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Examining Psychological Support for Paramedic Students during Training Programs A Qualitative Exploration of Mental Health Experiences

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Examining Psychological Support for Paramedic Students during Training Programs: A Qualitative Exploration of Mental Health Experiences

by

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Abstract

Background

There is limited research on the mental health (MH) of student paramedics in the UK, but the available studies suggest that student paramedics are at risk of burnout, depression, and post-traumatic stress disorder (PTSD). Given these findings, it has been proposed that the provision of psychological support is of utmost importance during training. Despite this, existing research, being predominantly quantitative or mixed methods, had minimal scope to take a humanistic perspective by prioritising students' subjective experiences, focusing on psychological self-care, and facilitating growth. The aim of this study, therefore, was to explore the influence of paramedic training on the MH of student paramedics, by answering the following questions: What are paramedic students' experiences of changes to or influences on their MH during their training programme? And secondly, what are paramedic students' experiences of psychological support that is available within their training programme?

Method

Semi-structured interviews were conducted via video call with a sample of twelve final-stage undergraduate paramedic students from UK university courses. Reflexive thematic analysis (RTA) was used to analyse the data.

Results

Four themes were generated from the interviews, with two significant findings being the disparities between training programmes and the challenges paramedic students encounter in voicing their needs, particularly those related to their MH.

Conclusions

Participants shared their inconsistencies regarding the psychological support they received during their training. Participants also described the common demands they faced during the course, such as managing academic work and fear of burnout, as well as the isolating experience they had while managing their own MH. The current study's findings can contribute to practice by indicating how therapists can adapt their services to meet the needs of paramedics, and policymakers should consider making psychological support a requirement for trainees prior to qualification.

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Chapter 1

Introduction

1.1 Context and Rationale

Paramedics provide a critical service to all communities, often dealing with traumatic events, critical injuries, and the end of life (Avraham et al., 2014). It has been reported that due to occupational stressors and potentially traumatic situations, paramedics can experience a wide range of mental health (MH) issues, such as rates of psychological distress, anxiety, depression, burnout, fatigue, suicide, trauma, and post-traumatic stress disorder (PTSD) (Sheen et al., 2012; Porter & Johnson, 2008; Guadagni et al., 2018). Anderson et al. (2017) suggested that entering a paramedic career has 'a 100% chance of being exposed to trauma'. This suggests that the MH and well-being of paramedics are significant issues that need to be addressed. Furthermore, the recent COVID-19 pandemic has also left a crisis and further strain within the workforce of emergency medicine due to burnout and limited resources. It has also been highlighted in recent research the negative impact this has had on paramedic's and paramedic students' MH and well-being due to the additional occupational stressors they now face following a pandemic (Williams et al. 2021; Du et al. 2022; Ozainne et al. 2023). Therefore, now more than ever, the MH of this population should be prioritised.

1.2 Background

Paramedics are registered healthcare professionals who are mostly well-known for working within ambulance services, providing immediate and emergency care (College of Paramedics, 2019). In the UK, paramedics are expected to meet the standards of proficiency to register for Health and Care Professions Council (HCPC) registration to practice. These standards ensure that individuals have the knowledge, skills, and experience to practice lawfully, safely, and effectively, and so individuals do not pose any danger to the public or themselves as practitioners (HCPC, 2018). In 2018, HCPC raised the level of qualification paramedics required to obtain HCPC registration. Currently, paramedics are required to hold a

bachelor's degree with honours in paramedicine or paramedic science as opposed to an 'Equivalent to Certificate of Higher Education'. In the UK, an undergraduate or bachelor's degree in paramedicine is three to four years full-time, split across both study and practice, and includes a variety of clinical placements in both ambulance and non-ambulance settings (e.g., hospital A&E, specialist medicine wards, maternity services, operating theatres, GP surgeries, and community services) (University of Surrey, 2023; University of Bradford, 2023; University of Swansea, 2023).

During the time this current study was conducted, requirements from the HCPC stated that paramedics must be able to 'maintain fitness to practice', which included 'adopting strategies for physical and psychological self-care and critical self-awareness'. However, effective from September 2023, HCPC has set changes to the standards of proficiency for paramedics. Changes now state that paramedics must 'look after their health and wellbeing, seeking appropriate support where necessary'. The revised standards now also state that paramedics should 'identify anxiety and stress in themselves and recognise the potential impact on their practice' as well as 'understand the importance of their own mental and physical health and wellbeing strategies in maintaining appropriate fitness to practice' (HCPC, 2023). However, despite this change, there appears to be no mandatory academic requirement for paramedic students to take part in counselling, psychotherapy, or any other form of psychological support while undertaking their paramedic training and placements. Yet, research has consistently suggested that paramedics and paramedic students are under high occupational stressors within their role and are likely to experience MH challenges (e.g., anxiety, depression, burnout, fatigue, PTSD, and suicide) due to the unavoidable, highly stressful nature of the role (Lowery & Stokes, 2005; Sheen et al., 2012; Porter, 2008; Stein & Sibanda, 2016; Shakespeare-Finch & Daley, 2017; Guadagni et al., 2018).

1.3 Definition of Key Terms

Paramedics. A paramedic is a 'registered Health and Care Professions Council (HCPC) care professional who provides specialist care and treatment to patients who are either acutely ill or injured. They can administer drugs and perform certain surgical techniques' (NHS, 2023). Additionally, they 'work autonomously across a range of healthcare settings, usually in emergancy, primary, or urgent care. They may also specialise in clinical practice, education, leadership, or research' (The College of Paramedics, 2019).

Paramedic Students. To work as a paramedic, registration with HCPC is required, which necessitates completing an approved qualification in paramedic science. There are various paths to becoming a paramedic, including full-time university course, apprenticeships, and working as a student paramedic while studying. The process typically takes between two and four years and involves a combination of theoretical and practice learning, including placements in healthcare settings. The entry requirements vary depending on the university or ambulance service (College of Paramedics, 2019). For the present study, only paramedic students on a university course were interviewed.

Clinical Placement. A clinical placement is defined as 'any arrangement where a student is present, for educational purposes, in an environment that provides healthcare or related services to patients or the public' (General Medical Council, 2023).

Peer Support. Peer support has been defined as a network which 'provides signposting, advice, and a listening ear to all members of staff'. Aiming to 'develop safe, confidential, non-stigmatising services for staff when they are struggling and need help in the event of a

particularly distressing incident' (West Midlands Ambulance Service University NHS Foundation Trust, 2020).

1.4 Aims and Objectives of the Study

The aim of the current research is twofold: firstly, to obtain insight into how student paramedics' training impacts their MH and well-being, using an Reflexive Thematic Analysis (RTA) approach to understand their experience. Secondly, to understand student paramedics' experiences of psychological support available on their training programmes. The objectives of the present study will be reached by interviewing final-year paramedic students from various paramedic undergraduate programmes in the UK. The data collected in the interviews will be analysed using thematic analysis. It is hoped that this study will contribute towards a greater understanding of the impact of paramedic training on trainees' MH. This insight will allow for further investigation as to whether the current psychological support or provisions that are available for paramedic students need to be adapted to better meet their needs. This could influence the current training programmes for emergency medicine to provide better psychological support for trainees. This will provide a better quality of life for the paramedic profession, which could also benefit all users of emergency medical services. This research could also pave the way for future studies to take a counselling psychology or humanistic perspective on this population to further investigate paramedics' MH experiences in a non-judgmental and supportive way. At this point it is important to highlight that throughout this thesis there will be boxes used to capture my researcher reflections since I am using Reflexive Thematic Analysis (RTA). The boxes are included to help the reader distinguish my own voice from the participants voice and the literature.

Reflexivity

Reflexive practice is seen to be the foundation of both clinical work and research in counselling psychology (Kasket, 2012). Finley (2002) described the practice of reflexivity as 'thoughtful, conscious self-awareness' and indicated the importance of reflexivity within research to promote integrity and trustworthiness. The rationale for including this reflexive statement and others throughout is to facilitate reflection on the potential biases or agendas that might surface prior to or during the research development. Furthermore, reflexivity will also provide the reader with richer insight into research decisions and choices.

My reason for investigating paramedics originates from personal encounters as a patient and as a university peer. I observed the heightened anxiety and helplessness I felt during medical emergencies and how it lessened once paramedics arrived. Although their context may be outside of my personal understanding, I would reflect on the demanding nature of their role and admire their caring but stoic

My epistemological stance began within realism, as I was seeking truth in whether there was enough support or not for paramedics. However, through the process of my literature search, I found this stance shifted towards a critical realist standpoint, through the understanding that there is some reality of enough psychological support for paramedics, and this study is a way into understanding that through the individual's own experiences.

Initially, it became apparent that I inadvertently held the belief that paramedics *would* be traumatised or distressed after attending a traumatic job. I also noticed the assumption that trainees may be more vulnerable to MH disorders due to the often shocking or intimidating nature of their job. After reflecting on these assumptions, the importance of documenting reflexive practice during the research process became clear. This will be done by keeping a reflexive research diary and having reflexive discussions with colleagues and supervisors to better understand the potential assumptions I hold surrounding this research topic. This will allow a translation of openness to the research.

Chapter 2

Literature Review

2.1 Introduction

To identify gaps in the existing body of literature and develop the research questions for the present study, a comprehensive and systematic literature search was conducted electronically during the initial stage of the doctoral research. Please see Appendix A for systematic search keywords. The outcomes of the systematic literature review played a crucial role in shaping both the research proposal and the study's overall design. Henceforth, this chapter was written after analysing the data to maintain the accuracy of the data interpretation without any preconceived ideas and will mainly focus on four theoretical frameworks: Job-Demand-Control-Support Model (JDCS) (Karasek & Theorell, 1990), Job Demand-Resources Model (Bakker & Demerouti, 2007), Social Support Theory (Cohen & Wills, 1985), and Role Identity Theory (McCall & Simmons, 1978; Stets & Serpe, 2013). These theories have been selected based on their occupational health psychology focus and the alignment with previous research findings and the findings from the systematic literature review therefore, these theories can provide a lens for viewing the relevant literature for this study. Furthermore, within this, the findings distilled from the systematic literature review, which have substantively informed the research objectives and inquiries of this study, will be discussed. This discussion is a vital component in determining how the theoretical frameworks collectively contribute to the synthesis and interpretation of existing literature, thereby advancing understanding of the subject matter under investigation.

2.2 A theoretical perspective of paramedic's experiences of training

The following section will introduce and provide an overview of the multiple theories that can be proposed to explain paramedics' experiences of training and demonstrate a critical understanding of the literature. These theories will be discussed in greater depth later in this chapter, supported by findings from the systematic literature review. The JDCS (Karasek & Theorell, 1990) suggests that high workload, low levels of autonomy and control over the job, and low levels of support, either in combination or individually, lead to poorer health and well-being. However, it could be argued that the JDCS model neglects the physical demands and the availability of resources required to successfully perform the job; thus, the Job Demands-Resources Model (Bakker & Demerouti, 2007) could be useful in explaining how high workloads and low levels of resources can impact paramedics well-being. However, both models overlook how the individual copes with the demands of the job; therefore, Social Support Theory (Cohen and Wills, 1985) could be more suitable to understand this and provide a more in-depth explanation as to how social support systems help paramedics cope with the demands of the role. Moreover, role identity theory (McCall & Simmons, 1978) could be an alternative approach to understanding the negative attitudes towards emotional expression found within the literature.

At this stage, there is not one specific theory that can give a precise explanation for the findings of the literature; therefore, as a counselling psychologist I will take a pluralistic perspective, meaning I will not employ a specific theoretical framework but rather consider the various theories that can explain the different elements of the paramedics' experiences of training. Taking a pluralistic perspective, accounts for the practical stressors (e.g., lack of funding, overworking, short staff, lack of resources) but also accounts for the individualistic perspective for how individual paramedic students might cope with such demands. By taking

this approach, we will be able to determine multiple interventions, both in an individual context and in a system context.

2.2.1 Job Demands-Resources Model

The Job Demands-Resources model (Bakker & Demerouti, 2007) is an occupational stress framework that examines the interaction between job demands (for example, physical, psychological, social, or organisational aspects of the job) and job resources (for example, resources aimed to reduce job demands such as career opportunities, supervision, or role autonomy) and the impact on well-being. This theoretical model offers a lens to investigate the specific challenges encountered by paramedics during their training and the resources available to support their mental well-being. According to research, being a paramedic has a '100% risk of being exposed to trauma' (Anderson et al., 2017). Because of the numerous occupational demands that paramedics face during training and their careers, much of the paramedic research focuses on MH issues such as psychological distress, anxiety, depression, burnout, fatigue, suicide, trauma, and PTSD (Holmes et al., 2017; Sheen et al., 2012; Porter & Johnson, 2008; Stein & Sibanda, 2016; Guadagni et al., 2018). Therefore, from a theoretical perspective, it could be suggested that paramedicine has limited job resources to help paramedics manage occupational demands, thus leading to MH difficulties. Stein and Sibanda (2016) provide further support for this, as it was reported that the prevalence of burnout in paramedic students appears to be high, particularly highlighting the risk of burnout in the first and final years of study. Stein and Sibanda (2016) suggested that the prevalence of work-related burnout was unsurprising in final-year students due to the increased complexity, volume of academic work expected, and clinical responsibility placed on them.

Furthermore, recent research has shed light on the demands of the COVID-19 pandemic on the MH and well-being of paramedics and paramedic students. It was highlighted within the literature that paramedics were a vital part of the health response to the pandemic; thus, the pressures on this workforce were intense and challenging (Petrie et al., 2022), due to the limited workplace resources in place for paramedicine prior to the pandemic (Du et al., 2022). The job-demands-resources-model (Bakker & Demerouti, 2007) offers insight into how the additional demands that the COVID-19 pandemic inflicted on paramedics created an imbalance between demands on the individual and the resources paramedics had to deal with such demands. Williams et al. (2021) investigated the impact of COVID-19 on paramedic students, and it was found that a large proportion of participants reported experiencing above-normal levels of anxiety in the initial stages of the pandemic. It was also highlighted within the results that students who adopted positive habits during isolation, such as regular exercise, good sleeping patterns, and good eating habits, were able to reduce and manage their anxiety and stress better. Therefore, from a theoretical perspective, it could be understood that paramedic students who utilised their personal resources coped with the COVID-19 pandemic demands better due to the limited workplace resources. This can be further supported by Ozainne et al. (2023), who investigated the impact of the pandemic on the performance of paramedic students and their psychological state using a mixed-methods approach. It was found that the pandemic did have an impact on the psychological state of paramedic students, most of whom were at risk or in psychological distress. Ozainne et al. (2023) suggested that institutions should reinforce social and psychological support (workplace resources), particularly during times when the course may be interrupted. According to Alzahrani et al. (2023), all paramedic trainee participants identified their training environment as a significant element negatively influencing their wellbeing, with many of them considering it a source of stress. Participants described physical, psychological, and social demands such as verbal or physical assault from patients'

family members or bystanders and occupational demands such as other healthcare providers overburdening paramedic students with tasks.

Finally, it could be suggested that paramedic students have limited workplace resources when it comes to managing MH challenges and patient encounters, particularly concerning MH issues. Holmes et al. (2017) identified that minimal time (-4% of educational contact) is devoted to the management and treatment of MH disorders. Further research by Smith et al. (2020) identified that paramedics are recognised as the first point of contact for patients presenting with acute MH episodes. However, findings showed that paramedic students were receiving inadequate levels of MH training on their course, thus feeling unprepared to manage MH jobs. It was identified by Smith et al. (2020) that further research into this subject is needed to explore the varying syllabuses taught in every Bachelor of Paramedicine programme, and it is important to note that this study focused on an Australian sample; therefore, there may be limits to the global generalisability of findings.

2.2.2 Job-Demand-Control-Support Model (JDCS)

The JDCS is a theoretical framework that is used to explain the influence of job characteristics on employees' psychological well-being (Karasek & Theorell, 1990). This model highlights the importance of having control and autonomy in reducing stress if demands are high, thus suggesting that when employees are not in control, stress can build. This model also highlights the importance of support from colleagues as a way of coping with the stress and demands of the job.

In the context of paramedic literature, research has consistently indicated that paramedics experience high levels of work-related stress (Lowery & Stokes, 2005; Shakespeare-Finch & Daley, 2017). Given the unpredictable nature of their role, which encompasses emotional challenges (i.e., dealing with traumatic events) and practical aspects (i.e., shift work), it could be suggested that paramedics have limited autonomy and control within their duties, thus impacting their stress levels. This idea is supported by Lowery and Stokes (2005), who noted that the unavoidable, extremely stressful events that paramedics routinely encounter while performing their responsibilities were indicated to be associated with and predictive of PTSD. Additionally, Lowery and Stokes (2005) also discovered that job exposure, dysfunctional peer social support, and negative attitudes towards emotional expression were all risk factors for PTSD in student paramedics. This finding was further supported by Fjeldheim et al. (2014), who also suggested that paramedic trainees are at 'heightened risk of developing PTSD and depression'. Therefore, it could be suggested that if student paramedics have little autonomy within their role, as well as high job demands and limited support, this can negatively impact their MH and well-being. Highlighting the importance of offering psychological support to paramedic students and equipping them with helpful tools and strategies to provide autonomy and support to help them cope with the demands of the role.

Shakespeare-Finch et al. (2015) found that low levels of social support predicted PTSD symptoms, which further supports the JDCS theory. Shakespeare-Finch et al. (2015) suggested that using social support may allow paramedics to process the traumatic event by reconstructing their life narrative rather than using avoidance as a means of coping. More recent research by Alzahrani et al. (2023) investigated the well-being of paramedic students in both the United Kingdom and Saudi Arabia and reported challenging work or training environments due to misogynistic attitudes directed against them or other female medical

professionals. This could suggest that the culture within paramedicine remains stigmatised and outdated, leading the environment to be potentially uncomfortable for inexperienced paramedics and female paramedics, thus impacting the psychological well-being of paramedic students, as explained by JDCS theory.

To provide more autonomy to paramedic students and as a way of managing the demands of the role, research has focused on preparing paramedics for the MH challenges of the role. Alghamdi (2022) suggested that psychological preparedness can mitigate the effect of psychological stress on paramedicine personnel. It was highlighted that effective preparedness and organisational support can prevent or decrease psychological challenges before, during, and after responding to disasters or traumatic jobs (Alghamdi, 2022). Furthermore, Alghamdi (2022) highlighted that a lack of MH awareness can lead to psychological challenges and PTSD symptoms following the response to major incidents. It was recommended that establishing awareness and training regarding the potential MH challenges related to traumatic events was needed (Alghamdi, 2022). From a theoretical perspective, it could be suggested that by establishing awareness and providing appropriate training to paramedic students, they gain more autonomy and freedom in making decisions in their role. To further provide paramedic students with more control, enhancing resilience seemed to be a promising 'early intervention' in reducing PTSD symptoms in groups such as paramedics (Streb et al., 2014). Anderson et al. (2017) supported this, as results showed a significant improvement in paramedics' resilience after taking part in the online training. It was advised that resilience education as part of paramedic training could have a significant impact on students. Further studies have supported the notion of resiliency training for paramedics, as it was suggested by Guadagni et al. (2018) that resiliency training for paramedics would 'ultimately benefit all users of emergency medical services'. It could be implied from this that enhancing paramedics' resilience would allow them to better perform

their service and duties. However, both studies highlight that future research is needed in this area.

It could also be argued that by preparing and appropriately training paramedic students to manage the MH demands of the role, it increases students' resources as a way of managing the demands of the role; therefore, the job-demands-resources model could also be used to effectively explain the literature that focuses on preparing paramedics for the MH challenges. However, both models provide important perspectives on viewing paramedic literature and how paramedic students manage the demands of the role. Although the JDCS model highlights the importance of support from colleagues in coping with stress, it could be argued that social support theory offers a more in-depth explanation as to how social connections and support networks promote MH for paramedics.

2.2.3 Social Support Theory

To further explore the role of peer support within the paramedicine context, the social support theory (Cohen & Wills, 1985) could be used, as this theory emphasises the importance of social connections and support networks in promoting MH, particularly in buffering against stress and fostering resilience. This has been highlighted by Warren-James et al. (2022), who reported within their systematic review that collegial social support was identified as important across all paramedic studies examined. Smith et al. (2019) also suggested that peer support, and social support from loved ones, and support from a MH professional were important to maintain positive self-care practices for nurturing their MH and well-being following a traumatic event or disaster for paramedics. Furthermore, Jonsson and Segesten (2004) supported this perspective, underscoring the need for ambulance personnel to talk to others about their stressful experiences as a way of 'internalising the

experience' to facilitate the processing and understanding of the events. Jonsson and Segesten (2004) also stressed that it was not necessary to get solutions but rather to find someone to share their agony with. The previous research aligns with social support theory in suggesting that individuals with strong social support networks will have fewer MH problems than those with weaker social support. Cohen and Wills (1985) also suggested within the social support theory that the quality of the social support is also important. This is supported by Jonsson and Segesten (2004) as it was highlighted that all participants said they received social support, but the quality of the support varied. Participants stressed that one of the most important factors was having a 'genuine', 'true friend' to share their inner thoughts and worries with.

However, Sheen et al. (2012) highlighted concerns surrounding the few paramedic students accessing peer support. This experience of paramedics, which has been noted in the literature as a 'culture of denial and negative stigma towards MH' (Shakespeare-Finch & Daley, 2017), might be claimed to be unaccounted for by social support theory; therefore, it could be suggested that role identity theory could explain this unique experience of paramedics.

2.2.4 Role Identity Theory

As mentioned previously, Role Identity Theory, originally pioneered by McCall and Simmons (1978), explains that individuals construct their sense of self through the enactment of social roles within society due to behavioural expectations, norms, attitudes, values, or beliefs (Mausz et al., 2022). Previous research has suggested a 'four-dimensional paramedic role identity' (Donnelley et al., 2015; Mausz et al., 2022). This 'paramedic role identity' originally defined by Donnelly et al. (2015) consisted of four aspects of personal and

professional fulfilment: caregiving, finding excitement in dramatic aspects of paramedic work, gaining a sense of self-efficacy from competently completing difficult tasks, or the selflessness of doing a vital communal service. According to Mausz et al. (2022), paramedics hold a recognised position in society, where they are frequently portrayed in a heroic light because of the high risks involved in responding to life-threatening incidents. Because of this 'role identity' maintained by paramedics, Mausz et al. (2022) observed that if the individual is unable to fill the attributes of the function of a paramedic in a manner that they feel or believe others feel is appropriate, this could be detrimental for their MH and well-being. Thus, role identity theory could be used to explain the paramedic research highlighting the negative attitudes towards emotional expression (Lowery & Stokes, 2005; Porter & Johnson, 2008; Sheen et al., 2012; Shakespeare-Finch & Daley, 2017; Alzahrani et al., 2023) due to the attitudes paramedics are expected to exhibit and maintain during their role.

