DEVELOPMENT AND VALIDATION OF THE MALAY VERSION OF THE PERCEPTION AND AWARENESS OF CYBERBULLYING QUESTIONNAIRE AMONG THE MALAYSIAN PARENTS AND CAREGIVERS

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CONTENTS

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ABSTRAK

Pengenalan: Pada masa kini, buli siber menjadi kebiasaan dan isu yang membimbangkan di kalangan kanak-kanak dan remaja. Perkara ini perlu diberi perhatian yang sepenuhnya kerana mangsa buli siber kerap kali diugut, diganggu, dihina, dimalukan atau dijadikan sasaran oleh pembuli. Oleh yang demikian, ia boleh dilakukan dengan cara membina kesedaran tentang isu ini dalam kalangan ibu-bapa dan penjaga. Setakat ini, tiada soal selidik dalam Bahasa Malaysia yang tersedia untuk menilai persepsi dan kesedaran ibu-bapa dan penjaga mengenai buli siber. Justeru, ada keperluan untuk membina dan mengesahkan Soalselidik Persepsi dan Kesedaran Ibu Bapa dan Penjaga mengenai siber buli dalam versi Bahasa Malaysia untuk menilai tahap persepsi dan kesedaran mereka tentang buli siber.

Objektif: Kajian ini bertujuan untuk membina Soal selidik untuk menilai Persepsi dan Kesedaran Ibu Bapa di Malaysia mengenai siber buli dalam versi Bahasa Malaysia serta menentukan kesahan dan kebolehpercayaannya.

Metod: Satu kajian keratan rentas yang melibatkan 270 peserta berusia 20 hingga 60 tahun telah dijalankan daripada bulan Disember 2020 sehingga November 2022 melalui borang soalselidik dalam talian. Soalselidik Persepsi dan Kesedaran Ibu Bapa mengenai siber buli versi Bahasa Malaysia telah dibina melalui tiga fasa iaitu membina soalan, membina dan menentukan kesahan dan kebolehpercayaan soal selidik. Ia dinamakan soal selidik Kesedaran dan Persepsi buli siber dalam kalangan ibu bapa (KEPS - I). Indeks pengesahan kandungan dan muka telah dijalankan untuk memastikan KEPS - I mempunyai kesahan yang baik. Versi cubaan KEPS - I telah diselaraskan dan pra ujian dijalankan ke atas 30 peserta untuk memastikan soalan-soalannya sesuai sebelum diedarkan. Setelah meneliti maklum balas daripada pra ujian, soal selidik tersebut disasarkan ke perserta yang telah bersetuju menyertai kajian sosio-demografi dan KEPS

- I. Analisa data merangkumi penilaian pengesahan konstruk dengan menggunaan analisa faktor penerokaan, pengesahan konstruk dan kebolehpercayaan uji-uji semula.

Dapatan: Dalam kajian ini, skala awal dibina dengan mengunakan enam faktor dan 48 soalan. Model terakhir KEPS - I terdiri daripada lima faktor dan 34 soalan selepas menjalani analisa faktor penerokaan. Soalan terakhir iaitu Soalan ke- 34 merupakan soalan terbuka. Soalan-soalan yang mempunyai faktor muatan lebih daripada 0.4 dan nilai Cronbach alpha yang memuaskan (α=0.894 - 0.939) telah diambil pada akhir kajian ini. Akan tetapi kebolehpercayaan uji-uji semula untuk soal-selidik ini adalah kurang memuaskan (ICC = 0.293).

Kesimpulan: Kajian menunjukkan skala KEPS - I dengan lima faktor utama dan 34 soalan memiliki ciri-ciri psikometrik baik. Skala ini adalah sah dan mempunyai kebolehpercayaan untuk menilai persepsi dan kersedaran buli siber di kalangan ibu-bapa di Malaysia, walaupun kebolehpercayaan uji-uji semula adalah kurang memuaskan .

