Failing medical finals: it's not as bad as you think; using mixed methods to understand the experience of failing

Dr. Dominic Johnson

Population Health Sciences Institute, Newcastle University.

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Supervisors

Professor Gill Vance, School of Medical Education, Newcastle University

Dr. Brian Burford, School of Medical Education, Newcastle University

Professor Philip Bradley, School of Medical Education, Newcastle University

Declaration

I certify that all work which is not my own in this thesis has been identified. No material is included which has been submitted for any other qualification.

Abstract

Background

A relatively static proportion of students fail the Newcastle University MBBS programme each year. The majority are successful at resit and so proceed to the postgraduate foundation programme.

Little is known about the implications of first-time failure on the students' experience of repeating their final year, or their experience in the foundation programme.

Summary of methods

A mixed methods approach explored how failing medical finals affects students and foundation-year doctors. The project used theories of self-esteem, professional identity and attribution bias.

Questionnaire data on self-esteem and professional identity were collected from final-year medical students and foundation-year 1 (F1).

Eighteen qualitative interviews were completed with students who had failed finals and who were repeating their final year, or who were F1s having previously failed. Interviews were conducted at three time points.

Summary of results

Qualitative analysis highlighted that participants who fail finals experience different stages of emotion as they come to terms with failing. Whilst self-esteem is affected initially, over time, confidence is enhanced by several aspects of the experience. Identity does not appear to be adversely affected; in fact, the resitter identity seems to have several positives.

The quantitative data indicated that self-esteem and professional identity may be appropriate constructs to explore the experience of failure; however, they have limitations when trying to explore lived experiences.

Discussion

This work provides a theoretical model that describes the experience of failing finals as an ‘academic adjustment reaction’ using theories of self-esteem, professional identity and attribution bias to understand this phenomenon.

Conclusions

Failing finals is a difficult experience for medical students, but one through which they appear to undergo significant development. The work highlights that support for those who fail examinations should be bespoke in order to give the best opportunity to access the many positives that can come from the experience of failing.

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Chapter 1. Setting the Scene for Exploring the Experience of Failing Medical Finals

1.1. Chapter Overview

The purpose of this chapter is to give the reader an understanding of the rationale of the thesis. Firstly, I will examine my own personal journey leading to undertaking this work and the context around which it is based. I will then go on to provide justification for the work by introducing the key areas of study and the theoretical perspectives that underpin the thesis. Finally, I will finish the chapter with a clear statement about the research questions and aims of the project, provide an overview of the thesis to orientate the reader and consider the writing style which has been used.

1.2. Justification for the Study

1.2.1. How the research arose

I am a clinical academic working in the large medical school in Newcastle University in the United Kingdom (UK). I had worked for the university setting up its branch campus in Malaysia delivering a medical degree out there. In returning from that project, I was looking to undertake some scholarship to underpin the considerable operational experience I had as the Dean of Clinical Affairs in Malaysia. Clinically, I work as a consultant forensic psychiatrist.

Having had to meet with students who had failed their medical finals in my role as a clinical dean, I had seen the distress this caused. These students faced having to resit a year and were often very upset, tearful and angry. I began to develop an interest in studying this group to explore this reaction. Also, as a doctor, I had come across a number of colleagues who had failed their medical finals and who had gone on to have successful careers but who had all remarked what a life changing experience that failure had been. They would reflect how hard it was but looking back, they would often say that they were glad it had happened and that it had made them the doctor and the person that they were. In my thesis, I looked to draw these two personal experiences together.

Around this time, the medical school was keen to explore some scholarships around the finals examination. One aspect of this was around differential attainment and seeking early warning signs of those who were at risk of failing using our established data sets. The other was broader and looked to consider an aspect of the psychosocial issues around failing. I therefore developed an interest in looking at the experience of failing, given my experience as a clinical dean described above, and in wanting to explore how we might support students better who have this experience. My initial idea was supported, and a formal research proposal was developed, submitted and accepted.

In developing the proposal, aspects of the self, namely self-esteem and professional identity, were mooted as lenses through which the experience of failure could be viewed. This will be expanded upon later, but it seemed intuitive that failure would affect confidence. Since the medical school were shifting their model of conceptualising professionalism to that of professional identity formation, this provided a theoretical window that was familiar to me and one that could be used to explore the experience of failing.

As became apparent, failing medical school finals is a little-studied area regarding exploring the experience of failure; more broadly, the literature around failure is quite sparse. With that in mind, an approach was adopted to explore the experience of failing whilst having some background theory to underpin it. The rationale of the chosen research methodology and theoretical constructs will be explored later in this chapter and more fully in the methodology chapter.

Given my senior position in the medical school and the field of study I was embarking on, I had to be very mindful of my position in the research; these issues are dealt with in detail under methodology. The skills and knowledge I have from my expertise as a consultant forensic psychiatrist have, I hope, enriched this work.

1.2.2. Context around medical students

In the UK, the course leading to becoming a qualified doctor is usually a 5-year undergraduate programme leading to a MBBS degree. There are a small number of graduate entry programmes. The degree qualification allows the graduate provisional

registration on the General Medical Council (GMC) register. Most graduates then enter a two-year foundation training period. After successful completion of one year of this, they are granted full registration with the GMC. After two years, they can apply for further training in their area of interest.

All medical schools have some form of high stakes assessment they use to ascertain who can graduate and become a doctor. When and how this is conducted varies considerably, although all medical programmes must sit within and be quality assured against parameters set by the GMC. In the past, most medical schools had these high stakes assessments at the end of the final year. However, the trend, more recently, has been for medical schools to sit their high stakes final assessment towards the end of their penultimate year, or early in the final year, which gives the students opportunity for remediation within the course timeframe and therefore they do not have to do an additional year should they fail. Newcastle is one of the courses that examines at the end of the final year, meaning that if a student fails, they must resit the whole year. Newcastle medical school was considering re-designing its curriculum at the time of starting this work and with this in mind, and with the national picture moving towards earlier finals, it seemed like a particularly opportune time to look at this aspect of finals in a more scholarly way.

Given the high stakes nature of the finals assessment and the important transition it represents, sitting finals is a key and memorable moment for most medical students. Most qualified doctors, no matter how senior, will still be able to recall quite clearly the patient they had in their finals examination and recount anecdotes of their memories of sitting finals.

Each year, a relatively static proportion of students fail the MBBS programme in Newcastle University. Usually, around 5% of students (15-20 out of a cohort of 350 at the time of starting this work) fail the finals assessment. The majority of these are successful at resit and so proceed to the foundation programme. Little is known about the implications of first time failure for the students' experience of the repeated final year, and their progression to and experience of the foundation programme.

Factors relating to the academic performance of medical students have been extensively studied, with factors such as strategic learning style, white ethnicity and female sex

associated with success (Ferguson *et al.*, 2002). Exiting the medical school programme early has been shown to be related to psychological morbidity, non-EU origin, academic difficulties, absenteeism, leave of absence and social isolation (Maher *et al.*, 2013).

However, the literature on students who fail medical finals is sparse. One study highlighted the need for screening and access to help for students as the qualitative approach in the study noted this to be themes amongst students who had failed(Cleland *et al.*, 2005). Engagement with learning, reflections on learning methods, and experience and the application of learning to future practice appeared to contribute to success compared to failure in failing students in a London medical school (Todres *et al.*, 2012). This work will seek to add to this under the studied area of the medical education scholarship.

The thesis will consider a basic demographic profile of the failing students in order to inform our understanding of who they are. However, I was not seeking to develop a model around predictors of failure; this was being addressed in other work. The object of the study is the student and their experience, not the process of assessment and progression, nor the perceptions of educators.

1.3. Introduction to Key Theoretical Constructs

During the development of the project, a number of concepts were identified as being of potential relevance; these were self-esteem, career progression, stigma, professional identity formation and resilience. Ultimately, self-esteem and professional identity were identified as potentially important. Self-esteem was chosen as it represented a commonly studied phenomenon in a number of populations including higher education and medical students (Brown and Dutton, 1995). Intuitively, it seemed that it was highly likely that failing finals would affect self-esteem in some form, and it was postulated that it would have a negative effect on self-esteem.

Professional identity was a dominant discourse in medical education at the time of the study design. I am the lead for professionalism within the medical programme in Newcastle and had used professional identity formation theory to underpin a new approach to the teaching and assessment of professionalism within the medical school. Using this background knowledge, and using it to understand how the students who failed

experience their sense of identity with each other within their resitting year and then later on as foundation doctors, this appeared to be a valid approach to explore the experience of failing given that it would be to some extent highly individualistic yet with identity theory allowing an understanding of the experience in relation to others.

Finally, as the data were analysed, the idea of using attribution theory to frame the work became an obvious extension of the theoretical approaches. The data spoke of how the students 'blamed' all sorts of parameters for their failure. Using this to consider the medical school response to support these students provided a useful framework to present the results but also to drive the model of the experience that would hopefully emerge.

In order to set the scene for the rest of the thesis, a brief overview of each of these areas is given below, together with further exploration in the literature review and results sections.