As the theory suggests, social roles such as paramedics come with their own meaning and expectations, which are internalised as identity. Therefore, it could be suggested that paramedics hold expectations that they should appear ‘stoic’ and not show emotion, as suggested by previous literature (Lowery & Stokes, 2005), who found that emotional distancing was a maladaptive coping strategy for paramedics, despite the expectation to appear stoic. It was also reported that paramedics believed they would be ‘socially rejected’ if they expressed their emotions (Lowery & Stokes, 2005). Porter and Johnson (2008) supported this, as it was found that individuals who endorsed a stoic attitude were more likely to report increased symptoms of interpersonal sensitivity, depression, distress, and burnout. It was also reported that PTSD symptoms are regarded as a ‘natural behaviour and reaction’ among paramedics (Jonsson & Segesten, 2004) and that paramedic students may become ‘acclimatised’ to trauma-related symptoms (Lowery & Stokes, 2005). Given that Jonsson and Segesten (2004) suggested that untreated traumatic experiences could affect paramedics'

sympathetic behaviours for their patients, it is possible to infer from the literature that trauma and PTSD symptoms are normalised within the paramedic profession, and as a result, appropriate trauma support may not be provided or accessed, impacting the quality of their work.

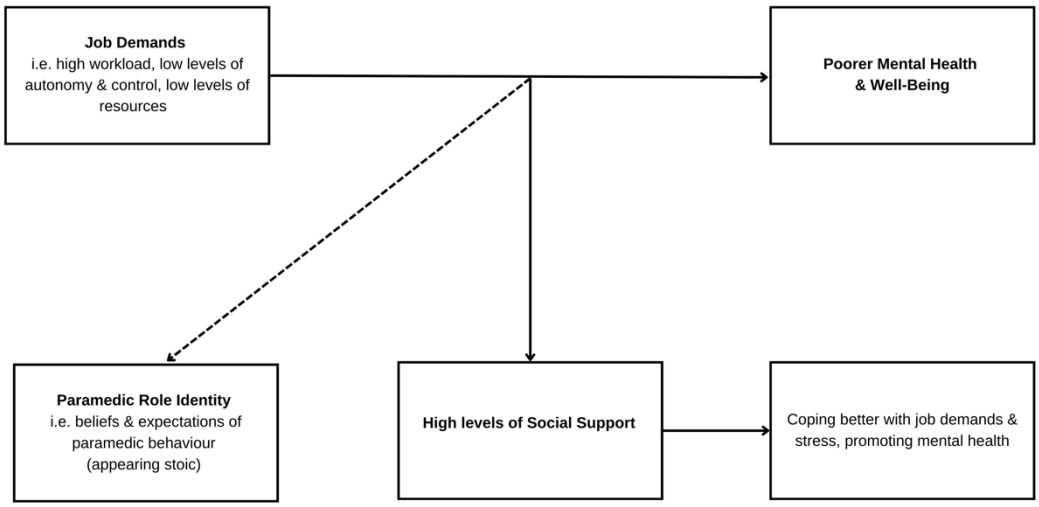
Moreover, research has also suggested that negative attitudes towards emotional expression or paramedic's 'role identity' create barriers to help seeking, as Pinks et al. (2021) highlighted that 'paramedic culture' limits paramedics ability to utilise support. This was further supported by an earlier study that highlighted student paramedics' negative attitudes towards emotional expression, which significantly contributed to their trauma-related symptoms and post-traumatic stress disorder (PTSD) scores (Lowery & Stokes, 2005). Finally, by viewing the literature using Role Identity Theory, it could be suggested that paramedics view their 'role identity' as a 'protector' and 'carer' (Mausz et al., 2022), which impacts their own MH and well-being, as research found that paramedics refrained from talking with their family and friends about their role or experience due to fear of causing vicarious trauma (Warren-James et al., 2022).

To sum up, the aforementioned theories consider the multifaceted aspects that paramedics encounter during their training. As the literature mentioned above suggests, paramedic work is intense, fast-paced, and demanding, involving high levels of workload, limited control or autonomy and low levels of resources. As suggested by JDCS and Job Demands-Resources Model, these factors can negatively impact mental health and general well-being. Therefore, peer and social support has been highlighted within literature as an important way in which paramedics cope with the stressors of the role, lessening the impact of such stressors on their MH and wellbeing, as suggested in JDCS (Karasek & Theorell, 1990) and Social Support theory (Cohen and Wills, 1985). However, Role Identity Theory

(McCall & Simmons, 1978) recognises a key obstacle to seeking help (i.e. via social support) within paramedicine by examining the expectations and beliefs that paramedics hold about their behaviour within their role as a paramedic (i.e., appearing stoic and strong), thus disrupting the primary coping mechanism for paramedics (social support). The connections between the four outlined theories can be further explained in the diagram below.

Figure 1.

Interactions between four theories outlined in chapter two.



Note: Figure 1 shows the interaction between the theories outlined in chapter two; JDCS (Karasek & Theorell, 1990), Job Demand-Resources Model (Bakker & Demerouti, 2007), Social Support Theory (Cohen & Wills, 1985) and Role Identity Theory (McCall & Simmons, 1978). This diagram demonstrates how Role Identity Theory could be suggested to be a key obstacle in how paramedics cope with the demands of their role.

2.3 Summarising the limitations of the current literature

It is important to highlight the various limitations within the above-mentioned paramedic MH literature. One notable limitation is that, as a population, paramedic trainees and students were found to be underrepresented in the literature, as so few studies specifically addressed this cohort (Lowery & Stokes, 2005; Porter, 2008; Sheen et al., 2012; Fjeldheim et al., 2014; Anderson et al., 2017; Holmes et al., 2017; Pinks et al., 2021). Despite the underrepresentation of this population, the studies, in particular, all highlight the MH challenges that paramedic students face when training. Holmes et al. (2017) reported that if

inclusion of MH and well-being was a formal accreditation requirement for paramedic training courses, additional resources may be allocated by education providers. This suggests a motivation for change within accreditation requirements or training policies. Holmes et al. (2017) were the first to research this topic among undergraduate students and course coordinators, receiving a 100% response rate from participants, which Holmes et al. (2017) indicated showed the importance of this topic within paramedicine. However, it could also suggest that paramedic students want to see changes made to the MH provisions within their training. Therefore, emphasising the value of giving this population a voice.

Many of these studies also place focus on an international sample, particularly Australian paramedics (Lowery & Stokes, 2005; Shakespeare-Finch et al., 2015; Holmes et al., 2017; Shakespeare-Finch & Daley, 2017; Smith et al., 2019; Pinks et al., 2021). Although these studies provide imperative findings, it could be suggested that findings may differ between international paramedic populations due to differences in protocols, training programmes, or cultural variations. Research has highlighted a 'major discrepancy' in relation to the duration of clinical placements between UK and Australian ambulance service training (Devenish et al., 2015). Eaton et al. (2018) also highlighted a key difference between UK paramedics and paramedics from other parts of the world. Reporting that 'UK paramedics have a level of autonomy as allied health professionals due to the requirement for paramedics to now register with HCPC'. This highlights a further gap within the literature, with a focus on the UK population of paramedics.

Finally, there are few studies that provide recent research and evidence. Although much of the research from the past 20 years has provided critical discoveries regarding MH and well-being within paramedicine and training, it has been highlighted that the role of a paramedic has evolved rapidly (Eaton et al., 2018), as paramedics are now expected to

manage a broad range of conditions outside of the hospital environment and now provide far more than just emergency care (Eaton et al., 2018). Moreover, it could be argued that MH attitudes have modernised in the last 20 years, as suggested by Lien et al. (2019). This suggests that some of the current literature could be presenting outdated views.

The literature showed varied responses regarding peer support, some suggesting the provision to be valuable and others suggesting it to be 'dysfunctional' (Lowery & Stokes, 2005). There appeared to be notable issues highlighted, as few individuals were utilising the peer support services (Sheen et al., 2012), as well as difficulties with accessing the peer support (Pinks et al., 2012). This could suggest that accessibility or attitudes towards the support need to be adapted, as it was highlighted by Sheen et al. (2012) that 'no intervention will be effective if it is not accessed'. It could be proposed that a compulsory approach to psychological support may reduce these limitations as well as diminish the need for trainees to ask for support.

An extremely limited number of studies presented a qualitative design (Jonsson & Segesten, 2004; Smith et al., 2019). It could be argued that qualitative designs present ethical and practical challenges for the researcher, such as recruitment of participants, confidentiality, and protection of participants, as suggested by van Wijk and Harrison (2013). However, qualitative studies for this population would allow for a deeper, authentic understanding of their experiences, which allows for a different perspective than the current literature.

2.4 Rationale for the Current Research & Research Questions

The body of literature explicitly examining the experiences of paramedic students within the UK population reveals visible gaps. The predominant research within the field of paramedics or paramedic students leans heavily towards quantitative methodologies and primarily derives from Australian demographics. The prior literature offers crucial insights into the MH and wellbeing of inexperienced paramedics and paramedic students. Since much of the work focuses on psychological support for qualified paramedics, such as peer support programmes, the literature also seems to lack investigation into the present psychological support provisions offered inside the training curriculum.

1. What are paramedic students' experiences of changes to or influences on their MH or well-being during their training programme?
2. What are paramedic students' experiences of psychological support that is available within their training programme?

Chapter 3

Methodology

3.1 Introduction

In order to answer the research questions and meet the aims of this study, a qualitative approach was selected. Within this chapter, the choice of the research paradigm, ontological, and epistemological stance will be explored, as well as providing a reflexive rationale for these choices. This chapter's second section will provide an overview of the research design, procedures, and ethical considerations for this study that focuses on paramedic students' experiences of psychological support during their training programmes.

3.2 Ontology and Epistemology

By taking an ontological and epistemological stance, researchers can be clear about their objectives and attempt to respond to the questions of 'how and what can we know?' (Willig, 2008). Qualitative research tends to be concerned with meaning and how people make sense of the world and experience events (Willig, 2008). Within qualitative research, different methodologies are often guided by different epistemological and ontological positions to provide researchers with a lens to interpret and make sense of the data.

Ontology is described as the 'study of being' (Fryer, 2020), in other words, what there is to know (Willig, 2019) and what constitutes 'reality' (Ponterotto, 2005). Realism and relativism ontological stances are positioned at opposite extremes, and critical realism is situated in the middle (Braun & Clarke, 2013). A realist ontological position understands there to be a single, identifiable, objective reality that can be studied and measured (Guba & Lincoln, 1994). Relativism, which assumes various, constructed realities linked to the context

in which they occur, is at the other extreme (Ponterotto, 2005). Sitting more in the middle of both stances is critical realism, which assumes that true reality exists, but the extent to which this can be measured and understood is always limited (Ponterotto, 2005).

Epistemology is concerned with the theory and study of knowledge (Willig, 2013; Fryer, 2020). Ponterotto (2005) suggested that epistemology involves consideration of the researcher-participant relationship in the process of knowledge creation, suggesting the relationship between the "knower" i.e., research participant and the "would-be-knower" i.e., researcher. It has been proposed that there are three main epistemological stances: objectivism, subjectivism, and constructivism. Objectivism assumes that there is an objective truth (Crotty, 1998) and that the researcher, participant, and phenomenon being studied are independent, and through following rigid procedures, the researcher can study phenomena without bias (Ponterotto, 2005). Subjectivism rejects the notion of an objective truth and acknowledges that meaning lies within the participant and is not constructed between the researcher and participant (Braun & Clarke, 2013). Finally, a constructivist epistemological position suggests that reality is co-constructed between interactions with the participant and researcher and abandons the idea of an objective truth (Ponterotto, 2005).

As a broad approach, Thematic Analysis (TA) is known for epistemological and ontological flexibility. Braun and Clarke (2006) previously suggested that TA can be a realist method that focuses on reporting the experiences, meaning, and reality of participants, a constructionist method that looks at the ways in which realities or experiences are the effects of discourses within society, or it can be a contextualist method that acknowledges the ways individuals make meaning of their experiences and the limits of 'reality'. Despite the epistemological and ontological position chosen by the researcher based on the research question, it is advised that the theoretical position within TA be made clear and transparent

(Braun & Clarke, 2006; 2019). Therefore, the current study adopts a critical realist stance, as it recognises that there is a reality but acknowledges that observations and experiences are subjective in the development of knowledge (Madill et al., 2000; Fryer, 2020). It assumes that the world as we understand it is constructed from our own perspectives and experiences.

3.3 Understanding the Concept of Critical Realism

The chosen philosophical position for this present research is critical realism. Critical realism is a stance that sits between the typically more extreme stances of positivism and constructivism, as it uses components of both approaches to give a comprehensive account of ontology and epistemology (Lawani, 2020; Gorski, 2013; Fleetwood et al., 2002). Critical realism was developed by Bhaskar (1998; 2013) as a critique to positivism and constructivist philosophies. Bhaskar (1998; 2013) suggested that 'reality is not exclusively about what is empirically known, and the nature of the world cannot be reduced to our knowledge of reality'; therefore, it cannot be feasible to make interpretations through scientific experiments, measures, or experimental observations alone, as originally suggested by a positivist stance (Lawani, 2020). Furthermore, in response to constructivists, Bhaskar (1998) argued that reality exists independent of our conception and knowledge of it, but this is not accessible to direct observation. This position acknowledges that there is a reality, but this sits 'behind' the subjective and socially located knowledge that a researcher can access (Madill et al., 2000). Critical realism combines ontological realism and epistemological relativism, suggesting that a true reality exists; therefore, this philosophical position of critical realism offers a balance between an objective reality and a social world, both of which help shape our understanding of reality.

Ontologically, critical realism understands reality as being stratified (Fletcher, 2017), therefore rejecting the notion of definitive knowledge or reality and instead suggesting multiple realities of the same phenomenon (Maxwell & Mittapalli, 2010). More specifically, critical realism suggests that reality exists within three different layers: the empirical, which is concerned with experiences and observations; the actual; which is concerned with events and regularities that occur; and finally, the real, which is described as causal mechanisms and structures (Lawani, 2020; Bhaskar, 2014).

Terry et al. (2017) suggested that participants words provide some level of access to their version of reality, and research then produces interpretations of this reality. This aligns well with the current study as it provides insights into participants reality while maintaining an understanding that this is then interpreted by the researcher through the RTA process. Furthermore, from a critical realist perspective, the main objective of research is to acquire knowledge about underlying causal mechanisms to achieve an explanation of how things work within broader social contexts. However, access to reality is mediated by socio-cultural meanings, suggesting that direct access to reality is never possible (Terry et al., 2017).

In conclusion, a critical realist stance assumes that a true reality exists, but our ability to study it is always limited (Ponterotto, 2005). The position rejects the notion of objective or definitive knowledge and suggests the idea of multiple realities (Maxwell & Mittapalli, 2010; Lawani, 2020).

3.4 Rationale for adopting a critical realist stance

A critical realist position was chosen for the present research, as I, the researcher, believed it sat appropriately as a position to answer the proposed research questions. My

journey with epistemology and ontology positions started during my psychology undergraduate degree, where I chose to carry out a quantitative research project. As I reflect on this early stage in my academic psychology career, I believe my stance sat within more positivist paradigms as I was concerned with understanding reality through scientific, logical, and mathematical methods and believed these methods could reflect an objective reality and truth. Although my undergraduate quantitative research provided some level of understanding, upon reflection, I believe incorporating the elements of individual experiences and subjectivity could have added richness to the data.

As I have progressed in my academic career within psychology, I have begun to naturally approach research with a more critical lens, rather than naively view things as absolutes. Upon reflection, my personal beliefs about the world and reality also align with the suggestion of multiple realities based on individual subjectivity. Therefore, my epistemological and ontological stance has evolved into and changed to a critical realist position, as positivism no longer fits. Based on my own views of the world I feel it is important for us to interpret things together with people and bring in elements of subjectivity in order to make sense of data and reality, and with that only a snapshot of reality can be fully understood. Through the progression of my own research career and experience I now think of researchers as explorers, uncovering findings and allowing the process of research to be messy at times as a way of developing knowledge.

Furthermore, as the overarching aim of this study is to gain insight into student paramedics' experiences during their training programme, more specifically their MH and psychological support experiences during their paramedic training, a critical realist stance will acknowledge and value the subjectivity of participants experiences, observations, and events. As well as taking an interest in the connections, causes, and meanings of participant

accounts. Subjectivity is positively valued in all qualitative research, as research is understood as a subjective process and researchers bring their own histories, experiences, values, assumptions, and perspectives into the research, and this cannot be ignored. The same can be applied to participants in research, as they also bring their own experiences, perspectives, and values to the research. As a result, it may be argued that all knowledge created will reflect subjectivity. However, using subjectivity critically in research is essential which can be accomplished through researcher reflexivity (Braun & Clarke, 2013), and Braun and Clarke (2019) have proposed that RTA employs subjectivity as an 'analytic resource'.

Another key part of the current research is to understand paramedic students' experiences of psychological support during their training programme. Therefore, it is important to understand potentially *how* and *why* this support is or is not as effective as it could be, to address potential areas that need to be changed or improved to better support paramedic students' MH and well-being during their training. As a key feature of critical realism is understanding underlying causal mechanisms or processes and going beyond understanding that A causes B and instead seeking to understand underlying mechanisms by which A causes B (Collier, 1994), adopting a critical realist stance allows for the analysis of the data to 'unpick or unravel the surface of reality' (Braun & Clarke, 2006, p. 81) and develop richer, more meaningful data. Moreover, during the interviews, participants responses and words allowed for some access into their version of reality, as suggested by Terry et al. (2017). The research then provides interpretations of this reality with RTA. However, as the critical realist stance suggests, this may only provide insight into a small part of reality, as our ability to study true reality is always limited (Ponterotto, 2005). Regarding the current research, it could be suggested that this is reflected through participants' recollection of their experiences, as it is possible that their responses may contain

inaccuracies based on the amount of time passed since certain events were discussed. Furthermore, as the researcher, there is a possibility that I may not accurately interpret participant responses, making it challenging to access true reality.

Willig (2013) proposes that a critical realism approach acknowledges that the researcher is an active participant in the research process and that the researcher would be unable to develop correct knowledge unless they impose their own experiential interpretations of the facts. This perspective sits well within qualitative research as the researcher is an active part of the research and has their own subjectivity, biases, or assumptions that can be seen to influence the data. Therefore, the data produced for the current research will be considered an account of the participant making sense of their reality, and as suggested by Willig (2013), this will produce a critical realist analysis of the data.

Finally, critical realism was examined as the most appropriate lens to understand and interpret the data for the current research questions and aims, as it allowed for a balanced approach between an objective reality and a subjective, social world influencing the participant and their world to be understood. Recognising that while there is a reality our understanding remains subjective and limited. A critical realist stance allowed me to explore underlying meanings behind participant experiences, going beyond the surface level of observation and allowed to understand the complex interplay between personal experiences, training environment and the broader context of MH support.

3.6 Method

3.6.1 Design

This study employs RTA, drawing on semi-structured interviews, based on a critical realist epistemology. RTA is a unique qualitative approach to analysing data that allows for

interpretation of various aspects of the data (Boyatzis, 1998) and utilises the researcher's subjectivity as a resource (Braun & Clarke, 2013; 2019). Unlike other qualitative approaches, RTA is more flexible in the sense that it does not outline a prescriptive method for data collection, theoretical stances, or epistemological and ontological positions (Braun & Clarke, 2013; 2019). This provides the researcher with the opportunity to make these decisions; however, Braun and Clarke (2013) do assert that epistemological, ontological, and theoretical assumptions must be decided and clarified before the process of analysis.

Before RTA was chosen to be the research method for the present study, other potentially compatible methodologies were considered. IPA was considered a suitable approach due to the nature of the current research exploring and understanding participants' subjective experiences, and IPA's approach emphasising subjective experiences with a phenomenological epistemology (Larkin et al., 2021; Braun & Clarke, 2006). It could have been argued that this approach would have been applicable to address the research questions. However, IPA also aims to uncover or make sense of a given phenomenon, which is not the sole aim of this research; rather, this research aims to identify and analyse patterns within the data set based on all participant experiences, not individual cases. This cross-case approach is an important part of the current research, as it can allow for transferability when potentially identifying areas for change or improvement within their training or educational programmes.

Other qualitative methodologies were discounted, such as grounded theory, as the aim of the current study was not to develop a *grounded theory* from the dataset and analysis, nor was there an intention to sample theoretically (Braun & Clarke, 2021). Instead, the aim was to identify patterns in the data to produce a conceptually informed interpretation of the data that unearths paramedic students' experiences of influences on their MH or well-being during their training programme and experiences of psychological support available during their training programme. Therefore, RTA was the more suitable approach for the current research,

as Braun and Clarke (2006) suggested that RTA is more comprehensive and provides a richer analysis of the data.

Moreover, the four theories outlined in chapter two (Job-Demand-Control-Support model, Job Demands-Resources model, Social Support theory and Role Identity theory) used alongside RTA methodology not only provide a critical lens for viewing the previous literature, but also offers a nuanced understanding of the topic under investigation, providing valuable insights into the lived, complex, experiences of trainee paramedics. By remaining mindful of the four theories and using RTA methodology, this enables a deeper exploration of participant's narratives and experiences, however, as outlined in chapter two, currently there is not a single theory that can accurately capture the complex experiences of paramedic students, therefore a pluralistic approach was taken by using multiple theories.

3.6.2 Participants

Twelve participants were recruited to take part in the present study. Participants were recruited initially through purposive sampling, as suggested by Hanley et al. (2015). This method of sampling allows the researcher to purposefully choose participants who have experienced the concept under investigation. Paramedic undergraduate university courses in England were contacted to ask permission to advertise the study to their students. Following this, the research was also advertised on paramedic social media groups (Appendix B). Subsequently, snowball sampling was also used as an additional recruitment strategy, where paramedic students passed the research advertisement onto colleagues. This additional recruitment strategy sped up the participant recruitment process.

Inclusion and exclusion criteria were established to ensure the suitability of participants. Due to a lack of research focusing on UK training courses and the decision to

not use an interpreter during interviews, as this raised potential challenges highlighted by Plumridge et al. (2012), participants were only included if they were currently in their final year of a paramedic training course in the UK and English-speaking. As the time of recruitment fell between academic years (July-September), students who had recently completed their final year and those who were about to begin their final year were considered to meet the inclusion criteria as a 'final stage trainee'.

Participants who demonstrated their interest in the study were asked the following questions via email or phone call to verify that they met the inclusion criteria to take part in the study:

- Are you currently a student on a university paramedic training course?
- At what stage are you in your paramedic training course?

If participants did not meet the inclusion criteria, it was explained to them that unfortunately they would not be able to take part in the research, and they were thanked for their time and interest in the study. Interview arrangements were then made for those participants who were eligible to take part in the study.

