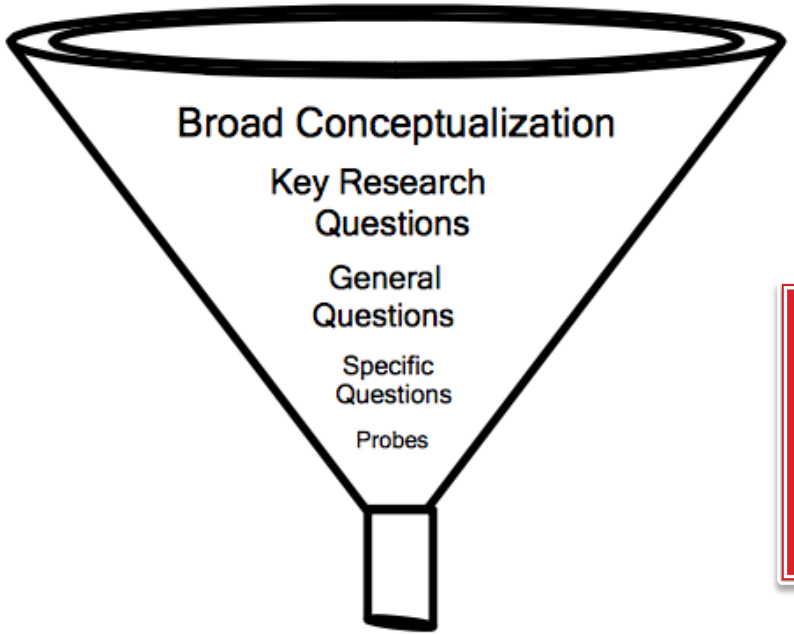
QUESTIONS, QUESTIONS, QUESTIONS

18th September 2020

Plan

- Consider different types of questions in evaluation research
- Update on work on NERUPI question bank
- Tips on designing question probes
- Drawing on people's experiences
- Cognitive testing examples
- Questions when assessing research

The Protocol Funnel



Start with the Research Questions – these set the focus and aims for doing the study.

International Program for Development Evaluation Training (IPDET), (2007) Module 8: Data Collection Options in the IPDET Handbook, World Bank

Need to focus

- Frame the central research topic into a problem question or a preliminary thesis – helps set the boundaries, focus and gives a conceptual thread.
- Be realistic in the number of questions you can answer. Time and resources are usually limited.
- Aim to say “a lot about a little problem” rather than “a little about a lot” (Silverman).
- Make your questions as clear and specific as possible. Specify what you mean for all general words (e.g. target group).
- Think about the audience – what do they want to know.
- Identify and sequence 3-4 aims to help you to develop your answer

Sample Questions

Clarity

Unclear: *"Why is the intervention with students a good idea?"*

Clear: *Do our participants have better subject knowledge compared to those who did not participate in the study group?*

Focus

Unfocused: *"What is the effect of the our work with current students?"*

Focused: *"How do targeted faculty interventions effect course drop rates and attainment of low SEC students?"*

Simple v Complex

Simple: *"Do participants benefit from taking part"*

Complex: *"In what ways do participants benefit, and how does this affect their attitudes to progression in education?*

