QUESTIONNAIRE DEVELOPMENT PROCESS

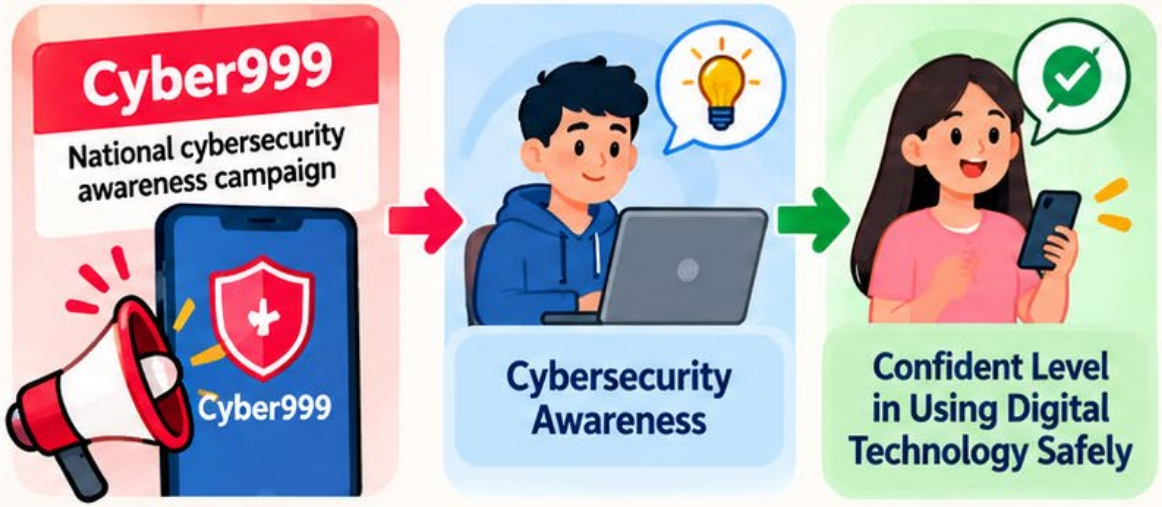


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RESEARCH QUESTION EXAMPLE

Original Research Question

"How does the **Cyber999 campaign** influence the level of **cybersecurity awareness** among Malaysians and subsequently contribute to increasing their **confidence in using digital technology safely**?"



Relationship Cybersecurity awareness → Confident level

Alternative Research Context

"How does the **MySejahtera application** influence the level of **digital awareness** among Malaysians and subsequently contribute to increasing **public confidence in government digital initiatives**?"



Relationship Digital awareness → Public confidence

QUESTIONNAIRE LAYOUT

Important Elements in Questionnaire Design

Questionnaire

Introduction Page

- Research Title
- Institution
- Research Objectives
- Survey Purpose

Briefly explain the study, assure confidentiality, and thank respondents for their participation.

01 Include a cover letter / introduction page

- Research title
- Institution
- Research objectives
- Survey purpose

02 Provide sufficient space for open-ended responses

Q: Please share your comments.

03 Use readable font sizes

Aa Aa

- Use a clear and readable font (e.g. Arial, Calibri, Times New Roman).
- Recommended size: 11–12 pt for main text.
- Use larger font (e.g. 14–16 pt) for headings.

04 Ensure instructions are clear and consistent

- Use simple and easy-to-understand language.
- Keep instructions consistent throughout the questionnaire.
- Explain how to answer each type of question (e.g. tick one answer).

05 Avoid splitting questions across pages

Q1

Keep the entire question and response options on the same page.

06 Provide adequate spacing for open-ended questions

Q: What are your suggestions?

QUESTIONNAIRE FORMAT AND STRUCTURE

01 CLEAR & ORGANISED LAYOUT

The layout and formatting of a questionnaire are equally important as the wording of the questions. It should appear **clear, systematic and easy to follow.**



02 LOGICAL QUESTION FLOW

Arrange questions in a natural sequence – from general to specific, simple to more complex, and according to the research constructs or themes.



03 GROUP QUESTIONS BY SECTION

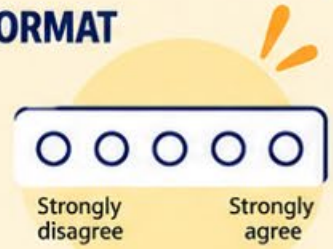
Use **clear sections** or themes to help respondents understand what each group of questions is measuring.





04 CONSISTENT RESPONSE FORMAT

Keep response scales and **formats consistent** within sections (e.g. Likert scale direction and number of response options).



05 SIMPLE & CLEAR INSTRUCTIONS

Provide brief and clear instructions at the beginning of the questionnaire and whenever respondents need to change how they answer.



