



Preparing First Year Paramedic Students to Cope with Stress and Stressors Associated with Their First Ambulance Placement

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Introduction

To become a qualified paramedic, students are required to complete university study in an accredited program, which must also include a Work Integrated Learning (WIL) component in the ambulance setting. WIL offers paramedic students an opportunity to link theory and practice, providing them with experiences that cannot be realistically replicated in simulation or the classroom environment. It also offers paramedic students an opportunity to be introduced to the paramedic culture,¹ and establish the values, attitudes and knowledge expected of registered paramedics.²

Whilst the ambulance setting offers a rich learning environment for paramedic students, it is also reported as being dangerous,^{3,4} high in demand, low in control and low in support.⁵ For example, paramedics are one uniformed profession that is exposed to repeated trauma of others, violence and emotional distress as an inherent part of their job.⁶ The detrimental impact of working in this setting are high levels of absenteeism, high levels of mental stress disorders resulting in serious worker compensation claims, and relatively high levels of paramedics suicide cases compared to the police or fire officers.^{7,8} In contrast, relatively little is known about how paramedic students experience stress when undertaking WIL in the ambulance setting. There is some evidence that paramedic students experience a form of occupational socialisation during WIL, where they learn what is acceptable to express and what is not. In particular paramedic students report a negative attitude towards emotional expression, and a preference for emotional suppression.^{9, 10} Other studies have identified that paramedic students are ill-prepared for working in the ambulance setting.¹¹

Currently there are 8000 students enrolled in entry-to-practice paramedic programs throughout Australia, all of whom are required to undertake Work Integrated Learning (WIL) in the ambulance setting to become a registered paramedic.¹² A better understanding of paramedic students' experiences of stress is urgently needed to support individuals when preparing for the challenges that they may face in the WIL setting. First year university students are identified as a particularly vulnerable population group in the university setting in Australia, especially as they transition from home to the university environment towards independent living.^{13, 14}

Aim

The aim of this qualitative study was to explore how first year paramedic students experience stress on their first ambulance placement.

Methods

A convenience sample of fifteen first year paramedic students from a single regional university who were undertaking WIL with Queensland Ambulance Service were recruited to the study via email and text. A six-phase process of thematic analysis outlined by Braun and Clarke (2006) was used to analyse narrative interview data,¹⁵ (Figure 1) followed by secondary analysis using a critical lens.¹⁶ The purpose of a critical approach was to highlight the negative conditions created by hierarchy, power and control of individuals, and the multiple meanings of language.¹⁶ To facilitate this approach the researcher kept a reflective diary of field notes to record observations, assumptions, or misunderstandings during each interview.

Figure 1 – 6-step Guide to Good Thematic Analysis (Braun & Clarke, 2006)	
Phase	Examples of Procedure for Each Step
1. Familiarization	Transcribing data: reading and re-reading; noting down initial codes
2. Generating Initial Codes	Coding interesting features in the data in a systematic fashion across the data set, collating data relevant to each code
3. Searching for Themes	Collating codes into potential themes, gathering all data relevant to each theme
4. Involved Reviewing Themes	Checking if the themes work in relation to the coded extracts and the entire data-set; generate a thematic map
5. Defining and Naming Themes	Ongoing analysis to refine the specifics for each theme; generation of clear names for each theme
6. Producing the Report	Final Opportunity for Analysis selecting appropriate extracts; discussion of analysis; relate back to the research question or literature; produce report

Four overarching themes emerged from the data, they were 1. Working in the Ambulance Setting, 2. Mentorship Stress, 3. Acceptance and 4. Coping (Figure 2).

Theme 1: Working in the Ambulance Setting
Participants reported adverse emotional and psychological stress when exposed to death and dying, seriously ill children and unpredictable patients.

'They had a DNR on them and it's just difficult to sit there and go, well you've been trained to keep people alive, not watch them die. Yeah so that was probably a bit of a stressful thing to have to try and go well I can't, we're not allowed to do a lot of intervention here.' (P10)

'There were a couple of paediatric jobs that I attended as well and I think, like a large number of people, serious jobs with paed isn't really anyone's cup of tea. So, one in particular was a quite young baby that had been having seizures and despite treatment the patient continued to have seizures in our care. So that was really, really stressful.' (P15)

'... a lot of unstable mental health patients, they just sat in the back of me, which was a little bit daunting because I didn't know if this person was going to spin off the rails, or lash out at me, or something like that.' (P14)

For some participants, shift work impacted self-care outside of their ambulance placement difficult.

