

**PARENTAL PERCEPTIONS AND AWARENESS
OF ADOLESCENT CYBERBULLYING IN
SELANGOR: A MIXED METHOD STUDY**

By:

DR. SARAH AQILAH BINTI GHAZALI

Research project submitted in

partial fulfilment of the requirements for the degree of

Doctor of Public Health

UNIVERSITI SAINS MALAYSIA

DECEMBER 2024

ACKNOWLEDGEMENTS

In the name of Allah, the Most Compassionate, the Most Merciful

Praise be to Allah, the Lord of the Universe. May peace and blessings be upon the beloved Prophet Muhammad (peace be upon him), his family, and his companions. I would like to express my deepest gratitude and thanks to the following individuals who have contributed to and supported me during the preparation of this research project and throughout the Doctor of Public Health (DrPH) programme at the School of Medical Science, Universiti Sains Malaysia.

1. My utmost gratitude to Associate Professor Dr. Azriani binti Ab Rahman, my previous main supervisor and lecturer from the Department of Community Medicine, School of Medical Sciences, Universiti Sains Malaysia (USM), for her compassion, mentorship, support, and hard work throughout this journey.
2. My special thanks to Dr. Raishan Shafini binti Bakar, my new main supervisor and lecturer from the Department of Community Medicine, School of Medical Sciences, Universiti Sains Malaysia (USM), for her invaluable contributions.
3. My sincere gratitude to Associate Professor Dr. Zaharah binti Sulaiman, my co-supervisor and lecturer from the Women's Health Department Unit, School of Medical Sciences, Universiti Sains Malaysia (USM), for her guidance and support, especially in qualitative inquiry.
4. I am deeply thankful to all school principals, teachers, and school counsellors who permitted me to conduct my study in their schools and who were directly and indirectly involved in the data collection process of this study.

5. I extend my sincere gratitude to the School of Sciences, Universiti Sains Malaysia, for the generous allocation of funds that enabled me to compensate respondents for their valuable time. This invaluable support underscores the institution's commitment to fostering academic excellence and facilitating innovative research initiatives.

6. I am profoundly grateful to my beloved husband, Dr. Mohd Rafiq Iskandar bin Zulkifli, and my parents; Ghazali bin Sulaiman and Al-Kamaruzzita binti Amin, as well as my loving daughter, Zaynab Izara, for their sacrifices and unwavering support throughout this journey.

No words can fully express my gratitude for all the contributions and sacrifices you have all made. May Allah reward each of your patience and understanding throughout this journey.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	ii
TABLE OF CONTENTS	iv
LIST OF TABLES.....	xii
LIST OF FIGURES	xiv
LIST OF APPENDICES.....	xv
LIST OF ABBREVIATIONS.....	xvi
LIST OF SYMBOLS	xvii
ABSTRAK.....	xviii
ABSTRACT	xx
CHAPTER 1	22
INTRODUCTION	22
1.1 Background of study	22
1.2 Cyberbullying	23
1.3 The burden of cyberbullying.....	24

1.4	Law, public education and other strategies to protect children and adolescents from cyberbullying in Malaysia.....	25
1.4.1	Legal frameworks	26
1.4.2	Public education initiatives.....	27
1.4.3	Other strategies and collaborative efforts.....	29
1.5	Problem statement.....	29
1.6	Rationale	31
1.7	Research questions.....	33
1.8	Research objectives.....	33
1.8.1	General objective	33
1.8.2	Specific objectives	33
1.9	Research hypothesis.....	34
CHAPTER 2		35
LITERATURE REVIEW		35
2.1	Differences and similarities between cyberbullying and traditional bullying	35
2.2	Extent and effects of cyberbullying.....	36
2.3	Parental perceptions and awareness of adolescent cyberbullying	38

2.3.1	Perceptions and awareness	38
2.3.2	Adolescence and risk factors	39
2.3.3	Impact of cyberbullying and the role of parents	39
2.3.4	Parental perception and extent of cyberbullying	40
2.3.5	Parental perception of preventive measures	41
2.3.6	Parental awareness of family practices in using the internet..	42
2.3.7	Parental knowledge of the internet and social media	45
2.3.8	Parental acquisition of knowledge about cyberbullying.....	46
2.4	Factors related to perceptions and awareness of cyberbullying among parents of adolescents.....	48
2.4.1	Age.....	48
2.4.2	Sex	49
2.4.3	Ethnicity.....	51
2.4.4	Marital status	51
2.4.5	Number of children.....	52
2.4.6	Education level	53
2.4.7	Employment.....	54
2.4.8	Household income	54