Table 1

Summary of participant's demographic profile

Pseudonym	Gender	Age	Ethnicity	Employment Status
Amy	Female	22-25	White Scottish	Full Time Student
Emma	Female	22-25	White British	Employed Part-Time
Jessica	Female	22-25	White British	Employed Part-Time
Charlotte	Female	41-50	White British	Employed Part-Time
Olivia	Female	22-25	White British	Employed Part-Time
Hannah	Female	22-25	White Scottish	Full Time Student

Niall	Male	18-21	White British	Employed Part-Time
David	Male	22-25	White British	Full Time Student
Gary	Male	31-40	White British	Employed Part-Time
Richard	Male	26-30	White British	Employed Full-Time
Sophie	Female	22-25	White British	Employed Full-Time
Spencer	Male	22-25	White British	Full Time Student

Note. This table outlines participants demographics taken from their responses to the questionnaire prior to the interview. Pseudonyms have been used to protect anonymity but to also preserve the humanised experience. These demographics have been included to provide a better understanding of participants and they determine how close the sample replicates the population, for transferability of findings.

3.6.3 Materials

A password-protected audio recorder was used to record interviews, which were conducted via the secure video-calling service Zoom, to provide more practical flexibility to both participants and the researcher. Transcription was conducted manually using Microsoft Word, and all data was stored on a password-protected laptop and computer with access only available to the researcher.

3.6.4 Procedure

Once ethical approval had been granted by the University of Roehampton ethics board (see Appendix C), the recruitment process for participants began. Consent was obtained from relevant university courses, and course leaders were then provided with an advertisement about the research to pass onto paramedic students on their course.

After potential participants were identified, they were briefly screened to ensure they met the inclusion criteria for the research. All eligible participants were then provided electronically with an information sheet (Appendix D), consent form (Appendix E), data privacy notice (Appendix F), and sociodemographic questionnaire (Appendix G) to complete. Arrangements were then made for the interviews.

Interviews took place online via the video call platform Zoom. Zoom was chosen as the most appropriate platform to conduct interviews regarding sensitive and personal information. Zoom is encrypted, and therefore data shared when using the service is more secure than other platforms such as Skype. Regarding confidentiality, Zoom does 'not sell your personal data'. Zoom also states, 'Zoom does not monitor your meetings or their contents' (Zoom, 2019). Interviews were recorded using an encrypted audio recorder. Only the participant and researcher were present during the interview.

Semi-structured interviews were then conducted, lasting approximately one hour. Semi-structured interviews were decided as they provide the researcher with freedom and flexibility to ask the prepared questions in any order without the need to use exact wording. The order and wording of the questions are based on the participants emerging accounts, as suggested by Braun and Clarke (2013). An interview guide was developed (see Appendix H) using open-ended questions to guide participants towards answering the research questions while still allowing participants' experiences to emerge and providing space to generate new and interesting insights (Willig, 2013). To build rapport with the participants during the interviews, I utilised my person-centred core counselling skills, i.e., providing reflections on participant responses and follow-up questions, to gain clarity and understanding about the participant's account. Simple follow-up questions or prompts were used, such as "can you

say more?" or "can you provide any examples?" to gain further understanding about the participants' experiences.

After the interview, a full verbal debrief took place, and participants were provided with a written debriefing sheet (Appendix I), outlining details on withdrawal from the study, contact details of the researcher and supervisory team, and signposting them to relevant MH support services such as the Samaritans if they felt affected by any of the topics covered during the interview or if issues had not been resolved during the debriefing stage.

3.7 Data Analysis

The analysis of the data followed Braun and Clarke's (2006; 2019) six-phase approach to RTA, which is outlined below. It is important to note that the six-phase process is rather a set of guidelines as opposed to rules; therefore, they should be applied in a flexible manner (Braun & Clarke, 2013; 2021).

Phase one: Familiarisation with the data

The first stage of analysis was familiarisation with the data. This involved listening to the interviews multiple times to ensure both familiarity and accuracy. When the transcription of all interviews was complete, the transcripts were read multiple times and notes were taken of initial observations, interests, and trends (see Appendix J for interview transcript example and Appendix K for initial analysis notes). The transcripts were then proofread to check for accuracy against the audio recordings of the interviews.

Phase two: generating codes

After familiarisation with the data had been achieved, the generation of initial codes began. Coding is the process of identifying aspects of the data that appear to be interesting to the researcher regarding the research question. For this analysis, the data was coded five lines at a time, as it was important for the codes to be concise. See Appendix L for illustrative examples of the initial coding.

Phase three: Generating [initial] themes

A theme is defined as capturing "something important about the data in relation to the research question and representing some level of patterned response or meaning within the data set" (Braun & Clarke, 2006, p. 82). Therefore, once initial codes were generated within the dataset, larger patterns (themes) were then searched for. Braun and Clarke (2013) suggest this stage be an active process of analysis, by choosing codes that help create and sculpt themes across the data set to answer the research questions. To establish patterns across the data set, initial codes were clustered together to begin to form the themes (see Appendix M). During this stage, it was important to reflect on whether these codes and themes were meaningful in answering the research questions.

Phase four: Reviewing themes

This stage is two-fold, aiming to develop a coherent thematic map that tells an overall story of the data by providing a map of provisional themes and subthemes and the relationships between them.

The first step involved reviewing the coded data and themes and ensuring that they answered the research questions. The next step of this two-phased approach involved reviewing the uncoded data and verifying that the chosen themes captured the overall

meaning of the data in relation to the research questions. During this stage, the themes were refined, reworked, and some discarded.

In TA, two types of themes are generated: semantic and latent. Braun and Clarke (2006; 2013) suggest that semantic themes closely tell the story of the data, whereas latent themes are more interpretive. For the current research, both semantic and latent themes were produced, as Braun and Clarke (2006; 2013) suggest that TA can use both types of themes, often beginning with semantic and concluding with latent themes.

Phase five: Defining and naming themes

Following the identification of themes for the data, the next stage involved deep analytical and interpretative work to understand and interpret patterns identified in the data (Braun & Clarke, 2013). The first step was to define the themes. This involved reflecting on each theme and identifying what was unique and different about each one to ensure clarity about all themes. It was important to ensure that each theme had its own purpose and focus, and together, the themes created a rich and meaningful picture that addressed the research questions. Finally, defining names for each theme involved carefully choosing a label that clearly identified what the theme embodies. It is important to note that after reflection, some themes were renamed to better reflect the content of the theme. See Appendix N for initial thematic map development.

Phase six: Producing the report

The final stage of analysis was to write up the data and carefully choose extracts from the participants' interviews that clearly captured each theme. Braun and Clarke (2012) state

that the purpose of the report is to provide a "compelling story about the data based on the analysis" (p. 69). This process allowed for a deeper understanding of the data as each theme was individually unpacked and evaluated in greater detail. My supervisors provided guiding feedback for refinement at this stage.

3.8 Quality control

It has been suggested that as qualitative research explores how people make meaning (Braun & Clarke, 2013), this can lead to no fixed criteria to determine appropriate analysis or 'truth' as suggested by Yardley (2000). Therefore, for the purpose of this research, Yardley's (2000) four-step quality control characteristics were followed to ensure quality control and avoid unfavourable outcomes.

Sensitivity to context

Yardley (2000) suggested that researchers should have a sound understanding of the theory concerning the topic being investigated as well as a sound knowledge of previous research in the field, including similar studies and methods. It was also suggested that researchers should be aware of the socio-cultural context that influences the topic of investigation and understand the social context between the researcher and participants. For the current study, the literature review explored previous, current, and similar studies and located the current study in the context of previous research and a broader social context. Furthermore, a reflexive stance throughout the research process allowed for recognising and addressing the social context between the researcher and participants.

Commitment and rigour

Yardley (2000) describes this as an in-depth engagement with the topic as well as methodological competence and skill to produce thorough data collection and in-depth analysis. My engagement with the topic stemmed from personal experiences and reflections; these experiences allowed me to deeply engage with the topic and data, which were then further enhanced through my immersion in the data through transcription, coding, and generating themes. In RTA, rigour may be further enriched through reflexivity, assisting both the reader and researcher to better understand the researcher's influence on the project (Braun & Clarke, 2018).

Transparency and coherence

Described as clarity and power of description and argument, transparent methods, and data presentation, and 'fit' between theory and method, as well as the importance of the researcher's reflexivity (Yardley, 2000). Braun and Clarke (2006, 2018) highlight the importance of researchers being open and transparent about the theoretical, ontological, and epistemological framework adopted from the outset (see above for a detailed discussion on the chosen position for the current research). Furthermore, reflexivity is a central part of the research process and is ongoing throughout.

Impact and importance

In the final stage of quality control, Yardley (2000) highlights the importance of findings having 'theoretical, socio-cultural, and practical (for communities, policymakers and/or health workers) impact'. As previously discussed, it is hoped that this study will influence current training programmes and policies for emergency medicine to improve psychological support for trainees, which in turn will provide a better quality of working life

to the paramedic profession, which could also benefit the wider community and all users of emergency medical services.

Additionally, Braun and Clarke's (2006) 15-point checklist (see Appendix O) for good thematic analysis was used to assess validity and reliability of the research.

3.9 Ethical Considerations

The research for this project was submitted for ethics consideration under the reference PSYC 22/427 in the School of Psychology and was approved under the procedures of Roehampton's Research Integrity and Ethics Committee on 28.07.2022 (See Appendix C).

The present study was compliant with the BPS (2021) code of ethics and followed ethical practice throughout to ensure all potential ethical issues were accounted for to protect participants from any risk or harm during the research process. Procedures were put in place to mitigate potential distress for participants due to potentially uncovering difficult or traumatic experiences during interviews. For example, participants were forewarned about the potentially sensitive or distressing nature of topics that could be discussed during interviews to allow them to make an informed decision regarding their participation. Participants were also informed of their right to withdraw from the research at any time, as well as their data, up until the analysis stage. Participants were also informed that they could take breaks during the interview if they were feeling overwhelmed or distressed, as well as given the option to stop the interview. If a participant did decide to withdraw their consent during the interview, the interview would have stopped immediately.

The relevant ethical issues accounted for in the present research are informed consent, the right to withdraw, confidentiality, the risk of harm to participants, debriefing, anonymity, and health and safety.

3.9.1 Informed Consent

Informed consent was obtained by both recruitment organisations (universities and Facebook groups) and all participants. Participants who met the inclusion criteria were given an electronic copy of the information sheet (Appendix D). The information sheet provided participants with full details about the research as well as contact details for the researcher. Participants were given the opportunity to raise any questions or concerns prior to providing informed consent. Participants were informed that participation in the research was voluntary, and they had the right to withdraw from the research at any time up until the stage of analysis (they were provided with a rough timeline highlighting when this stage would be). Once participants agreed to take part, written consent was obtained through the consent form, detailing that participants had read and understood the information sheet and based on this, were willing to take part in the research (see Appendix E).

3.9.2 Right to Withdraw

All participants were informed that they had the right to withdraw from the study at any point after the interview, up until the point of analysis. Following the BPS code of ethics guidelines (BPS, 2021), participants were informed that they had the right to request their data be destroyed and not used in the study final report or any subsequent publications up

until the stage of analysis. If participants requested to withdraw their data following analysis, then their data may not have been erased but would only be used in a de-identified form as part of an aggregated dataset. If a participant decided to withdraw their consent during the interview, the interview would have stopped immediately.

3.9.3 Confidentiality

Following the Data Protection Act (1998), all participant information was kept confidential. If there was a safeguarding concern or serious risk of harm to themselves or others, then confidentiality would need to be broken. This was outlined to participants at the stage of providing informed consent. All data was pseudonymized to ensure the anonymity of participants.

3.9.4 Risk of harm to participants

'Risk' is defined as potential physical or psychological harm, discomfort, or stress to human participants that a research project might generate (BPS, 2021). The main risk of harm identified for this research project was that participants could become distressed when discussing their experiences of changes in their MH during their training programme. It was identified that the interview could bring up difficult emotions or potentially traumatic memories of events for participants. This distress was mitigated through signposting participants to further MH support services (e.g., Samaritans), fully debriefing participants, providing them with the right to withdraw, and ensuring data protection and confidentiality. I also drew upon my training in counselling psychology, where I felt equipped and experienced to manage and respond to distress; therefore, I felt confident to carry out the interviews sensitively and ethically.

3.9.5 Debrief

Participants were provided with a written debrief (see Appendix I) which was discussed with participants after the interview. Participants were also given the opportunity and space to discuss any unsettling feelings that may have developed during the interview process or gain clarity on any further questions. Participants were also provided with relevant contact details for external services such as the Samaritans or university MH services for further support.

Reflexivity

Methodological Reflexivity

A significant factor in my choice of TA was a brief previous experience using it as an analytical method; therefore, my foundational understanding of the process was present, but also for its proclaimed 'flexibility' and 'less complex' procedure (Braun & Clarke, 2021). However, upon investigating whether TA would be suitable for my research, it was important for me to be clear on the objectives of my study. After completing an initial literature review, it became clear that I wanted to identify themes across the data rather than within individual cases. This decision was based on the gaps identified within the literature therefore, it felt important to present results with a birds-eye-view approach, leading to actionable outcomes and clear implications for practice and policy. This process felt like I had to work backwards, starting from the end goal of my research, to narrow down how I would go about achieving it.

Upon conducting this research, Braun and Clarke (2019) re-developed their initial writing on TA (Braun & Clarke, 2006), developing RTA, which takes the position of assuming that researcher subjectivity is inevitable and valuable for research as an analytic resource. With this, I acknowledge that, as the researcher, I would unavoidably influence the research through my own subjective assumptions and/or beliefs about paramedics, trainees, or the wider context of paramedicine. To ensure this subjectivity was valuable rather than detrimental, continuous reflexivity was carried out throughout the research process, particularly during the recruitment process and analysis procedure, to ensure any preconceived ideas about this area of investigation did not contaminate the data but were used as an 'analytic' resource, as suggested by Braun and Clarke (2019). Reflexivity was crucial since I, the researcher, had to balance my position as both an insider and an outsider while not working in the paramedic field and but still experiencing a clinical placement working with service users through difficult times in their lives as a fellow trainee. Themes and codes were examined with my supervisors during the analysis stage to make sure they matched the dataset well and were not the consequence of my assumptions.

Chapter 4

Results

4.1 Introduction

The aim of this study is twofold: to obtain insight into how student paramedics' training impacts their MH and well-being, using an RTA approach to understand their experiences, and, to understand student paramedics experiences of psychological support available on their training programmes. The findings were organised into four main themes, which are described in table 1 and figure 2. Reflexive boxes were included to separate the researcher's voice from the participants' voices. The first theme, luck of the draw, captured the lack of standardisation on UK paramedic courses and the varied responses regarding the availability of psychological support for participants at their university or during their ambulance service placement. Theme one showed the ambivalence trainees experience during their training, highlighting the domino-effect disparities can have. Theme two: secondary stressors examines the challenges that student's face in dealing with the demands of the paramedic training course. Within this theme, participants discussed the common difficulties experienced during the course, such as juggling academic work, feeling isolated with their MH experience, and concerns about coping long-term, thus leading to the expected burnout and early retirement within paramedicine. Moreover, theme three, ways of coping, focuses on how participants deal with the challenges of the training. It became apparent that peer support was an important way in which participants coped with the stressors, however this study offers an alternative view on this suggesting it could be bonding over shared trauma. Furthermore, theme three highlights the physical and psychological self-care

practices adopted by participants such as hobbies, exercise, sleep and cognitive coping techniques such as grounding and reflection.

Finally, theme four, voicing the needs of paramedic students, conceptualises proposed adjustments for psychological support on paramedic training, outlined by participants based on their own experiences and transparency shared within the interviews. Participant extracts have been included to further explain each theme and emphasise the participants' voices.

Table 1.

Summary of themes and subthemes

Main Theme	Subthemes and sub-sub themes	Quotes
1. Luck of the draw	Variations in mentor and lecturer quality *Generational differences* Insufficient MH training *Psychoeducation*	"I had a really good mentor, and I was lucky, but other people weren't so lucky with mentors" (Emma, p3, line 91-92). "I feel like I would much rather have extra modules on MH training, that would be really appreciated" (Amy, p48, line 1402).
2. Secondary Stressors	<u>I'm not struggling because I've just seen my 4th dead body of the week</u> I thought it was just me Expected burnout and early retirement *Long-term MH impact* *Unsupportive culture*	"I'm not struggling because I've just seen my 4th dead body of the week or I've gone to my second paediatric cardiac arrest this month, its everything as a whole" (Spencer, p63, line 1823) "that was a group of eight of us at the time and yeah seven out of the eight were on some kind of medication" (Sophie, p18, line 521-522) "I'll probably move onto something different, and you know, I'm already thinking about that before I've even graduated" (Olivia, p38, line 1134).
3. Ways of Coping	Bonding over shared trauma Physical & psychological self-care	"if it wasn't for my peers in the cohort and stuff like that and the friends I made through the service and through placement, then I definitely wouldn't have survived the

		first year alone" (Sophie, p11, line 329-331). "I know when I'm feeling down when I haven't exercised for a while" (David, p44, line 1312)
4. Voicing the needs of paramedic students	Debriefs Requirement to talk Improving support, access, and frequency	"I'm a lot better now than I used to be, but I do struggle opening up, so I was quite reluctant to go ahead and access those [psychological support]" (Richard, p31, line 898). "maybe just actually taking more than ten minutes to listen, if I had a bit longer with my lecturer then they might have been able to understand" (Jessica, p28, line 803).

Note: Table 1 outlines all four main themes: luck of the draw, secondary stressors, ways of coping, and voicing the needs of paramedic students. As well as subthemes and sub-subthemes in italics in the second column. The main quotes for each theme have also been included to provide a general overview of each theme and the qualitative data within them.

4.2 Theme One: Luck of the Draw

Rather than being something that can be controlled, the participant experiences and training outcomes are best described as being by chance. As theme one was being developed, it became clear that paramedic training programmes in the UK varied widely and had shortcomings. Additionally, these programmes did not seem to be standardised, leaving crucial training elements like mental health education, psychological support, and supportive mentors down to 'luck' or 'chance'. Participant narratives suggested variations in support, training components, and MH attitudes on training programmes, which were identified as sub-themes and are discussed in further detail below. Additionally, some participants were knowledgeable about psychological support available to them on their programme and described support as 'well signposted'. Many participants, however, were unaware of the types of psychological help that were available to them or the locations of these resources. "I wouldn't say there really has been anything offered to us" (Olivia, p. 38, line 1151), "it's a good question, I don't really know, I mean if there are they're not really well signposted" (David, p. 9, line 255).

4.2.1 Variations in mentor and lecturer quality

Participants reported mixed experiences of psychological support from mentors or lecturers. Many participants used the term 'luck' to describe the inconsistency, thus suggesting they were 'lucky' if they received an emotionally supportive mentor. Some participants separated their mentor's qualities as a paramedic and their emotional qualities as a teacher, describing them as a "good paramedic, just not a suitable teacher" (Emma, p. 10, line 300-301). Olivia highlighted the disparities between mentors supporting students academically and emotionally as she described "it really depends on the person" (p. 33, line 980). This led to question whether mentors receive training on how to mentor and support students. It would also be fair to suggest that mentors will have different teaching styles, and these will appeal to different students; therefore, it would be difficult to find a 'perfect'

mentor. However, another participant shared her positive mentor experience highlighting the valuable qualities of their teaching approach.

"I had a really good mentor, I was lucky, but other people weren't so lucky with mentors, he was really patient and understanding and even if I got it wrong, he was very supportive, so I was really, really lucky to have a good mentor in second year". (Emma, p. 4, line 100)

Emma emphasised that she was 'lucky' to receive a 'good', 'supportive' mentor during her second year. This could suggest that Emma felt advantaged over other as her mentor's teaching style complimented her learning style well, suggesting she had a more pleasant experience on placement compared to other students. One participant went as far as saying they felt some mentors lacked 'emotional intelligence' and suggested they had received a very dismissive approach from mentors.

"[…] they don't even bat an eyelid, they're getting in the ambulance, carry on driving, with the radio on, they haven't got the emotional intelligence to think oh I better check how my student is, because it might be the first time they've seen a dead body." (Niall, p. 46-47, line 1366-1375)

Another participant echoed this as they shared, "they want to hear about the job and not how you actually feel" (Olivia, p. 32, line 974). These quotes from Niall and Olivia suggested they had a negative experience with some mentors during training. It could also be suggested that a dismissive approach, impacted how student's felt about sharing feelings or concerns during placement. Niall referenced 'emotional intelligence' which refers to the ability to manage both your own emotions and understanding emotions of people around you

(Goleman, 2020). Niall's quote also highlighted that emotional intelligence training could be offered to paramedic mentors to equip them in the skills to appropriately support students.

Generational Differences

Many participants also highlighted the difference in teaching styles and approaches based on the demographics of mentors. It became evident that participants had noticed outdated MH attitudes from some mentors.

"[…] big stigma in paramedics and its more the paramedics that have been around for a longer time…If a paramedic saw something and they've been in the service for 15 years, it will affect them differently to an 18-year-old fresh out of college in first year and they haven't seen anything like that before" (Emma, p. 14, line 422-424).

Another participant echoed this as they shared "old school people that just say get on with it, this is part of the job" (Olivia, p. 16, line 483). These quotes suggest that the longer a paramedic's duration within the service, the more their previous experiences influence their emotional responses. Conversely, inexperienced paramedics might be exposed to a traumatic event for the first time, therefore have limited previous experiences to impact their thoughts or processes. Thus, it suggests that the longer paramedics have been in the service, the more 'hardened' they are to emotionally impactful jobs.

In some participants' accounts, it was noted that more experienced paramedics or mentors who hold military experience appear to hold different attitudes towards MH. One participant shared, "you've got the war generations that any low was smacked out of you" (Spencer, p. 57, line 1665). Another participant described "male, middle-aged, army men, so

they do combat technician and stuff like that, then they come back and be a paramedic and obviously MH within the army is no, no" (Emma, p. 17, line 542-545). The participant also described, "but they're from that older generation and they're male and that influences MH as well because men are taught not to cry, just push their feelings aside" (Emma, p. 17, line 537-539). This could suggest that students find it difficult to relate to some mentors because of the generational differences and attitudes; therefore, struggle to express their emotions in fear that they could receive a negative or misunderstood response.

Furthermore, it appeared that students and some mentors share differences in understanding of training expectations; this could be due to changes that have been made to paramedic training programmes over the years. One participant said, "just trying to explain to them, we've got to do all this academic writing stuff and they're just like why" (Gary, p.11, line 304). This lack of shared understanding could impact how mentors treat students, particularly if they are unaware of academic stressors students are under.