Example research question 1

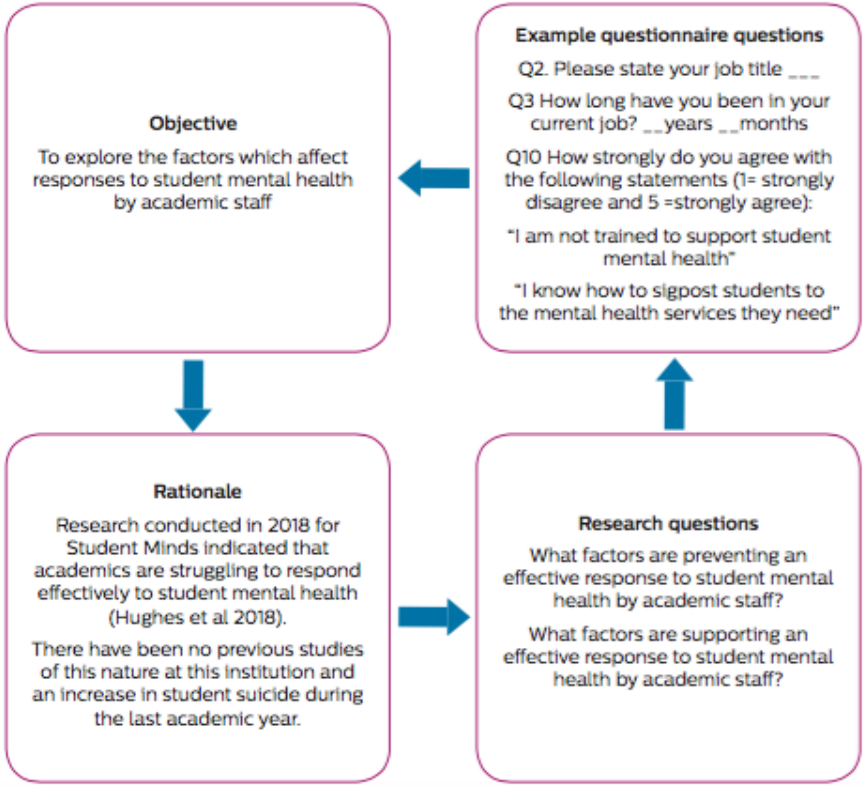
- ***'What is the effect of the outreach intervention?'***
  - What is the probable reason that this question would need some revision.

Types of research questions/evidence

Research topic category and high level research aim	Example question	Links to
Exploratory: Learn more about a topic, probe on the main factors involved	E.g. Do you feel that x (e.g. the summer school) has positively or negatively affected you and if so how?	Open ended questions Interviews and focus groups Creative methods
Predictive: Thinking about the potential future outcome of taking part in an activity	E.g. As a result of x (e.g. the summer school) are you more likely to y (e.g. apply to university). What do you feel you achieved by taking part in this activity?	Post activity surveys Interviews and focus groups
Evaluative (pre/post): Documenting impact against a measure	E.g. How confident do you feel… (e.g. in your ability to progress to university) - repeated before and after participation in an activity	Pre and post questions using rating scales Indicator Wheel/Outcome Star
Process: Understand the mechanisms at play in successful programmes	E.g. What's the best thing about this activity? How would you rate x,y,z?	Post activity surveys Observation

Different types of research methods will be needed to support different types of evaluation evidence

