



Exploring the engagement of New Zealand diagnostic radiographers with research

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RESEARCH QUESTION

TO WHAT EXTENT are New Zealand diagnostic radiographers

ENGAGED with research

and **WHY?**



BACKGROUND

University of
Wollongong
Institute of Technology
WU
WU
WU

Health Research Council of New Zealand

Strategic Five Year Plan 2008 – 2013

MRTB and NZIMRT Code of Ethics

MRTB competency documents:

- “Initiate a report on research and development”**
- “Identify resources”**
- “Produce and present a research proposal”**
- “Compile and present a research report”**



LITERATURE REVIEW

No studies in New Zealand on research engagement

NZHS Workforce survey (2007)

Activity, attitudes, awareness, barriers and resources:

UK: *Challen et al, 1996*

Norway: *Hafslund, 2008*

Nigeria: *Ohagwu et al, 2009*

Finland: *Ahonen & Liikanen, 2010*



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SIGNIFICANT PREDICTORS

Educational background?

Qualification?

Experience?

Employment status?

Role?

Work setting?

Age and Gender?



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UNDERSTANDING BEHAVIOUR

Self-efficacy

Bandura (1977)

Motivation

Vroom (1965)

Planned behaviour

Ajzen (1991)

Social Intelligence

Goleman (2006)