4.2.2 Insufficient mental health training

Participants narratives also captured the limited MH training they received during their training as participants highlighted that a significant amount of their jobs is related to psychiatric difficulties, "so a lot of our calls are MH or social issues or even just medical that actually has some type of MH along with it" (Emma, p. 15, line 454). Another participant echoed this and shared that MH is a "massive proportion of what the ambulance service deals with" (Sophie, p. 23, line 675). Throughout interviews, participants spoke about the importance of incorporating more in-depth MH training as part of the curriculum, it became clear from participant narratives that missing out on important aspects of training, such as MH training, had a knock-on effect on paramedic students' own MH, as feeling unprepared to

manage MH patients and jobs increased their stress and anxiety during placements. It is important to note that 'MH training' refers to teaching or training paramedic students want to receive to support them in treating MH patients.

"[…] number one, we don't get a lot of MH training ourselves as paramedic students, so first year we didn't get any, second year we didn't get any. I will get my MH training this year and I think one week of MH placement" (Emma, p14, line 440-442).

Participants expressed they didn't feel equipped to properly support MH patients: "I could pretty much guarantee they would snap that cardiac arrest out of your hand over the MH issue because we're not equipped to deal with it" (Richard, p. 59, line 1723). Another participant added, "we never got a single class on MH jobs, so you turn up to a MH job in my first-year placement I was like, no idea what to say, and everything I've learned is from the paramedics I've worked with, not from university" (Amy, p. 36, line 1037). This suggests that not only do paramedic students feel underprepared to deal with MH jobs, but they also feel they are missing important learning opportunities from their course and are having to seek information from elsewhere. However, this could lead to a domino-effect of paramedics potentially modelling poor practice in treating MH patients due to not receiving formal training. Participants shared they want to learn more about MH so they feel confident in supporting MH patients: "I want to learn more, and I want to then be able to learn why that happens and what I can do to help it" (Spencer, p. 42, line 1224). This demonstrates their willingness to learn and feel more confident as newly qualified paramedics.

Some participants also shared how their own MH experience has helped them relate to and support MH patients: "it does give you an advantage on placement with MH patients;

you're able to empathise, so that can really, really help" (Emma, p. 13, line 394-396). However, due to the limited MH training paramedic students receive, participants described how "sharing parts of yourself can also be quite draining" (Emma, p13, line 407). This could suggest that, due to insufficient MH training within their course curriculum, students have no choice but to draw upon their personal experiences as a way of supporting MH patients.

It is also important to note that the MH jobs paramedics will be attending as part of front-line emergency services are likely to be associated with high risks such as self-harm and suicide. One participant shared their experiences of attending MH jobs and described them as "quite shocking…it was more in second year, so it's really eye-opening. Yeah, and it was really just sad as well" (Emma, p.16, line 489-491).

"[…] She was self-harming, she had two trips, walking up to the railway… and then we attended, and she had stuck a pen into her neck which was horrible, so I remember that, but I don't think you could ever forget that […]" (Spencer, p41, line 1170-1183).

As highlighted by the quotes, due to the high-risk nature of the MH jobs paramedic trainees are likely to attend, it is paramount that trainees receive comprehensive training on these subjects therefore, reducing their stress and anxiety about attending MH jobs.

Psychoeducation

Some participants' narratives made it clear that they thought they would benefit from psychology input for managing their own MH issues and recognising when they needed to consult professional support. One participant shared, "there's probably so much psychology that we don't even know because no one tells us about what's normal to feel" (David, p. 48, line 1443-1444). Another participant explained, "we haven't had any input in two years from

any psychology lecturers or anything like that" (Charlotte, p. 35, line 1019). From this, it could be implied that MH difficulties within paramedicine are often normalised; therefore, students struggle to identify when they should seek psychological support versus what a 'normal' response to a difficult situation might be.

Moreover, narratives captured the helpfulness of including lectures on psychological support within the curriculum: "a detailed lecture on what support's out there, on the process, so TRIM[1] if you need this or psychological support this" (Gary, p. 31, line 907). Gary's quote highlighted that this could be an effective way of signposting psychological support to students, thus enhancing accessibility to support services. Participants also shared how it would be helpful to include self-care and coping strategies in lectures: "I'm not saying I'd always manage it all on my own, but I think having a baseline for what you can feel you can cope with" (Charlotte, p. 31, line 888). Here, Charlotte suggests the importance of teaching students' basic coping strategies that could offer comfort during times of stress or anxiety. Furthermore, lectures delivered by allied healthcare professionals such as psychologists or psychotherapists could also add additional, valuable input to the course curriculum as well as reduce negative attitudes and feelings of judgement, as suggested earlier.

Participants openly expressed their lack of awareness or knowledge around recognising MH difficulties within themselves and how this knowledge would guide them to seek psychological support: "I think if I recognised it in myself, yeah, I'd be the first in line to seek help" (Charlotte, p. 40, line 1168). Participants also believed these lectures would improve the MH stigma within paramedicine and encourage individuals to share more; "it's

[1] TRIM is a trauma-focused peer support system designed to help people who have experienced a traumatic or potentially traumatic event.

about understanding that there is nothing to be ashamed of" (Gary, p. 63, line 1850). Gary's use of the word 'ashamed' implies that currently within the profession there still appears to be MH stigma. As Gary highlighted, providing psychoeducation from training could lead to a ripple-effect of a change in attitude about MH within paramedicine.

Reflexivity

The development of theme one became apparent very quickly following all interviews and transcriptions. I was struck by the large disparities among participant experiences depending on their course structure, placement, and university. It began to feel like a 'postcode lottery' of how well supported you would be during your training. For me, it instantly felt disappointing that there appeared to be no standardisation in how paramedic trainees were supported in the UK.

Throughout the interview and analysis process, I found myself experiencing feelings of disappointment and anger for these paramedic students. I felt a sense of duty towards the twelve participants who had given up their time to take part in my research; I felt protective over them, and I found myself wanting to transition into the 'saviour' therapist position to provide empathy and support for what these students had experienced during their training. I was also surprised to hear the minimal amount of MH training trainees receive considering the amount of MH or social jobs they will attend. I questioned why it felt like the paramedic training programme has not been updated to incorporate these important issues and if this lack of update was the reason for outdated MH attitudes held by more senior paramedics. It felt applicable for 'top-up' trainings to be provided to more senior paramedics to ensure their awareness was up to date of societal issues such as MH and the content of the training programmes.

4.3 Theme Two: Secondary Stressors

All participants shared different responses regarding the various demands and additional stressors that adversely affect their experiences during the paramedic training. By definition 'Secondary stressors' refer to events or circumstances that limit recovery and adaption to sustain adversity such as organisational factors, financial arrangements, working conditions and work-life balance (Murray, 2022). It became apparent that many experienced managing 'work, life balance' to be a main difficulty, thus impacting their MH as some experienced stress and anxiety. "I think a lot of people struggle with keeping up with essays and readings as well as being on placement and dealing with that, the place, the practical side of things […]" (Amy, p. 10, line 279). Furthermore, practical implications of the training such as travelling to placement, limited resources within the ambulance service, and financial implications were all labelled by participants as additional stressors of the training, thus leading them to question how they might cope with the demands of the long-term role of a paramedic. As a result, many participants' narratives voiced their expectations of burnout and plans of early retirement from front-line work: "I'll probably move onto something different, and you know, I'm already thinking about that before I've even graduated" (Olivia, p. 38, line 1134).

4.3.1 'I'm not struggling because I've just seen my 4th dead body of the week'

As mentioned above, many participants' narratives captured the main challenges paramedic students face during their training. They were able to explicitly name elements of the training they found to be the most difficult to manage. Many participants shared the notion of managing "work, life balance, like making sure your assignments are done on time, making sure you do this, just general organisational aspects…" (Gary, p. 10, line 282). This

was echoed by other participants as they also described the difficulties of working long shifts and having to manage academic demands. Spencer described it as difficult as trainees are juggling both a “full-time job and full-time uni life” (p. 5, line 147). These quotes suggest that it is common for students to struggle to balance the demands but leads to question whether the levels of expectations are realistic and reasonable, as students are managing academic demands but also demands as emergency healthcare practitioners involving a duty of care for all patients.

Furthermore, participants shared examples of practical challenges such as financial stressors and implications of travelling to placement. As well as the difficulties in maintaining external jobs due to shift patterns. Olivia expressed, “You don’t get paid, so you know you’re travelling to and from, you being there for 14 hours, giving up new jobs and stuff like that and you don’t get paid for that” (p. 16, line 459). Sophie echoed this, “Obviously most of us need to work alongside because no one can afford to live on student finance” (p. 27, line 823). These quotations demonstrate the additional stressors paramedic students must manage alongside their placement and academic demands. As they are sacrificing time and money, this could affect their motivation as they could feel undervalued and exploited.

Another participant shared they don’t believe the stressors students experience are recognised by teaching staff: “I don’t think they quite understand the monetary loss that you make when you’re particularly on placement but just going to university in general” (Hannah, p. 20, line 610). Hannah’s quotation demonstrates the invalidation and neglect students feel from staff, which also suggests the added expectations placed on students by staff without acknowledging the challenges they are already facing.

Moreover, limited resources within the ambulance service were also captured in participants narratives when describing the demands of the training. It was shared amongst participants that limited resources can make the job more stressful but also promote feelings of helplessness for paramedics, resulting in them struggling to cope with the challenges of the role.

"I'm not struggling because I've just seen my 4th dead body of the week or I've gone to my second paediatric cardiac arrest this month, its everything as a whole…we do incredibly well to the best of our skills with what we've got available, the fact that what we've got available to us is falling apart, breaking down, we're unable to fix it" (Spencer, p. 64, line 1823).

Spencer's use of the words "it's everything as a whole" highlights the overwhelming, challenging nature of the training and role paramedics face daily. Spencer's quotation also highlights the uncontrollable reality that paramedics are expected to work with and manage. This quote highlights that it is not necessarily the traumatic content of the work that is the most difficult, but the uncontrollable system and lack of resources that can bring about the most challenges.

4.3.2 *'I thought it was just me'*

Many participants openly shared their experiences of MH decline, depression, burnout, stress, and suicidal thoughts during training. This sub-theme emphasises how some

participants' feelings of isolation in the face of a decline in their MH contributed to their struggles to cope during the training.

Some of the participants admitted they didn't fully comprehend the mental health decline: “all the time I was crying and it’s never like me, I’m bubbly, chatty but I was just so withdrawn that I didn’t recognise it” (Jessica, p. 16, line 471). Participants expressed that their decline in MH was not directly a result of the course but that the course was a factor that impacted the decline in their MH, and they struggled to acknowledge that until they reflected on it much later. This brings back into question the importance of psychoeducation integrated into the course, as highlighted in theme one.

Some participants shared their MH diagnoses received during their training. Spencer shared, “I probably started getting somewhat depression symptoms since then and then I left it till the end of first year, beginning of second year, until I like finally just bit the bullet, went to the GP and got diagnosed, treated for it, medicated for it” (p. 29, line 831-835). Sophie shared that her depression got intense that she also experienced severe suicidal thoughts during her training; she explained, “then it got to a point where I had every single intention of doing it, and then my friend just found out and put a stop to it essentially” (p. 18, line 543-544). Niall shared a slightly different experience with his official diagnosis of OCD, which he described how a conversation with his course director led him to receive 16 sessions of CBT to further support him in managing his OCD during training: “They referred me to a psychiatrist, who then made a further diagnosis of OCD and I had 16 sessions of CBT and that literally just finished, I think about two months ago and it helped unbelievably, so yeah it all came from just a quick conversation…” (Niall, p. 30, line 872). Based on the information participants provided in the interviews, at least five out of the twelve participants had received an official MH diagnosis prior to or during the paramedic training. Some shared that

this MH diagnosis led them to independently receive support for their MH during the course, but this also highlights the importance of having psychological support more readily available to access.

As a result of difficulties with MH during their paramedic training, some participants shared that they self-referred to their GP and were prescribed psychiatric medication for depression or anxiety. Sophie shared, “That was a group of eight of us at the time, and yeah, seven out of the eight were on some kind of medication” (p. 18, lines 521–522). Amy also shared, “Since being on the course, I now take anxiety medication, and that kind of helps you manage, like the more jittery sides of the course” (p. 23, line 665). It could be suggested that, due to the limited psychological support available, students had to independently refer themselves to their GPs to receive help with their MH. However, Sophie expressed a different experience with self-referring to their GP; she shared, “My GP just basically kept throwing various medications at me, going try this, try that, and all the rest of it saying, you’ve got anxiety, or you’re depressed” (p. 14, lines 408–411). Sophie went on to describe how she experienced feeling misunderstood and misdiagnosed by professionals as they didn’t acknowledge her traumatic experiences from her training: “I was like, I’m not; I’m just really sad about this case; I’m not depressed in general overall; it’s just the fallout of attending this” (Sophie, p. 14, line 417). Jessica shared a similar experience with their GP referral; she said, “They did put me on antidepressants and stuff like that, and it’s not the route I wanted to go down” (p. 24, line 685). These quotations demonstrate the gap in psychological support that is available for trainees, thus leading to misdiagnoses and misunderstandings of their experiences.

Participants went on to express the comfort they felt in knowing their MH experiences were shared by other members of their training cohort. They expressed how this helped them

feel less isolated and alone with their MH experience. Sophie shared, “In a weird kind of way, I found it really reassuring that I wasn’t the only person feeling like that” (p. 19, line 564). Sophie also shared, “I remember thinking, oh so it’s not just me; there’s not something just inherently wrong with me; it’s everybody; okay, that makes me feel a bit better” (p. 19, line 569). It could be argued that because of the MH stigma within paramedicine, this leads to trainees questioning their MH experiences. If MH was openly talked about, students might not have felt as isolated with their experience.

Expected Burnout and Early Retirement

Many participants shared their awareness of burnout within paramedicine, “So I think there’s more emphasis placed on that if you have been out there for 5–6 years and you want a break and then got through your uni course and then got three or four, five years down the line, right? Is this really for me?” (Gary, p. 53, line 1573). Another participant shared, “It’s quite upsetting, and I know that a lot of people have kind of left their job because of that and moved on to different things” (Olivia, p. 37, line 1129).

Not only did participants share their awareness of burnout, but many shared their own intentions to minimise risk of burnout in their impending careers. Many participants had plans to move away from frontline work and use their paramedic qualifications in alternative ways; “I'll probably move on to something different, and you know, I'm already thinking about that before I've even graduated, just because I know that it's getting worse and you're not doing those jobs where you can really, really help people”. (Olivia, p. 37, line 1133). This comment indicates how the risk of burnout is already being considered and addressed by trainees, even though they have not yet graduated or qualified.

One participant even shared they were completing their course but not registering as a paramedic or planning on working as a paramedic "So I'm completing the course, but I'm not going to register as a paramedic. I'm not going to work as a paramedic". They openly disclosed that they were "transitioning to medicine instead" due to their "rollercoaster" experience during their paramedic training (Sophie, p. 4, line 104). This could suggest that some trainees reach burnout before qualifying due to the demands of the training. It implies that paramedics are suddenly thrust into a brand-new setting with little support or preparation; thus, these ongoing demands may demoralise trainees.

Some participants also shared their understanding and appreciation for the ambulance service career variations that are becoming more widely available for paramedics. One participant shared, "There's not that pressure there to be present on the frontline" and "I know the rotational models coming in for paramedics" (Gary, p. 54, line 1601). Through this, they acknowledged the importance of variations in paramedic roles. "They are massively realising that it's a job that you need a break from…You need that rotation, you need not as high-pressure situations" (Gary, p. 54, lines 1597–1599).

Long-term mental health impact

Some participants acknowledged their awareness of the potential long-term MH impact of the training and role of a paramedic: "I'm no stranger to the something that happened 10 years ago couldn't rock up and smack you in the face" (Gary, p. 62, line 1827). Participants also shared strategies for coping with longstanding demands of the paramedic role, "I'm sure about the fact that something may happen in the future where I do need to go and get help, and it's about understanding that there's nothing to be ashamed of" (Gary, p.

63, line 1850). Some participants described that they would continue to use their current coping strategies, such as hobbies, exercise, and support systems, as a way of coping when they qualified. However, other participants shared uncertainty of how they will cope long-term, “I don’t know long-term, but I don’t think anyone can say long-term what the effects will be” (Charlotte, 54, line 1574). This quotation demonstrates the vulnerability trainees feel due to the uncertainty of whether they will manage the challenges of their upcoming career.

Throughout many of participants' narratives, their awareness of suicide rates within paramedicine was illustrated. Participants even willingly shared individual experiences: “My mentor also hung herself during that period as well” (Sophie, p. 6, line 175). It could be suggested that not only is a mentor’s suicide distressing, but could also reinforce to students the ongoing difficulties faced as a paramedic. Other participants shared how it’s not openly spoken about within the ambulance service and is often seen as a “stigmatised” subject that is often “swept under the carpet” (Emma, p. 12, line 364). A different participant shared, “And the colleague ended up unfortunately committing suicide, but they never spoke about it” (Jessica, p. 48, line 1382).

Unsupportive culture

Participants spoke about ways they felt unsupported during training; some participants discussed the ‘unsupportive expectations’ of students, and others expressed concerns about disclosing their MH with a fear of it jeopardising their registration as a paramedic. One participant shared the expectations set out by their lecturers at the start of their course: “If you don’t come to us in tears at least twice a year saying you’re going to quit, we haven’t pushed you hard enough, so that’s kind of like the level of stress that they

know that they're putting on you" (Sophie, p. 8, line 240). Another participant shared that the mentors "want to hear about the job, not actually how you feel" (Olivia, p. 32, line 974). Many participants also spoke about the unrealistic expectations and sacrifices students must make during the course, "They almost expect you to give up your life; like, like they say you work in healthcare you've got to expect this", this participant also shared, "They don't really understand how much some people do sacrifice" (Olivia, p. 15, lines 453–454). Spencer shared an important perception; he expressed, "I think what lacks in the NHS is the MH care for the professionals that provide the support" (p. 32, line 928).

Furthermore, students also shared concerns about reporting or disclosing their MH with mentors due to fears of having their HCPC paramedic registration revoked. One participant shared their understanding: "You don't know what's gonna take away your registration, and so for a lot of people, I feel like that's why they don't seek further help." (Olivia, p. 24, lines 722-723).

Some participants also shared the noticeable difference in the treatment of students compared to staff within their placements: "We seem to be treated differently as students compared to what the expectations would be for scheduled staff", They went on to describe "it almost feels like the expectations on us as students are not the same as qualified paramedics, that they're tougher" (Charlotte, p. 49, lines 1426–1427). Another participant shared a more general observation: "I think the ambulance service really lacks caring for their own staff; then having students as a bit of outsiders is another thing, so there's always a bit of a difference between students and staff" (Spencer, p. 54, line 1566).

Reflexivity

Throughout the interviews, transcript analysis, and development of theme two, I was astounded by the high level of demands placed on trainees. Prior to the interviews, I realised that I had been more focused on the details of the practical job and the difficulties it would pose than on the academic requirements and how they would affect trainees. Following the interviews, I reflected on the shared demands that paramedic trainees and I face on a professional course and could empathise with the challenges of balancing placement and academic work.

From a counselling psychologist perspective, I reflected on the importance of nurturing paramedics from training into retirement as a way of preventing the long-term MH impact and the importance of prevention as opposed to reaction. Finally, this theme felt significant in obtaining insight into the isolating experience trainees have experienced with declines in their mental health. I thought about the idea of conformity with human behaviour and how perhaps students were conforming to be more 'socially accepted' on their course. I was struck by the difference in 'norms' on a paramedic course to a counselling psychology course. During the counselling psychology doctorate, we are encouraged to acknowledge the impact our own experiences can have on our work. It is 'normalised' on my training programme to talk about MH whereas it seems to be 'stigmatised' on a paramedic training.

Finally, I reflected on how deflating it must be to consider how you might handle burnout after five to ten years. I thought about how I see my career developing after completing my training and noticed how it inspires me because I am looking forward to a rewarding long-term career. During the analysis I began thinking about what could be done as ways to improve the expectation of burnout and to limit the negative effects of training on students thus developing theme four: *voicing the needs of paramedic students.*

4.4. Theme Three: Ways of Coping

Theme three captures participants experiences of how they cope and manage the secondary stressors and demands of the training as mentioned in theme two. Throughout the interviews, all participants shared how they individually dealt with the impact of the training through various coping strategies. It became apparent through participant narratives that peer support was an important way of coping for trainees, however a few participants highlighted their concerns with this constant exposure to the stress of the training thus leading to viewing peer support in a different way, that is, as a means of bonding over shared trauma. Furthermore, participants also shared alternative ways in which they cope with the demanding training including through hobbies and cognitive techniques such as grounding exercises thus leading to the development of the subtheme, physical and psychological self-care.

4.4.1 Bonding over shared trauma

Peer support appeared to be the most used coping strategy, as reported in the accounts of the participants. Indeed, nearly all participants mentioned how important they found peer support during their training programme, as they expressed how important it was to have a shared experience with other trainees, which made it easier to open up and discuss topics they may have found difficult, such as MH or the impact of certain jobs they have attended. “It’s one of the things actually they did say during the first lecture; it’s like you are going to be bonded to these people for life, and they clearly meant it” (Sophie, p. 36, line 1105). Sophie also shared how vital these relationships were for her during training; she expressed, “If it wasn’t for my peers in the cohort and stuff like that and the friends I made through the service and through placement, then I definitely wouldn’t have survived the first year alone” (Sophie, p. 11, lines 330-331). This demonstrates the emphasis participants placed on their

relationships with peers. Furthermore, Sophie used the phrase “bonded to these people for life”, which also demonstrates the significance of these relationships. It also brings into question if because of the limitations in psychological support, this encourages students to rely on the trauma-bonded style of relationships developed with their peers as a way of managing the demands.

However, some participants did share some difficulties with peer support, as they said it can make it difficult to ‘switch off’ from the profession. “On the flip side if you are surrounded by it all the time, you can’t just switch off. You’re always talking about the next exam, the next paper, the next assignment, the next shift” (David, p. 29, line 873). David also shared how they were concerned that too much peer support could also become dangerous, stating, “But I think that could be quite dangerous, you know a slippery slope because then you’re just surrounded by it all the time” (David, p28-29, lines 850-852). Here David suggests the risks of these strong relationships, suggesting a trauma type bond could easily form amongst trainees, as they were seemly bonding over shared trauma.

Some participants also shared how COVID-19 impacted their socialisation and bonding with peers within their cohort during their first stage of the training: “Everything else was online, so I didn’t really get to know my peers well, and it’s only really been in the second year that there’s been that kind of peer-to-peer sharing, release, and coping, which I’ve really enjoyed” (Charlotte, p. 43, line 1266). This also demonstrates the significance trainees place on relationships with peers as a way of coping with the stressors of the training.