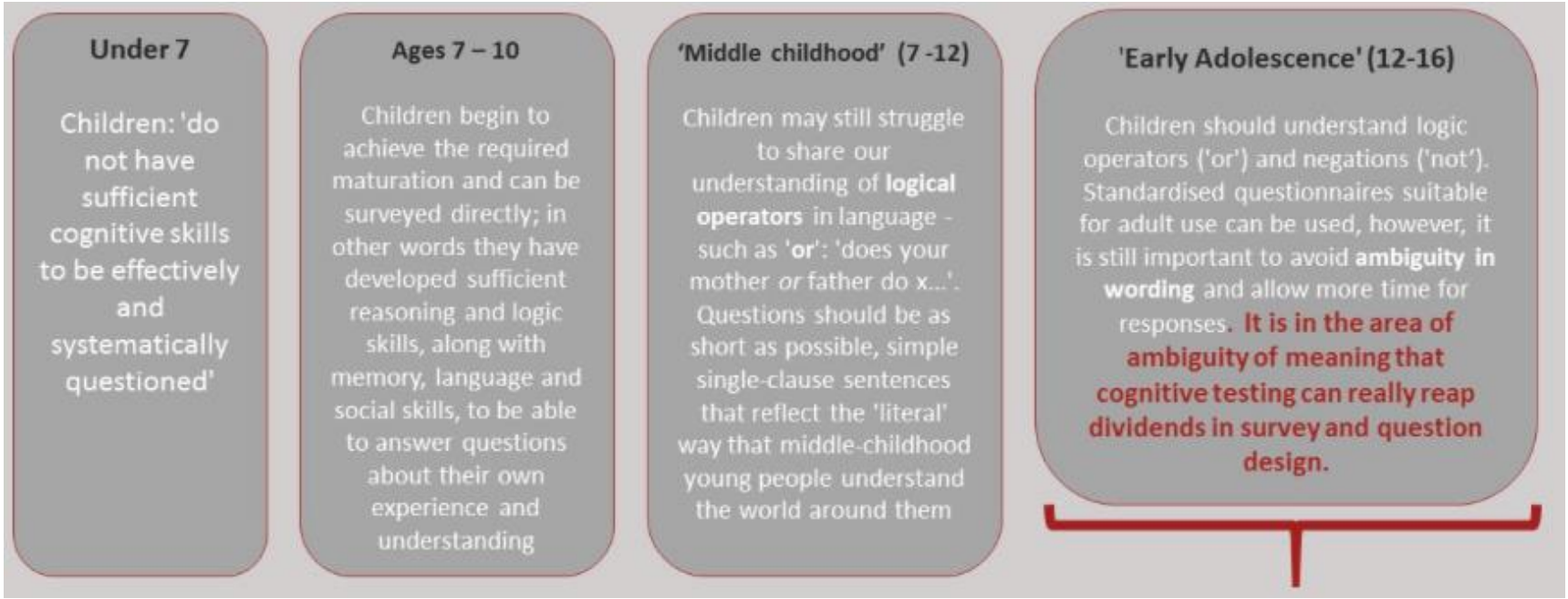
Question mapping



Questions constructed by the researcher (for example in an interview questionnaire or a focus group schedule) are based on a clear rationale and linked back to the aims and objectives. This will create a logical process from analysis to synthesis once the data has been collected.

Staff Guide to Using Evidence by Dr Liz Austen (Sheffield Hallam University) and Professor Stella Jones Devitt (Staffordshire University), February 2020

Psychology of childhood development (de Leeuw, 2011)



Things to avoid

Biased questions

Questions that assume what they ask

Double-barreled questions

Wordy and confusing questions

Unnecessary questions

Some Resources

- Reading age calculator in word
- SMOG toolkit https://www.learningandwork.org.uk/SMOG-calculator/smogcalc.php
- Hemingway editor www.hemingwayapp.com

Indicator Measurement Themes – v2

- **Imagined Future** - being able to visualize oneself in a future situation and having enough information/insight.
- **'Self-belief'** - aims to capture aspects of self-concept relating to belief in ability to control own destiny and perceived likelihood of future possibilities
- **Engagement** - interest in learning and extra-curricular activities which extends to the level of motivation to attain and progress in education
- **Application** – to see if learning in a specific context becomes applied to other situations
- **Expertise** – whether a person is knowledgeable about a subject or proficient in a technical skill.
- **Social networks** – to take account of the social, academic and other networks available to individuals as a resource.

Examples 1

Q1: Would you like to go to university?

Q2: Don't you agree that the campus visit was an excellent experience?

Q3: Do you feel more confident in evaluating course, student finance and job opportunities to make informed choices about courses that match with your personal interests and career aspirations?

Cognitive testing

- To ensure young people understand practitioner terms such as ‘post-18 options’, ‘Further Education’ vs ‘Higher Education’
- To test young people’s understanding of activity based terms such as ‘summer school’, ‘campus visits’, ‘Taster days’
- To test young peoples' interpretation of questions which look at behaviours such as ‘resilience’, ‘growth-mindset’, ‘self-efficacy’.
- To explore the difference in interpretations or understanding of terms at different ages/stages such as ‘student loans’, ‘UCAS’, ‘apprenticeships’
- To explore results from previous evaluations or activities which have unearthed unexpected results, e.g. as in ‘summer school’ anecdote

Cognitive model (Tourangeau et al (2009))

