A longitudinal enquiry into the impact of emotional intelligence on progression in student nurses and midwives:

Results from phase one
Overview

- Background and rationale for study
- Study design and process
- Data collection- first impressions
- Implications
Background- The Francis Report (2013)

- Focus on culture of caring
- Aptitude test for caring
- Recruitment for values
Rationale

- Need evidence base- which attributes/values/behaviours must be present in students?
- Can select students based on these attributes?
- How do you ‘measure’ caring?
- Is a minimum period of work experience required?
Emotional Intelligence

- Emotional intelligence (EI) is a contested concept.
  - ability to identify, assess, and control the emotions of oneself, of others and of groups.

- Trait EI and Ability EI

- Widespread support of EI concepts in nursing but lack of evidence of impact on student progression
The study

**Participants**
- 937 1st yr nursing & midwifery students from Edinburgh Napier and UWS
- 64 computing students - control

**Design**
- Longitudinal experimental design
- Data collected - On entry, 2nd year and point of registration

**Measures**
- Trait Emotional Intelligence Questionnaire (SF)
- Schutte Emotional Intelligence scale
- Demographic info, previous caring experience, mindfulness training
Hypotheses

- Nurses will have higher EI than computer students

- High EI will be linked to successful achievement of competence for entry to the NMC register

- High EI will be associated with previous caring experience

- High EI will be associated with mindfulness training

- EI will increase with age
Data

- **Variables:**
  - Gender, age group, campus course, previous caring experience, mindfulness training and Emotional Intelligence

- **Analysis:**
  - Descriptives and mean comparison
  - Correlations
  - Factor analysis
Sample

<table>
<thead>
<tr>
<th>Demographic Data</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>16%</td>
</tr>
<tr>
<td>Females</td>
<td>84%</td>
</tr>
<tr>
<td>Caring experience- YES</td>
<td>48%</td>
</tr>
<tr>
<td>Caring experience- NO</td>
<td>52%</td>
</tr>
<tr>
<td>Where gain experience:</td>
<td></td>
</tr>
<tr>
<td>Home</td>
<td>17%</td>
</tr>
<tr>
<td>Nursing Home</td>
<td>48%</td>
</tr>
<tr>
<td>Hospital</td>
<td>33%</td>
</tr>
<tr>
<td>Come from FE college- YES</td>
<td>33%</td>
</tr>
<tr>
<td>Come from FE college- NO</td>
<td>67%</td>
</tr>
<tr>
<td>Mindfulness training- YES</td>
<td>6%</td>
</tr>
<tr>
<td>Mindfulness training- NO</td>
<td>94%</td>
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</table>
Age Bands

17-20: 400
21-25: 250
26-30: 150
31-35: 100
36-40: 50
41+: 50
Programmes

- Adult
- Mental health
- Learning disability
- Children’s
- Midwifery
- Computing
Trait EI- distribution

Mean = 5.273028
Std. Dev. = .6452509
N = 938
Ability EI - Distribution

Mean = 3.849616
Std. Dev. = 0.4330987
N = 938
Previous caring and Trait EI

No difference

![Bar chart showing no difference in mean TEIQ Total between no and yes previous caring experience.](chart.png)
Previous caring and ability EI

No difference

![Bar chart showing no difference in mean EM total between previous caring experience 'no' and 'yes'.](chart.png)
EI and age on entry

Increase with age

Error Bars: 95% CI
Nursing/Computing and EI

ANOVA

<table>
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<tr>
<th></th>
<th>N</th>
<th>Mean</th>
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<tbody>
<tr>
<td>adult</td>
<td>586</td>
<td>5.318203</td>
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<tr>
<td>mental health</td>
<td>124</td>
<td>5.371505</td>
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<td>learning disability</td>
<td>29</td>
<td>5.143678</td>
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<td>children's</td>
<td>47</td>
<td>5.142553</td>
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<td>midwifery</td>
<td>83</td>
<td>5.372691</td>
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<tr>
<td>computing</td>
<td>68</td>
<td>4.737255</td>
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<td>Total</td>
<td>937</td>
<td>5.273710</td>
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**ANOVA**

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<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
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</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>24.027</td>
<td>5</td>
<td>4.805</td>
<td>12.234</td>
<td>.000</td>
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<tr>
<td>Within Groups</td>
<td>365.682</td>
<td>931</td>
<td>.393</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>389.709</td>
<td>936</td>
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Highly significant
Discussion

- Females score significantly higher than males on every aspect and measure of EI except sociability, where they still score marginally but not significantly higher (p<0.05).

- Age is significantly associated with differences in EI (p<0.001)
  - Positive direction of association

- Nurses have higher EI than computing students (p<0.001)

- There is no influence of previous caring experience on any EI score (p=0.063)

- Mindfulness training is not associated with higher EI (p=0.5)
Next steps….Phase 2

- Measures of performance in the cohort
- Track EI over time
- Differences in courses/campus/University
- Qualitative interviews
Thank you

Any Questions?

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Fiona Carver, Edinburgh Napier University
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Hannah Carver, Edinburgh Napier University
Jenny Young, University of the West of Scotland
Dr Norrie Brown, Edinburgh Napier University

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