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Increasing nurses' emotional intelligence with a brief intervention

Desirée Kozlowski, Marie Hutchinson, John Hurley, Graeme Browne

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ACCEPTED MANUSCRIPT

Title:
Increasing nurses' emotional intelligence with a brief intervention
Authors:
1. Desirée Kozlowski ^a , PhD, BPsych(Hons)
^a Discipline of Psychology, School of Health and Human Sciences, Southern Cross University, Hogbin Drive, Coffs Harbour, NSW, Australia
Desiree.Kozlowski@scu.edu.au
[corresponding author]
2. Marie Hutchinson ^b , RN, PhD, Associate Professor
^b Discipline of Nursing, School of Health and Human Sciences, Southern Cross University, Hogbin Drive, Coffs Harbour, NSW, Australia
Marie.Hutchinson@scu.edu.au
3. John Hurley ^b , PhD, credentialed MHN, Professor
^b Discipline of Nursing, School of Health and Human Sciences, Southern Cross University, Hogbin Drive, Coffs Harbour, NSW, Australia
John.Hurley@scu.edu.au
4. Graeme Browne ^c , PhD.
^c School of Nursing and Midwifery, University of Newcastle, Widderson St, Port Macquarie, NSW, Australia
graeme.browne@newcastle.edu.au
Declarations of interest None

ACCEPTED MANUSCRIPT

INCREASING NURSES' EMOTIONAL INTELLIGENCE

Title:

Increasing nurses' emotional intelligence with a brief intervention

Abstract:

Background: Emotional intelligence (EI) is associated with a wide range of personal, professional and social benefits with numerous applications being evident for nursing education and clinical practice. Despite growing support for increasing the focus on EI in nursing and nurse education, empirical evidence for the effectiveness of training to increase EI are sparse. The aim with this study was to test the effect of a brief EI training program for registered nurses.

Methods: We conducted a cross-site quasi-experimental study measuring nurses' EI pre- (T1) and three months post- (T2) EI training with a matched (untrained) control group (total n = 60). EI training consisted of a five-hour workshop, a 30-minute one-on-one feedback session, and an individualised follow-up reminder sent via SMS.

Results: Training resulted in a significant increase in El scores over baseline levels for the trained group while scores for the control group did not increase.

Conclusion: This pilot study has provided clear evidence of the applicability and efficacy of a low-cost training intervention for nursing staff in a real world setting.

Keywords:

Emotional intelligence; emotional labor; education

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Background

Emotional intelligence (EI) is generally regarded as adeptness at recognising and managing emotional experiences and responses in self and others and then integrating these to enhance thinking and consequent behaviours (Serrat, 2017). It is associated with good physical and mental health (Martins, Ramalho, & Morin, 2010) and general well-being (Sánchez-Álvarez, Extremera, & Fernández-Berrocal, 2016). El has long been regarded as an especially valuable attribute for nurses (Cadman & Brewer, 2001) given the emotionally demanding nature of their work (Riley & Weiss, 2016). In nurses higher El predicts work wellness (Nel, Jonker, & Rabie, 2013), workforce retention (Marvos & Hale, 2015), job satisfaction (Tagoe & Quarshie, 2017), and improved quality of patient care (Adams & Iseler, 2014). This has led many authors to call for an increased focus on El competencies in recruitment (Jones-Schenk & Harper, 2014), staff development (Taylor, Roberts, Smyth, & Tulloch, 2015), and pre-registration training (Foster et al., 2017; Hurley, 2008; Shahnavazi et al., 2018). Although there is general evidence that El can be improved with training (Vishakha Patil, 2016), well-designed studies of El interventions with nursing staff in real world settings are sparse (Codier, Freitas, & Muneno, 2013; Fitzpatrick, 2016).

The current study

The current study aimed to test whether a single training session on emotionally intelligent behaviours in the workplace together with an additional session of one-on-one coaching would result in increased EI three months post-training. The training workshop and subsequent coaching sessions were prepared and delivered by accredited trainers of the GENOS model of EI.

Methods

Participants were registered nurses drawn from eight established work units across two geographical sites within one health service in regional New South Wales, Australia. Two work units from each site served as the intervention group with approximately seven nursing staff from each unit participating in the El workshop and coaching. The remaining two work units from each site comprised the control group. The health service selected the workunits matching them as closely as practicable on size and type; they did not include intensive care units. The study was not blind. Data collection took place in the first half of 2016. Ethical approval was provided by the ethics committees of both the university and the Local Health District.