1.3.1. Introduction of self-esteem

Self-esteem is a disposition that a person has which represents their judgments of their own worthiness (Olson *et al.*, 2008). Self-esteem and stress have been extensively studied within the medical student and junior doctor populations with a correlation of increased stress leading to reduced self-esteem (Stewart *et al.*; Clever, 2002). The link between failing examinations and its effect on self-esteem has been well-established in many populations and extensively in students, with failing associated with a reduction in self-esteem (Brown and Dutton, 1995). One of the few studies looking into this area and specifically, in medical students, noted a relationship between external stress leading to lower self-esteem and subsequent poor performance (Linn and Zeppa, 1984). Another noted that self-esteem was related to burnout but did not examine any link to performance or the effect of failure (Dahlin *et al.*, 2007). There is little literature looking at the effect of failure on self-esteem within medical student populations; this study will hopefully contribute to this area. As previously stated, I anticipated that failing would have a negative effect on self-esteem.

1.3.2. Introduction of professional identity

Social identity is also a complex area and has its root in 1970s Britain, where a social psychologist, Henry Tajfel, developed a theory linking group membership and group life to individual cognition, societal interaction and social processes (Tajfel, 1974b). The theory seeks to explain intergroup behaviour based on perceived group differences in group status, group legitimacy and the ability to move between groups.

Professional identity is a type of social identification and is the sense of oneness individuals have with a profession, e.g. law or medicine, and the degree to which individuals define themselves as professional members (Ashforth and Mael, 1989). Understanding the process through which doctors develop their professional identities has been proposed to give insights into improving students' learning experiences and the development of a doctor identity that is more in keeping with the professional standards that are required by external regulators (Monrouxe, 2010). Professional inclusivity and social exclusivity are important contributors to students' professional identity (Weaver *et al.*, 2011). How failing finals impacts on these aspects of professional identity will be explored within this project.

There is a close relationship between social identity and self-esteem. This has been described in some of the dominant models of social identity, such as that described by Abrams and Hogg. They argued that intergroup bias relates to self-esteem in two ways. Firstly, self-esteem is enhanced if we compare ourselves favourable against others in other groups perceived to be less desirable and secondly, low self-esteem promotes discrimination between groups (Abrams and Hogg, 1990). How the chosen theoretical concepts link will be explored in this work.

1.3.3. Introduction to attribution theory

Attribution theory refers to the systemic errors humans make when attributing the reasons behind their or other people's behaviour and sits within the field of social psychology. (Heider, 2013).

For example, students may commonly attribute failing an examination, e.g. finals, to external factors; they may perceive that they had a particularly difficult patient in a clinical examination (uncontrollable) and subsequently be frustrated, not considering that they did not work hard for the examination (internal, unstable attribution) and therefore, they are spared feelings of guilt. This work will explore the attributions the students make as they experience coming to terms with their failure. It will give an opportunity to explore this over time and allow an understanding of what the students attribute failure to, which will be helpful in developing a model of understanding the experience as well as suggesting possible strategies to support failing students in the future.

1.4. Overview of Thesis

1.4.1. Research questions and aims of the project

These initial introductions into the field of study have set the platform for the main body of the thesis, the purpose being to explore these research questions:

1. How does the experience of failing the medical finals examination affect students across the repeated year and as a foundation-year 1 doctor?
2. Can a theory-driven model of the experience of failing be constructed to support students in the future who have the same experience?

The aims are:

- to explore the experience of failing the medical degree final examination in the context of relevant theoretical models; and
- to derive a theory-driven model that describes the experience, and which may be used to understand and to support students who fail in the future.

1.4.2. Structure of thesis

The intent of the project is to develop a model for understanding the experience of failing to underpin approaches to supporting students who are in that position. The work will focus on students studying medicine at a UK medical school, where a resit year is required. This will not be applicable to all curricula, but the results will hopefully provide

valuable insights that can be drawn from a study of the longitudinal journey of these failed students which may be applicable across all curricula. As described above, the introductory chapter sets the background context of the thesis.

The second chapter reviews what is already more generally known about the experience of failing finals and examinations. Aspects of the theoretical frameworks that the work utilised are expanded on in order to provide context and to scaffold the later results chapters. A gap in the literature in relation to understanding the experience of failing is identified and the scene is set for the modified grounded theory study.

The methods chapter outlines the study design and justifies the chosen methodology and theoretical stance. The chapter finishes with a brief discussion of the extent to which methodological coherence is achieved, a key ingredient of qualitative research.

The five results chapters then follow, each underpinned by a broad aspect of theory or approach. Initially, I report the findings from the quantitative data. This sets up and contextualises the qualitative data which follow.

The second results chapter explores one of the most important aspects of this data set, i.e., its longitudinal perspective. With three interview data points spread over the whole failing experience, this allows an exploration of how aspects of the experience change over time.

Self-concept is a collection of beliefs about oneself. This study examines its results through three aspects of the self, namely, self-esteem, attribution theory and professional identity (Byrne, 1996; Oyserman, 2004), as described above. These form the basis of all the remaining results chapters, with each chapter describing its results under a theory-driven framework.

The discussion summarises the principal findings and examines the fit with the literature. In addition, implications are discussed; the research is evaluated in terms of trustworthiness and authenticity, and future directions for research are proposed. I close with the main conclusions of the thesis.

1.4.3. Writing style

My writing style has considerably changed over the research process. Given my background as a clinical scientist, at first, it was more objective, but as I became more immersed in the area and understood my central role in the data collection and analysis, it became more subjective. As such, I use the first person, and adjectives are used to recreate the emotions around the findings. This style of writing is in keeping with reporting qualitative research. Although unfamiliar to those undertaking quantitative research, this style preserves the authenticity of the work and is congruent with the research paradigm.

1.5. Chapter Summary

This chapter has, I hope, set the scene for the rest of the thesis by explaining my journey in relation to taking on this work, introducing the relevant high-level literature to set the scene and finally, articulating the aims and research questions it seeks to answer. The next chapter will give a detailed description of the specific literature that is pertinent to the research questions and then provide a broader overview of the literature relevant to the three theoretical concepts that have been used to frame the work.

Chapter 2. What Is Already Known About the Experience of Failing Medical Finals?

2.1. Chapter Overview

This chapter presents the literature in two parts. Part A presents a scoping review of the literature on the research questions, identifying gaps and how this work fills those gaps. Part B summarises the key points of relevant theoretical literature, introducing concepts which were identified as relevant both a priori and in the conduct of the research.

The aim of the chapter will be to set the reader up for understanding the methodology used, the interpretation of the results and the recommendations of the thesis in the subsequent chapters. The chapter will initially resemble a microscope at high magnification, gradually drawing back to provide the reader with insight into the scope of the thesis.

Part A: Scoping Literature Review Pertaining to the Research Questions

Part A is a scoping exercise so as to identify and to describe the key literature pertaining to the research questions. This will seek to answer a review question derived from the research questions. The review question is:

- What does the literature tell us about medical students' experience of and response to failing finals?

Scoping reviews aim to map the existing literature in a field of interest in terms of the volume, nature and characteristics of the primary research (Arksey and O'Malley, 2005). Scoping reviews are a relatively new but increasingly common approach for mapping broad topics (Pham *et al.*, 2014). Scoping reviews are of use to scope a body of literature, to identify knowledge gaps and to clarify concepts (Munn *et al.*, 2018). This remit is appropriate to the field of study in this work.

2.2. Search Strategy

The review question was mapped to a search strategy consisting of two key broad headings: ‘medical students’ and ‘failure’.

These concepts were developed into search terms using keywords as follows. In these expressions, ‘*’ indicates a wildcard for one or more characters and so ‘fail*’ will also capture ‘failing’ and ‘failed’, as well as ‘fail’. Double inverted commas “” indicate that the search should return phrases, not individual words. ‘Adj3’ was used to enhance proximity in the search. Advice was taken from a Newcastle University librarian on the construction of the search terms. The following terms were used under each broad heading:

- For medical student: exp *Schools, Medical/ exp *Students, Medical/ exp *Education, Medical, Undergraduate/ medical student/medical school
- For failure: exam* adj3 fail*/ final* adj3 fail*/ assess* adj3 fail*/ academic adj3 fail*/ summative adj3 fail*/ exp *failure/

The final search combined these terms with logical AND, meaning that all hits contain at least one of the terms within all of the concepts. Hits were limited to those with a publication year of 1946 onwards.

Table 2.1 summarises the number of hits from the three main databases targeted, i.e. Medline, Psychinfo and Embase, in the first week of January 2022.

	Medical student hits	Failure hits	Combined
Medline	50595	12453	245
Psychinfo	8542	5876	65
Embase	253675	29602	444
Combined after removal of duplicates	**536**		

Table 2.1 Number of hits from search terms of three main databases

2.2.1. Inclusion and exclusion criteria

The following inclusion and exclusion criteria were applied when subsequently screening the papers identified above.

Inclusion criteria:

- Papers about medical students, postgraduate medical trainees and other health professionals.
- Papers about failure in the context of medical education and/or training.
- Papers published between 1946 and January 2022.

Exclusion criteria:

- Studies which only included failure incidentally.
- Papers that were not within the context of medical education and training.
- Papers not published in the English language.
- Papers published before 1946.
- Clinical trials involving patient and biomedical studies.

