



**teachers
meeting
OMPT**
25th November 2010
Zaragoza - Spain





**Enabling students to achieve the
research project component of
IFOMPT standards**

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Importance of this topic

- Research project is a requirement of OMT postgraduate programmes (IFOMT, 2000; 2008)
- Two environments of OMT programmes present challenges
 - University MSc
 - Non university programme
- Varied experience of OMT teachers in supervising research



Aim of presentation


- To clarify the requirements of the OMT research project
- To explore 3 key issues for us as teachers to enable student research projects:
 - Defining an appropriate research question
 - Selecting appropriate methodology / methods
 - Effective supervision of the research project



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REQUIREMENTS OF THE OMT RESEARCH PROJECT



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IFOMPT Standards 2008: Dimension 9

Competencies relating to knowledge	
	Demonstrate critical understanding of common quantitative research designs, including strengths and weaknesses
	Demonstrate critical understanding of common qualitative research designs, including strengths and weaknesses
	Demonstrate critical evaluation of ethical considerations relating to human research
Competencies Relating to Skills	
	Demonstrate effective critical appraisal of research relevant to OMT Physical Therapy practice as it relates to NMS dysfunction
	Demonstrate generation of a research question based on a critical evaluation of the current literature relevant to OMT Physical Therapy practice and relating to NMS dysfunction
	Demonstrate development of a research proposal which meets the requirements of a human ethics committee as appropriate
	Demonstrate selection and application of appropriate data analysis procedures
	Demonstrate effective execution of a research project and dissemination of its conclusions
Competencies Relating to Attributes	
	Demonstrate appreciation of the need for the development of further evidence in OMT Physical Therapy practice through research
	Demonstrate critical awareness of the role of research in advancing the body of knowledge in OMT Physical Therapy



Definition of a research project (IFOMT, 2008)

- 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 enquiry is designed to address a **research question**



**KEY ISSUE FOR US AS
TEACHERS TO ENABLE
STUDENT RESEARCH PROJECTS:**

**DEFINING AN APPROPRIATE
RESEARCH QUESTION**



Research question

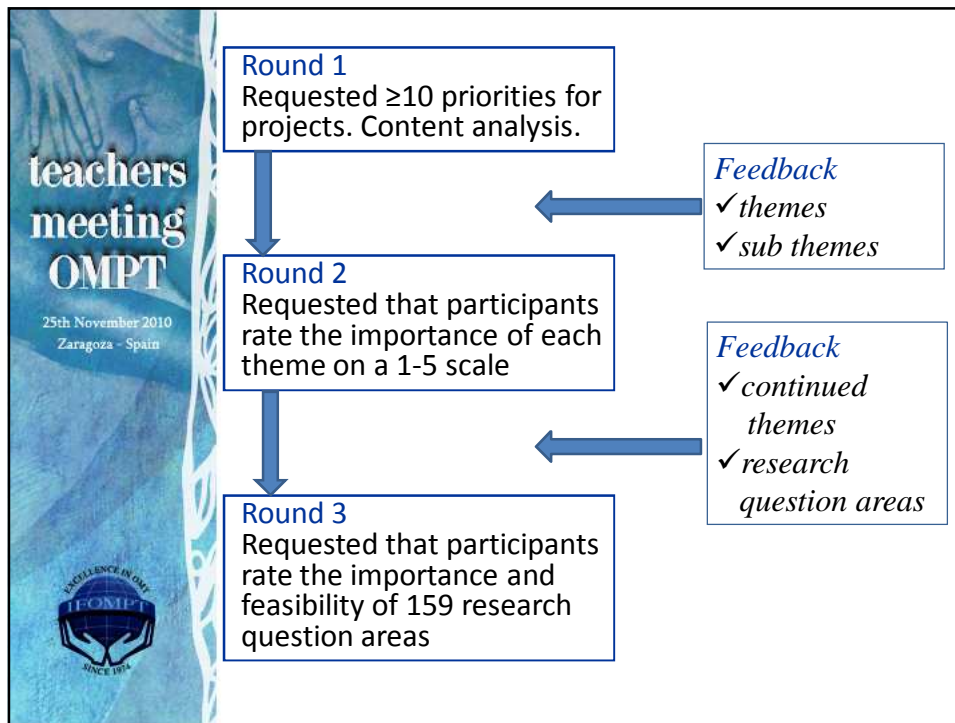
- The core of a research project
- Identifies the gap in existing knowledge that the research project attempts to fill
(Sim and Wright, 2000)
- Guides every aspect of the project
 - literature review, methodology, design, methods, analysis, discussion etc



Aim of the research priorities project

(Rushton and Moore, 2010)

- To identify international research priorities for postgraduate projects in OMT
- Consensual Delphi method




Participants

- Purposive sample of Course Tutors and Clinical Experts
 - Researcher and research consumers (Marshall, 2004)
- 10/20 Member Organisation countries of IFOMPT (in 2007)
 - 30/39 course tutors
 - 42/52 clinical experts


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Findings

- 12 research themes agreed as important
- Consensus for 43/159 research question areas identified as **important** and **feasible**
- Discrimination was demonstrated
 - Rating of feasibility was essential to process



Consensus of agreement for research question areas

Research themes (n=12)	Number of research Q areas in each theme
Personal Development	17
Epidemiology	10
Normative data collection	15
Biomechanics	11
Reliability of assessment tools	3
Validity of assessment tools	9
Outcome measures	13
Examination, assessment and diagnosis	13
Classification / subgroups / profiling syndromes	10
Mechanism of action of treatment	7
Clinical effectiveness	23
Patient focused research	20




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Reliability of assessment tools theme

Research question areas

- What is the intra-rater reliability of a broad range of assessment tools?
- What is the inter-rater reliability of a broad range of assessment tools?
- What is the accuracy of a broad range of assessment tools?



