Delivering resilience training to pre-registration student nurses in partnership with a reservist military organisation
Corlett, Jo; McConnachie, Tom

Published in:
Nurse Education Today

DOI:
10.1016/j.nedt.2020.104730

Publication date:
2021

Document Version
Publisher's PDF, also known as Version of record

Link to publication in Discovery Research Portal

Citation for published version (APA):
Delivering resilience training to pre-registration student nurses in partnership with a reservist military organisation: A qualitative study

Jo Corlett *, Tom McConnachie
School of Health Sciences, University of Dundee, United Kingdom of Great Britain and Northern Ireland

ARTICLE INFO

Keywords:
Physical and emotional resilience
Student nurses
Resilience education
Civilian-military collaboration

ABSTRACT

Background: Nurses need resilience to safeguard their well-being. In collaboration with a military reservist organisation the Team Series was designed to foster resilience by promoting teamwork and leadership skills in student nurses.

Objectives: To explore participants’ experiences of engaging with the Team Series and the skills and knowledge acquired.

Design: A qualitative design.

Setting: A Scottish University.

Participants: Fourteen 3rd year pre-registration nursing students, ten academic staff and ten reservists.

Methods: Audio-taped focus groups and interviews thematically analysed.

Results: Students conceptualised resilience as clinical competence, valuing an active learning process enabling them to practice clinical and interpersonal skills, utilising a range of communication, team-building, leadership and problem-solving skills. Participation in the Team Series fostered self-awareness and self-confidence, the foundations of resilience, helping students feel more competent in coping effectively in stressful situations.

Conclusion: The positive impact of collaborating with a military organisation experienced in developing team-working and leadership skills is demonstrated. Learning experiences designed to promote physical and emotional resilience should be threaded throughout curricula to ensure these attributes are developed and sustained over time.

1. Introduction

Nurses need resilience to cope effectively with the demands of professional practice and the Covid-19 pandemic is further highlighting the need to ensure staff can maintain their mental and emotional wellbeing (Ford, 2020). Nurse education must foster students’ resilience skills to safeguard their mental health when working in challenging healthcare environments both as students and qualified practitioners (Thomas and Revell, 2016; Thomas and Asselin, 2018).

Whilst the need to promote resilience skills in student nurses is recognised, research investigating effective interventions in civilian student nurse cohorts is limited (Reyes et al., 2015; McGowan and Murray, 2016). A review of 36 studies by Sanderson and Brewer (2017) found only 4 interventions designed to enhance resilience, specific to civilian nursing students. However, psychological resilience is a key component of military training to ensure personnel maintain a state of mental readiness (Daffey-Moore, 2020; Dragonetti et al., 2020). This study describes a collaborative initiative between the School of Health Sciences (SHS) and 225 Medical Regiment (225MR), a local Army Reserve unit, utilising their military expertise to support the development of teamwork, leadership and resiliency skills in undergraduate student nurses.

2. Literature review

Historically resilience was viewed as a trait people inherently did or did not possess, explaining why some individuals coped well in adversity, whilst others did not (McDonald et al., 2016). More recently resilience is regarded as the outcome of a process. It is an attribute which can be fostered (Reyes et al., 2015). There are different definitions of resilience, but they all include a notion of challenge individuals have the capacity to respond to and grow from:

* Corresponding author.

E-mail addresses: j.f.corlett@dundee.ac.uk (J. Corlett), t.mcconnachie@dundee.ac.uk (T. McConnachie).

https://doi.org/10.1016/j.nedt.2020.104730

Received 25 June 2020; Received in revised form 18 November 2020; Accepted 10 December 2020

Available online 17 December 2020
0260-6917/Crown Copyright © 2020 Published by Elsevier Ltd. All rights reserved.
“Resilience is the dynamic capacity to overcome adversity, drawing on personal, social and organisational resources, to achieve personal growth and transformation.”