Participants

Participants were 60 registered nursing staff from work units as described above (30 in the intervention group; 30 in the control group). Participants were nominated by the Local Health District on the basis of roster availability and invited to participate through their work unit. Data were collected via sealed envelopes and then de-identified ensuring participant anonymity.

Full data sets were received from 56 (93%) individuals at baseline (T1) and from 40 (66.6%) individuals at T2 resulting in 39 (65%) individuals contributing complete T1/T2 data. Results are based on data from those completing at both time points. The sample size was adequate for the 2 x 2 design as an a priori power analysis indicated that 36 participants would provide power of 90% for an effect size of f = .4 at an alpha of .05. No demographic data were collected.

Measurement

The GENOS Emotional Intelligence Self-Assessment (GENOS EI SA) is a 64-item scale, based on the Workplace GENOS EI model (Palmer, Donaldson, & Stough, 2008). It measures participants' ratings of their EI behaviours in their workplace on seven subscales as well as providing an overall EI rating¹. Unlike other models of EI this model is specifically designed for the workplace and measures the frequency with which an individual performs emotionally intelligent behaviours and so captures enacted, rather than latent, emotional intelligence (Palmer, Stough, Harmer, & Gignac, 2009). This measure has been found to be valid and reliable (Gignac, 2010).

Procedure

Data were collected at time 1 (T1; baseline) pre-training and at time 2 (T2; follow-up) approximately 3 months post-training. This design was informed by findings from previous workplace EI interventions in which behavioural outcomes related to EI enhancement were evidenced as early as 5 weeks (Harmer & Lutton, 2007). Training consisted of a single workshop of around 4 hours. It covered the GENOS model of emotional intelligence and included exercises designed to help participants to recognise and manage emotions in themselves and others.

Participants in the intervention work units provided their T1 data via paper and pencil at the beginning of the training workshop. Participants in the control work units supplied theirs at their place of work by completing the questionnaires and returning them to researchers in provided envelopes. T2 data were collected from all participants at their place of work in the same manner as for the control group at T1.

Approximately two weeks post-training, participants were invited by email to book a time for a one-on-one EI feedback session with one of the researchers. The day before their feedback session, each participant was supplied with their individual GENOS EI report, which formed the base document for feedback sessions. Feedback sessions took approximately 30-40 minutes, were conducted mainly by phone, and were focussed around the participant's areas of interest arising from the report. The rationale for adopting this focus was to capture each participant's individualised focus of motivation

¹ The GENOS model and self-assessment instrument was updated in 2017.

to experiment with new behaviours. Opportunities to improve certain aspects of emotionally intelligent skills were identified, and strategies for doing so were introduced by the researcher/coach. Participants were also encouraged to talk about EI matters with other staff in their work unit. The GENOS EI reports include tips and a workbook to facilitate self-paced reflection and learning.

A single individualised text message (SMS) was sent approximately two weeks after the feedback session. The SMS was a brief reminder to work on the particular focus area chosen by each participant. Not all participants supplied their mobile phone numbers so some did not receive these messages.

Results

As can be seen in figure 1, while the control group started with considerably higher scores than those in the intervention group, the intervention group increased their EI scores from a mean of 3.77 (SD=0.18) at baseline to 4.09 (SD=0.25) at T2. Due to the large differences in EI scores for the two groups at baseline, we compared pre and post scores for each group separately via paired samples t-tests. This confirmed that EI training resulted in significantly increased scores on the GENOS EI measure, t(19)=-4.77, p<.001. The effect size was large (partial eta² = .56). There were no significant changes in EI at the subscale level. There was no significant change in EI scores for the control group from pre (M=4.16) to post (M=4.16, t(16)=0, p>.05).