'They talk about all your coping mechanisms and everything like that, but - so you've got to fit in - like going to the gym is a coping mechanism to keep healthy and everything like that. But even just going to the gym after a day shift I'd find would be very difficult . . . your kind of also missing out on either doing your social activities, like going down to the beach.' (P9)

Another participant highlighted the challenges of balancing time spent on academic work and paid employment.

'It's stressful trying to maintain your assessment when you're on placement, as well as the work that you do, as well as the placement itself because a lot of people can't afford to just not work while they're on placement. So, I worked my three days placement then I'd have my rest day, sleep, then if the two other days fell on a work day I'd work and then at what point do I do my assessment?' (P12)

Finally, stress was perceived as useful in instances when participants needed to focus on a particular clinical task.

'I felt a lot quicker reaction times, I was thinking quicker. Kind of just going, okay, this is actually something that's time critical, let's go. It got me able to just be quicker in every way, if that makes sense. So, moving quicker, thinking quicker, being more efficient in how I would usually approach a job.' (P12)

Theme 2: Mentorship Stress
Other significant sources of stress included underdeveloped mentoring skills of clinical placement supervisors that negatively impacted students learning. Participants noted the negative impact of preceptors who were disengaged from the teaching process, were poor communicators, provided little or no emotional support and were poor role models as contributing to their experiences of stress.

'just probably on my first day with that older paramedic and the thing that really - not upset me, but annoyed me was that he didn't ask to see my book, so he didn't know what year I was, he didn't ask what my name was...' (P4)

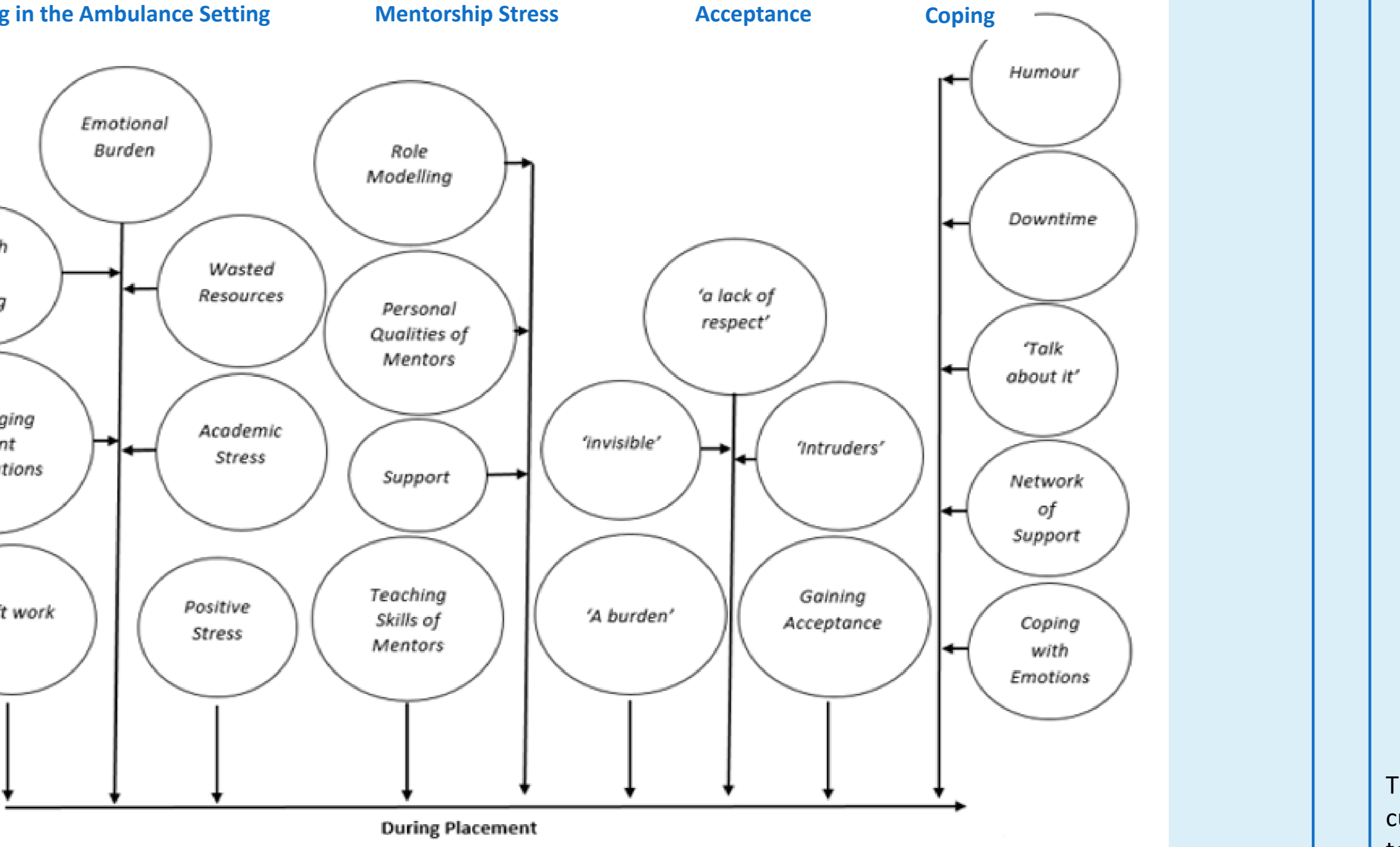
Over the next few days, it was a pretty miserable kind of - I tried to communicate with my mentor they were really snappy.' (P13)