Whilst English language publication was a criterion for inclusion, papers were not excluded on the basis of the location of the study.

2.2.2. Stages of literature review

Stage 1: Initial filter by title

The retrieved set of papers were initially filtered by considering titles against the inclusion criteria, which led to the exclusion of titles, leaving the remainder for abstract review. Where titles were not clear, abstracts were considered at this stage, but erring on the side of inclusion for further consideration.

Papers were initially sorted using the ‘document type’ field in Medline, Embase and Psychinfo in order to separate primary research (papers) and other documents, such as reviews, letters, editorials and commentaries (papers). This field was found not to be entirely reliable, however, with some reviews and empirical studies not being tagged as ‘journal articles’, whilst others were, despite being editorials or letters. The field was

therefore only used as a rough indicator so as to prioritise abstract review; the distinction was not subsequently used.

Stage 2: Secondary filter and initial sort by abstract

The abstracts of the included papers were reviewed against the inclusion criteria in more detail and sorted in order to provide an outline structure for the review.

Stage 3: Review of full papers

The final stage of the review was to consider papers in more detail, identifying the key findings from abstracts and full papers, and locating each paper within the themes. Further papers were rejected following closer examination against exclusion criteria.

Stage 4: Presentation of the results

Thirty-two papers were included in the final review.

The search process is highlighted in Figure 2-1.

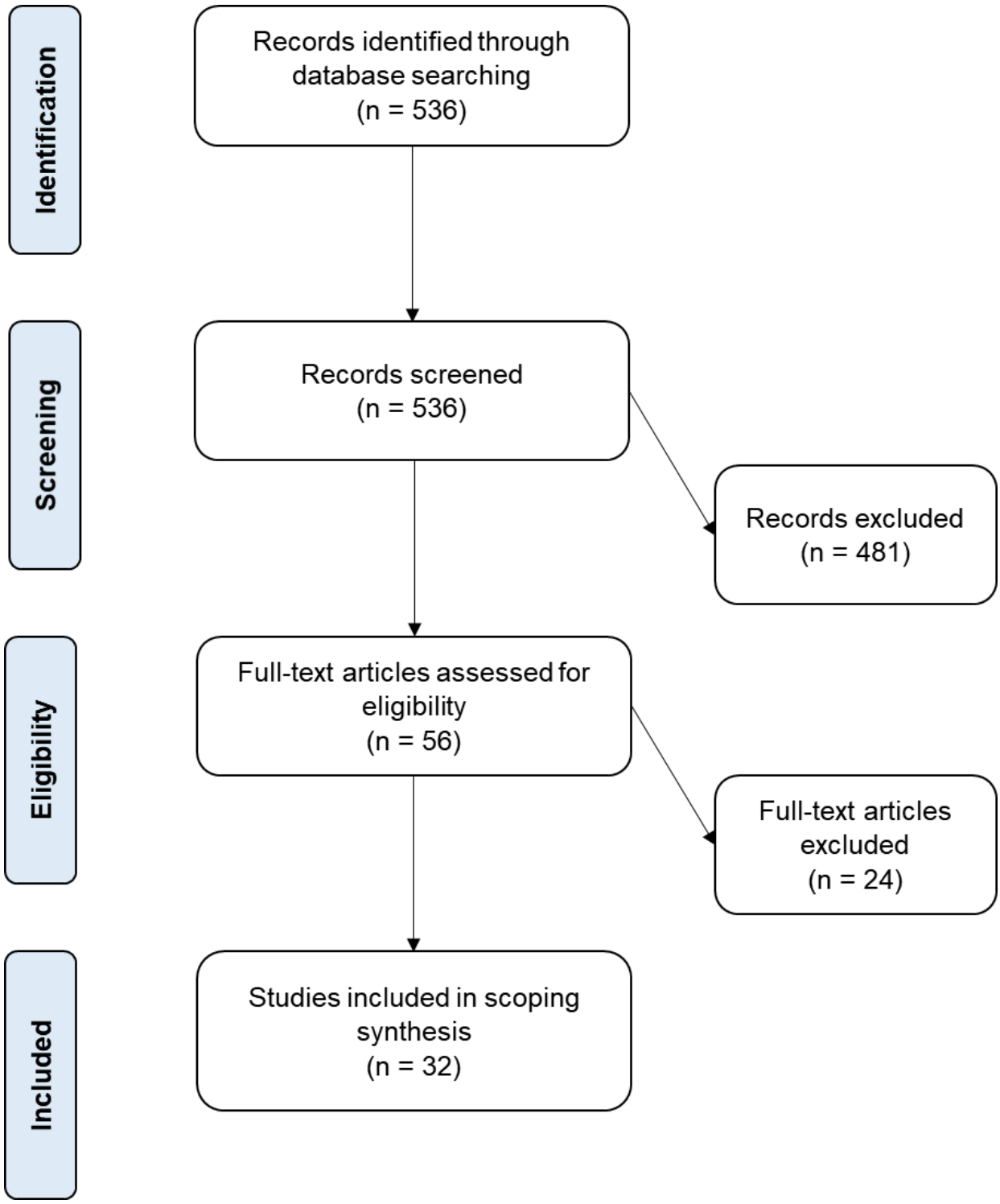

Figure 2-1 Search process details

2.3. Results

The overarching subject of the review was the experience of failing examinations in medical students. The results presented initially are those papers that specifically address that issue of the thirty-two captured in the above search. The remainder of the literature captured provides consideration of how remediation, and then student-specific factors, relate to failing.

2.3.1. The experience of failing in medical training

The review highlighted three articles which described the personal experience of failure. It is interesting to consider that over the span of 76 years, only 3 such articles exist. One could postulate that it appears that researchers and academics do not like to write about failure or those who fail do not like talking about it.

In an anonymous article in 1974 (Anonymous), a UK-based author speaks of the high stakes nature of the finals undergraduate assessment and then rails at the high failure rate (23%) in surgery compared to medicine (9%), and at the subjectivity and lack of standardisation of assessment. This could represent an example of the attribution bias that this work will seek to expand on. The author calls for a more continuous assessment and a national examination. It is fascinating to consider that some 46 years later, we are on the edge of such an intervention with the rollout of the Medical Licensing Examination through regulation from the GMC (GMC, 2020).

In the first of the more contemporary pieces, a chief resident in medicine in the United States (Agapoff) highlights the shame of failing and the unfairness of the cut score whilst reflecting on his perfectionism and his struggles in asking for help. In doing so, he captures some of the realities of life as a medical student and doctor, where perfectionist traits are common and asking for help is seen as a weakness. He concludes by highlighting the need for balance in his life, with time for recreation and a more collaborative approach. Whilst this is a personal reflection, in a small way the author captures several issues that will be examined in this work and that these 3 papers highlight, namely, the effect of failure, the attribution of the cause for failure (the change in the cut score of the

examination), the type of people who tend to study medicine, and the shame and reluctance in asking for help.

In the second contemporary personal piece, two UK medical students (El-Sbahi and Khan, 2019) reflect on their experience of having to resit a year at medical school. They highlight the benefits of having to repeat a year through improved learning strategies, improvements in resilience, and focus and express an appreciation of the formal and informal support network that helped them get through the year. The narrative also highlighted the challenges, such as the effect on confidence, social isolation, anxiety in face of further assessment and the fear of stigma. In many ways, this work will look to expand on this short piece in order to add depth to what is described here.

The emotional reaction and complexity of factors that affect students who fail is highlighted in reading the above. Exploring this will be a central tenet of this work.

Finally, when considering the one work found that is outside a Western context, a group of Korean researchers highlight the shame, isolation and a drop in performance after failing, in their series of semi-structured interviews on the experience of failing (Kim and Jeon, 2008) This provides a counterpoint to what has been described previously. This thesis aims to explore any sense of shame and stigma the participants may have felt.

These four papers provide the only literature around individuals giving voice to the experience of failing. Whilst based on individual anecdotal accounts, they provide an insight into the challenges and experience of failing, and potentially raise an issue that warrants further and more methodological robust exploration.

2.3.2. Failing finals

These papers considered antecedents and consequences of failing finals. The first study that specifically looks at failing the final examination is the study by (Cleland *et al.*, 2005). This mixed-methods study used focus groups and individual interviews, focusing on the support and feedback the participants received during their time at medical school. The study used a similar methodology to this thesis with a grounded theory approach, and quantitative and qualitative data. The qualitative approach used inductive analysis of

transcripts in order to identify some key themes. The quantitative data looked at mean scores in clinical examination performance and formative assessments. Those who failed finals had significantly lower mean scores in the formative assessments leading up to finals and looking back, had academic issues earlier in the course. The qualitative data highlighted that these students frequently had personal issues, such as financial problems or mental health issues.

The authors also described several factors whereby the students blamed the examination itself for their poor performance, such as describing nerves affecting them or not being able to do the 'performance' of the OSCE-type examination. The data describe a narrative whereby the students did not appear to take personal responsibility for their actions and sought to deflect blame onto the medical school for issues, such as their non-attendance and perceived lack of contact from the medical school.