2.4.9	Daily internet and social media use	55
2.4.10	Parents' history of cyberbullying.....	56
2.4.11	Perceived closeness in the parent-adolescent relationship	57
2.4.12	Child's age	58
2.4.13	Child's sex	59
2.4.14	Child's disability.....	60
2.4.15	Child's experience of cyberbullying victimisation.....	61
2.5	The lived experiences of parents who have dealt with or intervened in incidents following their adolescent's experiences of cyberbullying victimisation.....	62
2.6	Conceptual framework.....	65
2.7	Theoretical framework.....	67
CHAPTER 3		72
METHODOLOGY		72
3.1	Overall study design	72
3.1.1	Study area	73
3.1.2	Study period.....	75
3.2	Phase 1: Quantitative component	76

3.2.1	Reference population	76
3.2.2	Source population	76
3.2.3	Sampling frame.....	76
3.2.4	Study criteria.....	76
3.2.5	Sample size determination.....	77
3.2.6	Sampling method.....	79
3.2.7	Research tools.....	81
3.2.8	Operational definition.....	83
3.2.9	Data collection method.....	86
3.2.10	Statistical analysis.....	88
3.3	Phase 2: Qualitative inquiry.....	92
3.3.1	Qualitative research methodology	92
3.3.2	Research method.....	93
3.3.3	Study population.....	94
3.3.4	Sample size and sampling method.....	94
3.3.5	Study tools	95
3.3.6	Respondent recruitment and data collection.....	98

3.3.7	Data analysis.....	100
3.3.8	Rigour in qualitative research.....	102
3.4	Mixed-methods integration.....	105
3.5	Ethical consideration.....	107
3.5.1	Informed consent	107
3.5.2	Confidentiality and anonymity	107
3.5.3	Psychological safety of respondents.....	108
3.5.4	Data security and storage.....	108
3.6	Flowchart of the study	109
CHAPTER 4.....		111
RESULTS.....		111
4.1	Phase 1: Quantitative component	111
4.1.1	Characteristics of the respondents	111
4.1.2	Parental perceptions and awareness of cyberbullying.....	114
4.1.3	Factors related to perceptions and awareness of cyberbullying	123
4.2	Phase 2: Qualitative inquiry.....	127
4.2.1	Characteristics of the respondents and cyberbullying	127

4.2.2	The lived experiences of parents who have dealt with or intervened in incidents following their adolescent's cyberbullying victimisation	130
4.3	Mixed-methods integration (Joint display).....	188
4.3.1	Investigation and exploration of parents' perceptions and awareness levels regarding adolescent cyberbullying	188
CHAPTER 5		201
DISCUSSION.....		201
5.1	Phase 1: Quantitative component	201
5.1.1	Parental perceptions and awareness of cyberbullying	201
5.1.2	Factors influencing perceptions and awareness of cyberbullying	204
5.2	Phase 2: Qualitative inquiry.....	207
5.2.1	The lived experiences of parents who have dealt with or intervened in incidents following their adolescent's cyberbullying victimisation	207
5.3	Mixed-methods integration.....	215
5.4	Strengths and limitations of the study.....	221
CHAPTER 6		224

CONCLUSION AND RECOMMENDATIONS	224
6.1 Conclusion	224
6.2 Recommendations.....	226
6.2.1 Recommendations for policy and current practices.....	226
6.2.2 Recommendations for future research	227
REFERENCES	230
APPENDICES	268