'After the second suicide.... The Critical Care Paramedic on scene said to me if you need to chat have a chat, the cultures changed to what it used to be. But once we were in the ambulance on our own the subject was all changed . . . there was no recognition of mental health I guess or the effects of the job.' (P1)

'I guess I feel like there's the assumption that everything's going to be low acuity until they get there and it's proven wrong. Which can kind of be bad at the same time because if something is bad, then every second can be vital. I guess that can be a little bit stressful at times as well.' (P9)

Results

Figure 2 – Themes and Subthemes Outlining how First Year Paramedics Students Experienced Stress During their First Ambulance Placement



Theme 3: Acceptance
Hierarchical power imbalances between clinical placement supervisors and students contributed to a reduced sense of belongingness amongst some participants. For examples some participants reported being made to feel unwelcome.

'but he just blatantly made it obvious how much of a burden students are and how we're no help to them in the beginning. So, I was great, I want to try and make a good impression but already I know that I'm useless to you and you don't want me here.' (P6)

Others described isolating behaviours that made them feel 'invisible' or like 'intruders'.

'More frustrated - because it was that invisibility feeling. Well hello I'm in the back here. Just talk to me as if I'm an actual person, that I'm here. Or even be aware that I'm in the back here. I'm not just - I might just be an observer but I'm here to learn as well. I'm quite willing to learn and take on.' (P3)

'I think it was more when we were at station on break or waiting for another call and instead of just asking your name they'd say how's your student going, in front of you. Personally, I find that disrespectful. And a bit de-humanising in a way.' (P1)

'These two had been working together for a while so they were comfortable with each other. I think that makes a difference because I'm the intruder. You felt that.' (P3)

Finally, a number of participants modelled positive behaviours to gain acceptance by their clinical placement supervisors and other registered paramedics.

'But like I say, that was maybe the first four shifts that I felt like oh this is awkward. I want to prove to them that I can do this but after that, like I said, once they saw that I could do my vitals and all that sort of stuff, it was fine after that.' (P6) *'I think it was just my persistence. I didn't - as soon as that happened, I didn't go and mope in the corner.'* (P14)