Participants also shared the importance of a strong support system during their training as a way of coping with the demands of the course. Participants explained, “I think having a really strong, tight network around you is probably the biggest thing” (Sophie, p. 9,

line 263), “so it’s really important to have a good support network, so with family, friends at uni, friends at home, and hobbies” (Emma, p. 5, line 127). Some participants, however, mentioned how it might be challenging when their support network outside of the course doesn't understand them or doesn't want to hear about challenging jobs. One participant shared how they attempt to keep work, family, and friends separate, “Enjoying times with my friends and family is important, but I’ve made this decision, that clinical stuff and my stress is at work is not what I want to share with them” (Charlotte, p. 41, line 1188). They went on to explain how they don’t think it can be a healthy way of coping as it can lead to family and friends worrying about them. “It’s not a healthy outlet for them because then they worry about you. I mean I’m not hiding things from them I’m happy to say look I had a tough shift or something like that, but I don’t think they need to know all the ins and outs of everything” (Charlotte, p. 41, line 1198). This implies that trainees may feel the need to filter themselves around loved ones as a way of protecting them from stressors of the role.

Other participants shared how they do feel comfortable discussing work-related stressors with their support network due to partners or friends being in similar professions; therefore, sharing an understanding. David said, “Luckily my girlfriend is a nurse, so she understands” (p.33, line 989). This could suggest that feeling understood is an important part of the emotional support process, thus proposing the importance of paramedic-specific psychological support. This will be further discussed within theme four.

4.4.2. Physical & Psychological Self-Care

Participants expressed how self-care was a crucial part of how they coped with demands of the training; for example, exercise, sleep, and eating well were highlighted as

priorities for students. Participants shared the importance of exercising, such as going to the gym and being part of sports teams. They shared how exercise helps them to destress after difficult shifts and regulate their mood. “I know when I’m feeling down when I haven’t exercised for a while” (David, p. 44, line 1312), “sport has always been an outlet for me” (Charlotte, p. 31, line 910). However, some participants shared the difficulty of maintaining sports as part of a team during their training due to shift changes and academic commitments. One participant described taking up solo sports such as running and scuba diving as a way of staying active and having an emotional outlet (Charlotte) due to the difficulty of sustaining team sports during the paramedic training. Other participants shared their individual hobbies as a way of coping and releasing emotions.

“So like how I release my emotions at football in a positive manner, is actually me, my body subconsciously getting all those emotions out that I’ve built up negatively from work and life…On a paramedic course, we need those releases a lot more and a lot often.” (Spencer, p. 32, lines 911-923).

The above extract captures the importance of trainees maintaining different hobbies as a way of coping with the demands. The hobbies participants described demonstrated ways they ‘switch off’ mentally from the profession by removing themselves from the situation to reduce negative rumination, thus having a positive impact on their overall MH and well-being.

Some participants shared the importance of maintaining good sleep hygiene and eating well. They explained that due to the physically and emotionally demanding nature of the role of a paramedic, good sleep and diet are crucial for their MH and well-being. “Massively important, eating well, sleeping well, there’s like it’s such simple stuff, but if you

don’t do that, I already feel like my MH tailoring off because you start getting overwhelmed” (David, p. 7, lines 209-210). Another participant shared “not doing too many overtime shifts, getting enough sleep, and really basic things” (Olivia, p. 25, lines 760-761). Charlotte also described the importance of having coping strategies and a “personal plan for managing your MH rather than waiting for a disaster to happen” (p. 30, line 882). This relates back to theme one and the importance of providing psychoeducation, not only to reinforce the importance of self-care but also to provide trainees with MH management plans.

Participants shared the importance of self-reflection and grounding as a way of coping with the demands of paramedic training. One participant explained, “So now I’m able, if I’m on the ambulance, even if I’m just in the back, I’m able to do grounding whilst I’m sitting in the seat and that can be really useful, going to a job or after a really stressful job” (Emma, p. 19, lines 601-603). This demonstrates how techniques such as grounding could be beneficial to all trainees as a way of managing stress or anxiety momentarily. Other participants shared: “it wasn’t until I sat back and reflected on it, I thought no, this is the university situation, it’s not, it’s not actually the job” (Charlotte, p. 47, line 1379). This quote highlights how students may question their ability to undertake the role of a paramedic due to the stressors placed on to them. This could also demonstrate the importance of reflexive practice and how it could be integrated into their training syllabus.

Additionally, participants discussed how resilience is a crucial characteristic for paramedic training since it requires them to "bounce back quickly" and "stand up for themselves". Participants discussed how they increased their resilience to handle the demands of the training. Some shared how their career or experience prior to the paramedic training helped enhance their resilience: “I was lucky I worked in healthcare before so I knew what it was like” (David, p. 13, lines 388-389), another participant shared, “That massively helps as

well with the kind of people that go into it, you can tell instantly the people that I've been at healthcare before, although I've got a previous background in the military so I'm quite used to high demand" (Gary, p7, line 207). According to trainees, prior experience in a demanding field like the military or healthcare helps develop the necessary resilience needed to handle the stress of a paramedic's role. Other students discussed how the course's requirements helped them develop their resilience; one participant shared, "Obviously it has benefited me, and it has made me a stronger, more resilient person" (Sophie, p. 54, line 1631). She went on to share how the intensity of the course has allowed her to manage the career change into medicine, she expressed, "I am going to manage, and I am going to cope doing medicine because of what I've gone through as a paramedic" (Sophie, p. 31, line 953).

Reflexivity

During the analysis of transcripts, I did not find it surprising that peer support occurred as a theme in 10 out of 12 interviews. Literature has stated that peer support is an important coping factor for fully qualified paramedics (Shakespeare-Finch and Armstrong, 2015; Pinks et al., 2021), so it was unsurprising that this was the message being projected to trainees. I spent time thinking about the nature of these relationships and reflecting on how they are bonding over shared experiences of trauma, and thus how this could be considered 'bonding over shared trauma'. I felt tentative to use the term 'trauma bond', as I did not want it to feel diagnostic or judgemental but wanted to capture the unique nature of the attachment students were forming as a way of coping with difficulties on the course.

4.5. Theme four: Voicing the needs of Paramedic Students

During interviews, participants were asked “Based on your experience, what would you like to see improved for future paramedic students?”. This allowed the paramedic students themselves to voice their own thoughts and opinions of what could be helpful to successfully support paramedic students psychologically. It was crucial to provide students with an empowering voice to propose changes they would like to see after offering their transparency throughout the interview process.

4.5.1. Debriefs

Responses regarding the usefulness of debriefs, which are currently given throughout paramedic training and placement in ambulance services, were mixed. One participant shared the absence and inconsistency of when debriefs would take place, she explained, “I was promised official check-ins, and they never happened. The amount of debriefs that happened automatically that needs to be improved as well” (Sophie, p. 40, line 1210). Sophie continued by describing how some debriefs are not automated after every job, but rather require the ambulance crew to request them. She questioned why certain stressful jobs she had been to did not automatically result in debriefings, “I was like, is that not automatic? Common sense, you know, we’ve just seen something pretty horrific, like pretty gory, and is that just not just automatic?” (p43, line 1297). This could highlight how some trainees might not feel comfortable requesting a debrief and, therefore, are left with negative feelings post-job.

Participants also discussed what they found useful during debriefs after engaging in complex jobs. Charlotte shared, “It’s about learning; it’s about making sure you’re ok” (p. 15, line 420). She explained that debriefs gave her the opportunity to ask questions and that she has found debriefs “clinically and emotionally useful”. However, Charlotte also shared that she felt the way feedback and debriefs were delivered was unique to the ambulance trust she was part of, as she explained, “It’s very non-judgmental; and I think this is from talking to other paramedics; this is unique within our trust; it doesn’t happen the same within other trusts” (p. 14, line 411). Niall shared that he had expressed to his course director that he thought debriefs should be included during their simulation of the training.

“[…] we practice cardiac arrests, pronounce the patient as dead and then move onto the next group… I don’t think it prepares you for the time after the job, like the little things of packing up your kit and we have a little bit of training on difficult conversations with family

but the actual whole post-job nonclinical stuff I think would be something that should be offered, like how to have a debrief, implementing debriefs into our simulation from first year just so we know […]" (Niall, p37-38, line 1102-1119).

The above extract highlights how trainees do not feel properly equipped to handle emotional parts of the job due to it not being implemented in depth in their training syllabus. Niall uses the term "nonclinical stuff" to describe the areas of discrepancies within their training.

4.5.2. Requirement to talk

Some participants shared the value of mandatory support. They described, "I feel like a lot more people would have come forward if we had to…rather than everyone just sitting there in silence going no, we're fine" (Sophie, p. 25, line 751). One participant shared an example: "I'm a lot better now than I used to be, but I do struggle opening up, so I was quite reluctant" (Richard, p. 31, line 898). This suggests that if mandatory support was offered, it could break the barrier between students' reluctance to access support while also advocating the importance of opening up rather than struggling in silence. Moreover, it was suggested by one participant that if mandatory support time was in place, it would reduce the need for students to seek their own support or make self-referrals. Sophie said, "If I had the support

that I needed from the offset, rather than trying to manage things on my own, I'm just talking to friends and colleagues. I feel like I'd still be a paramedic now" (p. 26, line 786).

Participants highlighted the importance they found in talking about MH, and traumatic experiences when given the opportunity. One participant shared that during the initial part of training, their course held well-being-focused sessions: "It was good because you didn't have to then ask for help; it was just there like every week" (Olivia, p. 36, line 1070). Olivia also shared some suggestions of how more time to talk could be integrated into the course; she shared, "like a group therapy session and individual therapy sessions, or, I don't know, a run of 12 sessions or something, or like group walks where everyone can walk and chat together" (p. 29, lines 886–891). She highlighted the importance of dedicating time to reflect and talk, suggesting "not just like five minutes at the end of a job where you say, how was that?" (p. 30, line 895). This idea was supported by another participant, who also recommended the importance of dedicating time to talk and listen. "Maybe just actually taking more than ten minutes to listen; if I had a bit longer with my lecturer, then they might have been able to understand" (Jessica, p. 28, line 805). Contrastingly, Gary expressed how even 10 minutes of dedicated time would be appreciated, "so maybe more individual communication one-to-one where you have to have a meeting, let's say once every four months, with the representative of the uni and the representative of the trust, even if it's only 10 minutes" (p. 27, lines 787–799). This quote demonstrated that students would be grateful to have individualised, devoted time to talk with their mentors and lecturers, despite how little time this might be.

4.5.3. Improving support, access, and frequency

Participants narratives captured the importance of early interventions as a "preventative measure" as well as the advantages of increasing the frequency of

psychological support. Olivia shared, “definitely allocating time to actually do it and not just doing it when something bad happens but actually making a habit of doing it as a preventative measure” (Olivia, p. 30, line 897-900). “I think the most healthy thing is having a good personal plan for managing your MH rather than waiting for disaster to happen, and then you’re like, I’m in crisis, I need help now” (Charlotte, p. 30, line 882). These quotations highlight the required change in approach when it comes to support offered to students. At present, it appears support is offered as a response rather than prevention; therefore, students are suffering from the adverse effects of the training. Another participant shared, “I was promised official check-ins, and they never happened; I think I had one in eight months” (Sophie, p. 40, line 1210).

Another advantage of regular MH check-ins was also shared: “I think being seen more as like individuals, just if that is just having people regularly check-in and making you feel like you are a person, like you’re not just a student, a number”. This suggests a need for a change in approach and dynamic between staff and trainees.

Some participants also acknowledged that clearer access to support would be beneficial. Sophie shared “earlier access, earlier intervention, and clearer ways to get there” (p. 30, line 915) as a way of improving support. This was echoed by another participant who made clear that access to psychological support on their training programme was in question, “I don’t really know where the support is or where to be found; it’s not signposted really well” (David, p10, line 279). David’s exert highlights the problematic approach to successfully supporting trainees emotionally. It highlights the ambiguity trainees face when seeking support. Furthermore, Sophie highlighted the timeframe it took to obtain a counselling appointment with the university regarding an incident that occurred during placement: “five weeks had already passed and that five weeks of somebody sitting there and it going around, going around, going round in their head and it getting worse and worse and

worse" (Sophie, p. 30, line 913). This demonstrates the consequences of delayed access to support, which could impact students' ability to continue placement or effectively carry out their duties.

Participants also emphasised the need of providing support between semesters and during university breaks, since this is frequently when students needed it most as they had the opportunity to reflect, "And then we finished, and I heard nothing from anyone" (David, p16, line 476); this experience was echoed by Hannah, "I just had a massive breakdown over summer, essentially after that happened" (p. 9, line 273). These quotations highlight the significance of the time away from university in trainees' reflections of their placement experiences, perhaps suggesting the holidays provide time for rumination; therefore, the requirement for psychological support is greater.

Participants shared their experiences of feeling misunderstood by some counsellors during training. It became evident that, due to the complex and unique nature of trainees' experiences, they felt regular university support was not appropriate. "[…] the counsellor actually started crying and I was there like right okay I mean I just kind of done like just stopped talking" (Sophie, p. 13, line 374). This illustrates the significance of paramedic-specific care, where counsellors are prepared for and skilled in handling distressing circumstances. It may be argued that trainees' ongoing perceptions of support may be impacted by their negative counselling experiences, as mentioned above. If they had a negative experience, they will be less likely to seek psychological support in the future. Other participants also shared the need for healthcare-related counsellors: "a few therapists that were healthcare-related, that would be really helpful" (Olivia, p. 18, line 531); another participant shared "something quite specific to healthcare students, where you know, if you had a rough shift, you could have a little chat about something" (David, p25, line 755-756). The complex nature of paramedic training may cause paramedic students to believe that

standard university well-being services are not suitable for their needs. As a result, they may struggle to access the services and may seek support from other sources or suffer without help.

Many participant accounts suggested that better communication between the university and placement would be beneficial: “better communication if there was like a process whereby the university got informed you know the day that it happened and like actually following it through” (David, p25, line 726-727). This suggests trainees often feel neglected by both the university and placement, as neither institution takes responsibility for safeguarding student’s MH. It was also shared that the university was frequently unaware of challenges faced during placement, thus meaning support was not provided to students. Participants explained the “ping pong” effect they experienced when trying to seek psychological support, “Your university students, so the university should be dealing with you, and then the university started turning around going no, it happened on placement, the ambulance service should be dealing with you, and I had that kind of like ping pong back and forth conversations for months actually, which obviously wasn’t very helpful” (Sophie, p. 12, line 355). It could be implied that clarity should be established as to which institution will take responsibility for students' well-being. Again, this narrative highlights the ambiguity of psychological support available in paramedic training.

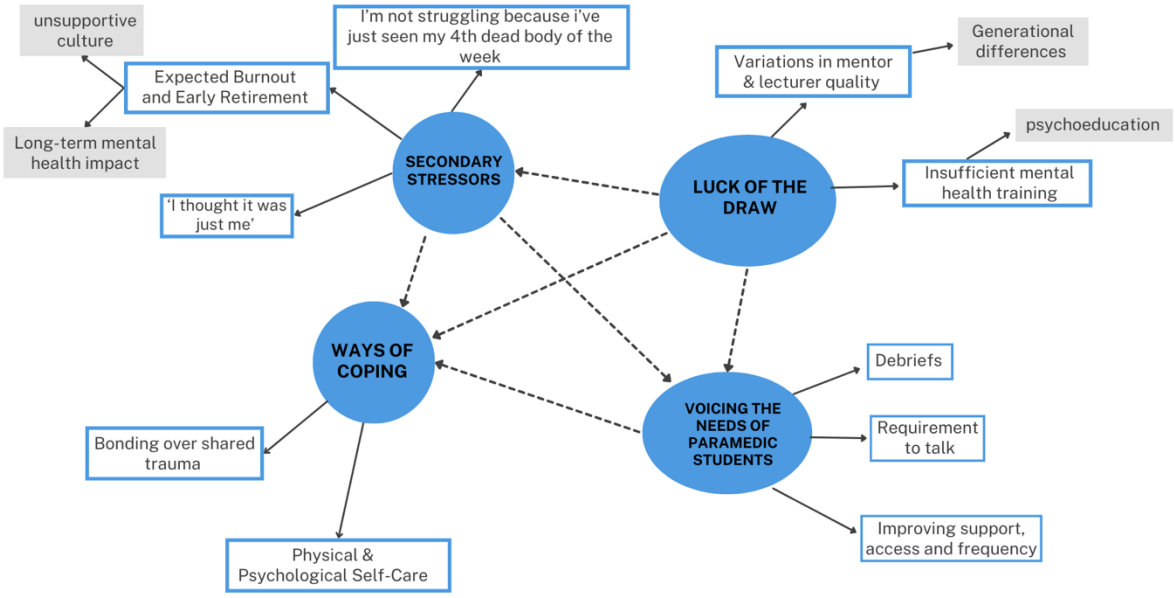
Reflexivity

Ahead of the interview process, I was concerned that participants might question the purpose or value of sharing their potentially difficult or emotional experiences; therefore, it felt important to provide an empowering space for them to share what they would like to see improved based on their own experiences. I discussed with my supervision team how we could ensure this space was offered to participants without it feeling like a service evaluation, as I wanted to ensure prioritisation of participants' own experiences. The result of this empowering space provided to participants during interviews allowed for the development of theme 4.

Theme 4 felt meaningful as it demonstrated how participants could use their voice and experience to lead to positive changes for future students' MH. I was impressed by the participants' readiness to share their ideas and reflected on how they must have already given thought to ways the support for the course could be improved, perhaps during times of difficulty. For me as the researcher, theme 4 answered my question of why I am conducting this research. For future paramedic students, for paramedics, and for my participants, in the hope that their experiences will go towards improving practice and policy on future training programmes.

Figure 2.

Thematic Map



Note: Figure 2 shows the four themes: luck of the draw, secondary stressors, ways of coping, and voicing the needs of paramedic students. Sub-themes are also shown in the white boxes, with sub-sub-themes following in the grey boxes. The dotted arrows illustrate how the themes interact, i.e., luck of the draw may influence some of the secondary stressors that adversely affects trainees' experiences during training, leading to trainees attempting to cope using bonding over shared trauma and physical and psychological self-care as coping

strategies. Finally, these themes highlight the importance of voicing the needs of paramedic students to improve the lack of standardisation on paramedic training courses in the UK, thus reducing secondary stressors and improving trainees' ways of coping with their MH and well-being.

Chapter 5

Discussion

5.1. Introduction

The current study aimed to explore the influence of paramedic training on the MH and well-being of student paramedics, as well as their experience of psychological support during training. To achieve this, RTA was utilised to explore and comprehend their first-hand experiences. To achieve the aims of the study, two research questions were proposed:

1. What are paramedic students' experiences of changes or influences to their MH or well-being during their training programme?
2. What are paramedic students' experiences of psychological support that is available within their training programme?

This chapter will provide an overview of the findings and discuss how they contribute to existing literature within the fields of counselling psychology, psychotherapy, and paramedicine. Particular attention has been given to highlight how these findings directly address the research questions; therefore, the research questions are used as subheadings. Finally, this chapter will highlight the implications for clinical practice, policies, and training as well as identify further research areas. This chapter will conclude with a reflective statement regarding the overall research process after a critical exploration of the research's limitations has been covered.

5.2. Overview of the findings

Four main themes were produced from participants' narratives as a response to the current study's research questions. The first theme, 'luck of the draw' encapsulated the widespread training experiences of paramedic students. This theme revealed that while support was offered on some training programmes, it was not consistently offered on all training programmes, illustrating a lack of standardisation on paramedic training programmes thus having an influence on students' MH. It could be suggested that these findings could be further explained using the job-demands-resources theoretical model (Bakker & Demerouti, 2007), as outlined earlier within chapter two. Paramedic students' MH and well-being are greatly impacted by the programmes' inconsistent resources for psychological care and MH education. Additionally, the findings from the subtheme 'generational differences' also indicates the expectations of seeming stoic, as demonstrated by some senior paramedics, which aligns with role identity theory (McCall & Simmons, 1978) as outlined within chapter two.

The themes 'secondary stressors' and 'ways of coping' focused on the influences on paramedic students' mental health and how students handle this during their training. 'Secondary stressors' recognised the additional physical and emotional strains that students endure during training, as well as the implications for students, such as burnout and early retirement. 'Secondary stressors' corresponds to the job-demand-resources theoretical model (Bakker & Demerouti, 2007), as findings show the connection between high practical and emotional demands within the profession and the impact on trainees' well-being. However, findings from this theme shed light on the difficulty of managing MH in isolation; thus, it could be suggested that the JDCS model (Karasek & Theorell, 1990) could also be used to explain the findings, as this model emphasises the importance of peer support in coping with the demands of the role.

The theme 'ways of coping' revealed how participants handle the impact of demands on their MH. The findings could be explained further using the JDCS theoretical framework (Karasek & Theorell, 1990) and social support theory (Cohen & Wills, 1985), as the current study found that paramedic students utilise social connections and support from colleagues to manage their stress and the impact of the role demands on their MH.

The participants' suggestions for improvements to psychological support during training were displayed in the final theme, ‘voicing the needs of paramedic students’. As discussed in chapter two, there is currently no single theory that can fully account for paramedic trainees' experiences; consequently, by taking a pluralistic stance, multiple theories can be considered. The job-demands-resources model (Bakker & Demerouti, 2007) can be used to explain this theme, as the findings recommend examining the present resources available to paramedic trainees to ensure they are adequately serving their needs. However, findings can be explained using both JDCS (Karasek & Theorell, 1990) and social support theory (Cohen & Wills, 1985), as both emphasise the need of providing social support provisions as a manner of more successfully supporting trainees' well-being.

5.3. The findings in the context of previous literature

The following findings will be presented specifically in relation to the current study’s research questions:

RQ1: What are paramedic students' experiences of changes or influences to their MH or well-being during their training programme?

Previous research has stressed the potential for university paramedicine training curricula to have significant effects on students' wellbeing, both positively and negatively (Alzahrani et al., 2023). The present study provides insight into paramedic students' experiences of their training and how this influenced their MH and well-being. Participants' narratives within theme two *'secondary stressors'* highlighted the additional occupational stressors they are expected to manage during training, such as work, life balance, changeable shift patterns, financial stressors, and limited resources within the ambulance service. These findings align with previous research by Alzahrani et al. (2023), which also identified training environments as a significant source of stress for paramedic trainees, given the unfamiliar and unpredictable nature of the work and the challenges of shift work. Furthermore, Fjeldheim et al. (2014) emphasised the heightened risk of developing PTSD and depression among paramedic trainees due to the work-related stressors they encounter. Considering the findings, it is crucial to establish support provisions to minimise the adverse effects of these demands and safeguard students' MH.

Within 'secondary stressors', participants also highlighted the negative impact of managing changes to their MH in isolation, expressing the importance of knowing that their peers shared a similar MH experiences. Due to the minimal psychological support provided on their course, participants shared their experiences of seeking independent psychiatric diagnoses, counselling, and medication from other sources to treat their MH decline. A conclusion that could be drawn from this is that universities should take a more active role in supporting students who need external MH support, by offering evidence to ensure they are receiving a correct diagnosis or treatment from GP's. Despite previous literature suggesting

that the support from external professionals such as GPs or MH professionals to have been helpful for paramedics (Smith et al., 2019), there remains limited research exploring paramedic's or paramedic students' experiences of MH medication or psychiatric support as a coping strategy. Therefore, more research exploring this would be beneficial to offer further insight into the current study's findings.