LIST OF TABLES

Table 3.1: The sample size required to determine perceptions and awareness of cyberbullying among parents in Selangor.....	78
Table 3.2: Household income category (DOSM, 2020)	85
Table 3.3: Independent variables	90
Table 3.4: Interview guide	97
Table 4.1: Characteristics of the respondents (n=522)	112
Table 4.2: Mean (SD) scores for parental perceptions and awareness of adolescent cyberbullying (KEPS-I questionnaire).....	114
Table 4.3: Perceptions and extent of cyberbullying.....	115
Table 4.4: Perceptions of preventive measure of cyberbullying.....	117
Table 4.5: Family practice on using the internet.....	119
Table 4.6: Level of knowledge on the internet and social media	120
Table 4.7: Acquisition of knowledge about cyberbullying.....	122
Table 4.8: Simple and multiple linear regression analyses of factors related to perceptions and awareness of cyberbullying among parents of adolescents (n=522).....	125
Table 4.9: Respondent characteristics.....	128

Table 4.10: Summary of themes and subthemes.....	130
Table 4.11: Joint display of integrated quantitative and qualitative data for parents’ perceptions and awareness of adolescent cyberbullying.....	195

LIST OF FIGURES

Figure 2.1: Conceptual framework of the study.....	66
Figure 2.2: Bandura’s self-efficacy model and the outcomes.....	71
Figure 3.1: Map of Selangor and its nine districts (Source: Selangor State Economic Planning Unit, 2022).	75
Figure 3.2: Flow chart of the sampling method for Phase 1	81
Figure 3.3: The flowchart of the study.....	110

LIST OF APPENDICES

APPENDIX	FORM / DOCUMENT
A	Approval letter from the Human Research Ethics Committee, University Sains Malaysia
B	NMRR research registration acknowledgement
C	Permission letter for data collection at selected schools
D	Patient information sheet and consent form for quantitative research
E	Patient information sheet and consent form for qualitative research
F	Data collection forms
G	Permission to use the KEPS-I questionnaire
H	Grant approval
I	Conference presentation invitations and certifications

LIST OF ABBREVIATIONS

ABBREVIATION	TERMS
B40	The bottom 40% of household income categorisation
COVID-19	Coronavirus Disease 2019
DE	Design Effect
EIA 2006	Education and Inspections Act 2006
ICC	Intraclass Correlation Coefficient
IDI	In-depth interview
KEPS-I	<i>Soal Selidik Kesedaran dan Persepsi Buli Siber dalam Kalangan Ibu Bapa</i>
M40	The middle 40% of household income categorisation
MCMC	Malaysian Communications and Multimedia Commission
MCO	Movement Control of Order
MLR	Multiple Linear Regression
MMU	Multimedia University
MOE	Ministry of Education
PIBG	<i>Persatuan Ibu Bapa dan Guru</i>
PIS	Patient Information Sheet
SD	Standard Deviation
SLR	Simple Linear Regression
SPSS	Statistical Package for the Social Sciences
T20	The top 20% of household income categorisation
UNICEF	United Nations Children's Fund
VIF	Variance Inflation Factor
WHO	World Health Organization

LIST OF SYMBOLS

SYMBOL	READ AS
%	Per cent
=	Equals to
<	Less than
≥	Greater than or equal to

ABSTRAK

PERSEPSI DAN KESEDARAN IBU BAPA TERHADAP BULI SIBER REMAJA DI SELANGOR: KAJIAN BERBENTUK KAEDAH CAMPURAN

Latar belakang: Penggunaan internet yang meluas dalam kalangan remaja telah meningkatkan kejadian buli siber, yang menimbulkan risiko serius terhadap kesejahteraan mental dan sosial mereka. Kefahaman ibu bapa mengenai isu ini di Malaysia masih kurang diterokai. **Objektif:** Kajian ini menilai persepsi dan kesedaran ibu bapa terhadap buli siber, mengenal pasti faktor berkaitan, dan meneroka pengalaman ibu bapa dalam menangani insiden buli siber di Selangor. **Metodologi:** Menggunakan reka bentuk kajian campuran penjelasan berurutan, Fasa 1 melibatkan kajian keratan rentas menggunakan borang soal selidik KEPS-I yang diberikan kepada 522 orang ibu bapa remaja, dipilih daripada lapan sekolah menengah kebangsaan melalui kaedah persampelan berperingkat, dan dianalisis menggunakan regresi linear untuk menentukan faktor yang berkaitan dengan persepsi dan kesedaran ibu bapa terhadap buli siber. Interfasa antara kedua-dua fasa melibatkan pengenalpastian ibu bapa yang anak mereka mengalami buli siber berdasarkan penemuan Fasa 1. Fasa 2, yang direka bentuk sebagai kajian fenomenologi, merangkumi wawancara mendalam dengan 12 orang ibu bapa, yang dipilih secara bertujuan daripada responden Fasa 1 serta responden tambahan yang direkrut melalui iklan bagi mencapai ketepuan data. Analisis tematik digunakan untuk meneroka pengalaman dan pandangan hidup ibu bapa. **Dapatan:** Skor min (sisihan piawai; SP) bagi persepsi dan kesedaran ibu bapa secara keseluruhan adalah 3.96 (0.44). Skor min (SP) tertinggi adalah didapati dalam

