psychol. Psychiatry* **2008**, *49*, 376–385. [CrossRef]
- 16. Slonje, R.; Smith, P.K. Cyberbullying: Another main type of bullying? Scand. J. Psychol. 2008, 49, 147–154. [CrossRef]
- Wang, C.-W.; Musumari, P.M.; Techasrivichien, T.; Suguimoto, S.P.; Tateyama, Y.; Chan, C.-C.; Ono-Kihara, M.; Kihara, M.; Nakayama, T. Overlap of traditional bullying and cyberbullying and correlates of bullying among Taiwanese adolescents: A cross-sectional study. *BMC Public Health* 2019, 19, 1756. [CrossRef]
- Lai, C.S.; Mohaffyza, M.; Lee, M.F.; Mohd Salleh, K.; Sulaiman, N.; Rosli, D.O.; Chang, W.V.S. Prevalence of Cyberbullying among Students in Malaysian Higher Learning Institutions. *Adv. Sci. Lett.* 2017, 23, 781–784. [CrossRef]
- Saharrudin, N.; Akmar, G.; Abu Samah, A.; Ahmad, A.; Abdullah, H. Cyberbullying among Malaysian Youth: The Case of Selangor. Int. J. Acad. Res. Bus. Soc. Sci. 2019, 9, 1060–1070. [CrossRef]
- Yusuf, S.; Al-Majdhoub, F.; Mubin, N.; Chaniago, R.; Khan, R. Cyber Aggression-Victimization Among Malaysians Youth. Asian J. Univ. Educ. 2021, 17, 240–260. [CrossRef]
- 21. Hanaffi, F. Malaysia Is Ranked Second Most Aggressive Country for Cyber-Bullying in Asia. World of Buzz, 26 July 2020.
- 22. Ng, C.G.; Kanagasundram, S.; Ann, Y.H.; Tan, L.H.; Teoh, K.M. Cyber Bullying—A New Social Menace. *Asean J. Psychiatry* **2016**, *17*, 104–115.
- 23. Hinduja, S.; Patchin, J.W. Bullying, cyberbullying, and suicide. Arch. Suicide Res. 2010, 14, 206–221. [CrossRef]
- 24. Nixon, C.L. Current perspectives: The impact of cyberbullying on adolescent health. *Adolesc. Health Med. Ther.* **2014**, *5*, 143–158. [CrossRef]
- 25. Brinkley, J.; Tabrizi, N. A Pilot Study Examining the Online Behavior of Web Users with Visual Impairments. *Int. J. Adv. Comput. Sci. Appl.* **2013**, *4*, 150–155. [CrossRef]
- 26. Hafiar, H.; Subekti, P.; Nugraha, A. Internet Utilization by the Students with Visual Impairment Disabilities. *Int. J. Emerg. Technol. Learn. (iJET)* **2019**, *14*, 200–207. [CrossRef]
- 27. Rosner, Y.; Perlman, A. The Effect of the Usage of Computer-Based Assistive Devices on the Functioning and Quality of Life of Individuals who are Blind or have low Vision. *J. Vis. Impair. Blind.* **2018**, *112*, 87–99. [CrossRef]
- Soni, D.; Singh, V. See No Evil, Hear No Evil: Audio-Visual-Textual Cyberbullying Detection. *Proc. ACM Hum.-Comput. Interact.* 2018, 2, 1–26. [CrossRef]
- 29. Bashir, L.; Gupta, S. Social Networking Usage Questionnaire: Development and Validation in an Indian Higher Education Context. *Turk. Online J. Distance Educ.* 2018, 19, 214–227. [CrossRef]
- 30. Buss, A.H.; Perry, M. The aggression questionnaire. J. Pers. Soc. Psychol. 1992, 63, 452–459. [CrossRef]
- 31. Holfeld, B.; Leadbeater, B.J. The Nature and Frequency of Cyber Bullying Behaviors and Victimization Experiences in Young Canadian Children. *Can. J. Sch. Psychol.* **2014**, *30*, 116–135. [CrossRef]
- 32. Cohen, J. Set Correlation and Contingency Tables. Appl. Psychol. Meas. 1988, 12, 425–434. [CrossRef]
- Ngonso, B.F. Effect of Social Media on Teenagers and Youths: A Study of Rural Nigerian Teenagers and Youths in Secondary Schools. *Glob. Media J.* 2019, 17, 1–6.
- Hu, B.Y.; Johnson, G.K.; Wu, H. Screen time relationship of Chinese parents and their children. *Child. Youth Serv. Rev.* 2018, 94, 659–669. [CrossRef]
- den Hamer, A.; Konijn, E.A.; Keijer, M.G. Cyberbullying behavior and adolescents' use of media with antisocial content: A cyclic process model. *Cyberpsychol. Behav. Soc. Netw.* 2014, 17, 74–81. [CrossRef]
- Runions, K.C.; Bak, M. Online Moral Disengagement, Cyberbullying, and Cyber-Aggression. Cyberpsychol. Behav. Soc. Netw. 2015, 18, 400–405. [CrossRef] [PubMed]
- 37. Law, D.M.; Shapka, J.D.; Domene, J.F.; Gagné, M.H. Are Cyberbullies really bullies? An investigation of reactive and proactive online aggression. *Comput. Hum. Behav.* 2012, *28*, 664–672. [CrossRef]
- 38. Peker, A.; Nebioglu, M. Mediating Role of Self-Control in the Relationship between Aggressiveness and Cyber Bullying. *Psychiatry Behav. Sci.* **2021**, *11*, 40. [CrossRef]
- Calvete, E.; Orue, I.; Estévez, A.; Villardón, L.; Padilla, P. Cyberbullying in adolescents: Modalities and aggressors' profile. Comput. Hum. Behav. 2010, 26, 1128–1135. [CrossRef]
- Wrzesinska, M.A.; Knol-Michałowska, K.; Stecz, P.; Kopytowska, M.; Binder-Olibrowska, K. Internet risky behaviours among youth with visual impairment. *PeerJ* 2021, 9, e12376. [CrossRef]