Cognitive	Definition	Response Errors/Question issues unearthed
Comprehension	Understanding and interpretation of questions	• Unknown terms • Ambiguous concepts • Long and overly complex questions
Retrieval/Recall	Respondent searches memory for relevant information to answer questions	• Recall difficulty • No prior knowledge/ experience • Perceived irrelevance of topic
Judgement	Respondent evaluates question and/or estimates response in deciding on an answer	• Question biased or sensitive • Estimation difficult • Impact of social desirability on judgement
Response	Respondent provides information in response to the question	• Incomplete response options • Response options don't fit with understanding or judgement of question • Response influenced by social desirability • Unwilling to answer

Cognitive testing results

- *'I know what grades are needed to get into university.'*

The item was considered difficult to answer as respondents stated that they would only know the answer to this item once they were researching university options in sixth form, so the item was omitted.

- *'I know I will achieve the grades needed to get into university.'*

The phrasing of the item was considered emotionally loaded so respondents felt they could not agree, as they did not know whether they would achieve the grades, it was hoped they would. The suggestion was then to reword the item to 'I think I will achieve the grades needed to go to university'.

- *'My parents/carers encourage me to get good grades, so I can go to university.'*

Respondents acknowledged that their parents encourage them to achieve at school, but not for the specific reason of attending university, as it was not an appropriate choice for all. The 'so I can go to university' part of the item was therefore omitted.

Discussion

Word/phrase	Discussion
HE is often said to: be for people like me not for people like me give me valuable life skills	Highly contingent: who are 'people like me' and 'people not like me' What are 'valuable life skills' and do these differ from 'skills employers are looking for'?
Higher Education (as a site)	Can imply: university, college of HE, further education college, specialist institution (ie a drama or agricultural studies college of HE)
Higher education (as a stage)	First year of study is Level 4 so HE refers to the level above Level 3 (A levels or BTECs). Make sure they understand HNDs and Foundation degrees are HE
Summer school	May not realise it is residential involving meals and accommodation over several days/nights; that it occurs at a HE institution (rather than at their school); that it will include sample lectures, tour of facilities etc

Discussion

Word/phrase	Discussion
First in family to attend higher education	Needs examples or a tick-list - young people may not understand terms like 'immediate family' nor will they always have accurate knowledge about HE experience of uncles, aunts, cousins and grandparents.
Confidence about applying	Often used in pre-post questions - OK so long as you have a solid understanding of what 'confidence about applying' means to them. Remember, IAG and campus visits can make YP less confident as the decision becomes more 'real'
Positive about HE	Similar to confidence, requires a pre-post understanding - how is it defined? what is the baseline?
Have you changed your mind since being on (the intervention)?	YP need to isolate the intervention from all the other advice and information they are subject to
Have your aspirations changed since being on (the outreach intervention)?	Requires a pre-post approach based on a tight definition of aspirations

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Discussion

Word/phrase	Discussion
Information, advice and guidance	What each of these terms mean and how they differ; what IAG means from point of view of the school where it is delivered
Distance learning/ Blended learning	Do they know it means online, rather than physical distance from the HE provider? do they understand it can be part by distance, part face-to-face (e.g. post Covid19). Do they know what it implies e.g. software, connection speed required etc

Questions when assessing research

- When you engage with evidence, you should always ask yourself these critical questions:
- Why was the data collected?
- Who did the research?
- What are the limitations of the research design?
- How transferable are the conclusions?
- What needs to happen now?

References

- de Leeuw, ED (2011) I*mproving Data Quality when Surveying Children and Adolescents: Cognitive Social Development and its Role in Questionnaire Constructs and Pretesting*, University of Utrecht, Netherlands, May 2011 https://www.aka.fi/globalassets/awanhat/documents/tiedostot/lapset/presentations-of-the-annual-seminar-10-12-may-2011/surveying-children-and-adolescents_de-leeuw.pdf
- Tourangeau et al (2009) *Scottish Government Social Research Group Social Science Methods Series Guide 7: Cognitive Testing in Survey Questionnaire Design* https://www2.gov.scot/Resource/Doc/175356/0091403.pdf