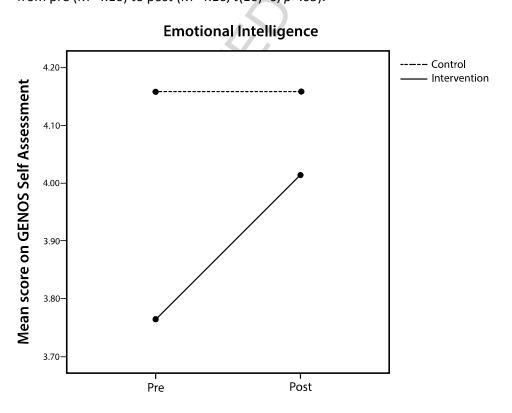


Figure 1. Scores on Emotional Intelligence at times 1 and 2 (pre/post training) for EI trained (intervention) and untrained (control) staff.

Discussion

In the intervention group of registered nursing staff across 2 hospitals and 4 work units, a relatively brief emotional intelligence intervention led to significantly higher EI scores 3 months post-training. A non-equivalent comparison group showed no increase. The training accounted for a substantial proportion of the variance.

There were limitations inherent in the recruiting of participants and in the fact that participants in the intervention and control groups may well have shared information. Due to rostering and backfill issues it was impractical to employ random allocation to groups in this real world study and the difference in EI scores between the two groups at baseline was notable. Nevertheless, the increase achieved through training was considerable and the efficacy of the intervention specifically for nurses scoring lower on EI initially is particularly encouraging and strengthens an argument for applying such interventions in practice.

Ours is not the first evidence of the effectiveness of specific EI training for nurses; for example, Sarabia-Cobo et al. (2017) found EI increased after sixteen hours of EI training over 4 weeks. However, the fact that our intervention required only a single attendance at training demonstrates greater efficiency and reduces the chance of staff not receiving the entire training. The GENOS model is tailored specifically to aid development of EI in the workplace (Palmer et al., 2009). Although some authors have suggested that EI is not amenable to change with a brief intervention (Faralli, 2009) and others (Kaya, Şenyuva, & Bodur, 2017) that EI develops slowly, our results add to previous work demonstrating that extended or multiple sessions of training are not required to produce a significant increase in emotional intelligence.

Conclusion

Earlier studies have found that higher EI predicts a range of desirable outcomes for nurses including higher retention (Marvos & Hale, 2015). Here we have demonstrated that a single, brief EI training with minimal follow-up can increase nurses' EI measured 3 months later.

References

- Cadman, C., & Brewer, J. (2001). Emotional intelligence: a vital prerequisite for recruitment in nursing. *Journal of Nursing Management*, *9*(6), 321-324. doi:10.1046/j.0966-0429.2001.00261.x
- Codier, E., Freitas, B., & Muneno, L. (2013). Developing Emotional Intelligence Ability in Oncology Nurses: A Clinical Rounds Approach. *Oncology Nursing Forum, 40*(1), 22-29. doi:10.1188/13.ONF.22-29
- Faralli, M. A. B. (2009). Emotional intelligence (EI): the impact of instruction on EI levels of undergraduate nursing students. (Ed.D.), Wilmington University (Delaware). Retrieved from http://ezproxy.library.usyd.edu.au/login?url=http://search.ebscohost.com/login.aspx?direct =true&db=cin20&AN=2010537076&site=ehost-live Available from EBSCOhost cin20 database.
- Fitzpatrick, J. J. (2016). Helping nursing students develop and expand their emotional intelligence. *Nursing Education Perspectives, 37*, 124.
- Foster, K., Fethney, J., McKenzie, H., Fisher, M., Harkness, E., & Kozlowski, D. (2017). Emotional intelligence increases over time: A longitudinal study of Australian pre-registration nursing students. *Nurse Education Today*, *55*, 65-70. doi:10.1016/j.nedt.2017.05.008
- Gignac, G. (2010). Seven-Factor Model of Emotional Intelligence as Measured by Genos El. *European Journal of Psychological Assessment*, 26(4), 309-316. doi:doi:10.1027/1015-5759/a000041
- Harmer, R., & Lutton, C. (2007). Enhancing team performance through emotional intelligence coaching. *Organisations and People*, *14*(2), 41-48.
- Hurley, J. (2008). The necessity, barriers and ways forward to meet user-based needs for emotionally intelligent nurses. *Journal of Psychiatric and Mental Health Nursing*, 15(5), 379-385.
- Jones-Schenk, J., & Harper, M. G. (2014). Emotional intelligence: An admission criterion alternative to cumulative grade point averages for prelicensure students. *Nurse Education Today, 34*(3), 413-420. doi:http://dx.doi.org/10.1016/j.nedt.2013.03.018
- Kaya, H., Şenyuva, E., & Bodur, G. (2017). Developing critical thinking disposition and emotional intelligence of nursing students: a longitudinal research. *Nurse Education Today, 48*, 72-77. doi:10.1016/j.nedt.2016.09.011
- Martins, A., Ramalho, N., & Morin, E. (2010). A comprehensive meta-analysis of the relationship between Emotional Intelligence and health. *Personality and Individual Differences, 49*(6), 554-564. doi:http://dx.doi.org/10.1016/j.paid.2010.05.029
- Marvos, C., & Hale, F. (2015). Emotional intelligence and clinical performance/retention of nursing students. *Asia-Pacific Journal of Oncology Nursing*, *2*(2), 63–71. doi:10.4103/2347-5625.157569
- Nel, J. A., Jonker, C. S., & Rabie, T. (2013). Emotional Intelligence and Wellness Among Employees Working in the Nursing Environment. *Journal of Psychology in Africa, 23*(2), 195-203. doi:10.1080/14330237.2013.10820615
- Palmer, B., Donaldson, C., & Stough, C. (2008). Emotional intelligence and life satisfaction. In J. C. Cassady & M. A. Eissa (Eds.), *Emotional intelligence: Perspectives on educational and positive psychology* (pp. 131-143). New York: Peter Lang.
- Palmer, B., Stough, C., Harmer, R., & Gignac, G. (2009). The Genos Emotional Intelligence Inventory: A Measure Designed Specifically for Workplace Applications. In J. D. A. Parker, D. H. Saklofske, & C. Stough (Eds.), *Assessing Emotional Intelligence: Theory, Research, and Applications* (pp. 103-117). Boston, MA: Springer US.
- Riley, R., & Weiss, M. C. (2016). A qualitative thematic review: emotional labour in healthcare settings. *Journal of Advanced Nursing*, 72(1), 6-17. doi:10.1111/jan.12738