Kata Kunci: Analisis factor, Buli siber, Ibu-bapa, Pengesahan, Malaysia

ABSTRACT

Background: Cyberbullying is becoming a common and alarming issue among children and adolescents. This situation must be given attention as the victims are repeatedly threatened, harassed, humiliated, embarrassed, or likewise targeted by the perpetrator. This can be done on the basis includes developing awareness among the parents and caregivers. However, so far, there is no validated questionnaire available in the Malay language to assess the perception and awareness of cyberbullying among parents and caregivers in Malaysia. Therefore, there is a need to develop and validate a questionnaire in the Malay language to measure their Perceptions and Awareness of Cyberbullying.

Objective: This study is to develop a questionnaire in the Malay language to assess the Perceptions and Awareness of Cyberbullying among parents in Malaysia and to determine its validity and reliability.

Method: A cross-sectional study involving 270 participants from 20 to 60 years old was conducted from December 2020 to November 2022 via an online questionnaire form. A Malay Version of The Perceptions and Awareness of Cyberbullying Questionnaire among parents was developed through three phases namely item development, scale development and scale evaluation. It was named as soal selidik Kesedaran dan Persepsi buli siber dalam kalangan ibu bapa (KEPS - I). The Content and Face Validation Index were done to ensure KEPS - I has good face and content validity. The finalized version of KEPS - I was harmonized and pre-tested on 30 participants. Study participants then completed the socio-demographic questionnaire and KEPS-I questionnaire. Data were analyzed using SPSS version 26 for construct validity by performing exploratory factor analysis (EFA), construct reliability, and test-retest reliability.

Result: In this study, the initial scale was developed with six factors and 48 items. While the final model of KEPS-I comprises five factors with 34 items after undergoing the EFA.

A final question (Question 34) is an open-answer question that was incorporated as the last question. The findings revealed acceptable factor loading, which is more than 0.4, overall Cronbach's alpha is good (0.894 - 0.939), yet poor test-retest reliability (ICC = 0.293).

Conclusion: The study revealed that KEPS - I with five factors and 34 items has good psychometric properties. The scale is valid and reliable to measure the Perceptions and Awareness of Cyberbully among parents in Malaysia, although it showed poor stability.

Keywords: Factor Analysis, Cyberbully, Parents, Validity, Malaysia

CHAPTER 1 INTRODUCTION

Introduction

Information and communication technologies (ICTs) provide many advantages for young people. However, the increasing use of electronic devices at young ages also encourages their inappropriate use, such as cyberbulling (Campbell, Marilyn and Sheri Bauman, 2018). Cyberbullying has a several definitions which are made from different perceptions. Cyberbullying is a form of communication misuse of technology by an individual or group to harm or hurt others (Campbell *et al*., 2018). An act of sending annoying messages or making social aggression with intention and repeatedly over time is also called cyberbullying. Today, this is the most common form of digital bullying among adolescent peers (Watkins *et al*., 2016).

In addition, cyberbullying negatively affects the psychosocial well-being of children and adolescents involved in this problem. This is because cyberbullying is also a kind of psychological bullying made by electronic devices such as mobile phones, websites, chat rooms, and weblogs by individuals or groups. In the worst case, the victims would receive threats, including death threats or sharing shameful pictures or videos without the victims' consent. Most of the time, the victims cannot defend themselves as they are worried things could turn into complications. Moreover, in most cases, the materials which have been published can still be accessed for many years after the event. Therefore, this would be sustained as a prolonged embarrassment to the victim, and some sort of repetition would be ongoing.

One of the significant factors that must be considered is a study that found that victims have more avoidant communication, which contributes to prolonging the duration of the victimization (Larrañaga *et al*., 2016). When the parents or guardian has less awareness of the consequences of cyberbullying and fails to safeguard their children, it

could have psychological impact on the victims. The fact that in both roles, these adolescent groups perceive family communication patterns as less open and more avoidant with their parents (Elsaesser *et al.,* 2017). Compared to non-victims, the victims are more likely to feel lonely, be less popular, and perceive their peers as less trustworthy, caring, or helpful. The victims are susceptible to develop neurotic symptoms such as anxiety and depression compared to the non-victims. Thus, awareness of cyberbullying and its effects must be taught to parents and guardians.