domain langkah pencegahan, 4.40 (0.47), manakala skor min (SP) terendah adalah dalam domain pengetahuan tentang internet dan media sosial, 3.61 (0.66). Umur ibu bapa (adjusted b = -0.475 95% CI: -0.704, -0.246, p -value < 0.001), etnik (adjusted b = -3.035, 95% CI: -5.893, -0.177, p -value = 0.037), dan penggunaan harian internet serta media sosial (adjusted b = 5.670, 95% CI: 0.244, 11.115, p -value = 0.041) berkait dengan persepsi dan kesedaran mereka terhadap buli siber. Empat tema yang dikenalpasti: tindak balas ibu bapa terhadap buli siber, keberkesanan sendiri ibu bapa dalam menguruskan buli siber, cabaran dalam menangani buli siber, dan memperkukuh keselamatan serta sokongan terhadap anak daripada buli siber.

Kesimpulan: Kajian ini menekankan keperluan untuk inisiatif pendidikan dan sistem sokongan yang disasarkan bagi memperkasakan ibu bapa dalam menguruskan buli siber dengan berkesan. Penemuan menyumbang kepada cadangan dasar yang bertujuan meningkatkan kesedaran ibu bapa dan strategi pencegahan.

Kata kunci: Buli siber, kesedaran ibu bapa, tindak balas ibu bapa, keberkesanan sendiri, keselamatan dalam talian, kajian kualitatif.

ABSTRACT

PARENTAL PERCEPTIONS AND AWARENESS OF ADOLESCENT CYBERBULLYING IN SELANGOR: A MIXED METHOD STUDY

Background: The widespread use of the internet among adolescents has increased the prevalence of cyberbullying, posing serious risks to their mental and social well-being. Parental understanding of this issue in Malaysia remains underexplored. **Objective:** This study assesses parents' perceptions and awareness of cyberbullying, identifies related factors, and explores parents' experiences in managing cyberbullying incidents in Selangor. **Methodology:** Using a sequential explanatory mixed-methods design, Phase 1 involved a cross-sectional study using the KEPS-I questionnaire, which was administered to 522 parents of adolescents, selected from eight national secondary schools through a multistage sampling method, and analysed using linear regression to determine factors related to parental perceptions and awareness of cyberbullying. The interphase involved identifying parents whose children had experienced cyberbullying based on Phase 1 findings. Phase 2, designed as a phenomenological study, included in-depth interviews with 12 parents, selected through purposive sampling from Phase 1 respondents and additional respondents recruited via advertisements to achieve data saturation. Thematic analysis was used to explore parents' lived experiences and insights. **Results:** The mean (SD) score for overall parental perceptions and awareness was 3.96 (0.44). The highest mean (SD) score was observed in the preventive measures domain, 4.40 (0.47), while the lowest mean (SD)

score was in the internet and social media knowledge domain, 3.61 (0.66). Parents' age (adjusted $b = -0.475$ 95% CI: -0.704, -0.246, p -value < 0.001), ethnicity (adjusted $b = -3.035$, 95% CI: -5.893, -0.177, p -value = 0.037), and daily use of the internet and social media (adjusted $b = 5.670$, 95% CI: 0.244, 11.115, p -value = 0.041) were related to their perceptions and awareness of cyberbullying. Four themes emerged: parental responses to cyberbullying, parental self-efficacy in managing cyberbullying, challenges in addressing cyberbullying and strengthening child safety and support against cyberbullying. **Conclusion:** The study underscores the need for targeted educational initiatives and support systems to empower parents in managing cyberbullying effectively. Findings contribute to policy recommendations aimed at enhancing parental awareness and preventive strategies.

