

Achieving the research component of IFOMPT Standards – ensuring research informed OMPT excellence

IFOMPT Standards Committee

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*2018 | Reno, Nevada
Changing the Pain Game:
OMPTs Transforming the Future*

Background

- AAOMPT's OMPT programs fulfill the IFOMPT Educational Standards that include Dimension 9:
 - Demonstration of a critical understanding and application of the process of research
- OMPT students need to demonstrate achievement of this dimension through effectively executing a research project relevant to OMPT practice, selecting appropriate data analysis procedures and disseminating the conclusions of the study
- This can be challenging across a range of diverse OMPT programs

Aims of the session

- To explore a range of strategies for programs to achieve the research project component of standards, including:
 - systematic and narrative reviews
 - qualitative and quantitative approaches to case studies
 - pilot and feasibility studies
 - exploratory studies using interviews or focus groups
- Barriers and facilitators and practical solutions will be explored
- Participants' personal objectives will be addressed directly:
<https://padlet.com/perkjaer/kt8itbp4s5va>

IFOMPT requirement of a research project

- Dimension 9 of the IFOMPT Standards Document:
 - Demonstration of a critical understanding and application of the process of research

Learning outcomes

- Recognise the need for the development of further evidence in OMPT practice and the role of research in advancing the body of knowledge in OMPT
- Critically evaluate common quantitative and qualitative research designs and methods
- Generate an appropriate research question based on a critical evaluation of current research evidence relevant to OMPT practice and NMS dysfunction
- Systematically address all ethical considerations associated with research involving human subjects
- Effectively execute a research project* relevant to OMPT practice and NMS dysfunction, selecting appropriate data analysis procedures and disseminating the conclusions of the study

Research project*

- A research project is defined as a process of systematic enquiry that provides new knowledge aimed at understanding the basis and mechanism of NMS dysfunction, or improving the assessment and/or management of NMS dysfunction
- The process of systematic enquiry is designed to address a research question
- The process may use a range of methodological perspectives and methods including literature review, qualitative, and quantitative approaches to address the research question

Examples of learning strategies that can be used to address learning outcomes

- ✓ Lectures
- ✓ E-learning
- ✓ Development of research proposal
- ✓ Execution of research project

Examples of assessment strategies that can be used to assess learning outcomes

- ✓ Research proposal
- ✓ Research article/oral presentation/poster presentation of research project findings

Achievement of the IFOMPT requirements can be challenging

- Particularly across a diverse range of educational programs
- More challenging outside of the education sector i.e. community based programs
- Common barriers include staff resource for supervision and ethics
- Common facilitators include the benefit from student research findings and their dissemination

A range of research methodologies are valuable to effectively enable an OMPT student's experience of a research project



Systematic and narrative reviews: Leanne Bisset

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Systematic Reviews

? Ask a clinical guided question



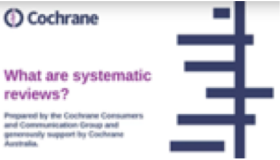
Search for the best evidence



Synthesize the evidence



Critically appraise the evidence



Qualitative and quantitative approaches to case studies: Per Kjaer

Qualitative and quantitative approaches to case studies



Effects of an intervention

Case study



Insights in a phenomenon

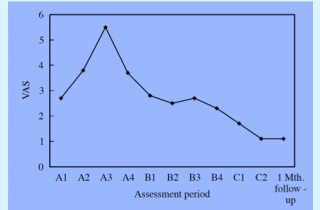
Multiple Case study



A case study `--aims to understand what is distinctive of a case defined as 'specific, a complex functioning thing'

Patient reports
Clinical tests

Compare AB, ABA,
ABAB, ABC



Quantitative methods

Patient reports
Clinical tests

Before - after

TABLE 1 Intra-Examination Processes									
Phase	Study ID	Study N	Study Age	Study Sex	Study Ethnicity	Study Location	Study Duration	Study Outcome	Study Notes
1	1	10	10	10	10	10	10	10	10
2	2	10	10	10	10	10	10	10	10
3	3	10	10	10	10	10	10	10	10

TABLE 2 Patient Outcomes at Discharge									
Phase	Study ID	Study N	Study Age	Study Sex	Study Ethnicity	Study Location	Study Duration	Study Outcome	Study Notes
1	1	10	10	10	10	10	10	10	10
2	2	10	10	10	10	10	10	10	10
3	3	10	10	10	10	10	10	10	10