Furthermore, participants highlighted financial concerns during training and the effects this can have on their MH, as it was suggested that financial strain can enhance anxiety and stress for students. Students identified several problems that put financial strain on them, including difficulty committing to additional employment because of shift work, expectations from courses that students travel for placements, and relocation. Wray and McCall (2007) echo this, as their study concluded that high levels of financial strain impact students' well-being. Their results suggested that allied health students are at risk of developing depression and stress because of financial difficulties due to placements and a lack of faculty financial support. Moreover, Wills and Asbury (2019) found that 47% of their sample of paramedic students were worried about the financial implications of the course and further study, thus adding intolerable pressure on students. These findings compliment those of the present study, demonstrating that the financial stressors of paramedic training can have a negative influence on students' MH and therefore need to be more widely recognised by universities.

It was also highlighted within *'secondary stressors'* that students often feel unsupported during training, particularly when sharing experiences of changes to their MH with mentors. It was highlighted that some students feared that negative consequences may arise, such as having their HCPC registration revoked if they spoke up about their MH. This finding extends to those of Sheen et al. (2012), who noted that paramedic students were less

inclined to initiate formal support or report difficulties due to a power imbalance between students and staff and apprehensions that doing so may jeopardise their career progression.

Findings also revealed that participants have awareness of long-term MH impacts, such as burnout, with several participants sharing plans to mitigate the long-term MH impacts of the role. For example, exploring career variations and continuing to use coping strategies. Existing literature has highlighted the high prevalence rates of burnout within paramedicine (Porter & Johnson, 2008; Sheen et al., 2012) and the high rates of burnout among paramedic students (Stein & Sibanda, 2016). These findings highlight the significance of ambulance services continuing to diversify and vary paramedic responsibilities to prevent burnout. It was also important to highlight that one trainee explained that she was not going to register as a paramedic following completion of the course and instead, transition to medicine due to her 'roller-coaster of an experience' during the paramedic training course. Based on this it could even be suggested that this trainee felt she had reached burnout before qualification as she also described experiencing suicidal thoughts during the training due to the demand and lack of psychological support and resources.

'Ways of coping' explored the various ways paramedic students manage demands during training with many participants sharing the importance of social support with their peers, friends, and family. These findings add to previous research that frequently emphasised peer and social support as an essential strategy for paramedics to deal with the demanding nature of their work (Fjeldheim et al., 2014; Shakespeare-Finch et al., 2015; Smith et al., 2019).

The present study, however, suggests a different perspective on peer support, contending that it could be seen as 'bonding over shared trauma'. This should not be confused, for the sake of the present study, with the psychological phenomenon known as 'trauma bonding', in which individuals develop strong emotional bonds with those who have

injured them or exposed them to terrible situations (Carnes, 2018). The concept ‘bonding over shared trauma’ refers to students developing a sense of camaraderie and connection with their peers as they collectively face and support each other through traumatic experiences. This bond can create a shared understanding and a sense of belonging within the training. Some participants, however, highlighted their reluctance and the possible dangers of forging close relationships with their peers, describing it as "quite dangerous" to continually be exposed to the training and role's content. Although there is no literature specifically addressing the idea of ‘bonding over trauma’ in paramedicine, dysfunctional peer support was found to be associated with paramedic students' negative attitudes towards emotional expression and to strongly predict the onset of PTSD symptoms (Lowery & Stokes, 2005). Therefore, it could be suggested that further research is needed to explore the psychological impact of dysfunctional peer support and bonding over shared trauma in paramedics.

Consistent with findings from Smith et al. (2019), physical and psychological self-care practices were an important coping strategy for participants to manage stressors. Maintaining social connections, prioritising sleep, and healthy eating, as well as continuing hobbies and exercise, were all mentioned by participants as important ways to decompress from the job. Similar results were observed by Smith et al. (2019), with participants emphasising the importance of physical and psychosocial self-care practices, particularly in younger paramedics. To safeguard the health and wellbeing of paramedics throughout their careers, Smith et al. (2019) also recommended that paramedic students be encouraged to practice physical and psychosocial self-care. This is in line with the conclusions and suggestions of the current study because it could aid students in better managing the demands of the role.

Self-reflection and grounding techniques were reported as psychological self-care practices within ‘ways of coping’. Participants commented on how these coping strategies

allow them to manage their stress momentarily following a stressful or traumatic job. Ducar et al. (2020) found that a mindfulness-based stress reduction intervention had a positive impact on participants compassion and burnout amongst emergency medical technicians. Additionally, research has previously discussed the professional advantages of reflective practice in paramedicine (Williams, 2013; Jasper et al., 2013; Turner, 2015; Howlett, 2019), as it has been noted to be a professionally valued strategy in enhancing health care practice (Williams, 2013) and to help practitioners identify knowledge gaps and learning needs (Howlett, 2019). The findings from the present study suggest that, to continue to better equip students to handle the demands and recognise their learning needs, reflective practice, mindfulness, and grounding practices should be taught and promoted in all paramedic training programmes.

To handle the challenges of the course, participants also spoke of building resilience with some participants sharing that their prior employment (military or healthcare experience) helped them adjust to the demands of the paramedic profession. Participants also highlighted that resilience is covered within the course curriculum due to it being a "vital skill required for paramedics". Previous literature has also stressed the importance of enhancing resilience in paramedics as a way of preparing paramedics for the MH challenges of their role (Streb et al., 2014; Anderson et al., 2017; Guadagni et al., 2018). It was suggested by Streb et al. (2014) and Guadagni et al. (2018) that enhancing paramedics' resilience would be a beneficial approach to reducing PTSD symptoms and thus benefit all emergency service users. However, results from the present study highlighted that the resiliency training students did receive during their course was "too broad" and "generalised" to all allied health professionals, rather than specifically tailored to paramedics. However, research has suggested that many employee resilience training programmes have relatively small and short-term effects, with concerns about resilience becoming exploitative and stigmatizing (Vanhove et al., 2016). It has been suggested that having strong psychosocial

resilience refers to a person's ability to manage social and personal processes related to how they adjust, recover, and make life adjustments to lower their chances of developing psychological problems in the future (Murray, 2022). Keeping this in mind, it could be proposed that resilience education within paramedicine training programmes should focus on the following features; availability and use of support, acceptance of reality, self-belief and improvisation as suggested by Murray (2022).

RQ2: what are paramedic student's experiences of psychological support that is available within their training programme?

Theme one *'luck of the draw'* highlighted the lack of standardisation of paramedic training courses and thus, the variance in levels of psychological support available to students that are present within paramedic undergraduate courses in the UK. Previous literature highlighted that both student and qualified paramedics' MH was of 'growing concern' (Smith et al., 2020). Therefore, the ambiguous nature of psychological support during training was not surprising, as it highlighted the problematic 'domino effect' when it came to MH within paramedic careers or ambulance services. As suggested by Sheen et al. (2012), introducing

the concept of psychological support early on in paramedic careers could lead to gradual changes in paramedic culture, thus increasing access to psychological interventions. However, as the theme ‘luck of the draw’ suggests, efforts still need to be made when it comes to implementing early intervention at the start of paramedic careers, as many participants described psychological support to be “non-existent” during their training.

It was also suggested within ‘luck of the draw’ that valuable psychological support was often a result of the quality of mentors. As highlighted within chapter four, ‘luck’ or ‘lucky’ was a term used by seven out of the twelve participants to describe the support they received from their mentors. Luck is defined as ‘the force that causes things, especially good things, to happen to you by chance and not because of your own efforts or abilities’ (Oxford English Dictionary, 1989). Therefore, it could be suggested that valuable, positive support was provided to students ‘by chance’ during training as opposed to a guaranteed expectation. This is supported by findings from Alzahrani et al. (2023), who reported that some paramedic students found faculty members to be supportive and offer advice but some reported faculty members to negatively impact their well-being through neglect, overall suggesting that relationships with staff could either help or hinder their well-being. Results from the current study, however, differ from those of Williams et al. (2021), who discovered that lecturers were going ‘above and beyond’ for students and that participants felt their paramedicine faculty responded fast with support. However, they did note that 12 of the 17 students felt their lecturers required more assistance, such as more staff, as some of them did not feel heard by tutors. It is important to note that Williams et al.'s (2021) sample came from a university in Victoria, Australia, therefore, undergraduate course curricula and staff expectations may differ from those in the UK.

Additionally, it has been asserted in the research that paramedics maintain expectations of seeming stoic, despite the notion that this is a maladaptive coping strategy

(Lowery & Stokes, 2005). This is consistent with the results of the current study, which indicate that many participants felt this attitude to be dysfunctional and inappropriate after being exposed to emotionally dismissive mentors during their training. Furthermore, Lowery and Stokes (2005) discovered a direct causal connection between duty-related trauma exposure and unfavourable attitudes towards emotional expression in paramedic students, underlining the dangers of encouraging emotionally detached, stoic attitudes in paramedic trainees. Based on findings from the present study, mentors might benefit from receiving emotional intelligence training to learn social skills and lessons in empathy, motivation, and self-awareness (Goleman 2020). This would improve their leadership abilities and enable them to support students more effectively as suggested by Weinberger (2009).

Much of the previous literature highlighted a culture of denial and negative stigma towards MH, often termed ‘paramedic culture’ to be a barrier to help seeking for paramedics and students (Shakespeare-Finch & Daley, 2017; Pinks et al., 2021). Therefore, several findings of the present study that revealed a "generational difference" in MH views were not unexpected. Participants in the current study also used terminology such as “stigma” when referring to MH views within the ambulance service. This adds further support to previous literature that suggests a prevailing negative stigma and attitude towards MH to be present within paramedicine (Shakespeare-Finch & Daley, 2017; Pinks et al., 2021). However, the findings from the present study went further, highlighting that these negative attitudes often arise from more senior male paramedics with previous experience in the military. Due to their prior careers, it could be argued that some senior paramedics lack understanding of the importance of MH. As a result, further training or workshops should be offered to senior paramedics with the aim of educating them about the necessity of MH awareness and providing psychoeducation. This is consistent with recommendations made in earlier research, proposing for ambulance service managers to create time and space for staff to

decompress (Smith et al., 2019) as well as managerial training and education regarding workplace belongingness (Shakespeare-Finch & Daley, 2017).

Furthermore, the participants in the current study revealed that staff members' length of service may have an impact on how they interpret events. For example, "If a paramedic saw something and they've been in the service for 15 years, it will affect them differently to an 18-year-old fresh out of college in first year and they haven't seen anything like that before" (Emma, p. 14, line 422-424) was mentioned. Previous research has investigated if time in the paramedic service is associated with increased resilience (Gayton & Lovell, 2011). Findings suggested that increased resilience is associated with number of years' experience as a qualified paramedic, highlighting that paramedic students from their sample were significantly less resilient than qualified paramedics. However, Gayton and Lovell (2011) noted that this suggestion must be considered with caution as further research is required to validate findings. Moreover, it has also been suggested that self-efficacy increases with experience and level of expertise which has been suggested to be an important factor is reducing levels of distress and active coping (Murray, 2022).

Moreover, findings from the present study also identified the limited MH content covered within the curriculum to prepare students to support MH patients. Participants emphasised the increasing number of MH-related jobs they are attending and the limited training they receive on this, thus impacting their MH leading to anxiety and stress about feeling underprepared. These findings support those of Smith et al. (2020), who also identified a lack of depth in MH topics within paramedic training curriculums. Similarly, they also concluded that paramedics feel inadequately trained to treat MH patients; therefore, consideration should be given by the Paramedic Accreditation Committee to provide consistency in MH education across paramedic programmes (Smith et al., 2020). Moreover,

King et al. (2021) highlighted that paramedics continuously report feeling underprepared to care for patients with mental illness and that there are still significant gaps in knowledge about MH for paramedics and students. These previous findings provide further support for the present study; however, much of the previous literature focuses on Australian samples, so it could be suggested that there are limitations in the transferability of the findings (Smith et al., 2020), therefore, more research is needed focusing on a UK sample. The current findings also highlighted that students drew upon their own MH experiences to support MH patients. Although transparency can be beneficial, adopting shared experiences as a therapeutic strategy can also have drawbacks for the patient, who may feel invalidated, and for the healthcare professional, who may experience emotional exhaustion. To properly prepare this workforce for successfully handling MH patients, paramedic students should be taught fundamental counselling skills including active listening, bracketing own experiences, and providing empathy.

Results also demonstrated the anticipation students experienced as they approached completion and qualification. Participants described not feeling well-equipped to identify their own MH struggles due to the limited psychoeducation they receive as part of their course curriculum. Previous literature offers support, as Holmes et al. (2017) reported that 37 participants from an Australian paramedic course sample feared for their personal mental well-being when commencing their careers as paramedics. It was identified within the current study that paramedic students felt they lacked understanding about their own MH and struggled to recognise their psychological responses. Therefore, it could be suggested that if paramedic students are not provided with psychoeducation or MH knowledge at training level, this could lead to undiagnosed or untreated PTSD responses later in their careers, thus negatively impacting the care they are able to provide to patients. This further supports Anderson et al.'s (2017) conclusions, as it was suggested that paramedic training offers an

opportunity to prevent or mitigate the risks of trauma or PTSD. Therefore, findings from the current study and previous literature provide strong evidence that paramedic training course curriculums need to be reviewed, to ensure they are positively preparing students for the MH challenges they may face throughout their career. Despite findings from Alghamdi (2022) suggesting little correlation between psychological challenges and years of experience, Holmes et al. (2017) suggested that implementing psychological support interventions at the start of paramedic careers would be beneficial as students are 'captive audiences within a preparatory learning environment'.

Theme four *'voicing the needs of paramedic students',* highlighted the need for paramedic training changes and provided specifics on the psychological support provisions that are and are not currently accessible on training programmes, giving more insight into their experience. Debriefings are already available as a psychological support provision for both paramedics and students. However, participants' opinions on the intervention's usefulness were divided with some suggesting the frequency of debriefs should be increased and some questioning why debriefs did not occur automatically after a challenging job. One participant highlighted that it would be helpful to incorporate debriefs into their simulation training. This was also proposed by Wilson and Asbury (2019), who identified the need for a theoretical framework for the development of a paramedic-specific model for simulation debriefs and offered an evidence-based approach to paramedic simulation debriefing. It could be suggested that this approach needs to be widely implemented into training programmes to allow students to prepare, and conduct debriefs independently. Furthermore, research has also highlighted the beneficial outcomes of talking through jobs with their mentors, as they stated it enhanced their confidence, reassurance, and job satisfaction when discussing clinical and technical aspects of the job (Williams, 2013). This would be an example of a 'technical debrief', which has been suggested to be highly valued as conveying learning. However, there is evidence to suggest that 'emotional debriefing' where clinicians are expected to

recount or re-live difficult or distressing aspects of the event in front of peers, colleagues or supervisors has been reported to cause potential harm and should be avoided. Moreover, NICE states that psychologically focused debriefing should not be offered for preventing or treating PTSD (Murray, 2022).

Furthermore, the present findings highlighted how little time paramedic students spent talking about their experiences with tutors or mentors. These findings align with those from Pinks et al. (2021), who found that safe, group environment interventions were beneficial to increasing students' emotional expression and allowed individuals to connect with their own feelings. Participants in the present study believed more students would discuss their feelings if given mandatory time to do so; they stated, “a lot more people would have to come forward if we had to”. This supports Pinks et al. (2021), who concluded that a group support intervention reduced the need for paramedics to seek help. Therefore, it could be suggested that mandatory supervision groups with peers and tutors could be a beneficial provision implemented into the curriculum to encourage students to discuss their experiences and offer dedicated time to share concerns. Moreover, this would offer further support to the findings of Jonsson and Segesten (2004), who reported on the importance and need for ambulance personnel to talk to others about their stressful experiences. Previous literature also highlighted a shortfall in current peer support provisions, as Sheen et al. (2012) found that no support was accessed when peer support was not aware of situations. The current study also reported similar flaws in psychological support during training, as it was commonly reported amongst participants that there was miscommunication between the university and placement. Therefore, it could be suggested that students need to be given more opportunities to discuss their experiences with the university or ambulance service, and the institution that

holds responsibility for students' well-being needs to be clearly identified to avoid ambiguity about the psychological support available to students.

'Voicing the needs of paramedic students' also brought attention to improving the access and increasing frequency of support on training programmes. The need for allocated time for psychological support as an early intervention and "preventative measure" was emphasised by participants. This supports findings from Smith et al. (2018), as it was highlighted that compulsory wellness programmes delivered by qualified psychologists should be offered to ensure paramedics have a regular outlet to discuss concerns. Furthermore, Alghamdi (2022) suggested that psychological preparedness can mitigate the effects of psychological stress. Alghamdi (2022) found that good training, preparedness, and peer support may lead to low levels of psychological burden following a traumatic event. Furthermore, it was also stated that paramedics lacking MH awareness can lead to psychological challenges following traumatic jobs. This finding supports findings from the present study, as participants suggested that psychoeducation could be a helpful early intervention. Participants from the current study shared that input from psychology teams would be beneficial in providing them with MH awareness and that paramedics should have a personal plan to manage their MH to prevent psychological crises.

Additionally, findings showed the importance of ongoing psychological support throughout the year, including during university breaks. Participants stated that frequently, outside of term times, psychological support was most necessary due to feelings of isolation and time for reflection. This offered a unique finding, as previous literature has not yet explored the effect of continuous psychological support for paramedic students.

However, literature has shown correlations between low levels of social support and coping issues or the prevalence of PTSD symptoms (Fjeldheim et al., 2014; Shakespeare-Finch et al., 2015; Williams et al., 2021). Finally, the findings suggested that psychological support should be specifically tailored to the needs of paramedic students. Due to the unique demands of their training course compared to other academic courses, participants reported feeling misunderstood by counsellors at their university and stated that the university well-being service was too generic to effectively support them. This finding supports Du et al. (2022), who highlighted that despite the need for psychological support amongst paramedics, services are often underutilised and have been reported to only be 'moderately useful'. Therefore, suggesting the need for psychological support provisions such as university counselling to be customised to better support the needs of paramedic trainees. Furthermore, Johnston et al. (2022) suggested that taking a 'holistic view' towards employee MH and well-being within the ambulance service was important.

5.4. Limitations of the current study

It is significant to highlight that all participants in this study were white British or white Scottish. However, upon further investigation this sample accurately reflected the lack of ethnic minorities within the paramedic profession, with HCPC highlighting in 2021 that the paramedic profession has approximately 5% black, Asian and other ethnic minority staff (College of Paramedics, 2023).

It is also important to note that only two participants from the current study were over age 30, therefore, it could be suggested that more participants from this age category could have added more age diversity to the study thus adding further diverse experiences and perspectives amongst the participants.

Furthermore, the current study used semi-structured, one-to-one interviews for data collection. This was considered a flexible approach to data collection that would allow the generation of rich and contextual data (Willig, 2013). However, it could be suggested that another form of data collection could have been beneficial; for example, focus groups may have provided an empowering approach for participants to share their collective experience (Braun & Clarke, 2013), thus providing more in-depth insight into the similarities or differences of participants' experiences.

5.5. Implications for clinical practice and training

The findings from the current study have several implications for clinical practice. Firstly, the current study revealed how paramedic students do not feel suitably supported psychologically due to their unique experience of their role. Given the reported complexity of their experience, therapists working with this client group may want to consider adopting a trauma-informed approach to their practice. Interventions from a cognitive behaviour therapy (CBT) model may also be suitable for this client group, such as psychoeducation, behavioural activation, cognitive restructuring, and stress reduction techniques to equip trainees with psychological awareness and coping strategies to manage their own MH while working. It could also be suggested that flexibility and adaptation may be needed when supporting this client group due to changeable shift patterns.

The current study's findings further emphasise the value of creating a strong therapeutic relationship as participants highlighted the value of having a strong support system of friends, family, colleagues, and peers as a coping strategy. Participants also reported experiences of feeling misunderstood or not heard by therapists or allied-health

professionals. Therefore, it could be suggested that practitioners working with paramedics should aim to adopt a relational approach, offering empathy, congruence, and unconditional positive regard (Rogers, 1957) to develop a warm, open therapeutic rapport.

Furthermore, the findings suggest, many participants did not feel adequately supported by their university well-being service. Therefore, it could be suggested that therapists who work in university settings should be provided with specified training to successfully support students on all university courses, including healthcare courses like paramedicine. Paramedic students may be more likely to utilise university support services if university therapists had more in-depth understanding of the additional stressors faced by paramedic students and were well-equipped to support students with such difficulties.

5.6. Implications for policy and procedures

Considering the present findings, policymakers might want to consider implementing therapy or psychological support requirements for paramedic trainees prior to HCPC registration. It is acknowledged in the findings of the current study and previous literature (Lowery & Stokes, 2005; Sheen et al., 2012) that negative MH attitudes and stigma are present in paramedicine, thus impacting trainees accessing psychological support. Therefore, if policy and procedure improvements are adopted, this could have a favourable effect on MH attitudes by emphasising the importance of psychological support during and after training.

Furthermore, findings from the present study highlight the disparities in support across university courses. Therefore, universities offering paramedicine undergraduate courses should consider examining the current course curriculum to ensure it features content to support MH patients as well as adequate information regarding paramedic MH. Psychological support interventions such as focus groups, individual therapy, or

psychoeducation sessions as a training requirement should also be considered to further support and protect trainees' MH.

5.7. Suggestions for future research

The present study provides possible directions for future research. As previously highlighted within chapter two, research focusing on paramedic students alone is sparse, particularly research understanding their experience and providing these participants with a voice. It could be suggested that a quantitative design would allow a larger number of participants to be studied and could explore direct, causal links between students utilising psychological support and job performance by comparing treatment and control groups. However, quantitative research may draw away from focusing on paramedic students' experiences. Therefore, taking a mixed-methods approach and bringing together both quantitative and qualitative data could provide a comprehensive and robust understanding of paramedic students' views and experiences of psychological support.

The findings from the present study highlight the outdated MH attitudes in advanced paramedics, particularly males. Future research could investigate this finding further, aiming to understand MH experiences or views of experienced paramedics, potentially exploring differences between genders. Although previous research has focused on qualified paramedics as a sample, there has been limited attention given to specifically exploring MH views and experiences using a qualitative design. Therefore, future research may wish to adopt this, which could offer a useful understanding of ways to enhance ambulance services by encouraging workers to consider and understand MH, benefiting both emergency service users and personnel.

Finally, findings revealed a different perspective on peer support asserting that it may be interpreted as ‘bonding over shared trauma’. Currently, there is minimal literature exploring the concept of ‘bonding over shared trauma’ within paramedicine; therefore, future research may wish to explore this, as it could provide meaningful insights into the potential psychological risks of forming such bonds with peers. Thus, suggesting ways paramedics can safeguard their peer support and further protect their MH.