Whilst this study focused on students' experience of student support, many of the themes identified will be explored in this work. In their discussion and conclusion, the authors highlighted the need for early identification and warning systems of failing students, the need for good formative feedback and to look at ways to change the culture whereby students perceive the medical school as unsupportive around their difficulties. However, what is picked up on in this paper is the tendency for the failing students to externalise blame to the institution. This indicates that attribution bias may be a theoretical concept with which to explore the phenomena of failing. This study also has methodological coherence with this thesis, suggesting that others have found this a legitimate approach to explore these issues.

A series of papers by Patel and a team in Leicester Medical School in the UK have the most resonance with this thesis. In 2015, they looked at medical students' personal experiences of high stakes failure through the accounts of three medical students who had failed finals using an interpretive phenomenological approach (IPA) (Patel *et al.*, 2015b). The paper noted the complexity of the interaction between the academic and personal issues the students had been experiencing. They described the 'emotional trauma' of failing and the anxiety these students often felt prior to and after examinations. The authors reported how the participants' social and academic problems interacted with

their personal and professional relationships. They noted a sense of isolation in their analysis, whereby the participants felt distanced from their peers, struggling to find time to see their friends, and there was a sense that there was a culture present that made it hard to talk about their failure, thereby compounding their sense of isolation. Finally, they reported on participants reflecting on the support they received from the medical school regarding remediation. The participants had negative perceptions of the medical school, feeling that it did not have their best interests at heart and that its support was too generic.

IPA provides in-depth insights into a small number of participants and is well-regarded as a means to explore lived experiences (Alase, 2017). However, it does provide a very narrow field of vision into an issue, which raises questions about how generalisable its findings can be. Whilst highlighting the strengths of the IPA approach and its ability to give a picture of what is experienced, the authors noted that the data did not look at how the participants go on to subsequently process their experiences and how this may change if they go on to pass. This work will specifically explore that issue.

A later paper by the same group, looking at GP trainees' experiences of failing ARCP, highlighted managing work-load, poor motivation, lack of family time and psychological ill-health in the thematic analysis (Winter *et al.*, 2021). In their discussion, the authors emphasised the need for bespoke support packages.

2.3.3. Models of learning and failing

Now papers captured in the literature review that consider models of learning and failing are considered. A review paper considered the effects on students of pass/fail assessments and found 9 studies which added some background to these individual accounts (Spring *et al.*, 2011). These papers highlighted that pass/fail examinations did not appear to have a negative effect on wellbeing, and that no difference was noted in terms of academic outcomes when compared to ranking assessments. The measures of wellbeing used were varied and included mental health standardised assessments, self-control, level of satisfaction and the amount of time available for other activities. The papers were drawn from varied populations including year 1 and 2 medical students, and doctors-in-training. The review authors postulated that the decreased competition and consequent stress from using pass/fail assessments supported this approach. They

acknowledged some challenges when using only a pass/fail approach and proposed a hybrid system using pass/fail and ranking examinations. This review highlights the paucity of literature in this area. Using standardised tools to quantify wellbeing can fail to capture the complexity of the lived experience. Thus, whilst these results suggest no effect on wellbeing from pass/fail assessments, they do not capture the individual experiences of failing and lack the details that allow an understanding of the experience.

A further paper by (Patel *et al.*, 2015a) looks more specifically at self-regulated learning (SLR) in students who had failed finals and had to resit other assessments at two medical schools in the UK. SLR refers to learning that is guided by metacognition, strategic action and motivation to learn. Semi-structured interviews and focus group discussions were conducted with 55 participants, and a thematic analysis was conducted to look from a SLR perspective at the factors that meant that they had not adaptively overcome failure. The authors noted a tendency for the students to normalise failure through a narrative that it was a hard course and lots of people failed. The tendency to attribute their failure externally was highlighted with participants variably blaming the examination, the feedback they received, the structure of the curriculum and the failure of the medical school to identify that they were at risk of failing. Like the previous study, participants described difficulties in accessing both formal and informal support.

The authors called for remediation strategies that included preparing all students for dealing with failure, possibly through role-play, building on their findings from their 2015 IPA study (Patel *et al.*, 2015b). The role of the medical school as the agency of failure and the source of support was discussed. The tension between these two positions was highlighted. The need for trusted skilled mentors or tutors was highlighted. This thesis will not look at any specific learning model, i.e. SLR, but will seek to build on this work in order to explore further the attributions and nature of the relationship between learner and institution.

Finally in 2017, the same group looked at the help-seeking behaviours of students who experienced distress around assessment failure (Winter *et al.*, 2017). Using semi-structured interviews and thematic analysis, the authors reported the drivers and barriers to seeking help in relation to assessment failure (Table 2.2).

Drivers to seeking help	Barriers to seeking help
Recognition that mental health is important from both students and others	Normalisation of symptoms and situation
Trust	Failure or denial that a problem exists
Overt symptoms of mental distress and illness	Fear of stigmatisation
	Overt symptoms of mental distress and illness
	Perceptions of self, medical school and others

Table 2.2 Drivers and barriers to seeking help from medical students who had experienced high stakes failure in two UK medical schools

In their conclusions, the authors highlighted the importance of a trusting relationship as being a facilitator of seeking help and support. They explored the challenges of providing such a relationship, given the nature and structure of medical training. The work suggested high stakes assessments potentially drive students away from help-seeking as they look to prioritise the assessment over their wellbeing. They recommend an integrative and multi-professional approach that identifies and helps students with mental help problems, i.e. those who present with them and those who may be experiencing them but lack the insight to self-report due to fear of the consequences. In considering this work in the context of this thesis, the work will not consider students with mental health issues specifically, but some of the findings may help to understand some of the issues around these students' experiences of failure. The recommendations of the authors will also inform any recommendations and strategies that come out of this work.

Table 2.3 summarises the papers that were found pertaining to the experience of failure.

Authors	Year	Population	Type of study	Findings	Relevance to this work
Agapoff	2018	N/A	Personal experience.	Describes emotional reactions and attributions of a chief resident on failure of a course.	Similar reactions are subsequently noted in this work.
Anon	1974	N/A	Personal experience: letter.	Questions the validity and reliability of the finals examination and the stress that it causes.	
El-Sbani and Khan	2018	N/A	Personal experience of 2 UK medical students on having to repeat a year after failing.	Highlights the benefits of having to repeat a year around improved learning strategies, improvements in resilience, and focus and appreciation of formal and informal support network. The narrative also highlights the challenges, such as the effect on confidence, feelings of social isolation, anxiety in the face of further assessment and fear of stigma.	This personal experience is coherent with findings of this study and are explored in more detail below.
Kim and Jeon	2008	Medical students.	In-depth semi-structured interviews of 9 failed students. (Abstract only as full text in Korean).	The students described poor learning styles, emotional problems, pastoral issues and lack of confidence as a consequence of failing. Students felt their status declined; it changed their self-confidence and they felt more isolated.	

Schwartz and Snow	1974	Medical students who failed in an American medical school.	Psychoanalytical essay about the treatment of these medical students in therapy.	Description of character types who fail, and recognises the rite of passage that exams and final exams form in the experience of medical students.	Some reference to an identity crisis in failing that resonates with this work.
Cleland, Arnold and Chesser	2005	Seven students who failed their finals examination at a UK medical school.	A focus group and interviews were used with inductive analysis based on grounded theory methodology.	The students often had personal issues and were noted to have had issues with previous assessments. They tended not to seek help nor take personal responsibility for their failure. Students reported frustration at not having been warned they were at risk of failing.	Coherence of aspects of methodology and findings to this thesis.
Patel et al.	2015a	Medical students who failed final resit examination.	In depth IPA interviews with 3 students in a UK medical school.	Students each experienced a multi-dimensional range of issues including academic, mental health and relationship strain. Remediation was experienced as one-dimensional.	Highly relevant: a broader description and analysis are provided below.
Spring et al.	2011	4 papers met all the inclusion criteria; a further 5 met part of the inclusion criteria.	A systematic review looking at effects of pass/failing grades on welfare and academic achievement in American postgraduate populations.	The paper found a benefit for the welfare of the students and no effect on academic achievement when using pass/fail compared to tiered grades.	The overall effect of using pass/fail had no significant detrimental effect when considering populations but the papers did not consider how it was experienced by individuals.

Patel et al.	2015b	55 medical students who failed the finals resit examination in 2 UK medical schools.	Semi-structured interviews and thematic analysis of interviews looking at self-regulated learning.	Resitting students demonstrated normalisation and significant external attributions of their failure. There was a failure to access both formal and informal support.	A model is proposed in this work that will bear comparison to my model in the final discussion. This work will add further to this area of the literature.
Winter, Patel and Norman	2017	57 medical students at 2 UK medical schools who failed high stakes assessments.	Semi-structured interviews and thematic analysis of 20 of the interviews of students who described a deterioration in their mental health.	The results considered barriers to seeking help, such as normalisation of symptoms, fear of stigmatisation, and misconceptions about role of the medical school. Drivers for seeking help were building trust with someone and self-awareness to maintain good mental health.	This paper is more relevant in the discussion chapter when considering student support models, an area of the literature this thesis will hope to contribute to.
Winter, Norman and Patel	2021	23 interviews with GP trainees identified as failing to progress satisfactorily or failing the MRCGP examinations.	A qualitative approach was adopted using semi-structured interviews.	Difficulties with managing workload, poor motivation, lack of family time and psychological ill-health were significant themes for many. This study highlights the need to fully understand trainees' journeys and to provide bespoke support packages.	The authors highlighted the need for bespoke support for those at risk of failing.

