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Theme Session 7C
Educational enhancement

7Ci, 10:30 - 12:15, 3 September 2021
Research paper
What happens to students' emotional intelligence during Pre-Registration Nurse Education?
Allison Evans, Birmingham City University

Promotional abstract: The Nursing and Midwifery Council (NMC) Future Nurse standards of proficiency for Registered Nurses (2018) stipulate emotional intelligence (EI) as a prerequisite for nurse registration. Nurse Educators now have a mandatory responsibility to create and deliver programmes that develop emotionally intelligent practitioners. However, the evidence exploring what happens to students' EI during the course of Nurse Education is limited. Using the clearly defined concept of Trait Emotional Intelligence (TEI), the aim of this quantitative study was to measure student nurses' self-perceptions of TEI during Pre-Registration education. To determine if there were any changes in TEI and identify specific aspects requiring targeted educational interventions.

Background, including underpinning literature and, wherever possible, the international relevance of the research: The Nursing and Midwifery Council (NMC) Future Nurse standards of proficiency for registered nurses stipulate Emotional Intelligence (EI) as a prerequisite for nurse registration (NMC, 2018). Nurse Educators now have a mandatory responsibility to create and deliver programmes that develop emotionally intelligent practitioners. However, conceptual heterogeneity has led to significant challenges in identifying and applying the correct tools for the appropriate methodological application (Keefer, 2015). As a result, the evidence exploring what happens to students during the course of Nurse Education is limited. Without this information, it is difficult to develop educational interventions to produce an emotionally intelligent nursing workforce.

Aim(s) and/or research question(s)/research hypothesis(es): Using the clearly defined concept of Trait Emotional Intelligence (TEI) the aim of this quantitative study was to measure student nurses' self-perceptions of overall TEI throughout their Pre-Registration education. In addition, to establish if there are differences in TEI relating to age, gender or field of nursing. Furthermore, to determine if there were any changes at factor and facet level in light of the over reliance on global EI scores, which potentially mask important information relating to individual traits requiring specific attention (Petrides *et al.,* 2016).

Research methodology/research design, any ethical issues, and methods of data collection and analysis: The quantitative element of a mixed-method longitudinal study, this design was chosen in order to answer research questions observing the impact of Nurse Education on students TEI. Participants were recruited from one large single cohort of Nursing students (n=389) joining the BSc (Hons) Nursing programme at a Midlands University. Demographic data were recorded and the final number of participants (n=187) identified as those who completed the Trait Emotional Intelligence Questionnaire (TEIQue),

(Petrides, 2009) on all three occasions (T1, T2 and T3). Differences between variables were tested using non-parametric and parametric tests according to distribution and group size.

Key findings and recommendations: There were no significant differences between groups observed in relation to gender, age or field of nursing by the end of the programme (T3). However, there were multiple differences at every level (facet, factor and total TEI) between scores generated at the beginning (T1) and the end (T3) of the course. For example, there was a significant difference between self-motivation scores at T1, T2, and T3 ($V=.35$, $F(2, 185)=49.75$, $p=.001$). Pairwise comparisons showing a reduction in scores over time (T1-T3, $p=.001$). A pattern replicated for the majority of facets, factors and including total TEI ($V=.23$, $F(2, 185)=28.17$, $p=.001$). Pairwise comparisons identifying a difference between T1 and T3 ($p=.001$) demonstrating an overall reduction in total TEI.

Three key points to indicate how your work contributes to knowledge development within the selected theme: There are some differences in TEI, particularly at facet level, associated with gender, age and field of nursing. However, these are no longer apparent by the end of the programme. More significant is the incremental reduction in TEI at facet, factor and global levels, which has important implications for the design and delivery of Pre-Registration Nursing courses.

References:

Keefer, K.V. (2015) 'Self-report Assessments of Emotional Competencies: A Critical look at methods and meanings.' *Journal of Psychoeducational Assessment*, 33(1), 3-23.

Nursing and Midwifery Council (2018) *Standards of proficiency for registered nurses*. Available at: https://www.nmc.org.uk/standards/standards-for-nurses/standards-of-proficiency-for-registered-nurses/ [Accessed: 21 February 2020].