5.8. Implications for counselling psychology

The present study offered a unique approach by taking a counselling psychologist perspective to understanding paramedics' experiences of MH as much of the previous literature originates from fields such as clinical psychology, psychiatry, and occupational medicine. Thus, demonstrating that counselling psychology was underrepresented within the field of paramedic research.

It has been suggested that taking a holistic view towards employee MH support is important within the ambulance service to promote inclusivity and de-stigmatisation (Johnston et al., 2022). This is further supported by O’Meara et al. (2017), who also suggested a holistic approach to paramedic training and education. A holistic approach can be defined as ‘an approach considering the whole person: physical, emotional, social, and spiritual well-being’ (NSW Government, 2020). This aligns with the values employed by counselling psychology, as it understands individuals as ‘socially and relationally embedded beings’ (Van Scoyoc & Orlans, 2008; Cooper, 2009). It is hoped that this research will offer insight and encouragement of the importance of the counselling psychology values within paramedicine practice and research.

Furthermore, the findings from the present study suggest that paramedics should be psychologically supported, informed, and prepared for MH challenges of the role from the start of their career as a way of empowering them, facilitating growth, and actualising potential in alignment with counselling psychology values (Cooper, 2009). Moreover, this study offers a unique contribution to the research field of counselling psychology and paramedicine, as it is one of few studies to explore paramedic students using a qualitative approach. Taking a qualitative approach allows prioritisation of the participants subjective and intersubjective experiences, which is a further unique quality of counselling psychology.

Reflexivity

At the beginning of this research process, I struggled to acknowledge which of my personal experiences could influence the current study, as I initially felt I was coming from an outsider's position. However, upon reflection, I noticed how my position was not strictly as an outsider, I was also an insider, as I was a fellow healthcare professional in training; therefore, it became apparent that we could share similar experiences, and this could influence the research.

From the interview, transcription, and analysis stages, I began to feel more immersed in my research. I believed this was because I had built an important rapport with my participants and instantly felt a sense of responsibility to support them and make things better for them during their training. I held this phantasy of psychologists and paramedics coming together as a united front to make society a better place for everyone. I thought about the domino-effect this research could have on a grander scale, as it could aim to reduce the staff turnover within the ambulance services if paramedics felt well supported psychologically, thus positively impacting the experience for emergency service users since paramedics won't feel burnt out because they are more prepared to handle the adverse effects of role. Obviously, this was a phantasy, and societal difficulties would not be cured that easily; however, this was the mentality I adopted following the interviews and analysis. This enhanced my ambition for my research as I could confidently identify how and where my research could have a positive impact on paramedic trainees.

I reflected on which status this phantasy was operating from; on the one hand, it was coming from 'outsider' status, I wanted to make a difference by sharing the opposing values with them since I felt like I was studying another profession through a magnifying glass with extremely different values from my own. On the other hand, I believed this phantasy could be resulting from an 'insider' position, as a fellow

5.9 Conclusion

This study sought to explore the impact of paramedic training on the MH and well-being of students, alongside an examination of the provision of psychological support within their training programmes. Participants openly acknowledged that the demanding nature of paramedic training can have a negative effect on their MH, resulting in experiences such as stress, anxiety, and depression. A significant finding of this research lies in the notable disparities observed within paramedic training programmes, which encompass variations in the availability and quality of psychological support, mentor attitudes towards MH issues, and a deficiency in MH training for both paramedics and future patient interactions. These divergent experiences appeared as pivotal factors significantly influencing the mental well-being of paramedic trainees during their paramedic education.

Furthermore, this research identifies the coping strategies employed by paramedic students to navigate the rigorous demands, isolation, and programme-related inconsistencies inherent in their training. It emphasises the paramount importance of support networks, particularly emphasising the role of peer support, in addition to highlighting the significance of proactive physical and psychological self-care. These results support those found in the existing literature, as elaborated upon within the context of the literature review.

In conclusion, the findings from this research corroborate the extant wisdom in the field, emphasising the importance of early and sustained psychological and MH support within the trajectory of a paramedic's career. Furthermore, this study sheds light on the exigency for UK policymakers and paramedic course facilitators to adopt a humanistic and holistic approach. A comprehensive review of the current paramedic curricula is warranted to ensure their efficacy in accurately addressing the multifaceted psychological needs of students. This research amplifies the enduring commitment to enhance the mental well-being of paramedics and, by extension, the quality of care they ultimately deliver to the broader community.

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Appendices

Appendix A - Systematic Review Key Words

The following databases were searched: Psycinfo, PsychArticles, CINAHL, Education Research Complete, and ERIC. Grey literature was also searched via google scholar.

Two search strings were carried out separately, due to exploring both the literature relating to paramedic students and literature relating to psychological support for paramedics. When the search strings were combined this showed to be problematic as limited results occurred and relevant results were removed. Therefore, for the purpose of this literature

review two separate searches were conducted in all databases and were combined using the [AND] and [OR] search functions. The following combination of search terms were used: DE "Posttraumatic Stress Disorder" OR "PTSD" OR "Post Traumatic Stress Disorder" OR "Psychological Trauma" AND DE "Allied Health Personnel" OR "Allied health personnel" OR "Paramedic*" OR "Ambulance Personnel" OR "Emergency Medical Technicians" NOT "Firefighter" OR "Fire fighter" OR "Military" OR "veterans"
AND "paramedic students" OR "paramedic trainees" OR students or trainees. The following search terms were used for the second search DE "Posttraumatic Stress Disorder" OR "PTSD" OR "Post Traumatic Stress Disorder" OR "Psychological Trauma" AND DE "Allied Health Personnel" OR "Allied health personnel" OR "Paramedic*" OR "Ambulance Personnel" OR "Emergency Medical Technicians" NOT "Firefighter" OR "Fire fighter" OR "Military" OR "veterans" AND "therapy" OR "Counselling" or "Psychotherapy".

Appendix B - Participant Recruitment Advertisement

Appendix C - Ethical Approval Granted by University of Roehampton Ethics Board

Ethics Application
Applicant: Jade Thomas
Title: Mental health during training: Paramedic student's experience of psychological support during their training programmes.
Reference: PSYC 22/ 427
School: Psychology

Under the procedures agreed by the University Research Integrity and Ethics Committee I am pleased to advise you that your School has confirmed their approval of your application and that any conditions for approval of this project have now been met, and that the risk assessment for your project has been reviewed and approved by the Health & Safety Office. We do not require anything further in relation to the approval of this application.

Please note that on a standalone page or appendix the following phrase should be included in your thesis:

The research for this project was submitted for ethics consideration under the reference PSYC 2/ 427 in the School of Psychology and was approved under the procedures of the University of Roehampton's Research Integrity and Ethics Committee on 28.07.22.

Please Note:

- **This email confirms that all conditions have been met and thus confirms final ethics approval (it is assumed that you will adhere to any minor conditions still outstanding).**
- **University of Roehampton ethics approval will always be subject to compliance with the University policies and procedures applying at the time when the work takes place. It is your responsibility to ensure that you are familiar and compliant with all such policies and procedures when undertaking your research.**
- **Please advise us if there are any changes to the research during the life of the project. Minor changes can be advised using the Minor Amendments Form on the Ethics Website, but substantial changes may require a new application to be submitted.**
- **If this project involves clinical procedures or administering substances it is a condition of Ethics approval that all relevant SOPs published on the School communities pages are fully complied with.**

Appendix D - Participant Information Sheet

University of Roehampton London

PARTICIPANT INFORMATION SHEET

Thank you for taking the time to read this information sheet. This document will explain why we are carrying out this research and will outline what will be involved in taking part in this research project.

We would like to invite you to take part in our research project. We are looking to interview 6-10 paramedic students, to explore their experiences of change or influences to their mental health or well-being during their training programme. Additionally, we are interested to know what are their experiences of psychological support that is available within their training programme. We believe it is very important for paramedic students to have the chance to share their experiences on these topics.

Before you decide if you want to participate, it is important that you understand why we are doing this research and what we are asking you to do. This is important as it will help you decide if you wish to take part. If you have any further questions, please feel free to ask.

Why are we doing this research?

There is very limited current research that explores the experiences of paramedic students in the UK. It has been reported in research that due to the occupational stressors and potentially traumatic situations paramedics may have to attend to, paramedics are at risk of developing a wide range of mental health issues and can have higher PTSD rates that the general population. There also appears to be limited research focusing on the psychological support that paramedic students/trainees are offered.

It is hoped that by developing a better understanding of paramedic student's experiences will improve the quality of psychological support delivered to paramedic trainees on training programmes as paramedics are a vital part of every community so we believe now more than ever, the mental health of this group should be prioritised.

To take part in this study you need to meet the following criteria:

All participants must:

- Currently be enrolled on a paramedic university course in the UK.
- Be in their final year of their training programme.

Participants will be excluded and not be able to take part in the study if they meet any of the following criteria:

- They are enrolled on a paramedic course outside of the UK.
- They are not in their final year of training.

What would I have to do?

If you decide to take part, you will be invited to meet for a 1-hour video call interview with the researcher. Before the interview begins you will be asked to complete a short form with some socio-demographic details about yourself which will be kept confidential. After this, the

researcher will ask you some questions about your experience of psychological support and your mental health during your paramedic training course. There are no expectations for your responses, we are just interested to hear about your experiences. The interview will be audio recorded and transcribed so the information can be used to write up the final report, all information will be pseudonymised in order to protect your identity. At the end of the interview, you will have the opportunity to ask any questions. The whole process should take no longer than one hour and a half, but this might be less.

Where will it take place?
Interviews will be held remotely at a time convenient for both you and the researcher.

Consent
Giving consent means that you fully understand what the research study entails and what taking part involves for you. If you agree you will be provided with a consent form to sign prior to the interview arrangements.

What are the possible disadvantages/ risks of taking part?
There are not many risks involved. You will have to give up some of your time to take part and might feel uncomfortable answering some questions about your experience of your mental health or psychological support during your training. If you do feel uncomfortable at any point, you can choose not to answer a question or to stop the interview. You would not need to provide a reason for leaving the study.

What are the possible benefits of taking part?
By taking part in this study, you will be given the opportunity to share your story and experience and you will be helping to improve the psychological support services available for paramedic students in the future.

Will anyone else know what I say?
What you tell us will be treated as confidential, which means the transcript of the interview will not be passed onto anyone else outside of the research. However, if you tell us that you or someone else might be at risk of harm, we may have to break confidentiality agreements as a duty of care to ensure everyone stays safe, however, we will discuss this with you beforehand.

Will people know it's me?
When we write up our findings, we will do our best to ensure anonymity by removing your name, and any other details that could give away something about you. Pseudonyms will be used in the final write up if we use any direct quotations from the interview.

What if there is a problem or something goes wrong?
If you feel there is a problem, please talk to us about it as soon as possible. This can be before, during or after the interview. At the end of the interview, we will give you a debriefing sheet that will provide you with details of who you can contact if you need more time to discuss something else or feel distressed following the interview.

What will happen to the results of the research study?
The results of the research study will be written up in a report and might be published. Audio recordings and transcripts will be destroyed after 10 years.

Who is organising the research?
The research is being organised by the Department of Psychology at the University of Roehampton.

Appendix E - Participant Consent Form

University of Roehampton London

PARTICIPANT CONSENT FORM

Title of research project: Mental health during training: paramedic student's experience of psychological support during their training programmes.

Brief description of research project and what participation involves:

The research project is seeking to explore 6-10 UK paramedic student's experiences of changes or influences to their mental health or well-being during their training programme. Additionally, we are interested to know what are paramedic student's experiences of psychological support that is available within their training programme?

The research participation will involve taking part in a one-hour video call interview where participants will be asked open-ended questions about their experiences of their paramedic training programme, their mental health and wellbeing during their training programme and their experience of psychological support during their paramedic training. Interviews will be held at a time convenient for you. Interviews will be audio recorded and transcribed.

All data will be pseudonymised to ensure anonymity of participants. Participants have the right to withdraw their data from the study up until the stage of data analysis, with no adverse consequences.

Investigator contact details:

Jade Thomas
Department of Psychology
Whitelands College
Holybourne Avenue
London, SW15 4JD
Email: thomasj5@roehampton.ac.uk
Phone: 07724789640

Consent Statement:

I agree to take part in this research and am aware that I am free to withdraw at any point without giving a reason by contacting Jade Thomas. I understand that if I do withdraw, my data may not be erased but will only be used in an anonymised form as part of an aggregated dataset. I understand that the personal data collected from me during the course of the project will be used for the purposes outlined above in the public interest.

By signing this form you are confirming that you have been informed about and understand the University's Data Privacy Notice for Research Participants.

The information you have provided will be treated in confidence by the researcher and your identity will be protected in the publication of any findings. The purpose of the research may change over time, and your data may be re-used for research

projects by the University in the future. If this is the case, you will normally be provided with additional information about the new project.

(Please tick if you agree):

1.	I have read and understood the information sheet about the study.	
2.	I have had chance to ask questions about the study and know what I am being asked to do.	
3.	I know who I can contact about the study if I need to.	
4.	I agree to take part in the project, and I understand that I am a volunteer.	
5.	I understand I can withdraw from the study at any time without giving reasons.	
6.	Confidentiality agreements and limits have been explained to me and I understand the circumstances when confidentiality agreements may have to be broken.	
7.	I agree that my interview will be audio recorded and transcribed.	
8.	The use of the data in the research, publications, presentations, sharing and storage has been explained to me.	
9.	I understand that my identity will be protected in any write ups or articles of this study.	
10.	I understand that audio recordings and transcripts will be destroyed after 10 years.	
11.	I understand that the data I provide may be used in future research by the University of Roehampton.	
12.	I agree to sign and data this consent form.	

Name ……..

Signature ……

Date ……

Please note: if you have a concern about any aspect of your participation or any other queries, please raise this with the investigator (or if the researcher is a student, you can also contact the research supervisor). However, if you would like to contact an independent party please contact the Dean of School/ Faculty.

Appendix F - Data Privacy Notice

University of Roehampton London

DATA PRIVACY NOTICE FOR RESEARCH PARTICIPANTS

Research Participants - How the University of Roehampton uses your personal data

Why have I been directed here or been given this form?

This statement explains how the University of Roehampton handles and uses personal data collected from research participants. This includes data collected directly from research participants or where the data has been received from a third party.

Who will process my personal data?

This statement applies to all research conducted by the University of Roehampton and its members.

What is the purpose of the personal data processing?

You will have been informed about the specific types of personal data that will be used in connection with the research project you are participating in, and the nature and purpose of the research project. You will have been informed of any data sharing with participating research institutions, transfers outside of the European Union, and any automated decision making that affects you.

In some cases, your data may have been shared with the University by another organisation for the purposes of conducting research. The University may also re-use personal data it already holds for the purposes of conducting new research. The University will only use personal data in this way where it is legally entitled to do so. In all cases, the University will normally contact you to give you details of the research unless this would be impossible or involve disproportionate effort, or would significantly undermine the research objectives.

The University may in exceptional circumstances release personal data to appropriate authorities without seeking the permission of or notifying the data subject, but will only do so in compliance with its legal obligations.

What is the legal basis of the processing?

In the majority of cases, your personal data (including, where appropriate, sensitive personal data) is used to carry out research, including scientific, historical and statistical research, in the public interest. Where the research is commercial in nature or funded by a private company, the legal basis for processing is likely to be legitimate interests. If the personal data being used for research purposes falls into one of the special categories of personal data, including criminal convictions data, the lawful basis will usually be that the processing is necessary for archiving purposes in the public interest, scientific or historical research purposes.

What are my rights as a data subject?

The General Data Protection Regulation and Data Protection Act 2018 provide exemptions for personal data processing in relation to research activities.

You have the right to opt-out of any further processing. If you do opt-out, your personal data may not be erased but will only be used in an anonymised form as part of the dataset. (Please note that this is separate to withdrawing your participation from the research project itself).

In accordance with accepted ethical standards, you will not be named in any published materials unless you have given your explicit permission for this to happen.

The University considers that other statutory rights held by personal data subjects do not apply where the personal data is being processed for the purposes of research. If you would like to request a copy of the personal data then you can contact the lead researcher. Where practicable, they will provide you with a copy of this data. However, they are under no obligation to do so.

How long is my information kept for?

Your data will be kept in accordance with the University of Roehampton's Record Retention Schedule. Research data may be retained indefinitely in an anonymised form by researchers. The University may also reuse your personal data for a different research project. If it does, the University will make reasonable attempts to inform you about this reuse and its impact on your rights as a data subject.

Occasionally a researcher will leave the University and begin working for another organisation. In this case, your personal data may be transferred to the new organisation so that the research project can continue. If this happens, you should be provided with updated privacy information by the new organisation.

The University is committed to protecting all personal data for which it acts as a controller. Your information will be safely held on a secure system.

Who can I contact?

The University has a Data Protection Policy which sets out how personal data will be used across the whole University. Further information about data protection can also be found on the University's website. https://www.roehampton.ac.uk/corporate-information/policies/. If you would like to receive hard copies of any policies relating to Data Protection please contact the University Data Protection Officer.

If you would like to make a general query about how your data is being used as part of a research project, you should contact the researcher whose details you will already have been provided with.

If you would like to make any further enquiries or raise any concerns with respect to your personal data, or your rights as a data subject, you can contact the University's Data Protection Officer, Alison Bainbridge, at a.bainbridge@roehampton.ac.uk.

How do I complain?

If you have any concerns about the University's handling of your personal data, you have the right to make a complaint about to the Information Commissioner's Office and can do so at http://ico.org.uk/concerns/.

Appendix G - Sociodemographic Questionnaire

University of Roehampton London

Socio-demographic questionnaire

Thank you for agreeing to take part in this research.
Please fill in the following information:

1. **I identify as:**
   - Male
   - Female
   - Transgender
   - Prefer not to say
   - Other (please give details) ……

2. **How old are you?**
   - 18-21
   - 22-25
   - 26-30
   - 31-40
   - 41-50
   - 51+

3. **Which is your ethnic group?**
   Choose one section from A to E, then tick one box to best describe your ethnic group or background.

A. White
- Welsh / English / Scottish / Northern Irish / British
- Irish
- Gypsy or Irish Traveller
- Any other White background, please give details:

……

B. Mixed / Multiple ethnic groups
- White and Black Caribbean
- White and Black African
- White and Asian
- Any other Mixed/Multiple ethnic background, please give details:

……

C. Asian/Asian British

- Indian
- Pakistani
- Bangladeshi
- Chinese
- Any other Asian background, please give details:

……

D. Black/African/Caribbean/Black British

- African
- Caribbean
- Any other Black/African/Caribbean background, please give details:

……

E. Other ethnic group

- Arab
- Any other ethnic group, please give details:

……

4. Out of the options listed below, which best describes your religious beliefs?

- No religious beliefs
- Atheist
- Christianity
- Judaism
- Islam
- Buddhism
- Sikhism
- Hinduism
- Other, please state ……..

5. How would you identify your current employment status?

- Employed full-time
- Employed part-time
- Other, please state ……

Appendix H - Interview Guide

University of Roehampton London

Sample Interview Questions / Interview Guide

1. Can you tell me a bit about your training as a paramedic?
2. How do you cope with the demands of the paramedic training?
3. Are there any psychological support services available on your paramedic training, if so, could you tell me a bit about these?
4. Has training as a paramedic had any impact on your well-being or mental health? If so, how did you experience this?
5. Can you tell me if you have tried to access any psychological support during your training, if so, what was your experience?
6. Is there anything that was not offered to support your well-being, that you think would have been helpful to have in place during your training?
7. Based on the support that is currently available, how would you like to see this improved for future paramedic students?
8. Can you tell me a bit about how or if you feel your course has suitably prepared you for the mental health challenges of the paramedic profession?
9. How do you plan on coping with the demands of your paramedic career?
10. In terms of coping with psychological and mental health demands of the paramedic training and career, what would you like to see improved?

Appendix I - Participant Written Debrief

Jade Thomas
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Alternatively, if you are feeling distressed or would like to speak to someone following this interview then you can speak to your university well-being services. Additionally, you can contact external support services, such as the Samaritans on 116 123.

Please note: if you are worried about any aspect of this study, or have any other questions please ask Jade Thomas (or her research supervisor). However, if you would rather talk to someone at the university who is not directly involved in this research, you can contact the head of department:

Research Supervisor contact details:

Dr. Savin Bapir-Tardy
Department of Psychology
Whitelands College
Holybourne Avenue
London, SW15 4JD
Email: S.Bapir-Tardy@roehampton.ac.uk

Head of department/ programme convenor contact details:

Dr. Mark Donati
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Appendix J - Example of Interview Transcript

Transcript

Researcher
And then I'll quickly run you through. So the interview stage shouldn't take any longer than an hour. And thank you for giving up your time. I really appreciate it.
Researcher
So the questions are very semi structured. I'm just going to be asking you about your experience really of your training and touching a little bit on psychological support on your training as well. So I'm just interested to hear about your experience and and then.
Researcher
We've also, I will run through a debrief when we finish and just ask you a few questions.
Researcher
And then I'll also send you the debrief form just for you to have to hand. It's just got some information about my research and then it's got my contact details and my supervisor's contact details on there as well.
Participant
OK.
Researcher
And if you want to stop the interview at any point, let me know. That's fine and we can also take breaks if needed, but like.
Researcher
I said shouldn't take any longer than an hour. Do you have any questions before we get started?
Participant
No, I don't think so, no.
Researcher
So the first question, just make sure I'm I am recording it before I ask.
Researcher
So the first question.
Researcher
So the first question is, can you tell me a bit about your training as a paramedic?
Participant
Uh, what about what? What kind of?
Researcher
Just in general. So I guess, yeah, in general, how it's been for you and also maybe touching on.
Participant
Just in general yeah
Researcher
And how your paramedic trainings sat out 'cause, from what I'm hearing, lots of paramedic trainings are very different. So how is yours set out and what's your experience been?

