

Is there a relationship between
MMI score and Physiotherapy
students' performance on
practice placement?

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What is an MMI?

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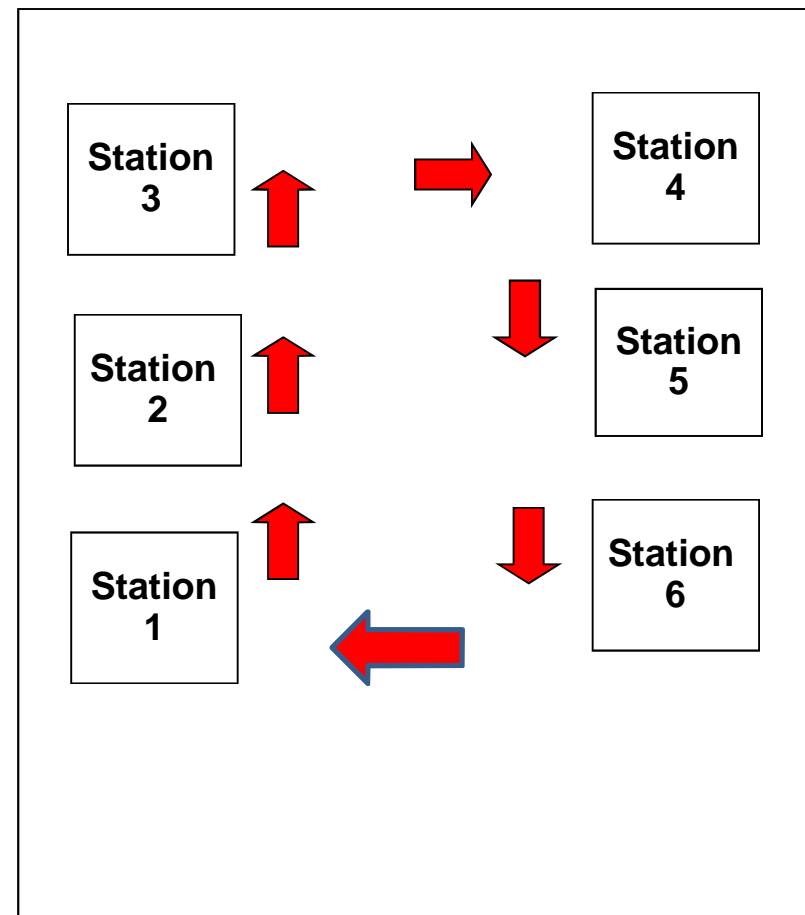
- Multiple Mini Interview

What is an MMI?

- Multiple Mini Interview
- Eva (2004)

Multiple Mini Interview:

- 7 'stations' (Callwood, 2017)
 - Icebreaker PLUS 6



What is an MMI?

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- Eva (2004)
- Plethora of research since 2004 supporting use of MMI for recruiting students to many healthcare professional programmes:

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- Multiple Mini Interview
- Eva (2004)
- Plethora of research since 2004 supporting use of MMI for recruiting students to many healthcare professional programmes:
 - Medicine (Eva et al, 2004, Husbands & Dowell, 2013)
 - Vet Medicine (Yen et al, 2011, Oliver et al 2014)
 - Nursing (Gale et al, 2016)
 - Pharmacy (Cox et al, 2015)
 - Midwifery (Callwood et al, 2014)
 - Paramedic Science (Callwood et al, 2018)

So *why* MMI?

So *why* MMI?

- Predicts pre-clerkship performance in medical students (Eva et al, 2012)
- Feasible, reliable and acceptable (O'Brien et al, 2011)
- No bias for gender or age (O'Brien et al, 2011)
- Reliable and cost effective (Eva et al, 2004)
- Dilutes bias (Eva et al, 2004)
- Multiple insights into cognitive domains (Eva et al, 2004)

- **Francis Report (2013)**



Rationale for change

- MBBS5 2010
- Physiotherapy 2014
- Occupational Therapy,
Radiography, Paramedic Science,
Midwifery, Nursing, Physicians
Associate and MBBS4

MMI for Physiotherapy?

MMI for Physiotherapy?