Justification of Study

Cyberbullying among children and teenagers are getting more serious nowadays and must be given attention when it becomes one of the causes for a person to commit suicide. There is no available questionnaire in Malay language regarding the awareness on the cyberbullying. Thus, a questionnaire in the Malay language is needed to create awareness among the parents. Malaysia is a unique multi-ethnic country with the Malay language as the official national language. Most Malaysians, especially those living in remote areas, can only understand the Malay language. Therefore, this study aimed to develop a questionnaire to assess the perceptions and awareness of cyberbullying among parents in Malaysia and determine its validity and reliability. This will be a valuable tool for the early detection and intervention of cyberbullying in the Malaysian population.

Findings from this validation study will provide a base for further understanding of factors associated with the lack of awareness among parents and caregivers about cyberbullying. In addition, this study may contribute to the development of earlier interventions such as strict rules and laws for at-risk children of cyberbullying to help prevent the future victimization due to cyberbullying.

1.3 Study Objectives

1.3.1 General Objectives

To develop a questionnaire in the Malay language to measure the Perceptions and Awareness of Cyberbullying among parents and caregivers in Malaysia and to determine its validity and reliability.

1.3.2 Specific Objectives

To determine items measuring the Malay Version of The Perceptions and Awareness of Cyberbullying Questionnaire among parents and caregivers in Malaysia.

To determine the content and face validity of the Malay Version of The Perceptions and Awareness of Cyberbullying Questionnaire among parents and caregivers in Malaysia.

To determine the validity of the Malay Version of The Perceptions and Awareness of Cyberbullying Questionnaire among parents and caregivers in Malaysia by using exploratory factor analysis (EFA).
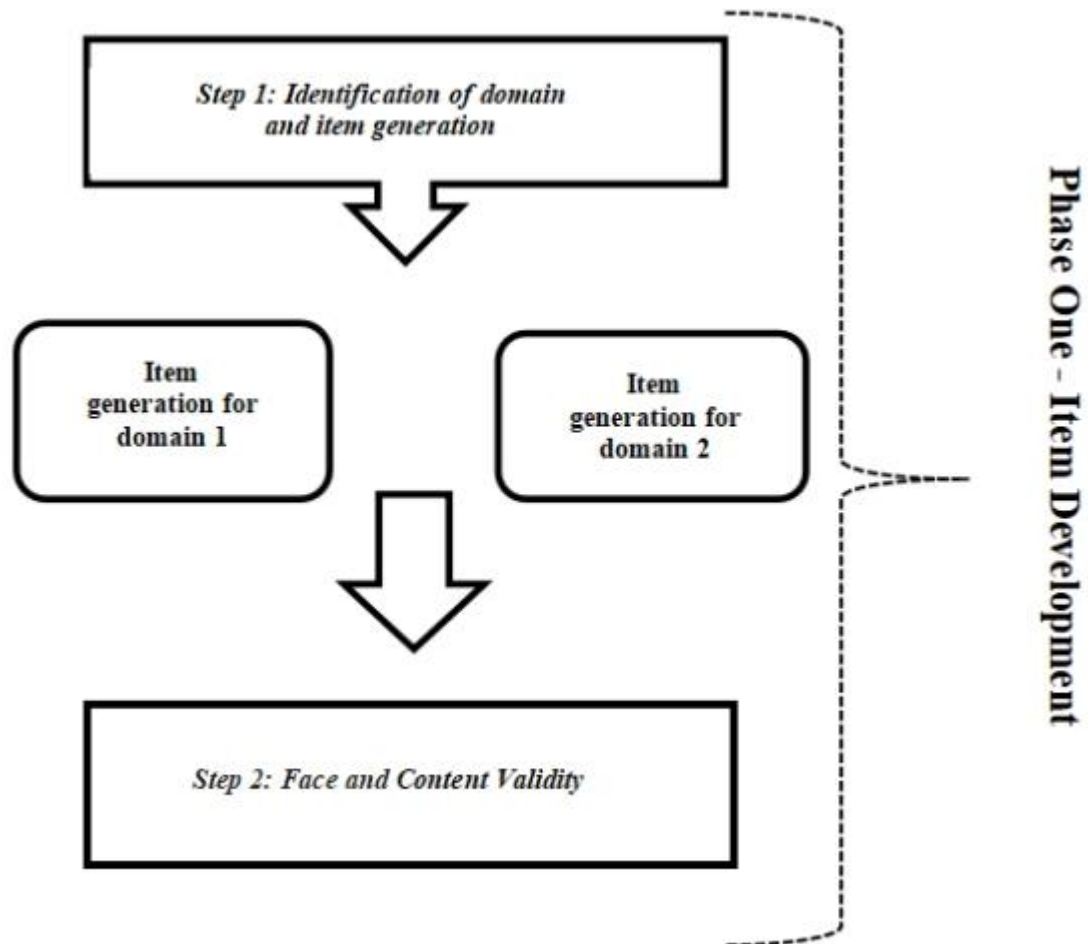
To determine the reliability of the Malay Version of The Perceptions and Awareness of Cyberbullying Questionnaire among parents and caregivers in Malaysia by using internal consistency reliability.