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CASE STUDY

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1 New Zealand city hospital

63 questionnaires distributed

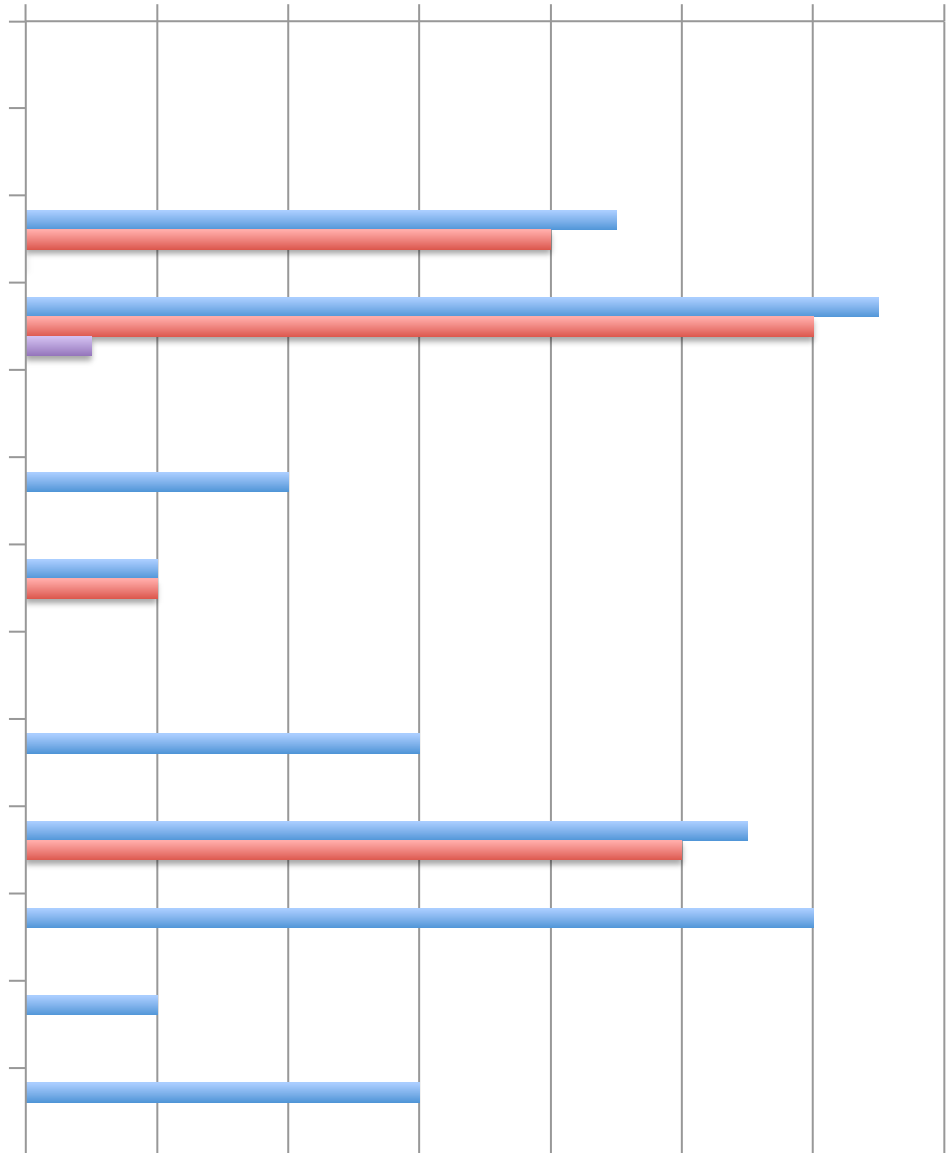
6 semi-structured interviews



www.catrental.co.nz

0 2 4 6 8 10 12 14

- Supervised research project
- Lead research team
- Completed team research
- Completed individual research
- Currently completing research
- Written proposal but not completed
- Presented research findings
- Published research findings
- Regularly read journal articles
- Attended training on research methods
- Contributed to data collection
- None of the above
- Not answered



■ Total ■ Undergraduate ■ Clinical role



DEFINING RESEARCH

“It’s basically you look on the internet, read a book, articles, ask people for their opinions”

“Generally speaking it’s increasing your knowledge base”

“Collecting data”

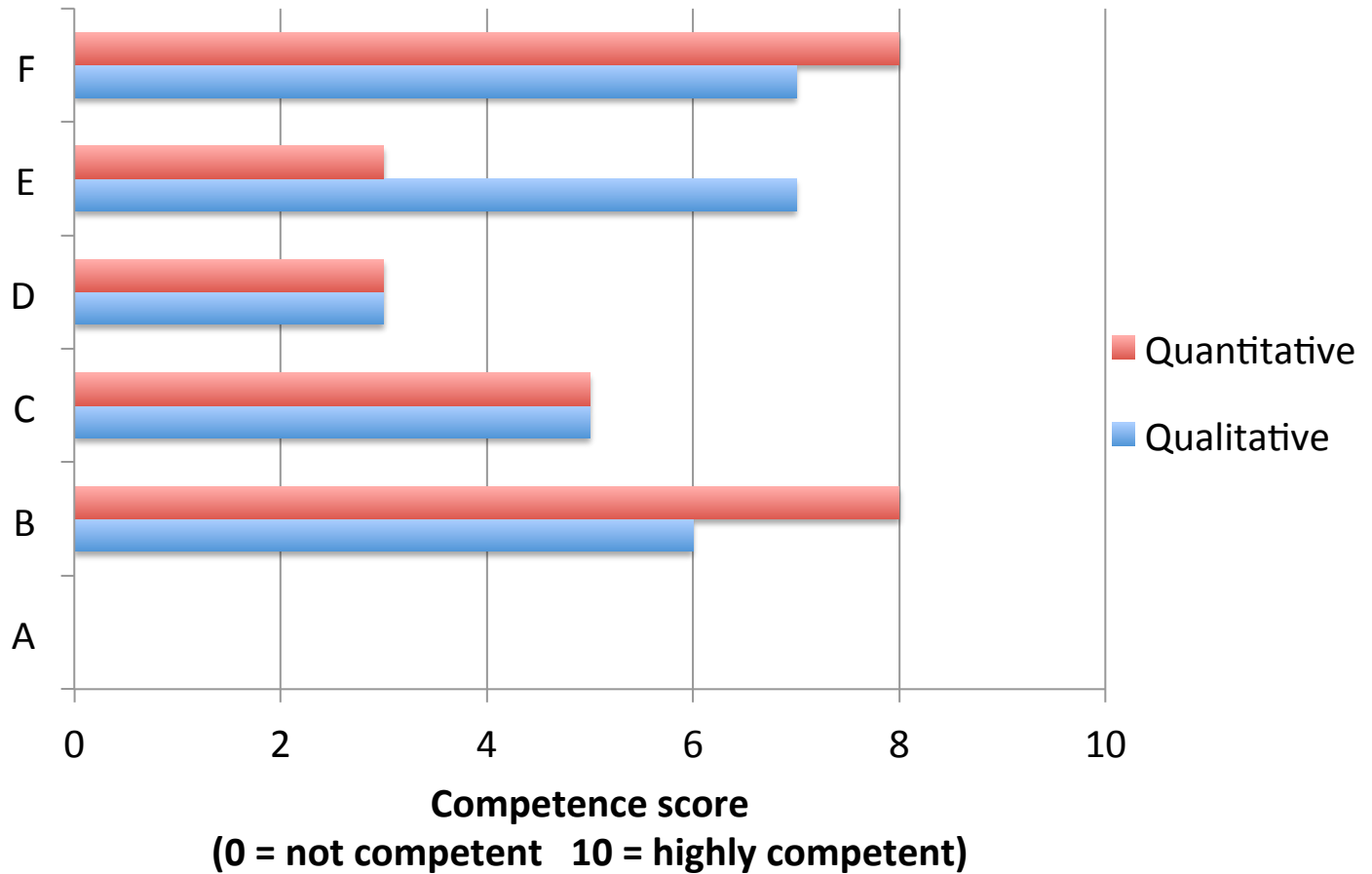
“Research is trying to find out some new information. It would be something that hasn’t been looked at before.”