06 MINIMISE RESPONDENT BURDEN

A well-structured questionnaire **reduces respondent burden and improves response quality.**



QUESTION INSTRUCTIONS

At the beginning of each section, provide clear instructions to respondents.

Instructions should:

01 Explain the purpose of the section

Briefly describe what the section is about and why the questions are being asked.



02 Clarify how responses should be provided

State the type of response required (e.g. tick one option, tick all that apply, use the scale) and provide an example if needed.



03 Inform respondents regarding confidentiality

Reassure respondents that their responses are confidential and will only be used for research purposes.



ETHICAL CONSIDERATIONS

Ethical principles must be followed to protect respondents' rights and ensure the integrity of the research.

Anonymous

- No names or personal identifiers are collected.
- Respondents cannot be identified from their responses.
- Suitable for sensitive topics and encourages honest responses.

Confidential

- Some identifiers may exist (e.g. codes or demographic information).
- These identifiers are protected and not disclosed to others.
- Data are stored securely and used only for research purposes.

DEMOGRAPHIC INFORMATION

Demographic variables are important for examining **differences in perceptions and behaviours** across respondent categories.

Examples of Demographic Variables

01 Gender
- Male
- Female
- Prefer not to say
- Other

02 Age
- Age range
- Year of birth

03 Income level
- Monthly income range
- Annual income range

04 Educational background
- Highest education level
- Field of study
- Current programme (e.g. undergraduate, postgraduate)

05 Employment status
- Student
- Employed
- Self-employed
- Unemployed
- Retired

06 Type of institution
- Public university
- Private university
- Other

07 Location
- State/Region
- Urban / Rural

08 Ethnicity
- Malay
- Chinese
- Indian
- Other

09 Religion
- Islam
- Christianity
- Hinduism
- Buddhism
- Other

10 Political beliefs
- Political orientation
- Party affiliation
- Other

RECOMMENDATION

Demographic questions are usually placed **at the end of the questionnaire** because they are **easier to answer and less intrusive.**



QUESTIONNAIRE ITEMS CONSTRUCTION

Regardless of the survey type, questionnaire items should be designed to **ensure responses are:**

01 CLEAR

- Use simple, clear and unambiguous wording.
- Avoid jargon and complicated sentences.
- Ensure each item asks only one idea (single concept).

02 ACCURATE

- Measure the intended construct.
- Avoid leading, misleading or biased questions.
- Use appropriate response scales and response options.



03 CONSISTENT

- Use consistent terminology, format and scale within the same construct.
- Maintain consistent direction (e.g. all items in positive or clearly stated direction).

04 RELEVANT

- Ensure items are directly related to:
  - Research objectives
  - Hypotheses
  - Research questions

Well-constructed questionnaire items lead to high-quality data that are **meaningful, reliable and aligned** with your study.

ULTIMATE GOAL:
Obtain valid and useful responses to answer your research questions.

FINAL QUESTIONNAIRE DRAFT

The final draft involves organising and preparing the questionnaire for administration.

01 Grouping related questions

- **Section A** Demographic Information
- **Section B** Construct 1
- **Section C** Construct 2
- **Section D** Construct 3

Organise questions into logical sections based on constructs or themes.

02 Arranging items systematically



- Present items in a logical and coherent sequence.
- Group items within each section appropriately (e.g. from general to specific).
- Ensure smooth flow and ease of understanding for respondents.

03 Numbering questions appropriately



- Use a clear and consistent numbering system.
- Number all questions, including sub-questions (e.g. 1, 2, 3 … 2.1, 2.2 …).
- Ensure numbering matches the section structure.

04 Including clear respondent instructions



- Provide clear instructions at the beginning of the questionnaire and at each section.
- Explain the purpose of the section.
- Clarify how responses should be provided (e.g. tick one option, use the scale).
- Remind respondents about confidentiality and voluntary participation.

At this stage, only the **formatting and technical preparation** of the questionnaire remain before administration.

READY FOR ADMINISTRATION:
A well-structured, clearly formatted and technically prepared questionnaire.

TRANSLATION PROCESS

If the original questionnaire items are written in English and respondents are not proficient in English, the items should be translated into a language that is **easily understood by respondents.**

01 SOURCE LANGUAGE



Original items (English)

Original questionnaire items are written in English.

02 DIRECT TRANSLATION



Translate to target language

Translate the items into a language that is easily understood by respondents (e.g. Malay) using direct translation.

03 BACK TRANSLATION (BACK-TO-BACK TRANSLATION)



Translate back to source language

Translate the translated items back into the original language (English) by a different translator.