To determine the stability of the Malay Version of The Perceptions and Awareness of Cyberbullying Questionnaire among parents and caregivers in Malaysia by using intra-class correlation.

1.4 Methodology

There is a need for the questionnaire to be developed in their Bahasa Malaysia so that it will apply to local social and cultural contexts. It has two phases which the first phase is to develop the questionnaire and the second phase is validation of questionnaire. The method of developing and validating a questionnaire is based on Best Practices for Developing and Validating Scales for Health, Social, and Behavioral Research: A Primer (Boateng *et al*., 2018). The process was summarized in the flow chart as below (Abdullah *et al*., 2021 and Yusoff, 2019).

1.4.1 Flow Chart Methodology


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┌─────────────────────────────────────┐
│  Step 1: Identification of domain    │
│        and item generation           │
└─────────────────────────────────────┘
                 ▼

┌──────────────────┐     ┌──────────────────┐
│      Item        │     │      Item        │
│ generation for   │     │ generation for   │
│    domain 1      │     │    domain 2      │
└──────────────────┘     └──────────────────┘
                 ▼

┌─────────────────────────────────────┐
│  Step 2: Face and Content Validity   │
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Phase One – Item Development

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┌─────────────────────────────────────────────┐
│  Step 3: Pre-testing Questions: Ensuring the  │
│    Questions and Answers Are Meaningful       │
└─────────────────────────────────────────────┘
                      ↓
┌─────────────────────────────────────────────┐
│  Step 4: Survey Administration and Sample     │
│  Size: Gathering Enough Data from the Right   │
│                  People                       │
└─────────────────────────────────────────────┘
                      ↓
┌─────────────────────────────────────────────┐
│  Step 5: Item Reduction: Ensuring Your Scale  │
│               Is Parsimonious                 │
└─────────────────────────────────────────────┘
                      ↓
┌─────────────────────────────────────────────┐
│  Step 6: Extraction of Factors: Exploring the │
│   Number of Latent Constructs that Fit Your   │
│               Observed Data                   │
└─────────────────────────────────────────────┘
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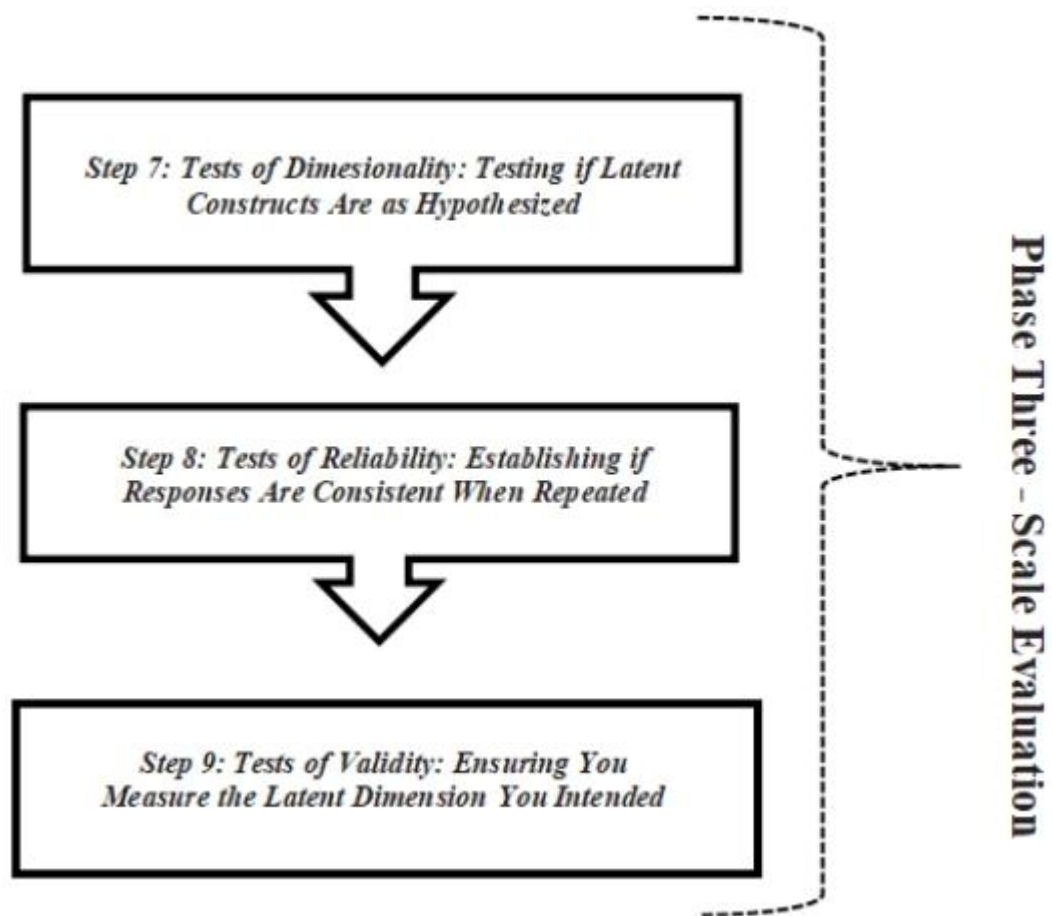
Phase Two - Scale Development
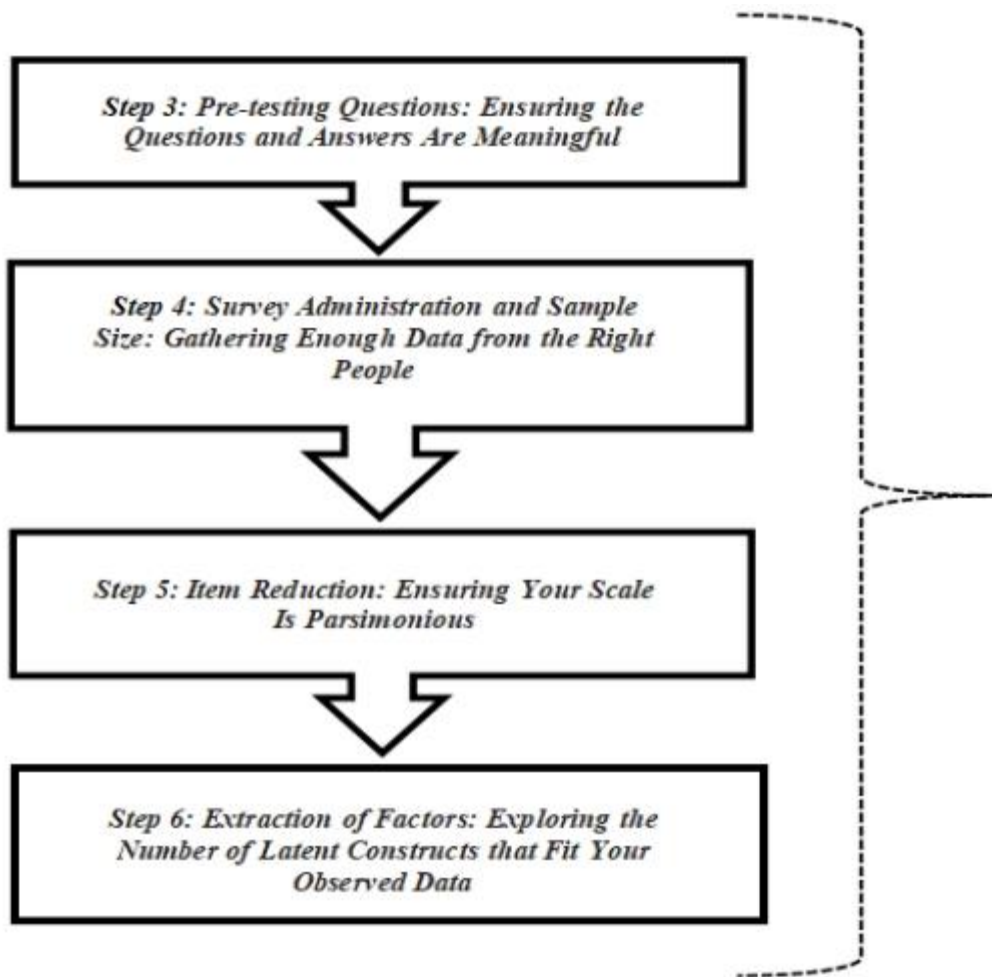
Figure 1: Flow Chart Methodology