(Sanderson and Brewer, 2017 p. 69)

Mental health training is embedded in military training in many countries (Cornum et al., 2011; Adler et al., 2013; Thompson and Dobbins, 2018). In the UK the Defence Health & Wellbeing Strategy 2017–2022, recognises the importance of promoting resilience (Daffey-Moore, 2020). Recruitment processes are designed to enlist those who are mentally healthy; ongoing psychoeducation based on positive psychological methodologies throughout an individual’s military career further enhances this (Finnegan et al., 2016; Precious and Lindsay, 2019).

In the UK military nurse training is managed by the Department of Healthcare Education, which supports pre-registration training in adult and mental health nursing and a post-registration BSc (Hons) in Defence Healthcare Studies (Finnegan et al., 2015). Following qualification nurses work in civilian hospitals and may be deployed to war zones or areas of humanitarian crisis where they face caring for poly-traumatised patients, threats to their personal safety and decision-making in complex situations (Carter and Finnegan, 2014). Prior to deployment they must achieve a series of Defence Operational Nursing Competencies (Beaumont and Allan, 2013) and complete a Hospital Exercise (HOSPEX). This macrosimulation replicates a field hospital with stressful, real-life scenarios (Hayes and Ryan, 2011). Advanced trauma management skills and non-technical skills including decision-making, prioritisation, teamwork, leadership and stress management are rehearsed (Avora et al., 2014). HOSPEX training can also prepare personnel deployed to support humanitarian disasters such as the Ebola outbreak in Western Africa (Gibson et al., 2016). Action-centred learning promotes individual competence and strong teamwork preparing personnel for the testing situations they will encounter once deployed (Gibson et al., 2016).

3. Background

Whilst robust evidence of interventions promoting resilience in civilian student nurses is limited, military colleagues have expertise in delivering activities designed to foster these attributes. A four year collaboration between the SHS and 225MR has utilised this expertise, resulting in the Team Series (TS) aimed at developing team building and leadership skills in pre-registration student nurses and the promotion of emotional and physical resilience.

Team Spirit in year 1 is a day-long activity, comprising eight tasks testing situational awareness, decision making, communication, relational skills and problem-solving. Teamwork and leadership are required to complete the tasks under time and resource pressure. Several tasks require a degree of physical effort. Each team has between six and eight members, with teams competing against each other. Academic staff and reservists from 225MR facilitate each task, providing feedback to the team.

Team Resilience in year 2 focuses on a major incident (an earthquake). Tasks are situated in military tents with a physical challenge to complete between each task. Participants simulate first wave responders dealing with significant numbers of casualties. Tasks are designed to increase students’ team building and leadership skills whilst introducing different nursing assessments and interventions modelled on real-life disaster protocols. Tasks are completed in a pressured, unfamiliar environment to further develop students’ emotional and physical resilience.

Team Endurance in year 3 centres on manning a field hospital receiving casualties from the major incident. A management theme is also embedded. Close cooperation, clear decision-making and situational awareness are needed to complete tasks and the level of physical activity is increased as students try to complete the tasks in the time allocated.

The events are facilitated jointly between SHS and 225MR staff. Health and safety risk assessments are completed prior to each event. Participation is voluntary, with approximately 1400 students participating over the last four years. Student evaluations indicate the TS is a valued learning experience, but more in-depth evaluation was needed to discover what skills and knowledge students acquired and whether these events increased their resilience.

The objectives were:

1. To explore students’ perceptions of the concept of resilience.
2. To identify the knowledge and skills students develop.
3. To explore whether (and if so how) students’ feel their resilience has been enhanced as a result of their participation.
4. To explore the views of academic and reservist staff facilitating delivery of the TS.

4. Methods

4.1. Design

A naturalistic qualitative design utilising a series of focus groups explored participants’ perceptions of the TS. Naturalistic designs are appropriate for investigating lived experiences (Silverman, 2020), whilst focus groups provide opportunities for individuals to collectively discuss and share their views (Kamberelis et al., 2018). Four focus groups were planned, two with students, one with academic staff and one with reservists.