Mixed methods

Interviews
Observations

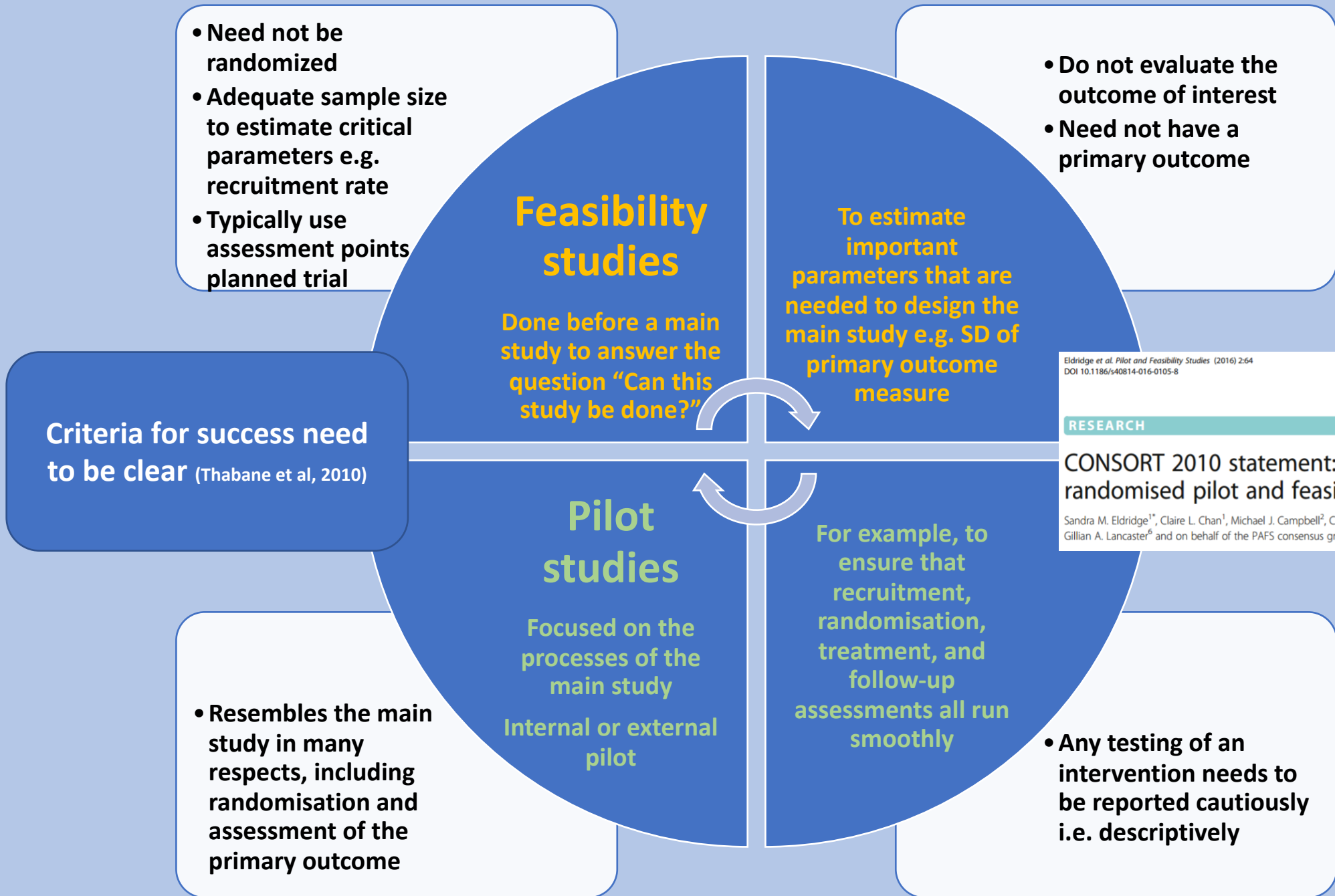
Thematic

Derived themes and quotes to support

Qualitative methods

Pilot and feasibility studies: Ali Rushton

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Eldridge et al. *Pilot and Feasibility Studies* (2016) 2:64
DOI 10.1186/s40814-016-0105-8

Pilot and Feasibility Studies

RESEARCH

Open Access

CONSORT 2010 statement: extension to randomised pilot and feasibility trials

Sandra M. Eldridge^{1*}, Claire L. Chan¹, Michael J. Campbell², Christine M. Bond³, Sally Hopewell⁴, Lehana Thabane⁵, Gillian A. Lancaster⁶ and on behalf of the PAFS consensus group



Exploratory studies using interviews or focus groups: Lenerdene Levesque

AIM: To prepare the groundwork for descriptive research questions; generate explanatory research in uncharted territories; shed light upon topics that have not yet been described in detail.(Sims J, Wright C 2000)

Exploratory Research

Gain additional insights before development of an approach

Isolate key variables and relationships for further investigation

To identify courses of action

To develop new hypotheses

To establish research priorities

To define a problem more precisely

<https://professortoday.com/exploratory-research-design/>

Approaches to Conducting Exploratory Studies

Scoping, Narrative or Systematic Reviews
To lead to new hypotheses or research priorities

Focus Groups
Nominal Group Technique
(Van de Ven, Delbecq 1972)
Interviews
Structured / unstructured

Clinician Surveys or End-user Surveys
To capture experiences, perspectives, beliefs and attitudes

Cross sectional/longitudinal observational
To explore several different potential correlations without defining any a priori hypothesis

Data Analysis

(Cote L, Turgeon J 2005)

Transcribing interview material

Reading material several times

Selecting units of meaning

Identifying general themes

Categorizing classifying data



Debate of experiences of the barriers and facilitators to achievement of the research project requirement of OMPT programs

Useful resource

- IFOMPT recommendations regarding the research project component of OMPT programs (IFOMPT Standards Committee, 2017)
- http://www.ifompt.org/site/ifompt/IFOMPT_research_project_guidance_MOs.pdf

Conclusions

- Need to find the right approach for individual programs
 - Standards Committee available as a resource
 - Work to overcome barriers
 - To realise benefits
-
- i.e. results and dissemination!