- Sánchez-Álvarez, N., Extremera, N., & Fernández-Berrocal, P. (2016). The relation between emotional intelligence and subjective well-being: A meta-analytic investigation. *The Journal of Positive Psychology*, *11*(3), 276-285. doi:10.1080/17439760.2015.1058968
- Sarabia-Cobo, C. M., Suárez, S. G., Menéndez Crispín, E. J., Sarabia Cobo, A. B., Pérez, V., de Lorena, P., . . . Sanlúcar Gross, L. (2017). Emotional intelligence and coping styles: An intervention in geriatric nurses. *Applied Nursing Research*, *35*(Supplement C), 94-98. doi:https://doi.org/10.1016/j.apnr.2017.03.001
- Serrat, O. (2017). Understanding and Developing Emotional Intelligence *Knowledge Solutions: Tools, Methods, and Approaches to Drive Organizational Performance* (pp. 329-339). Singapore: Springer Singapore.
- Shahnavazi, M., Parsa-Yekta, Z., Yekaninejad, M.-S., Amaniyan, S., Griffiths, P., & Vaismoradi, M. (2018). The effect of the emotional intelligence education programme on quality of life in haemodialysis patients. *Applied Nursing Research*, *39*(Supplement C), 18-25. doi:https://doi.org/10.1016/j.apnr.2017.10.017
- Tagoe, T., & Quarshie, E. N.-B. (2017). The relationship between emotional intelligence and job satisfaction among nurses in Accra. *Nursing Open*, *4*(2), 84-89. doi:10.1002/nop2.70
- Taylor, B., Roberts, S., Smyth, T., & Tulloch, M. (2015). Nurse managers' strategies for feeling less drained by their work: an action research and reflection project for developing emotional intelligence. *Journal of Nursing Management*, 23(7), 879-887. doi:doi:10.1111/jonm.12229
- Vishakha Patil, R. N., Avinash De Sousa. (2016). A study of the impact of emotional intelligence training in physiotherapy interns a pilot study. *International Journal of Physiotherapy*, 3(2), 163-165. doi:10.15621/ijphy/2016/v3i2/94874

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Declarations of interest None

Highlights:

- A single training session with minimal follow up increased nurses' emotional intelligence scores.
- Increased emotional intelligence was evident 3 months after training.
- The emotional intelligence training was specifically tailored for the workplace.

