

# Publication-based Thesis: what the examiners think

Helene Marsh  
Dean, Graduate Research

What are the differences between the reasons for an examiner reading a thesis and a researcher reviewing a paper?

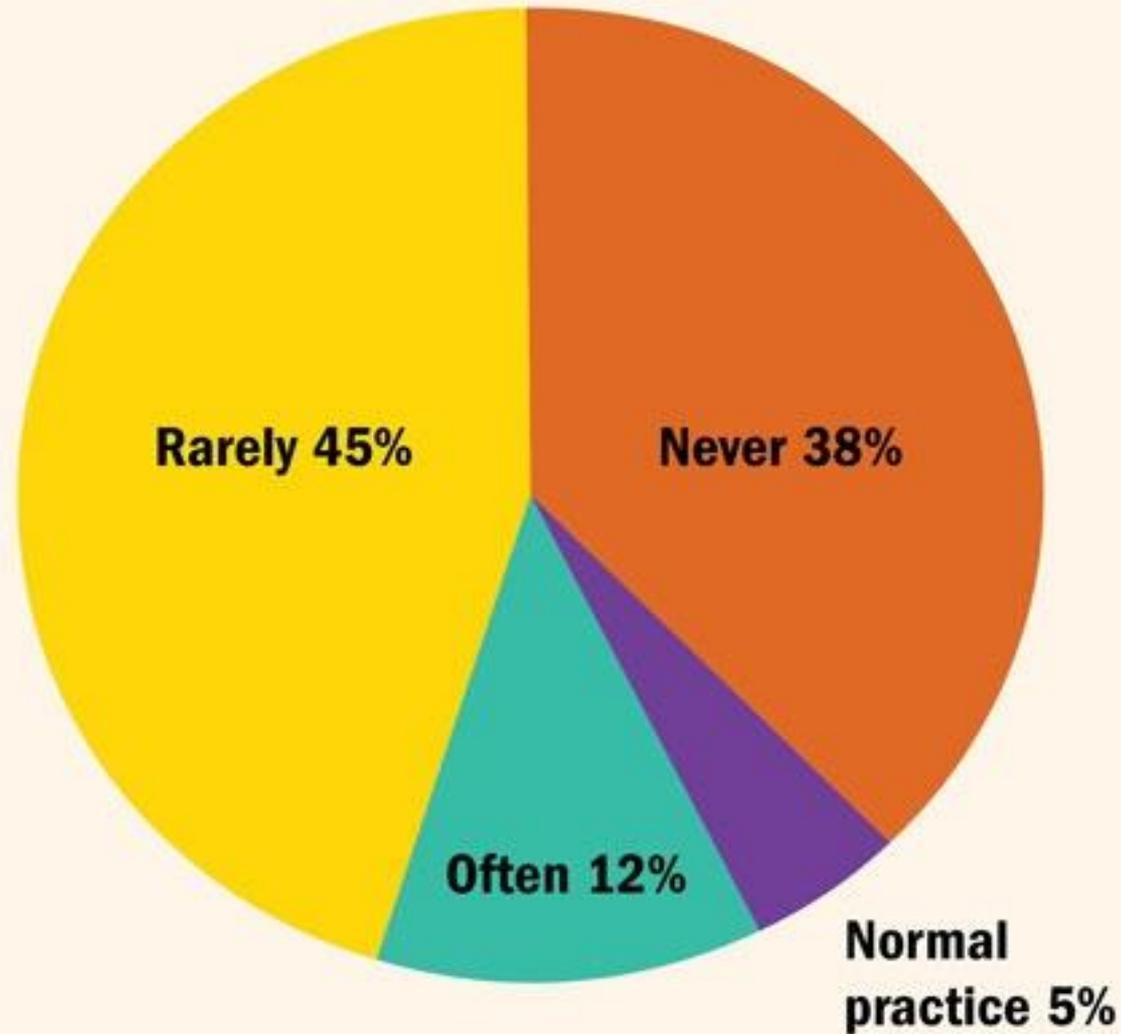
How does this affect the focus of their reading?