1.5 Dissertation organization

This dissertation is arranged according to Format B Manuscript Ready based on the guidelines of the Postgraduate Office, School of Medical Sciences (2016). In Chapter two, the study protocol that was submitted for ethical approval is presented. Chapter three is the manuscript of Development and Validation of the Malay Version of The Perceptions and Awareness of Cyberbullying Questionnaire among parents and caregivers in Malaysia that is being prepared for submission to International Journal of

Cognitive Research in Science, Engineering and Education (IJCRSEE). The appendices

contain the validated questionnaires. The raw data is included in the attached CD.

CHAPTER 2 RESEARCH PROPOSAL

1. INTRODUCTION AND STUDY BACKGROUND

According to American Psychological Association, bullying is a form of aggressive behavior in which someone intentionally and repeatedly causes another person injury or discomfort (July 2022). Bullying can take the form of physical contact, words, or more subtle actions. Traditional forms of bullying are physical, verbal, relational (such as social exclusion), or indirect (such as rumor spreading). However, cyberbullying is another kind of bullying involving communication technologies, such as laptops, mobiles, tablets, computers, and other forms of exchanging information. The communication being shared are text messages or calling, social media, and others. Some would defame a person using these methods. When these behaviors are repeated as intended to harm another person, it can be done by an individual or group.

In recent years, the use of social media, mass media, digital-based social media, e-mail, instant messaging, social network sites, chat rooms, video, and photograph-sharing applications, and online multiplayer computer games have started to affect our lives more and more. As noted in the recent WHO report, parents need to be actively involved in protecting and supervising their children's internet use. Active engagement between parents and their children enables safe and productive internet use and reduces the adverse risks (Solecki and Fay-Hiller, 2015 and UNICEF, 2017).

In the past years, the parents would know whom their child was talking to or with whom they were spending time. This has become more difficult in the later years with the increased use of instant messaging, email, and social networking. There often needs to be higher awareness among parents that cyberbullying is taking place because its venues are hidden electronics, making it difficult for parents to monitor children's interactions.

Parental supervision of children's online behavior has been considered a protective factor, especially in early childhood and adolescence, reducing the risk of adopting the roles of cyberbully and cybervictims (Giménez *et al.*, 2017).

2. LITERATURE REVIEW

In many countries, parents are still not aware of the cyberbullying that occurs to their children. There are a few factors that led to reduced awareness about cyberbullying among parents or caregivers.

2.1 Unable to recognize cyberbullying and its impact on their children.

It is essential to explore parents' understanding and recognition of bullying behavior. Most parents cannot distinguish bullying from other behavior such as fighting or arguments. This is especially seen in cyberbullying as it occurs in hidden areas. This must be a major concern because if parents do not have a clear understanding of the differences between fighting and bullying, they might respond inappropriately.