- Quantative, statistical analysis to assess for correlations between Physiotherapy students' MMI score and performance in professional practice

Method

- 99 BSc Physiotherapy students from 2 cohorts (2014 & 2015)
- MMI Score (/35)
- Overall PP1 score AND component scores (%)

Interpersonal
Skills

Professionalism

Clinical
reasoning

Treatment &
Management

Method

- 99 BSc Physiotherapy students from 2 cohorts (2014 & 2015)
- MMI Score (/35)
- Overall PP1 score AND component scores (%)
 - Interpersonal skills
 - Professionalism
 - Treatment & Management
 - Clinical reasoning
- Pearsons *r*
 - Statistical Analysis using SPSS v.23 ($p < 0.05$)

Results

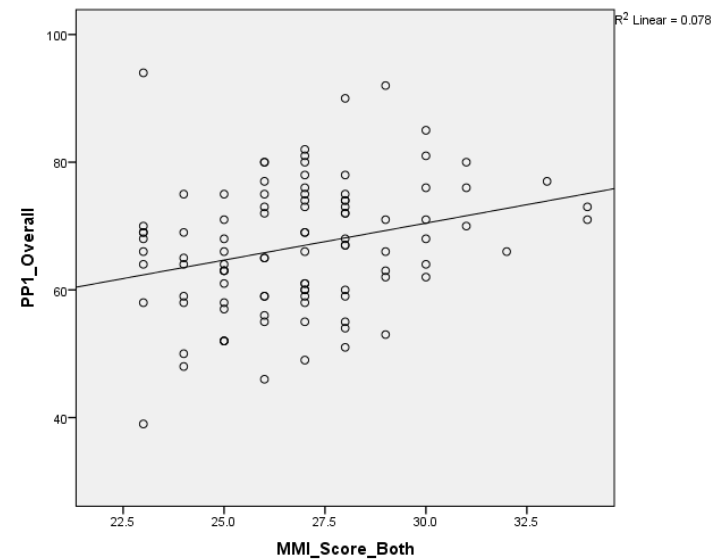
- Mean MMI Score 26.82 (2.36)
- Mean PP1 overall mark 66.88 (10.19) %

Results

- PP1 Overall / MMI

Results

- PP1 Overall / MMI
 - Weak ($r = 0.279$) but significant ($p = 0.005$) correlation

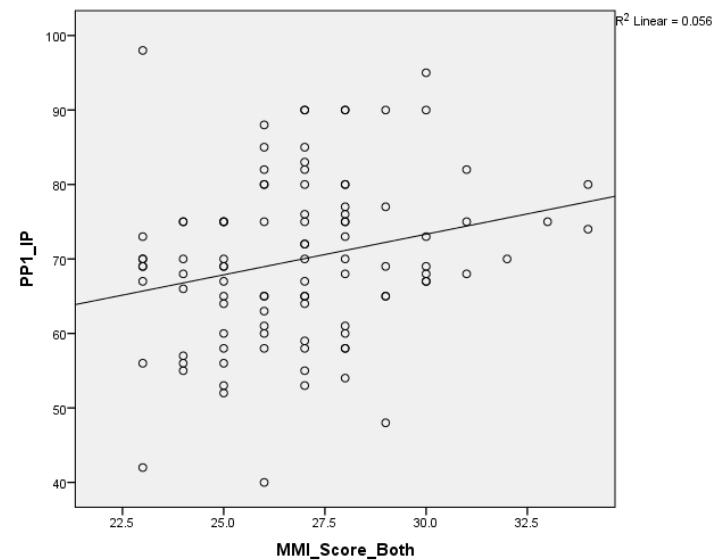


Results

- Interpersonal Skills / MMI

Results

- Interpersonal Skills / MMI
- Weak ($r = 0.238$) but significant ($p = 0.018$) correlation

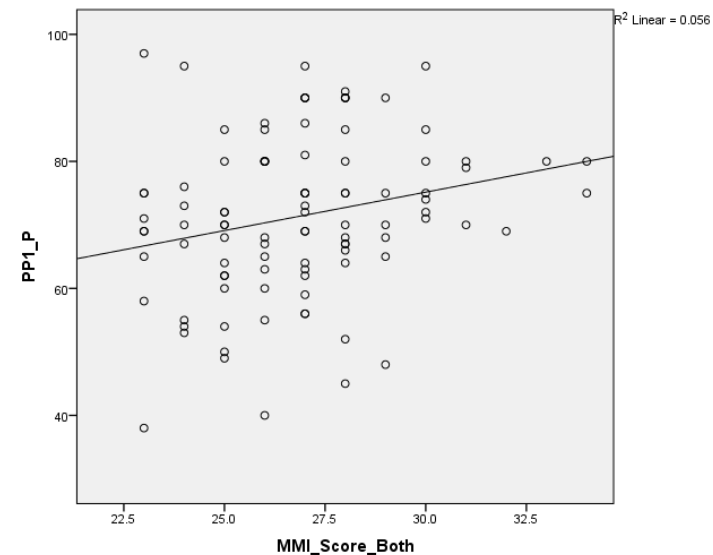


Results

- Professionalism / MMI

Results

- Professionalism / MMI
- Weak ($r = 0.237$) but significant ($p = 0.018$) correlation