# Typology of publication-based theses

- PhD by publication/compilation
  - Thesis consists entirely of published papers (not allowed at JCU)
- Integrated thesis
  - Data chapters as papers with introduction and discussion.
- Hybrid thesis
  - Publications are inserted in lieu of some chapters with appropriate formatting to achieve a common style
- Thesis with appended papers
  - Aspects of the thesis have been published and are appended to the monograph style thesis
- Self-Citation thesis
  - Thesis in which the candidates published work is cited but not reproduced.

## How frequently do your PhD publications incorporate published papers?

UK 2015



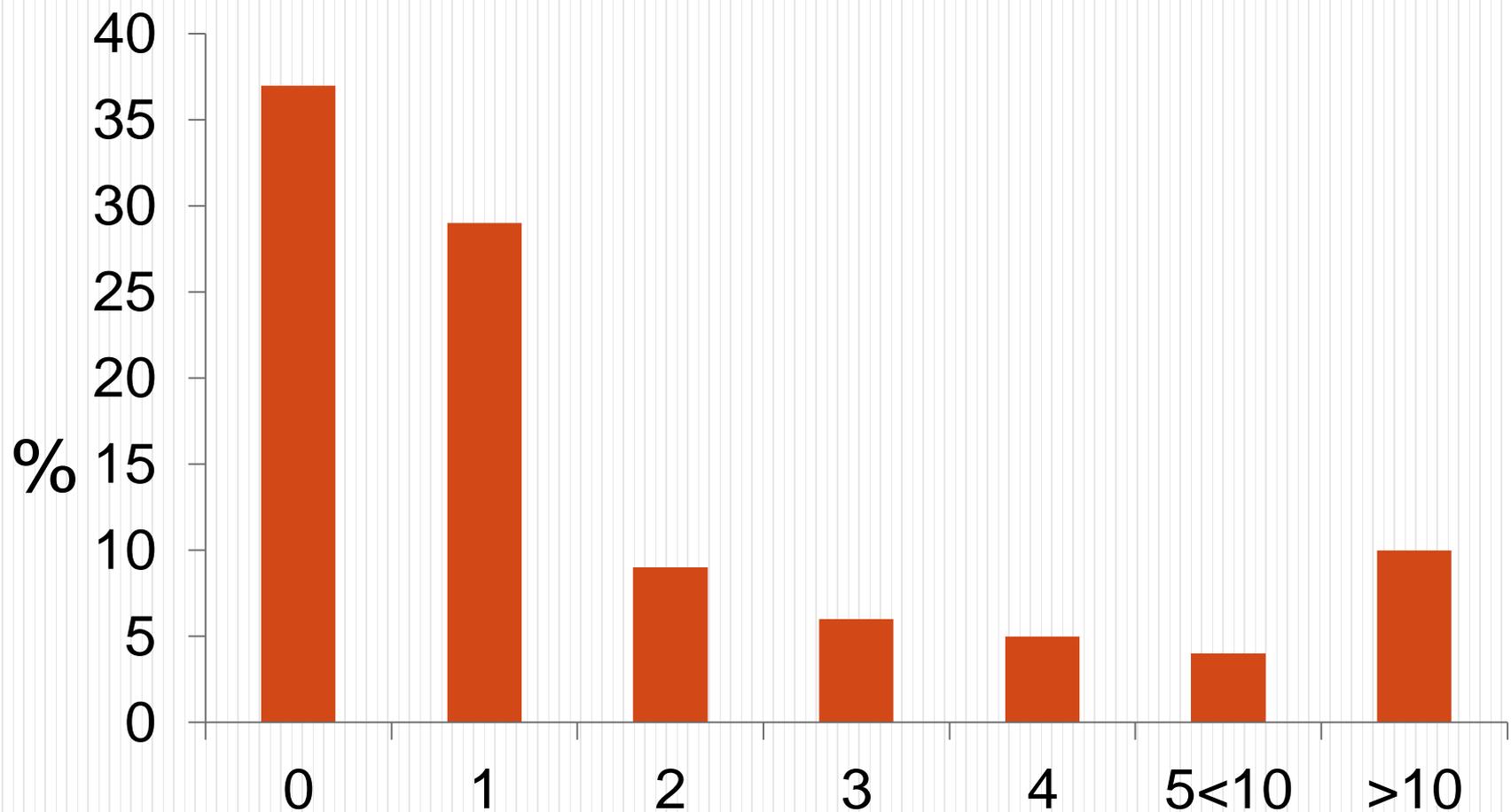
Source: UK Council for Graduate Education, *The Role of Publications and Other Artefacts in Submissions for the UK PhD*, 2015