Petrides, K.V. (2009) 'Psychometric properties of the Trait Emotional Intelligence Questionnaire', in Stough, C., Saklofske, D.H. & Parker, J.D. (eds) *Advances in the assessment of emotional intelligence*. New York: Springer. Doi: 10.1007/978-0-387-88370-0¬_5.

Petrides, K.V., Mikolajczak, M., Mavroveli, S., Sanchez-Ruiz, M., Furnham, A. & Perez-Gonzalez, J. (2016) 'Developments in Trait Emotional Intelligence Research.' *Emotion Review*, 8 (4), 335–341.

Keywords: Trait Emotional Intelligence (TEI), Measurement, Pre-Registration Nurse Education.

7Cii, 10:30 - 12:15, 3 September 2021
Research paper
Team Series: A collaboration with a medical reservist regiment to promote resilience in student nurses
Dr Jo Corlett and Tom McConnachie, University of Dundee

Promotional abstract: The need for nurses and Nursing students to be resilient is well recognised, but research providing evidence of educational interventions which improve resilience in student nurses is scarce. The School of Health Sciences collaborated with 225 Medical Reservists to deliver the Team Series in each year of its Pre-Registration Nursing programme. Each day-long voluntary event comprises team tasks designed to test situational awareness, decision making, communication, relational skills and problem solving. A qualitative study exploring the perceptions of student and staff participants of

these events discovered resilience was promoted as students developed self-awareness and self-confidence as a result of team work.

Background, including underpinning literature and, wherever possible, the international relevance of the research: The need for nurses and Nursing students to be resilient is well recognised globally (Thomas & Asselin, 2018; Jenkins *et al.*, 2019), but research providing evidence of educational interventions which improve resilience in student nurses is scarce (Pines *et al.*, 2014; McGowan & Murray 2016). Our School worked in collaboration with 225 Medical Regiment Scotland to deliver team building and leadership activities (the Team Series) to Pre-Registration student nurses aimed at increasing their physical and emotional resilience: A day-long voluntary event each year fosters situational awareness, decision making, communication, relational skills, problem-solving and physical abilities in small teams of students.

Aim(s) and/or research question(s)/research hypothesis(es): The aim was to explore participants' experiences to discover what skills students acquired and whether these increased their resilience.

The objectives were:

1. To identify the knowledge and skills students develop as a result of participating in the Team Series.
2. To explore students' perceptions of the concept of resilience.
3. To explore whether (and if so how) students' feel their resilience has been enhanced as a result of their participation.
4. To gather examples of where students' have applied the skills they have learned during the Team Series.
5. To explore the views of staff (academic and medical reservists).

Research methodology/research design, any ethical issues, and methods of data collection and analysis: A naturalistic qualitative design was utilised via focus groups with students, medical reservists and academic staff. Two interview guides were developed and piloted, one for staff/reservists, one for students. Fourteen students participated in two focus groups. Ten staff participated in two focus groups and two individual interviews. A convenience sample of 10 reservists formed a separate focus group. Focus groups and interviews were audio-recorded and transcribed verbatim. An inductive thematic analysis was conducted applying Braun & Clarke's (2006) six stage process. The University Ethics Committee approved the study, which was also checked for compliance with general data protection regulations.

Key findings and recommendations: Five themes were identified: having fun, building confidence, team working, promoting resilience and the pros and cons of collaborating with a military organisation. Team working is divided into sub-themes highlighting the specific skills students were utilising: active listening, negotiation, strategic thinking and problem-solving, playing to strengths, mutual support and being kind. Examples of mature leadership were evident with shared leadership and follower leadership behaviour observed. These findings will be discussed in more detail during the presentation.

A key finding is that resilience is based upon self-awareness, self-esteem and self-confidence. Self-belief is closely related to students' perceptions of their clinical competence, both clinical skills and leadership abilities. The Team Series helps students to develop these attributes, however, as one-off activities each year they are limited. Activities and learning opportunities to promote resilience need to be embedded throughout Nursing curricula. Collaboration with 225 Medical Regiment resulted in effective learning opportunities being

provided for students which would not have been feasible for the School to deliver alone. However, it has to be recognised that some individuals may not wish to engage with a military organisation and alternative ways for students to achieve similar learning outcomes need to be in place.