4.2. Data collection

Two interview guides were developed, one for academics and reservists, the other for students, based on the study objectives (Appendix 1). Prompt questions were further probed, enabling detailed exploration of participants’ experiences. A pilot test with pre-registration nursing students (n = 3) confirmed the guide elicited relevant data. The number of academic and reservist staff who could be recruited to the study was small and the questions very similar, therefore a pilot test was not conducted with these groups, to maximise participation in the main study.

4.3. Recruitment

A sampling plan was constructed aimed at including equal numbers of male, female, adult, mental health and child nursing students who had participated in the TS events in two focus groups, each with 10 participants. A cohort of approximately 350 third year pre-registration nursing students were briefed about the study as they had been able to participate in all three events during their training, with information sheets and consent forms handed out to those interested. Seventy consent forms were returned but the proportions identified in the sampling plan could not be achieved. The numbers of males was low and no child students volunteered. Additionally although twenty students were selected only fourteen actually attended – six in one group, eight in the other. All fourteen had participated in the TS events on at least one occasion. There were three male and eleven female students; five mental health and nine adult nursing students.

Academic staff facilitating the TS were contacted by email with ten academics returning a consent form. It was not feasible for all staff to attend at the same time, therefore two focus groups (four per group), plus two individual interviews were conducted. A convenience sample of ten reservists formed a separate group. Academic and reservist staff had facilitated the TS events several times.

A total of thirty four individuals participated in five focus groups (two student, two academic staff, one reservist) and two individual...
interviews (academic staff).

The focus groups and interviews, each lasting 40–60 min, were conducted by a member of staff not involved in the delivery of the TS in order to minimise bias and power differentials in the data collection. Participants were provided with information sheets and consent forms stating participation was voluntary and that they could withdraw at any point. They were also assured of anonymity and confidentiality. Data collection from staff and students took place in teaching rooms at the university. The reservist focus group took place at their barracks during one of the TS events. Focus groups and interviews were audio-recorded and transcribed verbatim ensuring data was anonymised.

4.4. Data analysis

An inductive thematic analysis was conducted using Braun and Clarke’s (2006) six stage process. Transcripts were read several times and codes, sub-themes and themes created from each subgroup of participants (students, academic staff and reservists). Sub-themes and themes were similar across the three data subsets and combined into one overarching analysis consisting of five themes. Member checking was conducted, returning the combined analyses of academic staff to participants. It was not possible to member check student analyses as they had completed their programme and it was not feasible to return the analysis to reservists.

4.5. Ethical considerations

The University Ethics Committee approved the study and confirmed compliance with general data protection regulations.

5. Results

Five themes were identified.

5.1. Having fun

Participants highlighted the fun they had. Students enjoyed doing something unusual and unique:

“I thought it was really fun, and it was good to do something a bit different, but that you were still learning, you still came away learning stuff from it and that was really good.”

They were enthusiastic about being actively involved in the learning process, rather than passive recipients:

“Actually doing something instead of being in lectures all the time. You were getting out and involved, and learning as well”

Students enjoyed the activities because they were realistic. Team Resilience and Endurance include emergency situations e.g. a truck crashing and a patient with a heavily bleeding wound. These scenarios allowed students to practise a range of clinical skills associated with caring for a deteriorating patient in a time-pressured situation. One student commented:

“You need the emotional side of it, you need the adrenaline and all that stuff going.”

Unlike the clinical area, it was not detrimental to the patient if they made mistakes:

“It’s a place where you can get things wrong and not be in trouble for it.”

The scenarios replicate the human dynamics of clinical practice, having to work effectively with different groups of people. Students appreciated the opportunity to practise leadership skills such as delegation and decision making:

“…being allowed, having permission to make decisions about stuff and how to proceed.”