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KEY ISSUE FOR US AS TEACHERS TO ENABLE STUDENT RESEARCH PROJECTS:

SELECTING APPROPRIATE METHODOLOGY AND METHODS




Methodology and methods

- Range of methodological perspectives and methods including:
 - literature review, qualitative, and quantitative approaches (IFOMPT, 2008)
- **Thematic analysis** explored insights from open questions in the Delphi study
 - Useful research methodologies, included:
 - Single case study / multiple case studies
 - Literature reviews - qualitative or systematic review
 - Pilot RCT, Delphi, cross sectional, epidemiological, correlational
 - Feasibility and quality were key issues



**KEY ISSUE FOR US AS
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STUDENT RESEARCH PROJECTS:**


**EFFECTIVE SUPERVISION OF
THE RESEARCH PROJECT**



Supervision


- Three functions proposed
 - Normative (administrative)
 - Formative (educational)
 - Restorative (supportive)

(Proctor, 1987)




Developing good supervision

- Enabling peer support
- Group supervision by one supervisor
- Teams e.g. group projects
- Research culture (Conrad 2003)
- Preparation / development of the supervisor (Brew & Peseta, 2004)
- Process of matching students with supervisors (Marsh et al, 2002)
- Avoid and overcome dissonance (Wisker et al, 2003)



Warning signs of problems

- Personal issues
- Supervision relationship issues
- Research project issues
- Not accessing the research culture (disinterested?) (Manathunga 2005)
- Lack of progress
- Lack of preparation for meetings



Tips

- Students require caring attitude, substantive feedback, & subject knowledge in their supervisors
- The relationship between supervisor and student is as important as the process of research supervision
- Avoid student dependency
 - Part-time students are prone to dependency
 - Process should be facilitatory

(Kam 1997)



Tips continued...

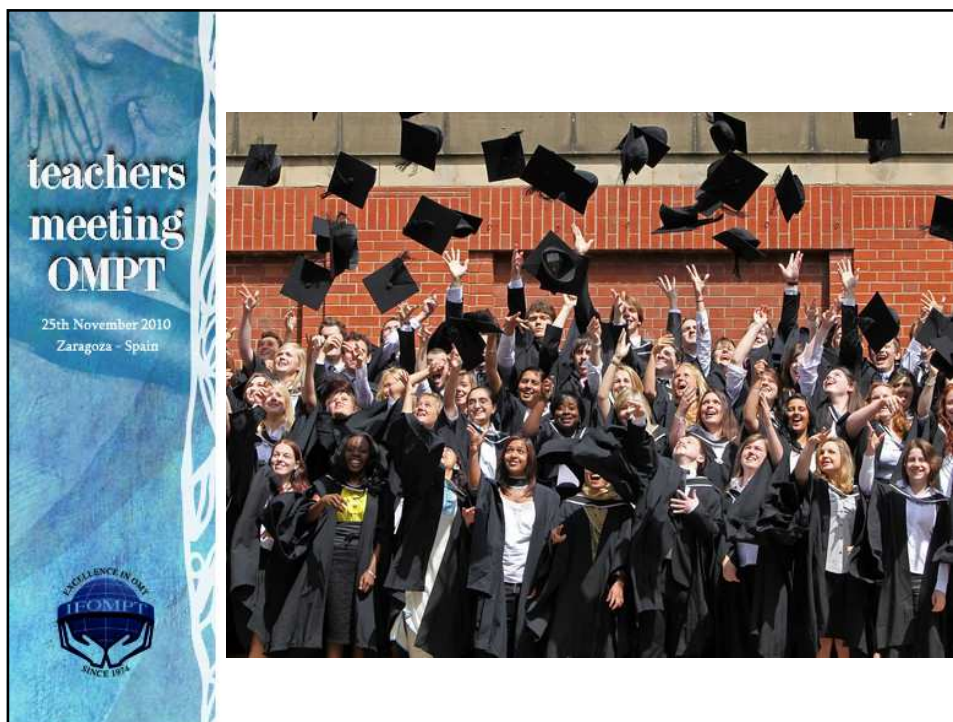
- Flexibility of approach - ability to modify approach as required
- Adapt approach to different students
- Planning
- Criticality
- Process of supervision is facilitated by a research culture
- Raises issues for non university courses



Take home messages

- Research project is an important component of OMT programmes
- Careful definition of the research question and selection of an appropriate methodology / methods is important
- Effective supervision is essential
- Development of supervisors needs to be a key focus of OMT programmes
- **Prioritised research question areas emphasise preliminary work and the value of OMT student research projects to our developing evidence base**

(Rushton and Moore, 2009)



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