1. INTRODUCTION

a) Background

The growing accessible landscape for social technology platforms and IoT devices has led to rising cases of students being easily targeted by cyber bullies. The student's health can be deeply affected physically, emotionally and socially, causing distress in academic performance and personal development.

Whilst many schools and agencies provide positive education frameworks in learning, there are gaps in how students can protect themselves, and the techniques support members can offer to minimise impact. There is also limited scope in how cybersecurity tools/techniques can support the well-being of students.

The audience is aimed to be age-related students, parents, associated family members, academic and pastoral teaching staff, cybersecurity researchers and professionals.

Secondary sources were selected and acquired through online library databases and search engines. Use search tools such as "_" for key terminology + and – to add or remove unwanted search results.

b) Scope

A. Students practice cybersecurity
B. Relationship with online behaviour patterns and cyberbullying
C. Cyberbullying affects emotional well-being
D. Cyberbullying methods to victimise students
E. Implementing techniques/tools to manage cyberbullying

Will not be covered:

- Issues relating to online schooling
- Cyberbullying during school suspension periods and online learning.

Title: Implementing cybersecurity tools/techniques to reduce cyberbullying for students.

Research question: To what extent can cybersecurity techniques reduce cyberbullying for students?

2. BODY

A. Student practices towards cybersecurity

i. Students' knowledge of online protection (Zorlu, 2022)

Research method:	Quantitative
Main findings:	-Users of the internet are more likely to be cyber aware. -Educational lessons on security would benefit.
Strengths	Limitations
-Awareness scales to measure	-401 participants (75.1% female)
Discrepancies:	No relationship between cyberbullying awareness and cyberbullying others.

ii. Students trends and cybersecurity practices (Nicholson et al., 2021)

Research method:	Mixed (Quantitative/Qualitative)
Main findings:	-Students have a good knowledge of cybersecurity risks, practices and tools. -Whilst they implement as initially, they disregard it over time due to usability.
Strengths	Limitations
-Methodology supported a positive response from participants. -Identified curriculum issues. -Staffing expertise and efficacy.	-Research was performed in a live environment, and more safe environment was needed.
Discrepancies:	

B. Relationship with online behaviour patterns and cyberbullying

i) Considering online lifestyle approaches and the risk of cyberbullying (Choi et al., 2019)

Research method:	
Main findings:	-Students who are regularly involved in online activity are more like to report cyberbullying. -High-risk behaviour led to cyberbullying victimisation -Ethics programs needed in schools.
Strengths	Limitations
-Person-centered approach study. -Online lifestyles influence victimisation.	-Limited to the location. -Limited secondary data, which limits analysis.
Discrepancies:	

C. Cyberbullying affecting emotional well-being

i) The effects of cyberbullying and the extent of psychological support available (Lim & Lee, 2021)

Research method:	Quantitative
Main findings:	-Cyberbullying causes social and psychological harm. -Peers play a crucial support role. -Cybersecurity knowledge can help prevent and danger of cyberbullying.
Strengths	Limitations
-Peer support is a valuable tool. -Psychological harm is more prevalent than social harm in cyberbullying cases.	-Datasets used were not the most recent. -School strategies not considered. -Restricted access to data.
Discrepancies:	

D. Cyberbullying perpetration to victimise students

i) Comparisons to traditional bullying and methods (Mkhize & Gopal, 2021)

Research method:	Qualitative
Main findings:	-Methods of cyberbullying (fake social media etc.) -Prioritise education
Strengths	Limitations
-Wide range of methods cyberbullies use. -Collection of secondary social media data. -Comparisons to traditional bullying.	-Some unsubstantiated assumptions. -Limited research and recommendations for indicative nature awareness programmes.
Discrepancies:	

E. Implementing techniques/tools to manage cyberbullying

i) Cybersecurity tools to reduce cyberbullying of students (Quayyum et al., 2021)

Research method:	Mixed
Main findings:	-Students have some understanding of privacy online -But further cyber risks lack in-depth research, and students' awareness may be limited
Strengths	Limitations
-Identifies approaches and technologies to develop students' knowledge in cyber protection.	-Some studies used lacked details regarding design and findings. -Data extraction was challenging. -Limited research on adverse effects of approaches or outcomes of students' online awareness programmes or products.
Discrepancies:	

3. CONCLUSION

E. Identify the research that is most significant to the research question.

F. Indicate the significant research gaps in the literature.

G. Justification for this literature review to support the research gaps.

H. Recommended outcomes from the review.

4. REFERENCES

Choi, K.-S., Cho, S. & Lee, J. R. (2019). Impacts of online risky behaviors and cybersecurity management on cyberbullying and traditional bullying victimisation among Korean youth: Application of cyber-routine activities theory with latent class analysis. *Computers in Human Behavior,* 100, 1-10.

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Mkhize, S. & Gopal, N. (2021). Cyberbullying perpetration: Children and youth at risk of victimisation during Covid-19 lockdown. *International Journal of Criminology and Sociology,* 10, 525-537.

Nicholson, J., Terry, J., Beckett, H. & Kumar, P. (2021). *Understanding Young People's Experiences of Cybersecurity*. *Proceedings of the 2021 European Symposium on Usable Security.* Karlsruhe, Germany: Association for Computing Machinery.

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