# How frequently is published material included in a PhD thesis ?

	<b>Arts/ Humanities and Social Science</b>	<b>Science/ Applied Science</b>
No	57%	27%
Sole author	37%	2%
Co-author	6%	71%

UWA data n=60

# How many publications are included in a thesis?



# publications

UWA data n=60

# What are the examiners required to focus on by AQF?

## Research Doctorate

- **Capacity** to apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation, scholarship or professional practice.

## Research Masters .

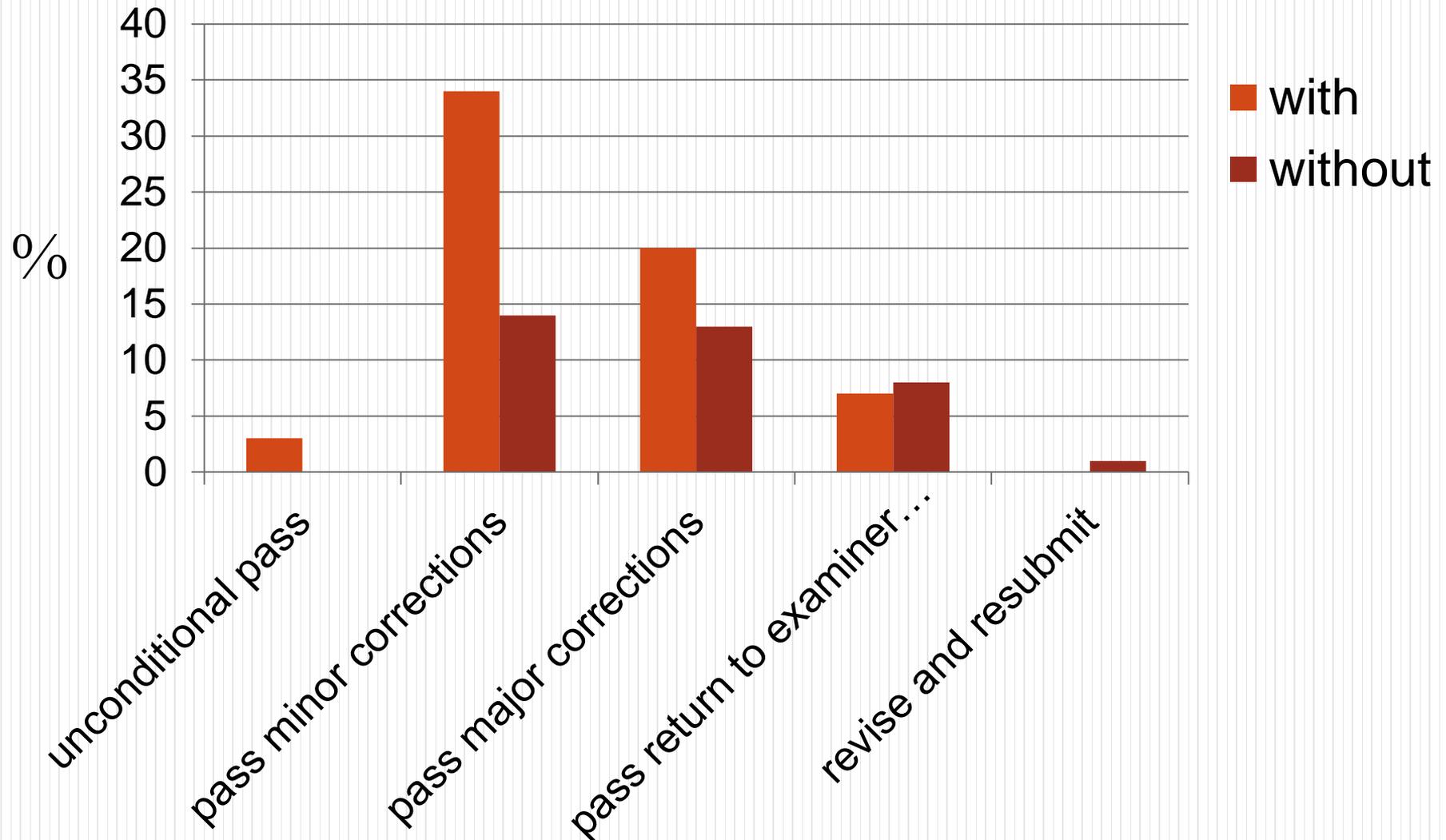
- **Capacity** to apply an advanced body of knowledge in a range of contexts for research and scholarship and as a pathway for further learning.