Table 2.3 Summary of papers relating to the experience of failure

2.3.4. Papers identified concerning remediation

Having described the literature that pertains to the experience of failing in detail, the next section will draw back to consider the other papers identified in the literature search. These will be described under two headings, i.e. papers that consider remediation, and papers that consider student-specific factors. These areas will be especially relevant when it comes to considering the implications of the work and any recommendations that may come from it.

Before considering the papers and their analysis, some context will be provided for the reader around the subject areas described. Firstly, remediation is one of the areas that will be referred to. Remediation in medical education is defined as:

> *the act of facilitating a correction for trainees who started out on the journey to becoming a physician but have moved off course.* (Kalet *et al.*, 2017)

Supporting students who have been highlighted as 'being off course', albeit academically or professionally, is a key responsibility of any academic institute. There are two aspects to this, i.e. identifying students in the first place who need help and secondly, having remediation strategies in place that work. These are challenges for all institutions.

In terms of identifying students clearly, assessment plays a significant role. Whether this finals examination has utility is beyond the scope of this work. However, what the literature review highlights is that often students who do fail have significant background issues, and working to identify and to support students around these has become a key priority for educators in recent times (Li *et al.*, 2019).

When considering remediation strategies, this review considers the 'how', the 'who' and the 'when' with respect to remediation. The 'how' refers to the broad theoretical concept (if any) that is adopted. The 'who' refers to the faculty that might be best placed to deliver the remediation. Finally, the 'when' refers to when the remediation takes place, i.e. is it a longitudinal on-going approach or it is very much a one-off in the event of an issue having been identified?

Remediation: the 'how'

From examining the literature, it would appear that the area of remediation has, up until recently, been relatively poorly researched. Recently, the evidence base has been developing. It would appear that the conceptualisation of remediation is moving towards a more systemic approach (Adkoli and Parija, 2019). Systemic approaches consider whole systems and consider where individuals sit within social contexts. This contrasts with previous approaches which tend to be more individually focused, for example, working with an individual on their study skills rather than seeing their failure in its broader context.

Remediation can take different forms, for example, resitting single exams or resitting a whole year. In (Pell *et al.*, 2009), short-term remediation strategies lead to improvement but the paper questions whether specific resit examinations are too easy. This contrasts the approach described in this thesis whereby students resit the whole year and are assessed as part of their cohort; standards are set for the whole cohort and not just for a resitting group. Short-term remediation programmes' effects do not tend to be sustained and the literature is moving towards supporting long-term interventions and strategies. As will be explored in this work, this flies in the face of the current trend for short in-year remediation periods in medical education.

Remediation: the 'who'

An emerging consideration from the literature is that for remediation to be successful, there is a need for skilled and experienced facilitators (Winston *et al.*, 2014). The skills that appear important are being able to manage groups, being capable of challenging existing learning strategies and of supporting reflection. In most institutions, the most senior and skilled educators would tend to have these qualities; however, in practice, this work can often fall to less seasoned and less equipped members of staff.

Remediation: the 'when'

Related to this, is that failure early in the course is a strong predictor of later difficulties, and the literature would suggest that the approach should be more longitudinal with an emphasis on early detection (Winston *et al.*, 2014).

This literature review suggests that remediation practices are moving towards a much more longitudinal approach as has already been noted, and that short-term

remediation strategies have limited benefits. Current views appear to view remediation as something that needs to be considered over a longer time period, with a flexibility of interventions and the need for experienced and flexible facilitators (Winston *et al.*, 2010a). Issues of the length and nature of remediation are a central area of interest to this thesis.

The papers pertaining to the above, identified from the literature review, are shown in Table 2.4.

Authors	Year	Population	Type of study	Findings	Relevance to this work
Pell, Boursicot and Roberts	2009	Resit population of two UK medical schools.	Retrospective study of OSCE data.	Bespoke immediate resit students improve their performance by significant amounts; the paper questions whether they are too easy.	The finding of improved performance is supported by my data. In Newcastle, bespoke resits are not offered; hence, no chance for them to be easier but they will be offered in the future.
Winston, van der Vleuten and Scherpbier	2014	275 medical students at Dutch medical school.	Evaluation of an intervention to prevent failure using a longitudinal cohort approach.	Failure of an assessment after two weeks of medical school predicted long-term poor performance. An intervention to support these students was only effective after sustained engagement.	This study highlights the use of an early assessment to allow a more targeted approach for intervention.

Table 2.4 Summary of papers relating to remediation from the literature review

2.3.5. Student specific factors

As stated earlier, it is well-established that background issues, be they academic, health-related, cultural or personal, play a role in failure (Maher *et al.*, 2013). Given that these are personal concepts, one could argue that, by extension, they will play a role in the experience of failure.

In the literature highlighted by this review, there is a theme that those who fail have been less engaged with other students (Todres *et al.*, 2012). The relationship with other students, educators and others will be explored in this work providing a window into this complex but important area.

Also highlighted, is the fact that students who fail often have significant background issues, for example, higher traits of neuroticism and mental health difficulties (Maher *et al.*, 2013; Sobowale *et al.*, 2018). These issues will be explored in this thesis.

Issues of culture and country of origin are noted across several papers. As already discussed, differential attainment of students and doctors who are not born in the UK is, at the time of writing, an area of much debate and study (Patterson *et al.*, 2018). Whilst this work will not look to examine it specifically, by looking at the experience of failing through an identity approach, areas of cultural identity, and how this influences the experience of failing, may be explored.

In summary, it is clear that failure is complex and multifactorial and needs an approach that aligns to that, i.e. a one-size-fits-all approach does not work. This work seeks to add to the literature in this important area.

The relevant papers from this part of the literature review are shown in Table 2.5.

Authors	Year	Population	Type of study	Findings	Relevance to this work
Todres et al.	2012	High-achieving and resitting medical students in a UK medical school.	Semi-structured interviews and thematic analysis.	High-achieving students had an improved awareness of what worked with regard to their approach to learning and were better at coping with difficulty than resitting students. Resitting students appeared to be less positively engaged with other medical students.	Consideration for recommendations and early detection. The lack of engagement with other students will be explored through the lens of professional identity in this work.
McLoughlin	2009	Medical students who fail.	An essay of characteristics of students who fail.	Students rarely expect to fail. There is often a background of personal and health issues. They are often socially isolated.	In not expecting to fail, one could postulate that this contributes to the need to blame other factors.
Chae, Kim and Chang	2016	43 Korean medical students across 2 years.	Longitudinal study looking at academic success against level of academic failure tolerance.	Students who had a higher academic failure tolerance in the feeling and behaviour subscales were more likely to achieve academically and to choose difficult topics.	It may be useful to consider issue of academic failure tolerance in scope of wider findings and is a concept that could be used in the discussion.

Jardine, McKenzie and Wilkinson	2017	561 medical students at a New Zealand medical school with data from 2008 to 2012.	Retrospective analyses of student progress meetings.	A higher risk for difficulties in clinical skills, knowledge and professionalism was evidenced by male gender, international entry and failure in the earlier years of the course.	This chimes with differential attainment agenda that is currently under close scrutiny in medical education.
Sobowale et al.	2017	61 clinical medical students in an American medical school.	Prospective questionnaire study looking at the Big Five personality traits.	High trait conscientiousness predicted a better academic performance. Neuroticism predicted poorer academic performance.	If students who fail have higher trait neuroticism, it would be of interest to know how that effects their experience of failure. This work will touch on this but not directly explore it.
Adam et al.	2015	146 medical students at a UK medical school.	An analysis of a longitudinal database of demographics, and key selection and academic performance indicators.	Females, younger and British citizens performed better. Selection data (UKCAT) scores predicted 5th year written examination performance. Tutor evaluation in early years identified more or less successful students.	

Maher et al.	2013	779 records of medical students in an Irish medical school.	A 10-year retrospective analysis of student files, exit interviews, staff interviews and academic records.	Factors associated with drop-out were non-EU origin, poor academic performance, absenteeism, social isolation and depression.	
Li, Thompson and Shulruf	2019	700 medical students at an Australian University.	Retrospective cohort study looking at using admission data and outcomes of in-course progress.	Pre-admission data predicted students who would struggle in medical school.	Part of the work that will be used to identify at-risk students early.

Table 2.5 Summary of papers relating to student-specific factors from the literature review

Part B: Focused Literature Review Pertaining to Key Theoretical Concepts

This will use a narrative review identifying key relevant papers to give the reader more detail on the important concepts in order to be able to appreciate the scope of the work. I will also highlight the literature that describes how these key concepts relate to each other. The themes explored are very broad and extensively researched. A formal literature review on any one of them would run to many hundreds of pages. For pragmatic reasons and for digestibility for the reader, a more focused and narrative approach has been taken.

2.4. Review Strategy

The core theoretical concepts were examined using relevant literature from core texts and seminal papers in the respective fields. Focused literature searches using key terms were then used to identify other important papers in more specific areas.