Three key points to indicate how your work contributes to knowledge development within the selected theme:

1. Student nurses need to acquire skills that help them be resilient in coping with the demands not only of their programme of study, but also as qualified practitioners. This study demonstrates how collaboration with an external organisation with specialist expertise can support this skill development.
2. Self-awareness and self-confidence are critical components of resilience building. Providing learning opportunities for students to engage in team working and leadership activities can help promote this confidence.
3. Resilience-building activities need to be threaded throughout curricula in order for them to be most effective.

References:
Braun V. & Clarke V. (2006) 'Using thematic analysis in psychology.' *Qualitative Research in Psychology*, 3, 77-101.

Jenkins, E.K., Slemon, A., O'Flynn-Magee, K. & Mahy, J. (2019) 'Exploring the implications of a self-care assignment to foster undergraduate nursing student mental health: Findings from a survey research study.' *Nurse Education Today*, 81,13-18.

McGowan J.E. & Murray K. (2016) 'Exploring resilience in nursing and midwifery students: A literature review.' *Journal of Advanced Nursing*, 72(10), 2272-2282.

Pines, E.W., Rauschhuber, M.L., Cook, J.D., Norgan, G.H., Canchola, L., Richardson, C. & Jones, M.J. (2014) 'Enhancing resilience, empowerment and conflict management among baccalaureate students.' *Nurse Educator*, 39(2), 85-90.

Thomas, L.J. & Asselin, M. (2018) 'Promoting resilience among nursing students in clinical education.' *Nurse Education in Practice*, 28, 231-234.

Keywords: Resilience-Building, Self-Confidence, Team-Working, Leadership, Collaboration.

7Ciii, 10:30 - 12:15, 3 September 2021
Research paper
Resilience and mental wellbeing of Pre-Registration students during COVID-19
Dr Jo Corlett, Julie Smith and Jon Revis, University of Dundee

Promotional abstract: This session will present the results of a mixed-methods study that measured the impact of COVID-19 on students' resilience and mental wellbeing and explored students' views of additional interventions and support required. The results demonstrate that resilience and mental wellbeing reduced over time, with male and younger students being more vulnerable. Students shared positive views of being in lockdown, such as spending time with family, but also spoke of the isolation many of them experienced. Opportunities to engage with peers online were advocated. Online action learning sets are now being piloted to test whether this type of peer support can enhance resilience and mental wellbeing.

Background, including underpinning literature and, wherever possible, the international relevance of the research: Nursing is a stressful occupation globally (Magtibay & Chesak, 2017), requiring practitioners to be resilient (Delgado *et al.*, 2017). The COVID-19 pandemic is further impacting on the mental and emotional wellbeing of staff (Ford, 2020). In the UK second and third year Pre-Registration Nursing students had the opportunity to join the workforce in response to the crisis, but there are concerns about the impact on their wellbeing and resilience which nurse educationalists need to respond to and foster resilience skills in students (Thomas & Asselin, 2018).

Aim(s) and/or research question(s)/research hypothesis(es):

1. How resilient and mentally healthy are Pre-Registration students following the 18 weeks of paid employment in clinical practice or full-time online study at home during the first lockdown of the COVID-19 pandemic?
2. Are resilience and mental wellbeing being maintained over time?
3. Is there a correlation between students' reported mental wellbeing and resilience?
4. Are there any differences in resilience and mental wellbeing according to gender, campus, field of nursing or age of students?
5. What interventions or support mechanisms do students feel could help maintain their mental wellbeing and resilience?

Research methodology/research design, any ethical issues, and methods of data collection and analysis: Mixed methods were utilised to collect data from a second year cohort of Pre-Registration students. Resilience was measured using the Connor-Davidson Resilience Scale, and mental wellbeing was measured using the Edinburgh-Warwick Mental Wellbeing Scale, both validated tools with high internal consistency. Students completed an online survey composed of these tools at two points in time. Demographic data was also collected. Focus groups were used to explore students' views of additional interventions and support that would be beneficial. Quantitative data was analysed using maximal modelling and stepwise regression. Qualitative data was analysed using thematic analysis. The study was approved by the University's ethics committee.