## All HDR theses

- Originality of the research data and/or analysis of the data;
- **Coherence of argument and presentation;**
- **Technical and conceptual competence** in analysis and presentation; and
- **Critical knowledge** of the relevant literature.

What do examiner's say?	With pubs	Without pubs
Lack of coherence	18%	23%
Unnecessary repetition	32%	23%
Omissions- not enough detail of in introduction, methods and discussion	58%	45%
Evidence of publication is positive	40%	
Concern that thesis concerns little published work	10%	
Publication leaves me nothing to consider	1%	UWA unpublished data; Sharmini et al. 2014
Hard to determine candidate's contribution	<b>68%</b>	

# Does publication improve examination outcomes?



UWA data n=60

# JCU guidelines

Thesis must include a statement for each publication that:

- clearly specifies the extent to which the original research was undertaken by the candidate rather than the co-authors,  
*and*
- gives full acknowledgement to the contributions of others

Qualitative statements less risky than  
quantitative statements

NZ (and increasingly Australian) universities  
move to oral examinations influenced by this  
issue

# Example of statement of contribution of others

Thesis chapter	Publication on which based	Role of each author
7	Grech, A., and Marsh, H. (2008) Rapid assessment of risks to a mobile marine mammal in an ecosystem-scale marine protected area, <i>Conservation Biology</i> 22: 711-720.	Grech and Marsh designed the study together. Grech conducted the analysis based on data collected by Marsh and wrote the chapter; Marsh assisted with the development of the rapid assessment approach, interpretation of results and editing.

# Example of quantitative statement of contribution of others (NOT RECOMMENDED)

Thesis chapter	Publication on which based	Role of each author
7	<p>Grech, A., and Marsh, H. (2008) Rapid assessment of risks to a mobile marine mammal in an ecosystem-scale marine protected area, <i>Conservation Biology</i> 22: 711-720.</p>	<p><u>Introduction</u> Grech 50% Marsh 50%</p> <p><u>Methods</u> Grech 50% Marsh 50%</p> <p><u>Results</u> Grech 80% Marsh 20%</p> <p><u>Discussion</u> Grech 35% Marsh 65%</p>

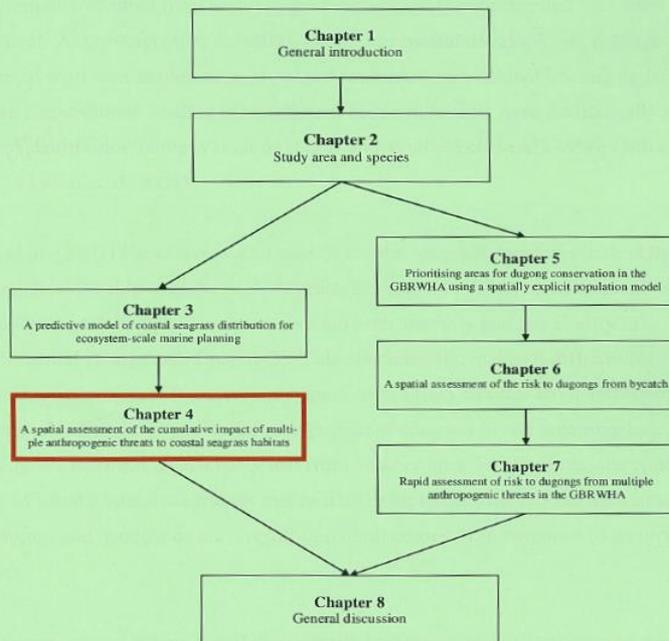
# JCU thesis guide

- If data chapters are presented as series of papers (published or unpublished)
  - Chapters should preferably be presented in coherent format (reprints bound together less reader friendly).
  - Papers may be co-authored but student should be senior authored on at least 50%
  - Intellectual thread of the thesis should be outlined in the introduction and synthesised in the general discussion **which must by substantively written by candidate alone**