5.2. Building confidence

Participants commented on how the TS built students’ confidence. Challenging students with demanding tasks was key in developing this self-confidence:

“…it gave you a sense of what you were able to accomplish yourself. With being outside of your comfort zone, you got an insight into where your strengths and weaknesses were…”

A crucial element was realising they had transferrable skills that could be applied to these new scenarios, e.g. the safe transportation of a patient with anthrax. Academic staff commented:

“I was astounded by what the students knew. Okay they didn’t know anything about anthrax, but that wasn’t involved. It was their infection prevention knowledge, and they were surprised…”

Reservist and academic staff observed students utilising different interpersonal skills as their self-awareness and awareness of others developed, noting that quieter, apprehensive students became more confident as they successfully completed tasks with the support of their team. Task leaders emerged who had previously been reserved and in the background. Positive feedback from reservist facilitators fostered their confidence by focusing on strengths of which students themselves were unaware:

“I didn’t even realise I was doing it. It was the trainer afterwards that said ‘you emerged as the leader’. And I was like ‘oh, okay’, but that was really good feedback to know that I felt confident enough to do that.”

5.3. Teamwork and communication

Academic staff provided examples of students working productively together, realising the need to work collaboratively:

“They were really working together and making use of different people’s physical abilities and who they can lift and move…”

Effective team working depended on other skills students employed e.g. deciding who was best to lead each task. Students were adept at appointing different leaders according to their skills, thinking strategically in figuring out who was best suited to each task and engaging in collective problem-solving. Students also identified their own weaknesses, displaying competent leadership in recognising when they were not the best person to lead an activity:

“…you will get somebody who says ‘I’ve done this before but I can’t remember, can somebody else take the lead on this one?’ It’s good to see that leadership maturity of ‘yes, I do have leadership ability, but not for this specific task.’”

This stepping back demonstrated mature leadership as individuals were prepared to become a good follower as warranted by the situation. Working effectively together required good communication. Staff observed students listening respectfully to each other as they worked out how to complete tasks. Students recognised the importance of active listening. Reservist staff observed how being listened to developed confidence of introverted students, sometimes resulting in them becoming the leader:

“…it brings their confidence on because they’re being listened to and it spirals to the point where that individual is running that task.”

Academic staff also observed students listening and responding
appropriately to each other, being assertive, not aggressive, as they negotiated and agreed a course of action:

"...they’re not arguing with each other, but they’re quite vocal in ‘no, that’s the wrong answer.’ That’s great, that they’re able to have those discussions… and feel comfortable."

Students appreciated opportunities to manage these debates, recognising them as a useful rehearsal for the realities of clinical practice:

“I think it gave us a good opportunity to learn how to compromise and discuss… everyone had different ideas of how to do it, so it’s just trying to manage that and if there were disagreements, how to resolve it to get the task done.”

Academic staff commented students were kind, encouraging each other when one of them was struggling, demonstrating emotional and relational intelligence. As students learned about each other, they displayed supportive group behaviours:

"...some people in my team got really frustrated and a bit tearful… the people on the sidelines were like ‘you’re doing really well, keep going’. Nobody said ‘you could have done that better.’”

5.4. Promoting resilience

Students said the TS made them more aware of their fitness, but as one-off events did not improve their physical resilience. Academic staff agreed, but added students could often do more than anticipated when completing the physical tasks which increased their self-confidence. Students conceptualised emotional resilience in terms of their confidence in practising competently, both clinical and interpersonal skills. Coping effectively with tasks helped them believe in their ability to deal with the realities of clinical practice. Even if they had not done well, getting positive feedback helped them think how to improve their performance:

“...it’s a safe environment and you know if you get things wrong… it did make me think ‘oh my god’, you’re standing there and you feel lost. But after that activity I felt like I was more confident in that situation, definitely.”

Academic and reservist staff also thought the TS beneficial in promoting self-confidence and self-esteem, important elements of emotional resilience, but stated activities need to be embedded throughout the curriculum in order to be most effective.

An important aspect highlighted by many participants was the need for reflection following each task. This can be short due to time constraints. Significant event analysis sessions are incorporated at the end of series, but this could be revisited to include student speakers and videos for the events includes a presentation and rationale for each part of the series. Providing more information about the purpose of the days was suggested as a means of debunking the boot camp perception. Preparation for the events includes a presentation and rationale for each part of the series, but this could be revisited to include student speakers and videos of the events.