COMPETENCE

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**Interview
participant**

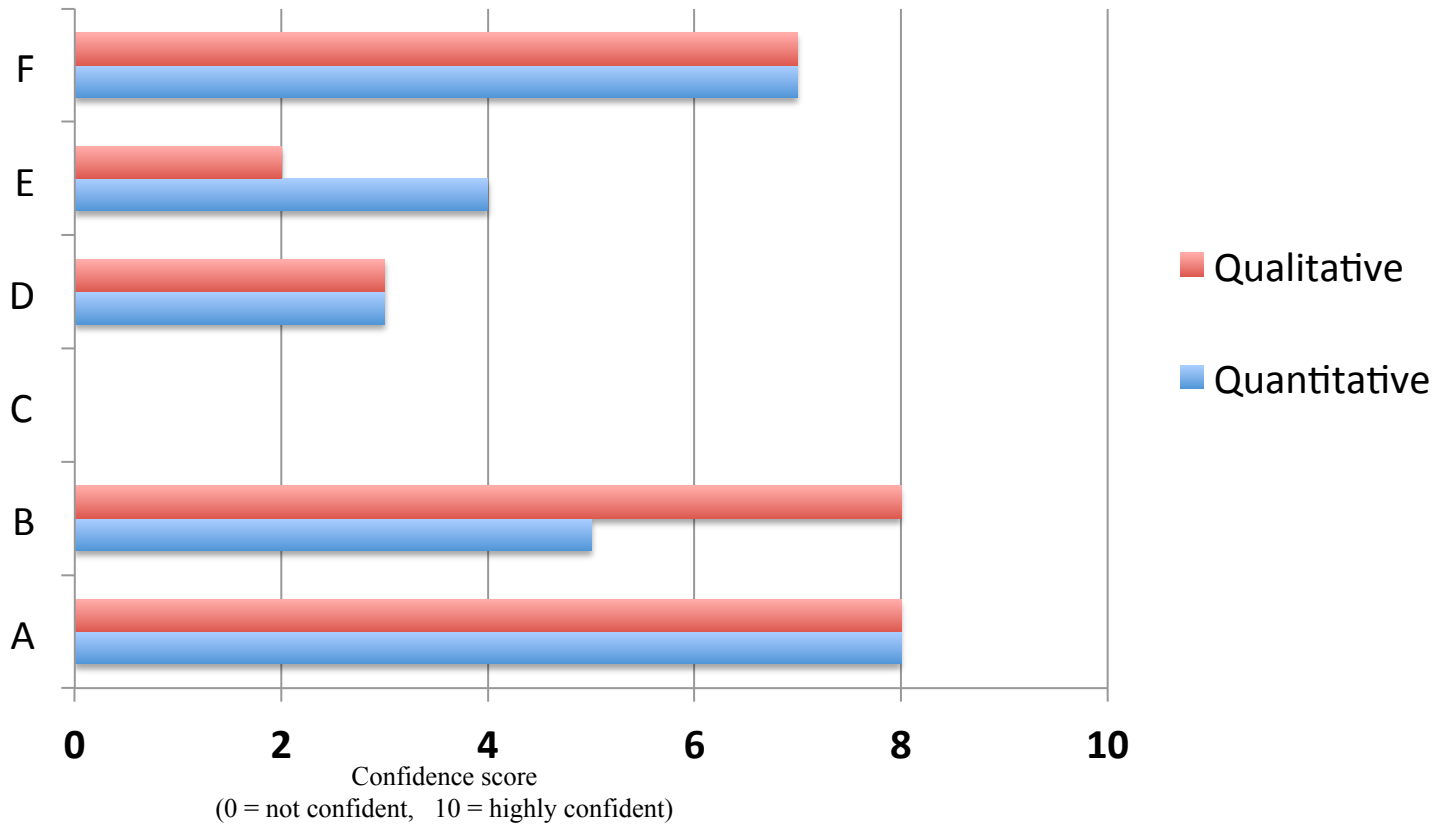




CONFIDENCE

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Interview
participant





RESOURCES

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| | 3 – 4 AVAILABILITY RATING (%) |
|-------------------------------|--------------------------------------|
| Computers | 90% |
| Internet | 89% |
| Radiography text books | 76% |
| Peer support | 62% |
| Expert advice | 59% |
| e-journal articles | 58% |
| Quiet space | 36% |
| Hardcopy journals | 29% |
| Approved funding | 21% |
| Research skills text books | 15% |
| Time | 14% |



MY ROLE?