Keywords: Cyberbullying, parental awareness, parental responses, self-efficacy, online safety, qualitative study.

CHAPTER 1

INTRODUCTION

1.1 Background of study

In today's digital era, internet access has become a necessity rather than a privilege, particularly for adolescents, serving as a crucial tool for education, communication, entertainment, and personal development. A staggering statistic reveals that one out of every three internet users worldwide is a child or adolescent under the age of 18 (UNICEF, 2017). In the United States, nearly all adolescents aged 13 to 17 (95%) have access to a smartphone, with 90% using desktop or laptop computers, and 80% accessing game consoles. Moreover, the percentage of teens who use the internet daily increased from 92% during the period of 2014 to 2015 to 97% in 2022. (Vogels *et al.*, 2022). This growth highlights that more adolescents now have access to digital communication tools than in previous years (Maurya *et al.*, 2022).

In Malaysia, there has been a remarkable 155% increase in the number of children aged five to seventeen using the internet between 2016 and 2020, with 56.3% of them having their own devices for internet access (MCMC, 2020). This surge in internet usage among children can be attributed to the Malaysian government's Movement Control of Order (MCO) during the Coronavirus Disease 2019 (COVID-19) outbreak. With stay-at-home orders in place, children had to rely on online platforms such as

Zoom and Google Meet for virtual learning, which has now become a more common practice for students.

For adolescents, instant messaging tools and social media platforms have become the preferred mediums for building relationships, expressing themselves, and acquiring knowledge (UNICEF Malaysia, 2020). A survey conducted between April and May 2022 among 1,316 American teenagers aged 13 to 17 revealed YouTube (used by 95% of teens) and TikTok (67%) as the most popular online platforms, followed by Instagram (62%) and Snapchat (59%) (Vogels *et al.*, 2022). In Malaysia, studies have similarly highlighted the significant engagement of youth with social media platforms, with substantial amounts of time spent online (Haji Ahmad *et al.*, 2015). While online engagement offers numerous benefits, such as access to educational resources, opportunities for social connection, and entertainment, it also exposes adolescents to various risks, including the growing issue of cyberbullying.

1.2 Cyberbullying

Cyberbullying refers to the act of bullying that takes place through electronic devices such as laptops, computers, smartphones, tablets, and other internet-accessible devices. It can be defined as deliberate and repeated aggressive behaviour carried out by one or more individuals against a victim who lacks the power to defend themselves (Smith *et al.*, 2008; Coric & Kastelan, 2020; UNICEF, 2024). This means that anyone with access to technology can either engage in cyberbullying or become a target of it,

making it a widespread issue worldwide. Cyberbullying can manifest in various forms, including cyberstalking, impersonations, spreading rumours, sending harmful or cruel text messages, sharing unsolicited pictures, humiliation, exclusion or harassment through instant messaging, text messaging or online chat rooms (Robinson, 2013; Goldstein, 2016; Hale *et al.*, 2017; Chi *et al.*, 2020). Additionally, cyberbullying is known by various terms such as online harassment, cyber aggression, online bullying, cyber harassment, online peer harassment, and cyber victimisation (Wade & Beran, 2011; Özdemir, 2014; Corcoran *et al.*, 2015).

1.3 The burden of cyberbullying

The prevalence rates of cyberbullying are increasing worldwide, with varying percentages of victimisation and perpetration reported. Studies have shown that the prevalence of cyberbullying victimisation and cyberbullying perpetration ranges from 14.6% to 52.2% and 6.3% to 32%, respectively (Zhu *et al.*, 2021). A study conducted by the United Nations Children’s Fund (UNICEF) and the United Nations Special Representative of the Secretary-General on Violence against Children across 30 countries found that one in every three children experienced cyberbullying (UNICEF, 2019). In Asia, Malaysia recorded the second-highest youth cyberbullying rate, as found in another UNICEF survey (Malay Mail, 2022). This is supported by the number of reported cyberbullying cases, with the Malaysian Communications and Multimedia Commission (MCMC) receiving 6,698 public complaints related to online harassment from 2020 to July 2021 (Ganesh, 2022).