5.5. Pros and cons of collaborating with a military organisation

Academic staff valued the expertise of reservist staff in designing and delivering TS activities, commenting it would be challenging to resource without their input. Students appreciated their positive and motivating feedback:

“they were great, brilliant….They were really encouraging, like at the end of each task they told you what you’d done well and what you’d done good as a team.”

Even when things went wrong:

“I killed somebody in one of the scenarios because I forgot to check… But they kept you motivated… and they explained that ‘yeah, but this could happen in real life. You’ve got so much pressure… sometimes you’re not going to notice everything.’ And they were just really nice about it, they weren’t in your face like ‘what have you just done?’”

Academic staff acknowledged some lecturers and students might not wish to engage with a military organisation. Currently, participation is voluntary. Academic staff commented it would be important to include a “get out” clause for students not wishing to participate for personal or ethical reasons if the TS was embedded in the core curriculum. The need to make adjustments for students with physical disabilities and chronic health conditions was also highlighted.

Academic staff felt students might think the TS would be strict and physically demanding, like a “boot camp” discouraging them from attending. Students confirmed this:

“I didn’t do the first year one … I thought it was going to be like a boot camp, like going to do Tough Mudders, but everyone was like ‘oh, no, it was brilliant’, so I signed up for second year and it was so good.”

Participants commented the events were efficient and highly organised, but did not feel regimented. Reservist staff were encouraging and motivating, rather than acting like drill sergeants.

Some students had not attended all the TS events because they were apprehensive about what was involved:

“I missed the first year one because I was too shy, too anxious to go… it was totally out of my comfort zone. It just gave me the fear… having done the second one… I don’t know what I was so worried about.”

Some students commented they had not attended whilst on placement in first year as they did not want to miss clinical time. Currently TS events are counted as clinical hours, but in future will be staged during theoretical blocks to address this concern.

Academic staff commented less confident students might be less likely to attend, but would most benefit in developing their confidence. Providing more information about the purpose of the days was suggested as a means of debunking the boot camp perception. Preparation for the events includes a presentation and rationale for each part of the series, but this could be revisited to include student speakers and videos of the events.

6. Discussion

Educational interventions fostering resilience should include identity and capacity building, leadership development and reflection on practice (McAllister and McKinnon, 2009). These elements are embedded within the TS and this study demonstrates the TS helps build students’ self-identify and sense of personal agency. Providing opportunities for students to participate in tasks designed to foster team working and leadership skills enabled students to become more self-aware and self-confident, key elements of resilience (McDonald et al., 2016).

Dragonetti et al., 2020 discuss the design of resilience building activities in the army, emphasising the need for interactive, problem-based approaches in small groups where individuals have opportunities for peer learning. This approach was beneficial in the TS as students enjoyed the active, engaged learning in small teams. Draonetti et al. also highlight the importance of linking new learning onto existing knowledge in designing military programmes, a similar point made by Williams (2020). In the TS students’ self-confidence developed as they realised they had transferrable skills they could apply to successfully complete the activities. A study by Beaumont and Allan (2012) discovered military nurses still felt competent once deployed, even when they were unable to achieve pre-deployment competencies as they applied existing skills and knowledge. Similar to the pre-registration nurses in this study, these military nurses were also adept at utilising the expertise of others in the team to ensure tasks were successfully completed.
Students conceptualised resilience as confidence in their ability to perform competently in clinical practice. This included clinical skills such as caring for rapidly deteriorating patients and non-technical competencies including effective teamwork, leadership, decision-making and delegation. These skills mirror those promoted during military simulation exercises such as HOSPEX, demonstrating this type of training can be transferred from a military to a civilian setting (Hayes and Ryan, 2011; Arora et al., 2014). Arora et al. (2014) demonstrated that participation in HOSPEX resulted in significant improvement in decision-making and situational awareness. Students who had participated in TS appreciated the opportunities to practise decision-making skills and being out of their ‘comfort zone’ in a safe, supportive learning situation.

