Seminar 2: Research Methods and Professional Practice – Peer review Activity - Preparation

Quantitative:

Garba, A. A., Siraj, M. M., Othman, S. H., & Musa, M. A. (2020) A study on cybersecurity awareness among students in Yobe State University, Nigeria: A quantitative approach. *International Journal on Emerging Technologies* 11(5): 41-49. Available from: https://d1wqtxts1xzle7.cloudfront.net/64160387/A%20Study%20on%20Cybersecurity%20Awareness-with-cover-page-v2.pdf?Expires=1668597993&Signature=SRte4c0cINncTfRkBUNgC3rJn58EhWHlhEu0zO5DxChd7~aBFncf4QqJycaiLiznIY-mgt9n-zNcFid9tfcpfxBp-u72MJKy6huGLY0xWdAkpAK~9RzqeZAIa6vDVva5S5vv024~g9~hNoxBokFCl4GqEpVT9Oy-l042hQsrtEsN1KnIeJGmQX0K~KqsSCadkMalUFb013FdCrApVcJbIgl9f74nxNr9zv7GyiMITgPDlUw0xJLZiMsD-bmQ2BWCT7bZdMSQqewCPpf-gHU18lbkQ4xT871z025bKDgfOpMNQKH0k5Zd0EPv5wo217hJRKmkvlYF16sqyRznH4Ijiw__&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA [Accessed 16 November 2022].

- Familiarise yourself with the purpose, problem, objective or research question of each paper. Are they in line with your experience or thoughts on the topic, contributing to the collective body of knowledge in this area?

➔ The study highlights the danger posed by cybersecurity threats, noting that the 60% of the population who are young people represent a vulnerable segment of the population. The aim of the study is to investigate the basic cybersecurity knowledge among female and male computer science students and to identify gender-specific differences.

- Is the research methodology utilised in each paper appropriate for the stated purpose or question?

➔ The research uses a quantitative approach in the form of an online questionnaire. It is therefore appropriate.

- In terms of data collection and analysis, is this also appropriate for the stated purpose or question? (We will discuss this further in upcoming units.)

➔ The questionnaire only allows 'yes' or 'no' answers, some of them are difficult to clearly determine as yes or no.
Example 1: "Do you consider yourself knowledgeable about sybersecurity?"
Example 2: "When using the computer system and the Internet, do you feel secure?"

- Does each paper support its claims and conclusions with explicit arguments or evidence?

→ Yes

- How would you enhance the work/paper

→ Using a different response system in the questionnaire. Instead using 'yes' and 'no' answer possibilities, using a scale. For example 1 to 4:
  4 = 'totally agree'
  3 = 'slightly agree'
  2 = 'slightly disagree'
  1 = 'totally disagree'

Qualitative:

Quayyum, F., Cruzes, D. S., & Jaccheri, L. (2021) Cybersecurity awareness for children: A systematic literature review. *International Journal of Child-Computer Interaction 30*. Available from: https://www.sciencedirect.com/science/article/pii/S2212868921000581 [Accessed 16 November 2022].

- Familiarise yourself with the purpose, problem, objective or research question of each paper. Are they in line with your experience or thoughts on the topic, contributing to the collective body of knowledge in this area?

→ The paper highlights the cybersecurity risks and awareness-raising approaches for children and systematically reviews current existing literature about the topic.

- Is the research methodology utilised in each paper appropriate for the stated purpose or question?

→ The study uses a qualitative approach by systematically scanning online databases for studies about cybersecurity awareness for children. Used keywords are:
  1. 'Cybersecurity / Cyber security' AND 'Children / Child / Teen'
  2. 'Internet / Online' AND 'Privacy' AND 'Children / Child / Teen'
     It uses therefore an appropriate methodology.
  Databases: ACM Digital Library, IEEE Xplore, ISI Web of Science, ScienceDirect

- In terms of data collection and analysis, is this also appropriate for the stated purpose or question? (We will discuss this further in upcoming units.)

➔ Yes

- Does each paper support its claims and conclusions with explicit arguments or evidence?

➔ Yes

- How would you enhance the work/paper

➔ Adaptation of a quantitative component to weight the keywords found and thus to be able to make statements about particularly important aspects of the topic.