04 COMPARISON AND REVIEW



Compare the versions

Compare the original, translated and back-translated versions to ensure:

- Conceptual equivalence
- Linguistic accuracy

05 FINAL TRANSLATED VERSION



Final items ready for use

Final questionnaire items in the target language, ready for administration.

The translated versions should be compared to ensure **conceptual equivalence** and **linguistic accuracy**.

COMMON TRANSLATION APPROACHES:

1. Direct Translation
2. Back Translation (Back-to-Back Translation)

DIRECT TRANSLATION

Direct translation, also known as **literal translation or word-for-word translation**, aims to **preserve the original meaning** and **sentence structure** by translating each word individually without major interpretation or adaptation into the target language.

TRANSLATE EACH WORD

Translate the original text word by word into the target language.

PRESERVE ORIGINAL MEANING

Maintain the same meaning as the original text.

KEEP SENTENCE STRUCTURE

Retain the original grammar and sentence structure as much as possible.

NO MAJOR INTERPRETATION

Do not add, remove or adapt the content beyond the original text.

ORIGINAL TEXT (ENGLISH)

EN

I always check the security settings before using a new application.

Direct translation

TRANSLATED TEXT (TARGET LANGUAGE)

BM

Saya sentiasa menyemak tetapan keselamatan sebelum menggunakan aplikasi baharu.

Direct translation is suitable when the concepts and terms are **clear** and have **direct equivalents** in the target language.

KEY POINT:
Translate word by word, keep the original meaning and sentence structure, without major interpretation.

BACK TRANSLATION

This method typically involves **three** translators.

01 Translation to Target Language



The original English items are **translated into Malay** by Translator A.

02 Back Translation to Source Language



The Malay version is **translated back into English** by Translator B.

03 Comparison and Review



Translator C **compares** the back-translated English version with the original instrument.

04 Improved Equivalence and Validity



This process improves **semantic equivalence** and **translation validity.**

KEY OUTCOME

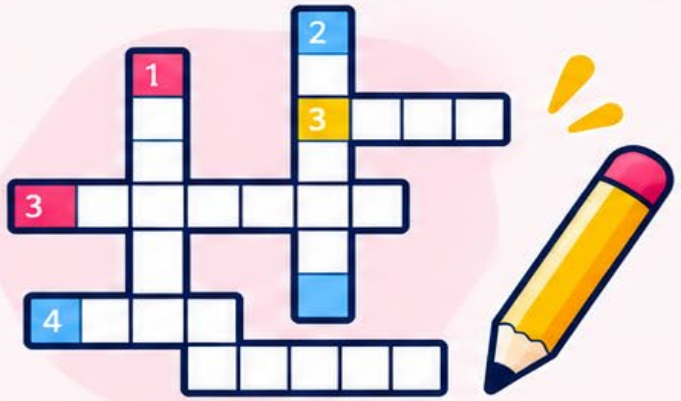
- Ensures the translated items have the same meaning as the original items **(semantic equivalence).**
- Enhances the overall quality and validity of the translated questionnaire.

YOUR NEXT TASK!

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1 CROSSWORD PUZZLE

10 questions



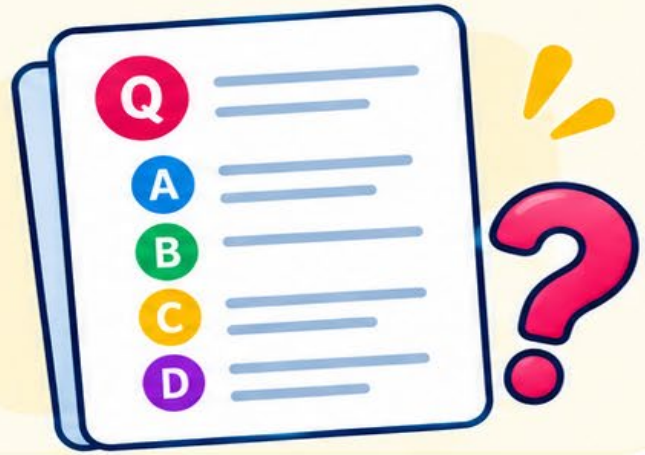
2 WORD SEARCH GAMES

Find the hidden words

S	S	E	C	U	R	I	T	Y
A	C	R	Y	P	T	O	L	M
T	D	A	T	A	I	Q	N	Z
N	E	T	W	V	R	K	I	A
F	I	R	E	W	A	L	L	P
M	A	L	W	A	R	E	T	Q
P	A	S	S	W	O	R	D	O
E	N	C	R	Y	P	T	O	N

3 ASSESSMENT QUESTIONS

10 questions



Each activity/test can be attempted up to **3 times.**

Passing rate: **60% and above** for each activity/test.

Let's Start! Have Fun Learning!

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THANK YOU