2.5. Self-esteem

Here, I give a chronological account of the development and understanding of self-esteem as it has been used in many different ways by different theoretical schools.

Self-concept has been well-described, particularly in psychological literature. Self-concept is a collection of beliefs about oneself and is made up of self-schemas (Epstein, 1980; Byrne, 1984). Schemas are long-lasting and stable sets of memories that summarise a person's beliefs, experiences and generalisations about the self in specific behavioural domains. Within a social psychology paradigm, self-schemas interact with self-esteem, social identity and self-knowledge so as to form the self as a whole (Myers, 2013). Self-esteem is therefore an aspect of self-concept.

2.5.1. The origins of self-esteem

On one level, self-esteem is simply defined as 'a disposition that a person has which represents their judgments of their own worthiness' (Olson *et al.*, 2008). However, self-esteem as a concept has a rich and long history within a number of theoretical models which will now be explored in order to contextualise the definition used in this thesis.

The concept of self-esteem traces its origins back to the American psychologist, William James who, in 1892, conceptualised two levels of hierarchy of the self, i.e. the

'me-self' and the 'I-self' (James, 1892). Within this framework, he was the first person to conceptualise self-esteem as a collection of views towards the self and how it was related to success. Self-esteem was seen as an affective (emotional) state as opposed to the more cognitive (learned thinking) descriptions that were to come.

2.5.2. Rosenberg and self-esteem

The social-psychological approach to self-esteem has been a cornerstone of the modern understanding of the concept. No one has been more influential in this than Morris Rosenberg whose experiments, theories and self-esteem measurements remain central to much practice in this field today (Rosenberg, 1965b). His definition is worth citing in its entirety:

> *Self-esteem, as noted, is a positive or negative attitude toward a particular object, namely the self […] High self-esteem as reflected in our scale items, expresses the feeling that one is 'good enough'. The individual simply feels that he is of worth; he respects himself for what he is but does not stand in awe of himself nor does he expect others to stand in awe of him.*

There was more of a cognitive focus within this description that allowed the perceptual and social factors involved in attitude formation, which were fields that were able to be measured and researched by social scientists. Thus, much of Rosenberg's work was more empirically based than anything that had come before it, including some studies with more than 5000 subjects. Rosenberg introduced within his definition the concept of personal dignity or 'worthiness' into the field. This brought in the scope to consider self-esteem within the concept of 'values'. Psychologists define values 'as an aspect of personality that underlies and motivates attitudes and behaviour' (Cieciuch *et al.*, 2015).

Values and the acquisition of values are part of the interpersonal process, such as culture, which broadened the understanding of self-esteem from the individual into a much broader sociological phenomenon (Rosenberg, 1965b). Social scientists were skilled at measuring values and attitudes along various dimensions. For example, they could examine content, i.e. what an attitude was about, direction, i.e. whether it was a positive or negative attitude, intensity, i.e. how strongly it was held, and finally, how stable it was over time. This ultimately led to the development of the Rosenberg self-

esteem inventory which has formed the basis of thousands of studies within the fields of psychology and sociology and which is used in this work (Rosenberg, 1965a).

Rosenberg moved the understanding of self-esteem towards that of a social construction suggesting that it arose from the complex interplay between social, cultural, familial and other interpersonal processes. He emphasised worthiness over competence which opened the gateway for understanding the concept within a values framework. Finally, he pioneered the work that was to look at the modification of the environment as a way to enhance the formation of positive self-esteem and to improve low self-esteem. Many of the therapeutic approaches of the ’60s, ’70s and ’80s had this as their theoretical bedrock.

2.5.3. Current theories and their relevance to this thesis

Sociometer theory represents the main contemporary alternative account of the need for self-esteem. The theory is based on the notion that our species needed to be part of groups to survive and to reproduce, both in our evolutionary past and today (Leary and Baumeister, 2000c). This theory supports the notion that self-esteem serves as a function to reflect the extent that one perceives the self as included or fit for inclusion in social groups. There is not an inherent need for it, rather it serves as a:

> *subjective monitor of one’s relational evaluation […] the degree to which other people regard their relationships with the individual to be valuable, important or close.* (Leary and Baumeister, 2000b)

It suggests that self-esteem will be dependent on how one matches the criteria that are used to include or exclude individuals from a group, for example, self-esteem may be affected by not matching the criteria to entering the medical profession, i.e. not passing finals. This thesis will consider the emotional (affective) impact of failing on students as well as how failing affects their perceptions of how other social groups see them. For this reason, this approach may have utility in the analysis and interpretation of the data.

Recent work has moved away from theories and definitions to considering certain aspects of self-esteem. The concept of collective self-esteem has been described as the positivity of being a member and identifying oneself with a social group (Luhtanen and Crocker, 1992). More recently, implicit self-esteem, contingent self-esteem,

explicit self-esteem and self-esteem lability have all been postulated as further conceptualisations (Trzesniewski *et al.*, 2003; Kernis *et al.*, 2008; Hallsten *et al.*, 2012).

Some common themes emerge from these different stances (Guindon, 2009). Firstly, self-esteem is the individual's evaluation of the self-concept. Common key elements across different backgrounds are of competence and achievement being integral. These elements combine to lead to one's judgement of one's self-worth which can be modified by societal values and feedback from others. The distinction between global self-esteem and a more specific or selective self-esteem is another common theme. Finally, self-esteem can fluctuate and be situational; this can influence specific issues of self-esteem and if particularly marked, could affect global self-esteem.

2.5.4. Self-esteem in education

Having reviewed the theoretical background to self-esteem, its place in education will be considered. Self-esteem has been researched and utilised in many areas, such that to review the literature even in one of them, such as education, would be worthy of a book and such texts exist. I will seek to outline some of the key historical work in the area of education and then to focus on higher and ultimately, medical education.

Such was the traction that self-esteem gained in the 1980s as a concept that could improve educational and other societal outcomes, that no paper on it can fail to mention the Task Force on Self-Esteem and Personal and Social Responsibility that took place in California starting in 1986. This spent billions of dollars commissioning groups across California in order to examine how improving self-esteem for the population could reduce criminality, rates of teenage pregnancy and improve educational attainment, to mention just a few potential benefits. The evidence went on to show that self-esteem was an independent variable in a number of social problems; it did not have the importance that was originally thought. The task force was disbanded in 1995 and a growing movement in the 1990's questioned the evidence and practical value of many self-esteem programmes that looked to boost self-esteem as a means to improve key social problems (Baumeister *et al.*, 2005).

The roots of the perceived importance of self-esteem in educational attainment were based on research that persistently found correlations between self-esteem and school test performance (Hansford and Hattie, 1982). However, association does not mean causation and, as emerged from longitudinal studies, high self-esteem was a result of

good performance, not the cause for it (Bachman and O'Malley, 1977). More recent data has even suggested that boosting self-esteem may negatively impact performance (Forsyth *et al.*, 2007).

2.5.5. Self-esteem in medical education

Self-esteem and stress have been extensively studied within the medical student and junior doctor population. The link between failing examinations and its effect on self-esteem has been well-established in other populations (Brown and Dutton, 1995). One of the few studies looking into this area in medical students noted a relationship between external stress, self-esteem and poor performance, with stress being associated with lower self-esteem and a tendency to a more external locus of control. These students tended to perform poorly compared to others (Linn and Zeppa, 1984). Another noted that self-esteem was related to burnout but did not examine any link to performance or the effect of failure (Dahlin *et al.*, 2007). This study is hoping to explore how the experience of failing affects self-esteem and its potential interrelations to the other theoretical themes described below.

2.6. Professional Identity

Professional identity can be seen as a form of social identity. One way of looking at social identity is through the approach encompassing social identity theory and self-categorisation theory.

Henry Tajfel developed a theory linking group membership and group life to individual cognition, societal interaction and social processes (Tajfel, 1974b). The theory seeks to explain intergroup behaviour based on perceived group differences in group status, group legitimacy and the ability to move between groups. There are three aspects described in assigning others and ourselves as ‘us’ or ‘them’, respectively. The first is categorisation, whereby we seek to make sense of the world using parameters, such as gender, occupation and race, amongst others. Self-categorisation theory considers the process by which people categorise themselves and others into differentiated groups (Turner and Reynolds, 2012).

In the next stage of social identification, we adopt the identity of the group we have categorised ourselves to and then seek to behave like that group. Finally, once we have identified ourselves within a group, we undertake social comparison, comparing

our group with others (Tajfel, 1974a). If we were to identify ourselves favourably compared to other groups this would maintain and possibly enhance our self-esteem (Tajfel and Turner, 1979). Comparison is a root of intergroup tension, leading to in-group favouritism and out-group denigration through a drive to maintain positive distinctiveness.

The basic tenets are that identity is endemic and that individuals will always have a salient social identity from a number of possibilities which are available to them. Which social identities are available and which are salient will vary with context.

As can be seen, there is a close relationship between social identity and self-esteem. Hogg and Abrahams argued that intergroup bias relates to self-esteem in two ways. Firstly, self-esteem is enhanced if we compare ourselves favourably to other groups which are perceived to be less desirable and secondly, low self-esteem promotes discrimination between groups (Abrams and Hogg, 1990).