An Australian study with parents of primary school and secondary school students that used the same set of scenarios as the present study to explore parents' ability to recognize bullying, cyberbullying, and non-bullying incidents, found that 78% of parents identified all five traditional bullying scenarios and 87% identified all five cyberbullying scenarios. However, 76% of parents were not able to recognize the behaviors that were not bullying and 58% were not able to recognize the behaviors that were not cyberbullying (Campbell *et al.*, 2019). A study in the United States that showed only 40.5% of parents accurately identified the bullying as the bullying behaviour. While 93% of parents correctly identified the non-bullying behaviours (Campbell, 2016). Parents exert less control because they believe that the virtual world is less dangerous than the

real one. Online access is considered one of the very essential tools for children in this current world.

2.2 Low parental supervision.

Parental supervision is a positive and valid predictor to protect the subject's optimal level of self-esteem, which is probably linked with how students build individual self-esteem not only in the school context but also in the quality of familial relationships. Only 20% of parents supervise internet use among their children (Ahern *et al*., 2016).

This is also depending on the number of children that the parents have which causes them to have difficulties in dividing their attention between their children. For example, the parents with only one child were 2.30 times more likely to educate their children on the safe use of the Internet than those with four or more children (Dilek Uludasdemir *et al*., 2018). This is because the attention that was not paid fully to their kids will be caused lack of supervision on how their kids are managing the internet. Due to less parental control and supervision, the children could expose to cyberbullying.

2.3 Unfamiliarised with social media.

The adolescents are communicating through these social networking websites rather than through landline telephones. This is because the current methods of communication are very easily available and affordable as well. In some of the computer shops, there are no rules that people above 18 years old can only access these methods. A lot of applications have come out with new technologies which easily understood by the younger generation but not the older generation. Moreover, parents often lack sufficient knowledge of rapidly changing social networking technology, creating another barrier to sufficiently monitoring online activity. One study of Canadian adolescents found that

while parents report familiarity with email, they are the least familiar with social networking platforms. This is a disconcerting finding, given that adolescents report that social networking platforms are the most frequent location of cyberbullying (Cassidy, Brown and Jackson, 2012).

2.4 Unable to understand social media language.

It also is important to note that the language adolescents use to threaten each other online is complicated and nuanced, and parents may not understand what their youth are saying online (Patton *et al*., 2016). Communication is more effective than parental supervision of online activities (Buelga, Martínez and Musitu, 2016). During the childhood and adolescence stages, positive communication appears to be more effective for behavioral control in the specific area of digital media (Buelga *et al*., 2016).

2.5 Low socio-economic background.

Similar studies have shown that a low socioeconomic level increases the likelihood of cyberbullying (Eloy López-Meneses *et al*., 2020). This is because the parents may need more money to buy gadget that could connect them to the digital world. This could be a barrier for them to know if their children have gone through cyberbullying. Socioeconomic status is also depending on the level of education of the parents. If they have lower education status, most likely they would be doing jobs that give less income. Thus, when the income is less, the parents wouldn't have such technologies which are affecting their children, and the bully would be left unknown.

2.6 Poor parental attachment.

The youth can access online easily when their parents' barriers to control such access are at the least. At the same time, the neglectful parenting style is also not good as this allows the youth to access online technologies without their parent's knowledge. A cross-sectional study of 1808 Taiwanese middle school students found that lower parental attachment was associated with higher levels of cyberbullying perpetration (Chang *et al*., 2015). Moreover, warm, and responsive families provide a context for youth to feel safe and process difficult emotions, reducing involvement in bullying both as perpetrators and victims.

2.7 Hesitation among children to share with parents.

Some adolescents involved in cyberbullying do not inform their parents about it for fear of punishment and the negative consequences they may suffer (Mehari *et al.,* 2018). Many adolescents are hesitant to disclose being cyberbullied to a trusted adult. Active engagement between parents and their children enables safe and productive use of the Internet and reduction of the harmful risks (Solecki *et al*., 2015 and UNICEF, 2017). They are also afraid of reporting to parents for fear that their parents will take away their cell phones, laptops, or internet access. It has been found that many young people are fearful of telling others about being bullied for fear of the increasing frequency and severity.