## Chapter 4

### A spatial assessment of the risk to coastal seagrass habitats to multiple anthropogenic threats in the GBRWHA<sup>1</sup>

In this chapter, I use expert opinion and a risk assessment framework to delineate areas of low, medium and high relative impact to coastal seagrass habitats from multiple anthropogenic threats. I compare the distribution of threats with the probabilistic model of coastal seagrass distribution to estimate the risk of coastal seagrass habitats from the threats at the scale of the coastal GBRWHA. Outputs of the assessment are the identification of: (1) anthropogenic threats with the greatest relative impact on coastal seagrass habitats; and, (2) 'hot spots' that are a priority for conservation actions.

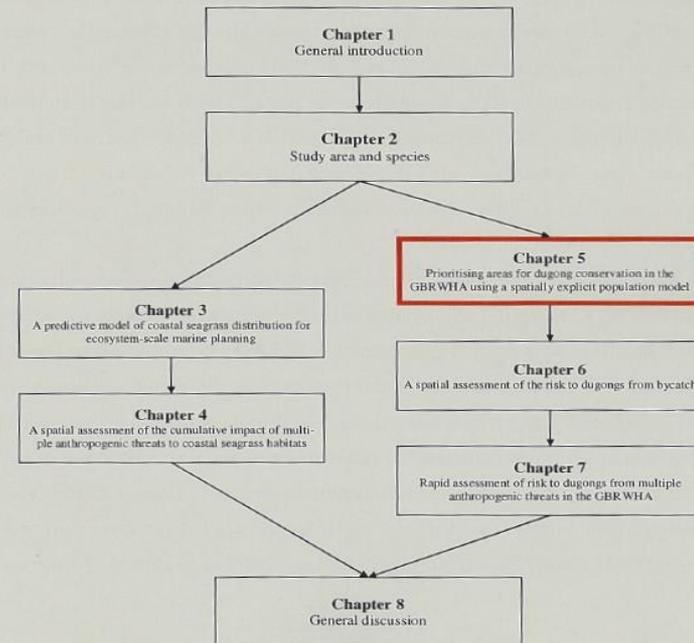


<sup>1</sup> Grech, A. and Coles, R. *in prep.* A spatial assessment of the risk to coastal seagrass habitats from multiple anthropogenic threats in the GBRWHA. Target journal *Aquatic Conservation*.

## Chapter 5

### Prioritising areas for dugong conservation in the GBRWHA using a spatially-explicit population model<sup>1</sup>

In this chapter, I outline the development of a spatially-explicit dugong population model that can assist managers in prioritising the administration of conservation resources at the GBRWHA scale. I use information collected from dugong aerial surveys in conjunction with geostatistical techniques to develop a model of dugong distribution and relative abundance. I classify each dugong planning unit as low, medium, or high conservation value on the basis of the relative density of dugongs estimated from the model and a frequency analyses.



<sup>1</sup> Grech, A. and Marsh, H. 2007. Prioritising areas for dugong conservation in a marine protected area using a spatially explicit population model. *Applied GIS* 3(2): 1 – 14.

# Pros and Cons of Writing Data Chapters of Thesis as Papers

## Pros

- Benefit of input in the journal review process
- Improves candidate's CV – essential for research or academic career in most disciplines – **index of potential as a researcher**
- Improves likelihood of positive examiners' reports

## Cons

- More acceptable in some disciplines than others
- Takes time – may be tradeoff between timely completion and 'publishing as you go'-hybrid option
- May increase the chances of unintentional plagiarism – additional care required

# Advice to candidates

- Is including publications in the thesis common (or expected )?

Increasingly yes, especially in the sciences/applied sciences

- How many (planned) publications do I need?

Depends on discipline, project and publication type. Examiners may be concerned by low levels of publication.

- Will including publications 'guarantee' that my thesis is passed / minimize need for corrections?

No but, it will improve your chances

**Don't forget the differences in the reasons for an examiner reading a thesis and a researcher reviewing a paper**

# Questions?