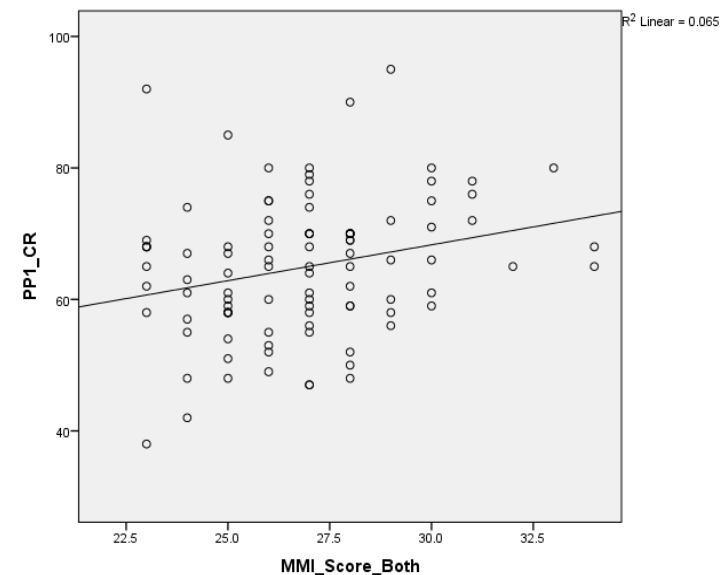


Results

- Clinical Reasoning / MMI

Results

- Clinical Reasoning / MMI
 - Weak ($r = 0.256$) but significant ($p = 0.011$) correlation

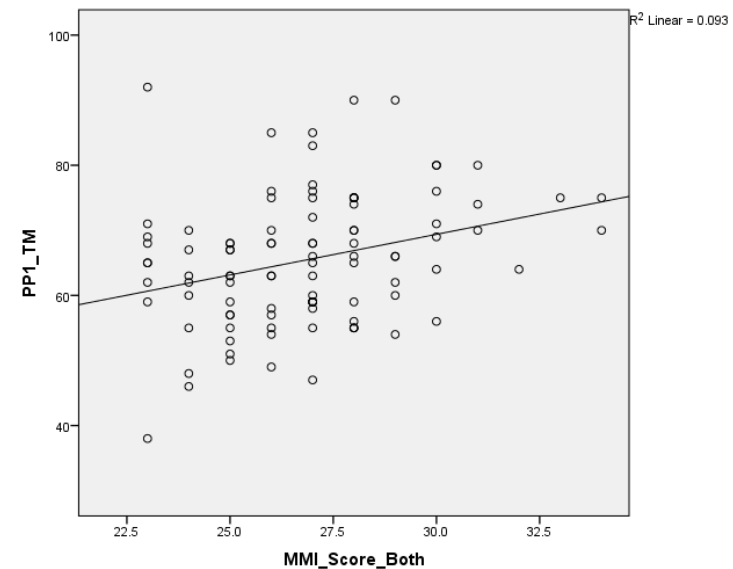


Results

- Treatment & Management / MMI

Results

- Treatment & Management / MMI
- Weak ($r = 0.305$) but significant ($p = 0.002$) correlation



Conclusions

- There is a correlation between our students MMI score and their marks for PP1.
- Reinforced our commitment to using MMI for Physiotherapy student recruitment.

Limitations / Discussion

- Small Sample Size
- PP1 is in Year 2
- Snapshot of PP1 only

The Future...?

- More cohorts?
- Link between MMI score and overall degree classification?
- Assess for potential for use of MMI in other professional programmes?

Final message....

- MMI does not appear to discriminate and could be a useful tool to recruit healthcare students with a solid set of professional values on which to develop.
- Knowing that there is a correlation between MMI score and performance in clinical practice could be useful to identify those students who need more support or guidance.

Thank you

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