Measuring social identity in a quantitative manner has been long-established. Initial measures sought to use a unidimensional approach, such as that proposed by Doosje, Ellmers and Spears (Doosje *et al.*, 1995). Later on, towards the end of the 1990s, several authors developed multi-dimensional scales including the one by Cameron (Cameron, 2004). Qualitative approaches to social identity are also well-established and mixed methodology is common (Greene, 2007). Cameron's multi-dimensional scale can be used to capture the identity of different in-groups. His model describes three aspects of identification, i.e. the ties or strength of the identification with a group, the centrality of that identification or how important it is to the individual, and the affective consequences of group membership. This scale has not been extensively used in health or student populations although a scale from which it was derived has been particularly utilised in the area of inter-professional education (Barnes *et al.*, 2000; Adams *et al.*, 2006).

2.6.1. Professional identity in medicine

Professional identity is a type of social identification and is the sense of oneness individuals have with a profession, e.g. law or medicine, and the degree to which individuals define themselves as members of the profession (Ashforth and Mael, 1989). Understanding the process through which doctors develop their professional identities has been proposed to give insights into improving students' learning

experiences and the development of a doctor identity that is more in keeping with the professional standards that are required by external regulators (Monrouxe, 2010). Professional inclusivity (in-group homogeneity) and social exclusivity (seeing oneself as distinct) are important contributors to students' professional identity (Weaver *et al.*, 2011). How failing finals impacts on these aspects of professional identity will be explored within this project.

2.6.2. Self-esteem and professional identity

A close relationship between social identify and self-esteem has been described by Abrams and Hogg (1990). They argued that intergroup bias relates to self-esteem in two ways. Firstly, self-esteem is enhanced if we compare ourselves favourably against others in other groups perceived to be less desirable and secondly, low self-esteem promotes discrimination between groups. This thesis will look to explore how the students who fail see themselves in relation to those that also failed and whether this is a favourable comparison or not. Also, relating to the second point, is the consideration of whether the fact that resitting students may have low self-esteem leads to discrimination against this group.

2.7. Attribution

This final section will consider theory about how blame is assigned when considering others and one's own actions or behaviours. As described in the introduction, as data were collected, there was a strong narrative of blame being assigned within the participants' experiences of failing. Attribution theories are introduced to provide a framework to consider this phenomenon.

The three key theories of attribution are:

- Common sense psychology (Handke and Barthauer, 2019): this theory worked on the premise that humans use explanations to understand behaviour. The author of this theory, Heider, broke this down into internal (personal), e.g. 'I failed because I did not revise' and external (situational) attributions, e.g. 'I failed because the exam was too hard'.
- Co-variation model: this theory relies on a logical and rational premise that people attribute behaviours to factors that are either present when the behaviour happens or absent when it does not across a time period. For example, a

student frequently fails because the observer has seen them out drinking a lot. It is compared to the statistical technique of analysis of variance (ANOVA) (Kelley, 1967). In trying to consider the fact that we make attributions frequently on incomplete information and not on multiple observations, Kelley introduced causal schema. These are 'experience-based beliefs about how certain kinds of cause interact to produce an effect' (Kelley, 1973).

- Weiner's model purports that individuals have an initial affective response to the potential consequences of the internal and external motives of the actor, i.e. the person in action compared to an observer (Weiner, 2010). The notion of achievement attribution may be useful and has three categories:
    - stable theory (stable and unstable)
    - locus of control (internal and external)
    - controllability (controllable or uncontrollable)

2.7.1. Relevant extensions of Weiner's attribution theory

When considering success or failure, (Weiner *et al.*, 1987) proposed that someone had initial positive emotions after success and initial negative emotions after failure. There would then be a causal attribution to the outcome which would produce more specific emotions, e.g., guilt at not having worked hard enough, and this would colour expectations about future performance. This model was supported by a body of empirical work. However, there were concerns about its reproducibility beyond laboratory conditions.

Later, Weiner (2010) introduced the notion of judgements of responsibility. People make judgments of responsibility based on causal attributions and it is these that influence affective experiences and other reactions rather than the causal attributions. For example, 'I think I failed my finals because I had a very tough examiner, and this makes me very angry and frustrated'.

2.7.2. Other helpful key concepts and relationships in attribution

Correspondence bias, formerly known as fundamental attribution error, is a type of attribution bias (Jones and Harris, 1967). In explaining others' behaviour, individuals tend to blame (that is, correspond to) the individual's internal characteristics rather than the external situational factors. This contrasts with explaining their own behaviour which tends to be the opposite, i.e. more related to situations rather than internal

factors. For example, ‘I failed finals because the exam was unfair’ or ‘Michael failed finals because he had mental health issues’.

Explanations of correspondence bias include:

- Focus of attention: there is an overrepresentation of the actor’s behaviour compared to the background when assigning causality.
- Differential forgetting: in order to attribute causality one needs to have causal information represented in memory. There is evidence that suggests that one tends to forget situational causes more readily compared to dispositional causes.
- Linguistic facilitation: this proposes that the construction of the English language makes it easier to describe an action and the actor in the same terms compared to describing the situation.

Self-serving bias is a cognitive or perpetual distortion to protect or to boost self-esteem, i.e. the belief that one tends to view success as due to one’s own qualities (self-enhancing bias) whilst failure is externalised (self-protecting bias) (Larson, 1977). Initially thought to be just ego-serving, later ideas supported that there was also a cognitive component, especially for the self-enhancing aspect. Generally, people expect to succeed and will therefore place responsibility for success on themselves. If they were to try hard to succeed, they would associate success with their own effect and exaggerate the amount of control they had over the success.

Self–handicapping, described by Jones and Berglas (Jones and Berglas, 1978), suggests that one exaggerates any handicaps that reduce personal responsibility for failure whilst enhancing personal responsibility for success. When anticipating failure, people will often intentionally and publicly make external attributional statements.

Self-esteem and attribution

As has already been alluded to above, attribution theories have explored the relationship between attribution and self-esteem. In blaming external factors for failure one preserves one’s own self-esteem (Federoff and Harvey, 1976).

Professional identity and attribution

Within the realm of social psychology, the notion of intergroup attribution exists. This concerns itself with examining the causal explanations offered by people acting as members of social groups (Hewstone, 1990). These attributions tend to favour members of the in-group over those of the out-group. In this thesis, students who are resitting the year are placed in a new year-group. How that year-group perceives these new additions and how they make attributions as to why they failed will be examined in the scope of this study.

Within social identity theory, intergroup attribution biases seek to maintain and to achieve a positive social identity. For example, students who are sitting finals for the first time may look at students as resitting and think they are not as clever as them and their classmates. This, in turn, can be related to self-esteem, in that by telling oneself one is cleverer than those who have failed, one is boosting one's self of identity with others which, in turn, builds a sense of belonging and reinforces the notion that they are clever which, in turn, boosts their self-esteem (Rubin and Hewstone, 1998).

2.8. Discussion

The focus of this work is the experience of failing. Some of the studies that examine the experience of failing consider the emotional response. It is of little surprise that the ones that focus on personal individual experiences or use detailed descriptive approaches, such as IPA, give the best sense of the emotional experience of failing.

Another salient consideration is the importance of institutional culture and its response to failure. The institutional culture sets the context in which students experience failure. Within the institutions, are the people who work with students who fail. The need for trusted and skilled mentors with a long-term relationship with the students appears to be a key narrative that emerges from the contemporary literature. Aligned to this is the importance of student wellbeing and support in not only preventing failure but also in supporting students who fail.

Given that failure is experienced on average by approximately 10% of every year in medical courses (O'Neill *et al.*, 2011), there is a paucity of literature which looks to examine this phenomenon. This work will seek to remedy that in a small way.

From the literature described above that considers the experience of failure, this work had methodological coherence with what has gone before. There are several mixed methods approaches with the emphasis on the quantitative aspect. This is the methodology proposed for this work as will be described in the next chapter. All the cited works provide snapshots of failure; this work will look to provide a sense of the journey of failure which will be unique.

The literature review has highlighted the utility of self-esteem, professional identity and attribution in exploring failure. This work will seek to address a gap in the literature in that it will add to this understudied area, and it will consider how the experience changes over time viewed though these theoretical lenses. This has not been explored before in this field. Through doing that it will provide an insight into how failure affects the experience across the resitting year and during the transition to practice; these have not been previously described.

2.9. Chapter Summary

Without a coherent and well-validated model to conceptualise the experience of failure, the literature currently sits at a point that is disparate and sparce. The hope of this work is to provide an important piece of the jigsaw that will allow this area to be better understood and to be of value to those involved in the education of students. This chapter has highlighted key theoretical constructs that are related and that will act as lenses through which to view this complex and fluid phenomenon.

Chapter 3. Designing a Study to Explore the Experience of Failing

3.1. Chapter Overview

The methods chapter is divided into two sections. In the first part, the methodological underpinnings of the study are justified. The view of reality (ontology), view of knowledge (epistemology) and research paradigms (theoretical stance) are detailed, and methodological coherence is considered. The second part describes the methods, considering the study profile and in particular, the participants, the data collection methods and analysis strategy.