Participant
So ours is kind of like we have a 12 week placement once a year and it's at different time periods so that each group won't be out on at the same time as each other
Participant
This this urm we have a new course and because of COVID what they decided to do was six weeks out of ambulance placement and six weeks ambulance placement, whereas before it would have been 10 weeks ambulance placement and two weeks ambulance and and that that hasn't been so good. It's it's been nice to get the experience.
Participant
Like in different areas. But I think most people out of ambulance know that we're never going to work with them in hospital and so they don't really pay much attention and as such.
Participant
So we've had a bit of reduced ambulance time and it hasn't been hasn't so good, but.
Researcher
Tell me a little bit more about the out of ambulance placement and what that's been like 'cause, you said it hasn't been as good…
Participant
Yeah. So urm obviously, it depends what year you're in. So, so when we go into third year we will have a bit more like maternity and things, but before they would have put you in pediatrics, maternity and ED and they've kind of stripped a lot of that. So we'll only have, we'll only have one week out of the whole entire.
Participant
Three years of placement with maternity.
Participant
Which doesn't seem like a lot, but and for the first two years we're in.
Participant
And just everywhere really, some people are in with the jet team and district nursing in in the hospital and acute assessment units and resus.
Participant
So they are good, but they some sometimes people don't even know you're turning up, so you'll turn up and they say, I wasn't expecting you.
Participant
And and you don't really have anyone to follow, no one really kind of takes you under their wing. You don't really know what.
Participant
You're doing.
Participant
And it's it's a bit of a misery for six…
Participant
weeks [laughing]

Researcher
Yeah, what's that like when?
Researcher
I don't know. You turn up and somebody says I wasn't expecting you. And and what's that like as a student to kind of be almost kind of left to your own devices in a way?
Participant
Yeah, it's it's awful to be honest. I know that a lot.
Participant
Of it you have to.
Participant
Kind of do yourself.
Participant
But yeah, for them to kind of say that, it makes you think, why am I here then? Like, obviously they don't think the experience would be valuable for me.
Participant
Uhm yeah they it's it's hard. It makes you want to go home as soon as you get there and and so then have to be there for like 3/4/12 hour shifts and you think, oh my God, like this is going to be awful and and you have no one to follow.
Participant
And you, you kind.
Participant
Of don't know what you are allowed to do, what you aren't allowed to do.
Participant
So you spend a lot of the time just talking to patients 'cause they're like a quite an easy go to just sit and chat with them so.
Researcher
Do you feel like there's a sense that you're missing out on a lot of experience and practice?
Participant
Yeah, I think so.
Participant
Like some of them are good, for example, like in resus you see a lot, but I I feel like especially the ambulance time we are missing out, missing out of quite a lot. So by the time we graduate we would have only done…
Participant
18 weeks of ambulance placement, but obviously half of that is days off and probably another half of that is sat outside hospitals.
Participant
So you know, it's not really representative of the time that we are actually getting on, on the ambulance and so I do feel like we have missed out quite a lot.
Researcher
Yeah, yeah.

Researcher
So what would you say the greatest demands are during the paramedic training?
Participant
[laugh] god… there's so many...
Participant
Probably urm for you to kind of.
Participant
Be really good at everything and pass everything first time. So obviously with other courses you can fail something and just pass the credits on next year.
Participant
We we have to pass every single module because you can't just fail one and and graduate having failed maternity for example.
Participant
So I I'd say having to kind of.
Participant
Pass everything. You get two chances and then you either have to do the whole year again or or a lot of people drop out. So that demands.
Participant
To kind of.
Participant
Get everything perfect is I'd say probably, yeah, probably the biggest, biggest thing.
Researcher
Yeah, and I imagine with that comes a lot of pressure
Researcher
Whether that's on yourself or from external?
Participant
Yeah, there is. There is a lot. It's 'cause. I think everyone kind of just expect you to do an exam and then go through the next year.
Participant
Like with this one, it's kind of like each year you don't know if you're even going to be on the course.
Participant
And and yeah, it is a lot of a lot of pressure, especially especially for the people that have failed one or two things and that's so much.
Participant
Pressure for them 'cause they go on to the next module, having still got the other module to do an exam for and and that's so much stress for them.
Participant
And, you know, in the back of their head they've kind of got like, oh, if I fail this.
Participant
Again, this might.

Participant
Be it like it's it's it is a lot, yeah.
Researcher
And you said…
Researcher
When I asked you that question initially, you said, oh, there's so many. Any others alongside that one that spring to mind?
Participant
Uhm, I think the.
Participant
Kind of the demands, to almost like give up your life. Like they they say you work in healthcare, urm you've got to expect this.
Participant
You've got to kind of give up your life. And so when you're on placement, for example, you get, you know, you don't get to choose.
Participant
Like, for example, if you have a Sports Club one day, you can't say to them, oh, I just just this one day we can you not.
Participant
Put me on the shift. You can't say that, so you have to almost give up absolutely everything.
Participant
And with not much kind of support behind it.
Participant
So, so even like the driving home from placement after 12, 1/2 or 14 whatever hour shift and driving 30 minutes back is is so dangerous for students, especially because they aren't used to that pattern and that so many people have worked in for a long time, they're not used to it so.
Participant
Yeah, that was well, let's say.
Researcher
Was that something that you noticed, I guess the commitment side of things, was that something…
Researcher
You already knew before coming onto the course or was it something that you kind of you realised as you went through?
Participant
Yeah, I think. I think I definitely knew before the course that that would be a thing.
Participant
But I didn't.
Participant

Uhm, I say I didn't know they would be so strict about it. And because obviously some of these things …

Participant

urm people do for their own mental health, if that makes sense, and for them to be able to stay on the course they do things that that make them happy. So to then have that kind of stripped away and be.

Participant

Like, this is the absolute priority. Not family events, not weddings, not not funerals, not not sports, whatever.

Participant

Coming to a lecture is more important than all of those things.

Researcher

Yeah… So how do you cope with the demands that you've just mentioned of the training?

Participant

Uhm, you don't really, you you get quite stressed about it and I think it's it's lucky that everyone is in the same position because everyone talks to each other and and I suppose if you if you've had a placement where you get on with your mentor, you can always talk to them like they might give you their e-mail or or the their number or whatever and you can always talk to them.

Appendix K - Initial Analysis Notes

Post-Interview Notes

Mixed responses about psychological support available at the university. Some students were very knowledgeable about the support available to them and described the support to be well signposted, however majority of the students interviewed either were not aware of any psych support available to them via the university course or did not know where to go if they needed psych support, suggesting limitations with the awareness and signposting of the psychological support.

Many students described they would prefer to go via the ambulance service for psychological support but others described the ambulance service psych support to only be available to fully qualified members of staff and experiences of being turned away by the ambulance service, therefore as a student they felt quite lost when it came to accessing psych support.
Furthermore students also highlighted feeling neglected between academic years as no psych support seemed to be available during the holidays and often this was when they required it the most as they would ruminate about previous traumatic jobs they went to. Some described their disappointment with the university as nobody checked in on them during the summer.

There were mixed responses from trainees regarding the psychological support available via the university and psychological support available via the ambulance service. Overall responses from the trainees demonstrated that it can be down to 'luck' as to which ambulance service you are in for placement or which university / members of staff work at that university is dependant as to the psychological support you receive as a trainee paramedic, "I wouldn't say there really has been anything offered to us", "it's a good question, I don't really know, I mean if there are they're not really well signposted", "we just got to speak to your personal tutor, but when you do nothing, nothing really progresses", "we've got like 12 lecturers and they're all approachable". Based on these responses there appears to be no standardised or mandatory process or approach to psychological support for these trainees, the psychological support within the paramedic training in the UK lacks consistency.

Some trainees described being offered the same psychological support as fully qualified paramedics within the ambulance service, as they were allowed to access staff counselling services, fast track assessment processes and TRIM (trauma risk management) which is a welfare led process intended to access the response of a member of staff exposed to a potentially traumatic incident, one trainee described "I remember them saying if you need help, if you need anything, you're fully entitled to everything that the ambulance service offers".

However, other trainees described being turned away or told "I'm not authorised to provide support to you because you're not an employee, you're a student". Trainees described feeling confused or lost when it came to seeking psychological support because they lacked clarity on whether to seek support via the ambulance service or via the university "there's an element of you don't know who, whether its the trust or the university, who's best to go to in that situation".

Appendix L - Examples of initial coding

Transcript Analysis	
Code Ideas	**Context / Quotes from Transcript**
'Lucky'	Lucky to have a good mentor
'patient'	What makes a good mentor
'understanding'	What makes a good mentor
'supportive'	What makes a good mentor
'good support network'	Coping with demands
'hobbies'	Coping with demands
'student support services' / 'student support wellbeing'	Psych support available
'ambulance service support'	Psych support available
'trim assessments'	Psych support available
Counselling	Psych support available
Entitled to same support as paid staff	
Quick referrals	
University mentor	
Learning support plan	
Didn't feel comfortable	Sharing with mentor about mental health/ learning support plan
Under confident	
Disability support allowance (DSA)	From government
Adequate debriefs after jobs	Part of learning support plan
Shift work	Struggled initially
Diagnosis of anxiety & depression	Prior to university
Hyper aware	Of looking after mental health as a paramedic
Knowing what I need	Awareness
Covid / online learning	During course
Placement delayed	Due to covid
Not a good mentor	'good paramedic, but not suitable to be a teacher'
Abrasive	Negative quality of mentor
Don't want to cause issues as a student	'ambulance station I want to work at, so I don't want to cause issues as a student and then find that I have to work with her as a colleague'
Resources available	Psych support services – made aware of / safeguarding themselves (uni)
New / young paramedics - Suicide	Aware of suicide rates among paramedics
'all very hush hush' 'swept under the carpet'	Not openly spoken about paramedic suicides
Stigmatised / stigma in paramedics	Not openly spoken about paramedic suicides
That generation/ generational shift / older generation	Older generation not openly discussing mental health making it harder to destigmatise within ambulance service

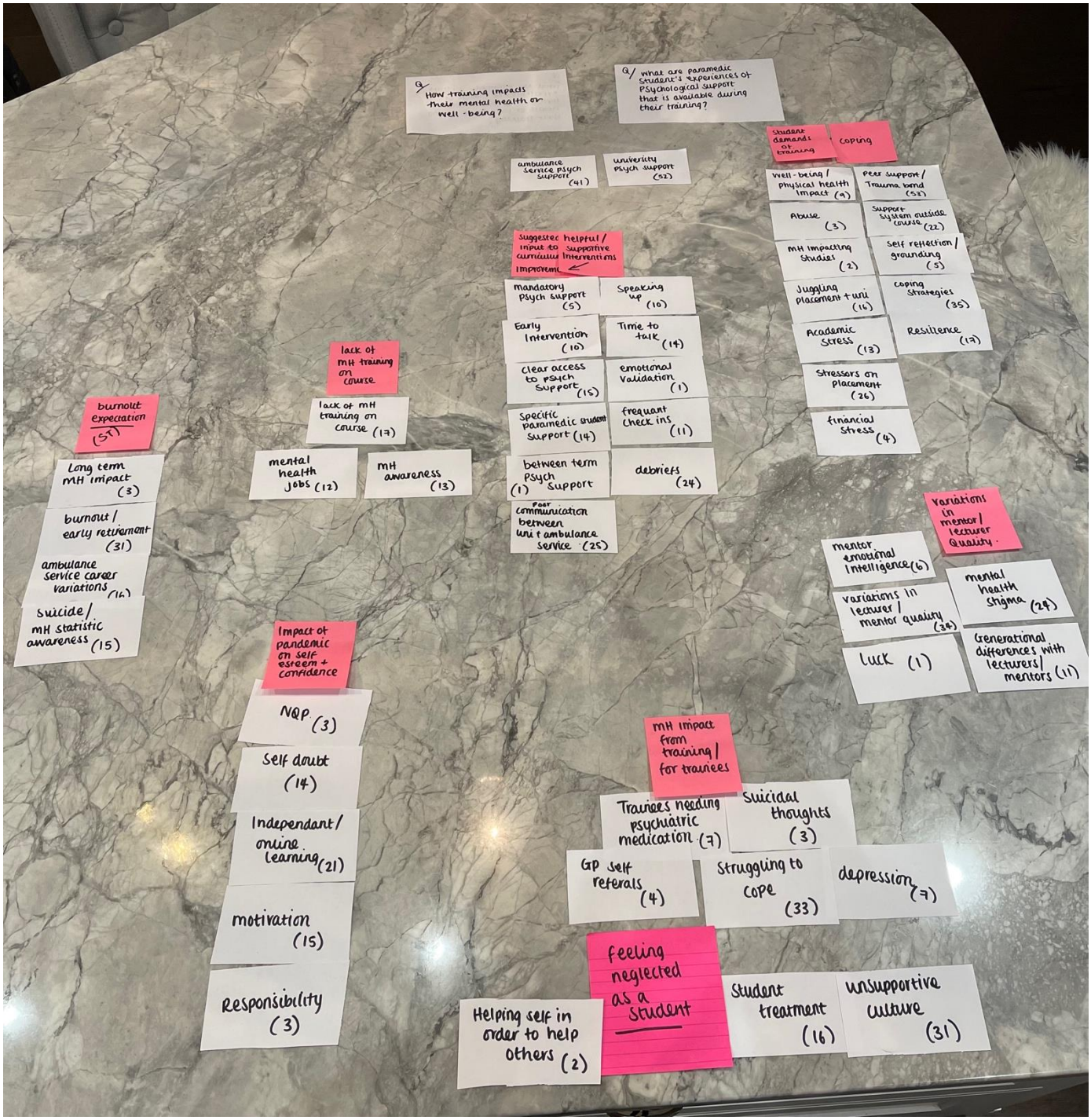
I’m very open about my mental health with family and friends	
Harder on placement	To be open about mental health
Uncomfortable	Talking about mental health with mentors or people not worked with before
Mental health patients	Advantage with these types of patients – can empathise
Empathise with MH patients	
Bond with patient / slowly trust you / more accepting of help	MH patients
Draining	Sharing mental health with MH patients
Predisposition of MH patients	And then the next call that comes through is for a mental health patient. There's almost like that predisposition, which is like, oh, it's another mental health patient, like, and it's really, really bad. And it yeah, it's not a great attitude.
Lack of mental health training	we don't get a lot of mental health training ourselves as paramedic students, so first year we didn't get any, 2nd we didn't get any. I will get my mental health training this year.
One week of MH placement	And I think one week of mental health placement.
Mental health services overrun	social services system and system is in place for mental health are so overrun and oversubscribed that we're picking up the slack. So it's a it's a lot.
Shocking / stressful / sad / eye opening	I've seen sectioning happen once with our pack with a patient and it's just really they don't like doing it and it's really stressful for everyone involved.
Better communication	better communication between the university links and the ambulance links
‘old army’ ‘army men’	but male, middle-aged and now getting older army, army men, so they do combat technician and stuff like that, then they come back and then they'd be a paramedic and oversee mental health within the army is very no, no.
Time for self reflection	‘Also having time to self-reflect’ ‘So when I do self-reflection I do like grounding, not meditation but guided breathing’. And just having just, even if it's just for a minute, just having just a bit of time just to to think, I think we're so and for paramedics and for any health profession, we're just paying from one task to the next. We don't really get much time to just sit still and just focus on how you're feeling.
Exercise	Going to the gym

Coping strategies	And coping strategies, uhm, making sure that yeah, but I've got like little plans in place if I feel overwhelmed that I know what to do.
Light lamps (SAD lamp)	And it's really dark all the time. We go to work in the dark and come home in the dark and so I have one of those urm, lights that resemble that? Yeah, there's some light lamps, yeah, yeah, so that's that's really useful.
Occupational therapist	she's not a paramedic, she does understand about like the NHS and how stuff works and how stressful it can get.
No psych support just for students within ambulance service / psych support tailored to students	I feel like that there should be, although the support that we get from placement is good and we get the same people that staff get, there isn't like a thing just for students. I feel like if there was like a tailored something tailored towards students 'cause, although we see what paramedics see.
Antidepressants	So first year started getting really rough before Christmas. Uhm, I was already on a dose of antidepressant and but I just knew that I needed more support. So I I had an appointment with GP and they just upped the dose which has worked for me. So just being hyper aware and I was already on that antidepressant before the course started as well, so I didn't have to start that because of university and just need the dose up.
healthy space, healthy mind/ clean space, clean mind / own personal space	And have like and maintaining a good clean, like health. It's yeah, sounds cheesy, but like healthy space, healthy mind.
Peer support	They've been always just really supportive to me and I'm really good at listening so when my friend was upset or if any of my friends are upset or just struggling. Just kind of like, yeah, we can get like, providing the same support that they provided to me. Just like, yeah, we can get through it. All right, we'll get there.
Burn out rates	Definitely on the road experience, but then knowing that the burnout rate has just rocketed, especially for new paramedics

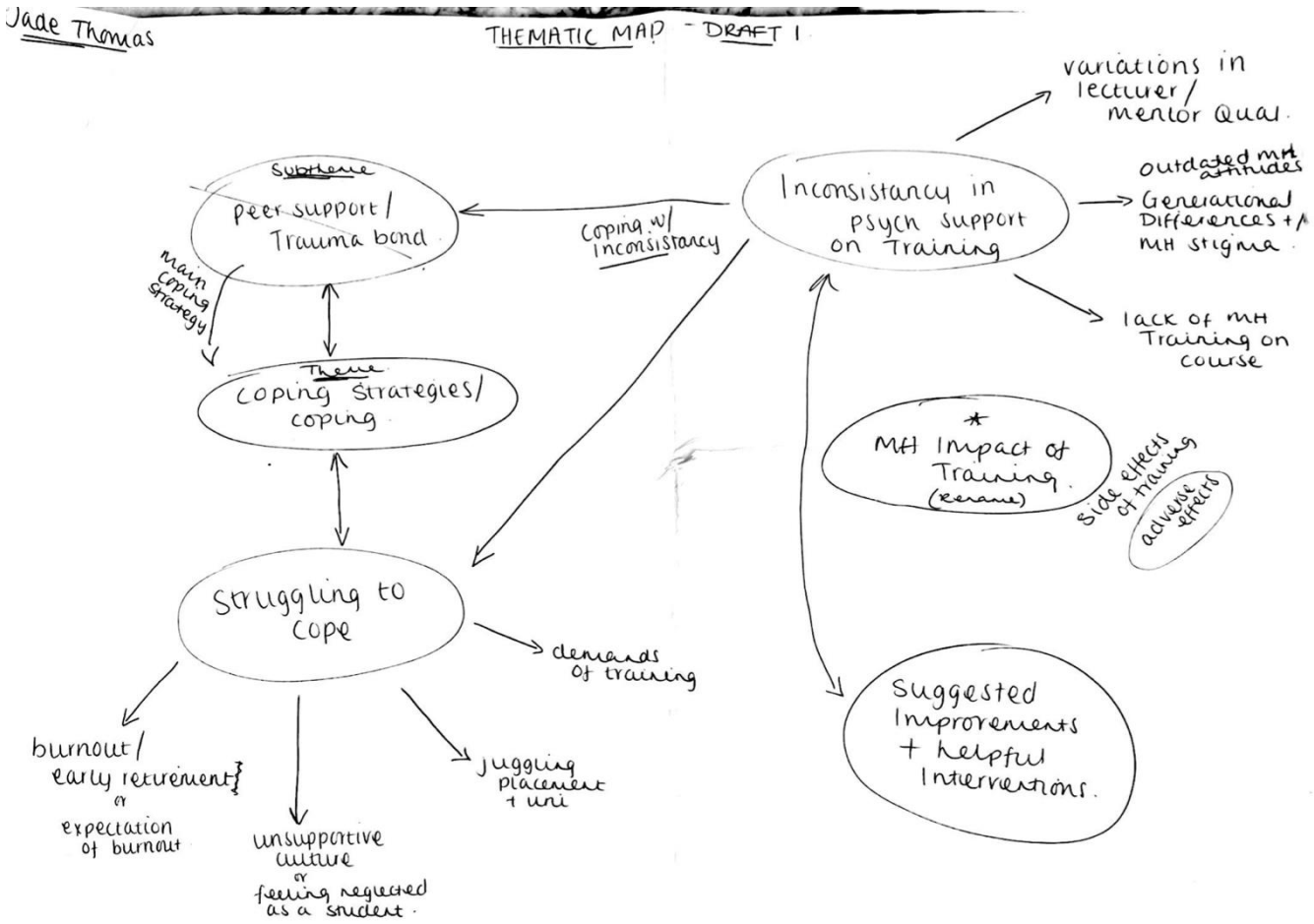
Student paramedic practitioner	he's now a student paramedic practitioner and they do ambulance shifts, but they mostly do shifts as a lone response in a car. But they go out and do like year urine dip testing and like falls, stuff to do with falls. And then they do shifts up in a hub. So they're actually on the phone, the computer and they deal with referrals. So it's a bit and in GP surgery's as well. that environment would be beneficial to me rather than being out on the road all the time.
Change what I think I want out of the career	
personal academic tutor	Unless you're really, really close with them and really, really good, I don't know how comfortable I would feel about going to them with those types of issues.

Extracts from data / Interviews	Code	Reflexive comment
placement and coursework as well, so trying to write our essays and things like that whilst also working a full time following our mentors Rd to doing four night shifts in a row. And then you're off and you're trying to do your work. p11 that can be obviously just a more physical demand, 'cause you're tired, but I think that's I don't struggle that as much 'cause. You just have to plan ahead. P11	**Juggling academic work plus placement is a great demand on the course** Is training to be a paramedic harder than once qualified due to the academic work plus placement. Could support be put in place to support students with management of academic work alongside placement. Time management and academic planning helps success of the course and helps to manage stress levels / feeling overwhelmed.	I have also experienced very similar on my training course, constantly have to be able to adapt to being a student and being a practitioner can be tiring and overwhelming. Personally, this has been a common theme throughout my personal therapy and it has helped to have a dedicated space every week to reflect on how I am managing everything.
I think trying to become your own paramedic is probably the biggest demand I've found p11	**Developing autonomy as a paramedic** Do they receive teaching on how to develop autonomy as a clinician, is this a gap/important part of the course that is missing before they qualify.	My personal experience differ slightly as this has been an element of our course particularly in her final year that I have thoroughly enjoyed and found a stress relief to begin to find my own way of practising.

Appendix M - Example of Generating Initial Themes



Appendix N - Example of Initial Thematic Map Development



Appendix O - Braun and Clarke (2006) 15-point checklist for good thematic analysis

Table 2: A 15-Point Checklist of Criteria for Good Thematic Analysis

Process	No.	Criteria
Transcription	1	The data have been transcribed to an appropriate level of detail, and the transcripts have been checked against the tapes for 'accuracy'.
Coding	2	Each data item has been given equal attention in the coding process.
	3	Themes have not been generated from a few vivid examples (an anecdotal approach), but instead the coding process has been thorough, inclusive and comprehensive.
	4	All relevant extracts for all each theme have been collated.
	5	Themes have been checked against each other and back to the original data set.
	6	Themes are internally coherent, consistent, and distinctive.
Analysis	7	Data have been analysed – interpreted, made sense of – rather than just paraphrased or described.
	8	Analysis and data match each other – the extracts illustrate the analytic claims.
	9	Analysis tells a convincing and well-organised story about the data and topic.
	10	A good balance between analytic narrative and illustrative extracts is provided.
Overall	11	Enough time has been allocated to complete all phases of the analysis adequately, without rushing a phase or giving it a once-over-lightly.
Written report	12	The assumptions about, and specific approach to, thematic analysis are clearly explicated.
	13	There is a good fit between what you claim you do, and what you show you have done – i.e., described method and reported analysis are consistent.
	14	The language and concepts used in the report are consistent with the epistemological position of the analysis.
	15	The researcher is positioned as *active* in the research process; themes do not just 'emerge'.