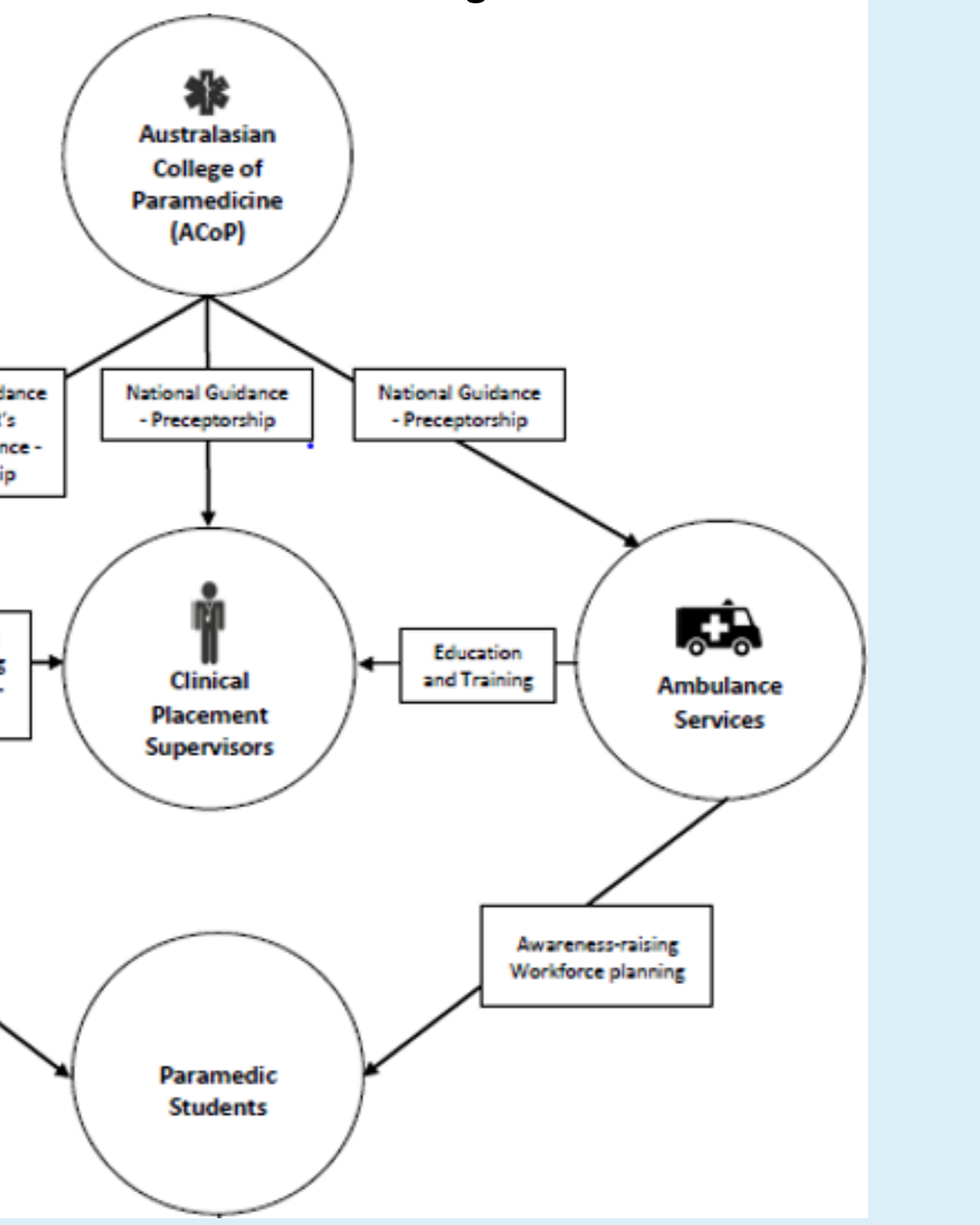
Theme 4: Coping
Participants identified a number of helpful coping behaviours during ambulance placement, including accessing support from family, friends and their university, and talking about their experiences. Humour was identified as an effective mediator of stress, however, participants distinguished between humour that was light-hearted and helped them to cope with stress, and 'gallows' humour that was unprofessional, unethical and made a situation worse.

'To me he's still a person and is still valued and I think it was just so hard that he got to the point where he did kill himself and in such a public way, in a park where kids go through. I didn't think there was anything funny in calling him a swinger.' (P1)

'When we got him to the hospital, he was all in this little area, they had jokes about him, like what type of stroke he was having and betting on it. I just found that really unbecoming and that was just another thing about his whole demeanour that was like, no, I'm really put off by you' (P4)

Conclusion

Figure 3 – Educational Schema for Resource Allocation to Enhance Students' Experience of Stress when Undertaking WIL



The findings from this study have implications for students, educators, clinicians and stakeholders involved in curricula development and organisational policy. Undergraduate paramedic curricula can be better leveraged to prepare students for the stressors that they will encounter in the ambulance setting by both raising awareness of negative socialisation behaviours and employing a proactive health orientated approach to stress management before students undertake ambulance placement. Education providers and the Australian College of Paramedicine (ACoP) should offer professional development courses and incentives for clinical placement supervisors to effectively undertake the preceptorship role as to date there is no national guidance on how to educate paramedic students in the clinical setting.

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