Key findings and recommendations: Key Findings:

- Baseline levels (September 2020 on return from paid placement or online study) of reported resilience (n=111) are slightly lower than those reported in similar populations of university and Nursing students.
- Baseline levels of reported mental wellbeing (n=111) are "average" and similar to other populations of university and Nursing students.
- Overall there is no significant difference between September/October 2020 and December 2020/January 2021 in the resilience and mental wellbeing of the participants completing surveys 1 and/or 2 (n=111 for each survey).
- There is a highly significant decline in both resilience and mental wellbeing of the 37 students who completed both surveys.
- There is a strong positive correlation between reported levels of resilience and mental wellbeing.
- There is a significant difference in resilience and mental wellbeing according to gender, with males reporting lower levels of both.
- There is a significant difference in mental wellbeing according to age, with younger students (<20) reporting lower levels than older students (46-50).
- A few students had enjoyed the lockdown period, but most reported feelings of social isolation, anxiety and declining mental health.

Key Recommendations:

- Implementation of online action learning sets to promote socialisation and peer support.
- Interventions specifically aimed at male and younger students.

Three key points to indicate how your work contributes to knowledge development within the selected theme: This study adds to the growing evidence of the impact the COVID-19 pandemic is having on student nurses' mental wellbeing and resilience and specifically the vulnerability of male and younger students. Student feedback across the higher education sector in the UK during the COVID crisis has emphasised the isolation students are experiencing and pleas for more opportunities to engage with other students, both academically and informally. A recommendation from this study suggests a learning intervention that could help respond to this student feedback.

References:

Delgado, C., Upton, D., Ranse, K., Furness, T. & Foster, K. (2017) 'Nurses' resilience and the emotional labour of nursing work: An integrative review of empirical literature.' *International Journal of Nursing Studi*es, 70, 71-88.

Ford, S. (2020) 'Covid-19 – Negative impact on nurse mental health.' *Nursing Times*, 116(5) 6-7.

Matibay, D.L. & Chesak, S.S. (2017) 'Decreasing stress and burnout in nurses.' *The Journal of Nursing Administration,* 47(7/8), 391-395

Thomas, L.J. & Asselin, M. (2018) 'Promoting resilience among nursing students in clinical education.' *Nurse Education in Practice*, 28, 231-234

Keywords: COVID-19, Resilience, Mental Wellbeing, Student Nurses.

7Civ, 10:30 - 12:15, 3 September 2021
Innovation paper
Developing and evaluating resilience characteristics of Healthcare students during a pandemic
Dr Stuart Mackay, University of Liverpool

Promotional abstract: Healthcare students are required to learn in an increasingly stressful environment. Young peoples' reported mental health challenges have increased 10-fold in recent years. The need has never been greater for universities to develop resilience in students so they can flourish in the healthcare environment. The aim of this paper is to present data from a longitudinal study which described resilience training and evaluated its impact, alongside a pandemic, using questionnaires measuring resilience characteristics. Results and implications will be discussed.

Background, context and evidence base for the innovation, including, where possible, its international relevance: The NHS is struggling to cope with record demand and social care services are stretched to the limit (The King's Fund, 2017). This places huge pressure on the healthcare workforce, including students, many of whom are from the Z generation (born 1995-2010) and have certain characteristics. They require a work/life balance (Jones, Warren & Davies, 2015) and place great value on being supported and appreciated (Price Waterhouse Cooper, 2013). They also have mental health challenges with students entering higher education being five times more likely to disclose a mental health condition then ten

years ago (Thorley, 2017). Therefore, the university developed a resilience training programme to promote resilience in Healthcare students.

Aim/focus of the innovation: The aim of the project was to provide a resilience training programme to promote resilience in the Healthcare students at the School of Health Sciences at the University of Liverpool. This included Diagnostic Radiography, Nursing, Occupational Therapy, Orthoptics, Physiotherapy and Radiotherapy students. There was reasonable evidence found (Rogers, 2016) for the resilience-enhancing effects of workshops and other interventions such as mindfulness, relaxation techniques, mentoring, resilience workshops, and inspirational talks.