Williams (2020) highlights the importance of coaching skills, allowing learners to engage in problem-solving rather than teachers jumping in to correct every mistake. Students have to problem-solve to complete the TS activities. Feedback focuses on what students think has gone well and what could be improved, similar to HOSPEX where post scenario debriefing focuses on strengths and areas for further development (Arora et al., 2014). The positive, encouraging feedback provided by reservist facilitators was key in increasing students’ self-awareness and confidence during TS. Students sometimes were unable to see the skills they were using, particularly their leadership skills, needing help to recognise these traits in themselves.

This confidence building feedback also helped change some negative preconceptions students had of the military. Some students thought the TS would be a strict, regimented ‘boot camp’ discouraging participation initially. The organised, facilitative approach throughout the activities, together with the supportive feedback from reservists debunked these misconceptions. Stankiewicz et al. (2012) had a similar finding. Civilian student nurses taught by military nurse lecturers at an American university initially thought they would be ‘strict, structured and disciplined’ with a “command and control attitude” (p.207). These views changed as students appreciated the clinical credibility of these military lecturers and servant-leadership attributes. A benefit of the collaboration between SHS and 225MR has been the changing perceptions of academic staff and students towards the military.

Academic staff valued the expertise and resource provided by 225MR, commenting it would be challenging to deliver an initiative of this scale without their input. This is a potential limitation, 225MR are committed to continuing this collaboration, although reconfiguration will be needed post the Covid-19 pandemic, but this partnership model may not be replicable in other areas. Academic staff also highlighted the importance of offering alternative learning opportunities for those not wanting, or unable to participate.

Participants agreed that whilst beneficial in promoting self-awareness and increasing self-confidence, the TS was limited in promoting ongoing physical and emotional resilience. Physical and mental readiness training is ongoing throughout an individual’s military career (Finnegan et al., 2016; Dragonetti et al., 2020). Further thought is needed as to how training can be embedded throughout the pre-registration nursing curriculum, together with longitudinal studies to evaluate its impact. The need to build in more time for reflection in the TS is also recognised as a central tenet of resilience building (Thomas and Asselin, 2018).

7. Limitations

This was a small scale research study, based in one university and collaboration with local military reservists. A further limitation was the lack of child nurse participants and male students. Also, the sample potentially participated because they had positive views of the TS biasing the results. In retrospect it would have been useful to include students who had not participated in any of the TS events and the reasons for this. Member-checking of the analysis was only possible with academic staff.

8. Conclusion

This study illustrates how a learning process enabling small groups of students to engage actively in tasks designed to promote team-working, problem-solving, rapid-decision making and leadership facilitated the development of self-awareness and self-confidence. Students conceptualised resilience as clinical competence, valuing an active learning process enabling them to practice clinical and non-technical skills building their confidence in coping with stressful clinical situations. Academic and reservist staff observed students utilising a range of communication, team-building, leadership and problem-solving skills. Participants felt that whilst valuable, resilience building activities need to be embedded throughout the curriculum to be really effective. Academic staff and reservists recognised the benefits of collaborating together. This immersive, active learning was only possible by utilising the expertise of a military organisation. An added benefit was the opportunity for 225MR to engage with students and academic staff, changing some stereotypical views of the military. Nursing worldwide is a stressful occupation. Resilience building is integral to military training in many countries (Thompson and Dobbins, 2018). This study adds to the international literature (e.g. Murray et al., 2019) demonstrating the positive benefits of collaboration between civilian and military organisations in the provision of simulated learning experiences.

Supplementary data to this article can be found online at https://doi.org/10.1016/j.nedt.2020.104730.

Funding

Not applicable.

Contributions

Jo – conceptualisation and proposed methodology, investigation, analysis, writing original draft.

Tom – conceptualisation and proposed methodology, project administration, reviewing and editing draft.

Declaration of competing interest

None.

Acknowledgements

We would like to acknowledge our 225 Medical Regiment colleagues for their support in designing and delivering the Team Series. Also, all the students, academic staff and reservists who participated in the study.

References