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Is there a requirement for Radiographers to be research active?

| Response | Frequency |
|--------------|-----------|
| Yes | 6 |
| No | 16 |
| Not sure | 4 |
| Not answered | 4 |

“I suppose you associate research with lecturers, you don’t really think about people doing it in health”



MOTIVATION

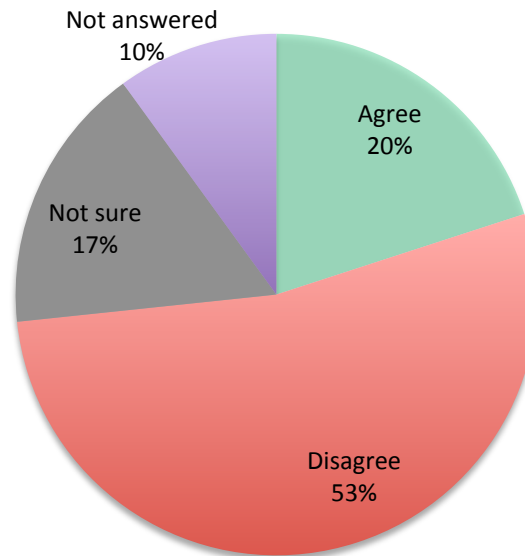
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| “I am motivated to be involved in research” | “Research will make a difference to my practice” | | | | |
|---|--|----------|---------|-------|----------------|
| | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| Strongly agree | 0 | 0 | 0 | 0 | 0 |
| Agree | 0 | 0 | 1 | 4 | 0 |
| Neutral | 0 | 1 | 4 | 5 | 0 |
| Disagree | 1 | 0 | 4 | 4 | 1 |
| Strongly disagree | 0 | 1 | 2 | 1 | 0 |



PROFESSIONALISM

To be considered professional
I am expected to be involved in research



**“There’s different levels of professional
and we’re kind of at the bottom”**



CULTURE

University of Wollongong
WOLLONGONG

“Basically we’re **over-ridden** by radiologists on most things. They have the final say in our protocols. You’ve obviously got all the information but they have the final **more educated** answer. **We’re just making images** for them to report and make a diagnoses”

“**Promotion of the profession**...I think that here [in New Zealand] radiography is **way down here**, not a very high profile profession.”



CULTURE

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“I know no-one wants to do it, but once you actually get into it, trying to find relevant data its actually quite good”

“No-ones going to do it unless they either have a **genuine interest** or it can help them to **progress in their work”**



ADVANCED PRACTICE?

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TE Kōwhiri Mātauranga o Waikato

An advanced practitioner is expected to be research active as part of their role

| Response | Number of respondents |
|---------------------|------------------------------|
| Agree | 15 |
| Disagree | 6 |
| Not sure | 8 |
| Not answered | 1 |

**“Radiographers in NZ are undervalued/underutilised.
We need a clear advanced practitioner pathway, if research is involved, good.”**



IMPROVING ENGAGEMENT?

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YE HOSSEIN MOHAMMED Q. COLLEGE

| | | |
|---------------------------|----------|---|
| <i>Leadership?</i> | 8 | Open discussions, research forums, strong leadership towards research, role models. |
| | | Assistance in how to conduct research effectively and what opportunities are available |
| | | Encouragement and training |
| | | promotion and encouragement |
| | | Supervision and good strong topics to research |
| | | Instruction and mentoring |
| | | Support...from supervisors |
| | | Encouragement, guidance |



IMPROVING ENGAGEMENT?

| | | |
|------------------------|----------|--------------|
| <i>Funding?</i> | 7 | Money |
|------------------------|----------|--------------|

| | | |
|--------------------------|----------|---|
| <i>Incentive?</i> | 4 | Incentive |
| | | Compulsory step for payrise, - Staff might hate it though. |
| | | Rewards, CPD points, promotion |
| | | Time + funds + resources. No-one's going to do research unless they either have a genuine interest or it can help them progress in their work. |



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EMERGENT THEMES

Self – efficacy

Workplace culture

Professional hierachy

External motivators



SUMMARY

Defining the term

The difference between:

Rhetoric and reality

Perceptions and reality

The undergraduate experience

Who is going to lead?



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