Implementation of the innovation: A strategy decision was taken to combine the resilience training with the interprofessional learning programme delivered to all professions over the three years of their degree. The aim was to provide a supportive and educational environment to promote resilience in students. We provided small interprofessional interactive learning groups, who stayed together for the whole programme. Resilience programme topics included reflection, stress management, emotional intelligence, and sharing of challenging experiences. Students were also supported with personal tutors, and a self-referral counselling service. A range of optional activities were also offered e.g. relaxation techniques, mindfulness, psychological support services.

Methods used to assess the innovation: A longitudinal study explored changes in resilience characteristics over time. Four questionnaires were completed at the start of each year and the end of the third year. Ethical approval was obtained. Questionnaires used measures of Resilience (Davidson & Connor, 2018), Emotional Intelligence (Cooper & Petrides, 2010), Perceived Stress (Cohen, Kamarck & Mermelstein, 1983) and Well-being (Pontin *et al.*, 2013). Data was analysed used paired sample T-Tests. An annual 'focus group' was planned to evaluate the student experience. Then the pandemic hit, and the methods had to be adapted. Only data at the start of year one and the start of year 3 was obtained. This is the data analysed and reported in this paper.

Key findings: Total number of students in cohort was 311. Response rate was Year 1, 84% (n=262), Year 3, 32% (n=129). Students scored lower in resilience initially (cf comparable group) Their resilience did not change over time. Wellbeing scores were initially higher than a comparable group and did not change over time. Perceived stress was reported as 'moderately stressed' initially and this did not change over time. Global emotional intelligence was initially high. This did not change over time but the EI subscales of 'self-control' increased ($p \leq 0.01$) and 'sociability' decreased ($p \leq 0.05$). The implications of this data are discussed in the full paper.

Three key points to indicate how your work contributes to knowledge development within the selected theme: The study benchmarks and provides valuable data to show what happened when a resilience training programme and a pandemic occur at the same time. The expected changes did not materialise in the final resilience and wellbeing scores. It was anticipated that both would increase, and that perceived stress would reduce. The emotional intelligence scores were not anticipated to change as this measure is a trait EI measure. However, the changes resulted in students reporting higher self-control and lower sociability which might be an effect of the pandemic. Further research is needed to explore and explain this finding.

References:

Cohen, S., Kamarck, T. & Mermelstein, R. (1983) 'A global measure of perceived stress.' *Journal of Health and Social Behaviour*, 24, 385-396.

Cooper, A. & Petrides, K.V. (2010) 'A Psychometric Analysis of the Trait Emotional Intelligence Questionnaire -Short Form (TEIQue-SF) Using Item Response Theory.' *Journal of Personality Assessment*, 92(5), 449-457.

Davidson, J.R.T. & Connor K.M. (2018) Connor-Davidson Resilience Scale (CD-RISC) Manual. Unpublished. 06-01-2018 and partly accessible at: www.cd-risc.com.

Jones, K., Warren, A. & Davies, A. (2015) 'Mind The Gap; Exploring the needs of early career nurses and midwives in the workplace', Summary report from Birmingham and Solihull Local Education and Training Council, Every Student Counts Project, HEE.

Pontin, E., Schwannauer, M., Tai, S. & Kinderman, P. (2013) 'A UK validation of a general measure of subjective well-being: the modified BBC subjective well-being scale (BBC-SWB).' *Health and Quality of Life Outcomes*, 11,150.

Price Waterhouse Cooper (2013) PwC'S NextGen: A global generational study 2013. Evolving talent strategy to match the new workforce reality. [Online] Available at: https://www.pwc.com/en_GX/gx/hrmanagement-services/pdf/pwc-nextgen-study-2013.pdf.

Rogers, D. (2016) 'Which educational interventions improve healthcare professionals resilience?' *Medical Teacher*, 38(12), 1236-1241.

The Kings Fund, (2017) Is the NHS in Crisis? [Online] Available at: https://www.kingsfund.org.uk/projects/nhs-in-crisis [Accessed 02.01.2020].

Thorley, C. (2017) 'Not by Degrees; improving student mental health in the UK's universities.' Institute for Public Policy Research. [Online] Available at: https://www.ippr.org/publications/not-by-degrees.

Keywords: Resilience, Emotional Intelligence, Healthcare Students, Perceived Stress.