2.8 Authoritarian parenting style.

The authoritarian parenting style has also been associated with more adolescent cyber victimisation (Martínez *et al*., 2019). The low affection and self-confidence promoted by an authoritarian education would severely limit the development of self-esteem and the mechanics of family support in the children, essential resources to cope

with situations of cyberbullying (Martínez *et al*., 2019 and Grusec *et al*., 2017). The open communication and low strictness of the indulgent style, in contrast to the high control of the authoritarian and authoritative styles, act as a protective resource against children's involvement in cyberbullying (Martínez *et al*., 2019).

2.9 Privacy for their children.

    In the past, parents would know whom their child was talking to or with whom they were spending time. This has become more difficult with the increased use of instant messaging, email, and social networking. With internet access, adolescents can now communicate with others from anywhere without leaving their rooms. Despite some parents' efforts to monitor their children's online behaviors, the adolescents used their computers in the privacy of their bedrooms, thereby reducing, or even eliminating, the presence and supervision of their parents. Instead, the children can be bullied during school, after school, or even in their bedrooms. Now we are living in the age of science and technology, with smartphones, computers, tablets, and cell phones, bullies can get involved in a child's life and affect every aspect of it (Kasthuri *et al*., 2022).

Author	Year	Study population	Description of the studies	Questionnaire	Result
Bryan David Clarke	2013	A study was done in New England.	There were 99 participants from 13 states of New England.	Participants filled out two surveys: (a) a demographic questionnaire and (b) the parents' cyberbullying perception and awareness measure designed by the author.	It was found that a majority of caregivers (n = 78; 83.8%) believed that cyberbullying is a problem that should be better addressed. Caregivers learned more about cyberbullying =64) than any other resource (n

					=23).
Dilek Uludasdemir et al	2019	A study was done in Turkey.	The descriptive cross-sectional research was carried out with 1129 secondary and high school adolescents and 776 parents in Turkey.	The Revised Cyber Bullying Inventory – RCBI-II.	51.7% of the parents educated their children on the potential risks of the Internet, with a lower number of children affecting the likelihood of such training being given. Furthermore, 54.8% (n = 425) of the parents controlled their children's use of the Internet, while 56.5% (n = 240) said they "sometimes" controlled their children's activity on the Internet.
L. Ey at al	2020	A study was done in Australia.	Using a convenience sample, a total of 222 Australian parents who had young children between the ages of 5 and 10 years responded to a survey in 2019.	This study reports on (a) two open-text questions seeking parents' definitions of bullying and fighting, (b) a multiple-select question to examine parents' ability to recognize the differences between bullying and fighting, and (c) 20 scenarios used in a previous study by Campbell et al. (2019).	Most parents in this study recognized all five traditional bullying scenarios (97%) and cyberbullying scenarios (98%).
David	2019	A study	The final	A) Parental	Regarding cyber

Moreno–Ruiz et al		was done in Spain.	sample was made up of 2399 adolescents (50.2% boys) enrolled in 19 public and private schools of Compulsory Secondary Education and High Schools of the provinces of Huelva, Seville, Cadiz, and Cordoba (western Andalusia, Spain).	Socialization Scale. This instrument is based on the two-dimensional theoretical model of parental socialization. B) The Adolescent Victimization through Mobile Phone and Internet Scale (CYBVIC; Buelga, Cava, & Musitu, 2012). C) The Cyberbullying Scale.	victimization, participants from the authoritarian group obtained the highest scores (1.26). No differences were found between the neglectful, authoritative, and indulgent groups. The girls from authoritarian families obtained higher scores (23.6%) in cyber victimization than all the other groups analyzed.
Caitlin Elsaesser	2017	Nine drew on samples from the U.S., four from Canada, eight from Europe, and two from Asia.	23 articles were included in this review. 1) 2 articles were meta-analyses that included data on the connection between family and cyberbullying. 2) 19 were cross-sectional. 3) 3 were longitudinal.	Systemic reviews.	Parental restrictive mediation is associated with lower cyberbullying perpetration and victimization (Chang et al, 2015, Taiwan). The effect of parental monitoring was greater than parental internet restriction (Khurana et al, 2015, US). Parental mediation of technology use predicted only lower cyber victimization (Chen et al, 2016, Singapore).
Lai C.S	2017	Involving	A total of	A self-	The results