Key features of the study are set out in Table 3.1.

Studied Phenomena	
Research questions	How does the experience of failing the medical finals examination affect students across the repeated year and as a foundation year-1 doctor? Can a theory-driven model of the experience of failing be constructed to support students in the future who have the same experience?
Study intent	To derive a theoretical model of the experience of failing that will inform process and procedure in order to support students who fail.
Ontological perspective	Relativism
Epistemological perspective	Subjective
Research paradigm	Social constructivism
Data collection methods	Mixed (quantitative data collection and interviews)
Sampling	Purposive
Analysis	Thematic

Table 3.1 Key features of the study

3.2. Part A: Methodology

3.2.1. Phenomenon to be studied

A clear understanding of the theoretical stance adopted is essential to the research process. Fundamentally, this is because it will shape the methods, data collection methods and analysis (Cohen *et al.*, 2000).

Central to deciding the methodology is to consider the research question and the aim of the research. The research questions to be answered are:

1. How does the experience of failing the medical finals examination affect students across the repeated year and as a foundation year-1 doctor?
2. Can a theory-driven model of the experience of failing be constructed to support students in the future who have the same experience?

The aim is to derive a theoretical model of the experience of failing that will inform the process and procedure in order to support students who fail.

Thus, the key studied phenomenon is the experience of failing.

3.2.2. Ontology

Ontology is a branch of metaphysics that deals with the nature of being. A relativist ontology has been chosen. This ascribes to the position that reality is a finite subjective experience (Denzin and Lincoln, 2005). This is in keeping with the studied phenomenon which is the individual's subjective experience of failing. A relative perspective holds that reality is dependent on multiple experiences.

3.2.3. Epistemological stance

Epistemology is the theory of knowledge and considers how knowledge is gathered and from what source. It also considers the relationship between the researcher and the subject of study. In keeping with a relativist perspective, a subjective view of knowledge (epistemology) is adopted. This epistemological perspective holds that knowledge is personal and as such, multiple truths exist.

Two opposite positions could be selected to examine this, either a positivist perspective or an interpretivist position.

A positivist approach would assume that there is one truth concerning how failing is experienced. The opposite stance is that there is no absolute truth, rather a collection of realities, and that there would be no ideal answer, the answers to the research question being influenced by factors related to an individual's interpretation of events and the context that these experiences are set in (Crotty and Crotty, 1998). The product of the research process in such a stance might be a theoretical model which, although not entirely generalisable, could effectively inform other settings (Collins and Stockton, 2018).

A solely positivist stance could be too reductionist for the purpose of the study; however, it may provide helpful data to inform and to shape the qualitative element and the final output. As the experience of failing is a highly complex social process involving a multitude of individual, interpersonal and contextual factors, it is unlikely that a single narrative around experience will emerge (Crotty and Crotty, 1998). Moreover, a failing experience in one medical course may not be the same as in other institutions with a different group of students within a different organisational context.

An alternative approach is to go back to the original intent of the project, i.e. to understand rather than to define the experiences of failing. An interpretivist stance might lend itself more appropriately to answer the question and generate richer and more meaningful data. Experience of anything is clearly individualistic. By working in an interpretivist paradigm and exploring constructions of realities and experience, important themes could be uncovered which could inform a theoretical model and potential interventions (Collins and Stockton, 2018).

3.2.4. Research paradigm

Within the spectrum of interpretivist stances, one could consider the use of social constructivist or social constructionist positions. Social constructionism assumes that multiple realties exist, that the studied phenomenon is socially related and that the meaning of knowledge is made within the social context (Edley, 2001). A social constructionist stance sees the world as constructed by different processes and interactions; such knowledge is constructed in discourses that allow an understanding of the phenomena of interest. Potentially, for students, such a perspective would be that the experience of failing would be lived in the context of their interactions with other students, doctors and the institution (all socially constructed). Methodologies

consistent with constructionism focus on discourses and tend to involve the study of narratives, literatures, policies, debates and other discourses (Lincoln and Denzin, 2011).

Social constructivism holds the position that multiple realties exist; these realities are dependent on individuals and are thus local and specific. This position states that we construct knowledge within our lived experience (Talja *et al.*, 2005). Individuals construct their own knowledge and this is represented within their thoughts. Researchers influence and shape how knowledge is created. This stance sees the lived experience of researchers coming out in the knowledge that is generated by their subjects. Methodologies that are consistent with a constructivist stance are naturalistic methods, such as interviews and observations; there is an interaction between the researcher, the participants and the research phenomenon (Varpio *et al.*, 2017). Since, in this thesis, the phenomenon of interest is the experience of failing medical finals and that is, in its essence, an individual experience, a social constructivist stance is the most salient of these approaches.

In summary, I argue that I have adopted a constructivist paradigm because the experience of failing is an individual experience. Failing is experienced by the individual within the context of relationships with other students, family, friends, educators, clinicians, institutions and many others. It is through an exploration of these individual experiences that I will endeavour to answer the research questions.

3.2.5. Appropriate methodology

I have chosen to use a modified grounded theory approach as it is:

> *a research methodology designed to develop, through collection and analysis of data that is primarily qualitative, a well-integrated set of concepts.* (Kennedy and Lingard, 2006a)

The methodology and principles of the approach are highly applicable to the purpose of the research. In particular, because concepts are grounded within the data, grounded theory lends itself to studying previously under-researched areas. Secondly, grounded theory has the advantage that it is both inductive and deductive, allowing the possibility of testing out themes and concepts as they emerge. Grounded theory has been criticised in its earlier form because it advocates that researchers should

approach the study without any prior preconceptions (Carter and Little, 2007). I have chosen to use a later version of grounded theory (Charmaz, 2006b) which is more pragmatic in nature, lends itself well to educational research and is congruent with the adopted theoretical stance.

Methodologies can be broadly divided into quantitative and qualitative. Quantitative methodologies, such as experimental, survey and quasi-experimental, are less suited to a social constructionist theoretical stance. Typically, such investigative methods involve uncovering 'the truth' and building on assumptions which have been proven in previous research (Bryman, 2016). In contrast, qualitative methods tend to involve exploring realities and contexts.

In deciding on the approach, I considered using elements of both stances. Mixed methods investigations involve integrating quantitative and qualitative data collection and analysis in a single study or programme of inquiry (Creswell *et al.*, 2004). Mixed methods studies use both quantitative and qualitative elements (Schifferdecker and Reed, 2009). This is a common design within the field of medical education.

There is a growing recognition of the use of mixed methods within a modified grounded theory approach (Guetterman *et al.*, 2019). The original proponents of grounded theory and of its subsequent progeny, modified grounded theory, recognised the potential use of mixed methods in grounded theory research (Charmaz, 2006a; Glaser, 2008). In wanting to recognise the role that mixed methods could provide in grounded theory, Johnson coined the term 'mixed methods grounded theory' and described it as 'classical pragmatism and dialectical pluralism for the purpose of developing practical theory' (Johnson *et al.*, 2010). This recognises how the two similar but contradictory stances could dovetail together.

Mason (2006) describes 6 strategies when considering mixed methods:

1. Different set of research questions; they do not have connection analytically but run in parallel
2. Adding breadth or depth to analysis with 'other' data as a supplement
3. Researching different aspects of a whole question
4. Triangulation as corroboration
5. Distinctive, but intersecting questions

6. Opportunism

From the above, there are two aspects supporting a mixed-methods approach in this work, namely, adding breadth to the analysis and opportunism. In relation to adding breadth to the analysis, Mason argues that the use of mixed methods in order to provide background information can be a valid approach to supplement the main data set. In describing opportunism, Mason identifies that there may be no intrinsic logic to the use of mixed methods but highlights that gathering data when there is access to a potential data source, in this case final-year and foundation doctors, is an opportunity that may provide insights that might otherwise be missed (Mason, 2006).

Cresswell et al. (Creswell *et al.*, 2003) described 6 types of mixed methods; these are summarised in Table 3.2.

Type	Description
Sequential explanatory	Quantitative followed by qualitative. Prime focus is usually quantitative.
Sequential exploratory	Quantitative followed by qualitative. Prime focus is usually qualitative.
Sequential transformative	Can be either qualitative followed by quantitative or the other way round. Equal priority to quantitative and qualitative data.
Concurrent triangulation	Collection of quantitative and qualitative data at the same time. Equal priority to quantitative and qualitative data.
Concurrent nested	Collection of quantitative and qualitative data at the same time. Equal priority to quantitative and qualitative data but with later integration of the data.
Concurrent transformative	Collection of quantitative and qualitative data at the same time. Equal priority to quantitative and qualitative data but working to a distinct theoretical perspective.

Table 3.2 Description for types of mixed methodologies

This research uses a sequential exploratory framework with the quantitative data used initially in order to validate the approach and to add breadth to the exploration of self-esteem and professional identity.

3.2.6. Overview of study

Figure 3-1 provides an overview of the study. Data were obtained from multiple sources in order to produce a richer data set and to generate a broader understanding of the studied phenomenon. The main data collection methods were interviews and quantitative data. The sizes of the boxes in Figure 3.1 represent the relative sizes of these sets of data.

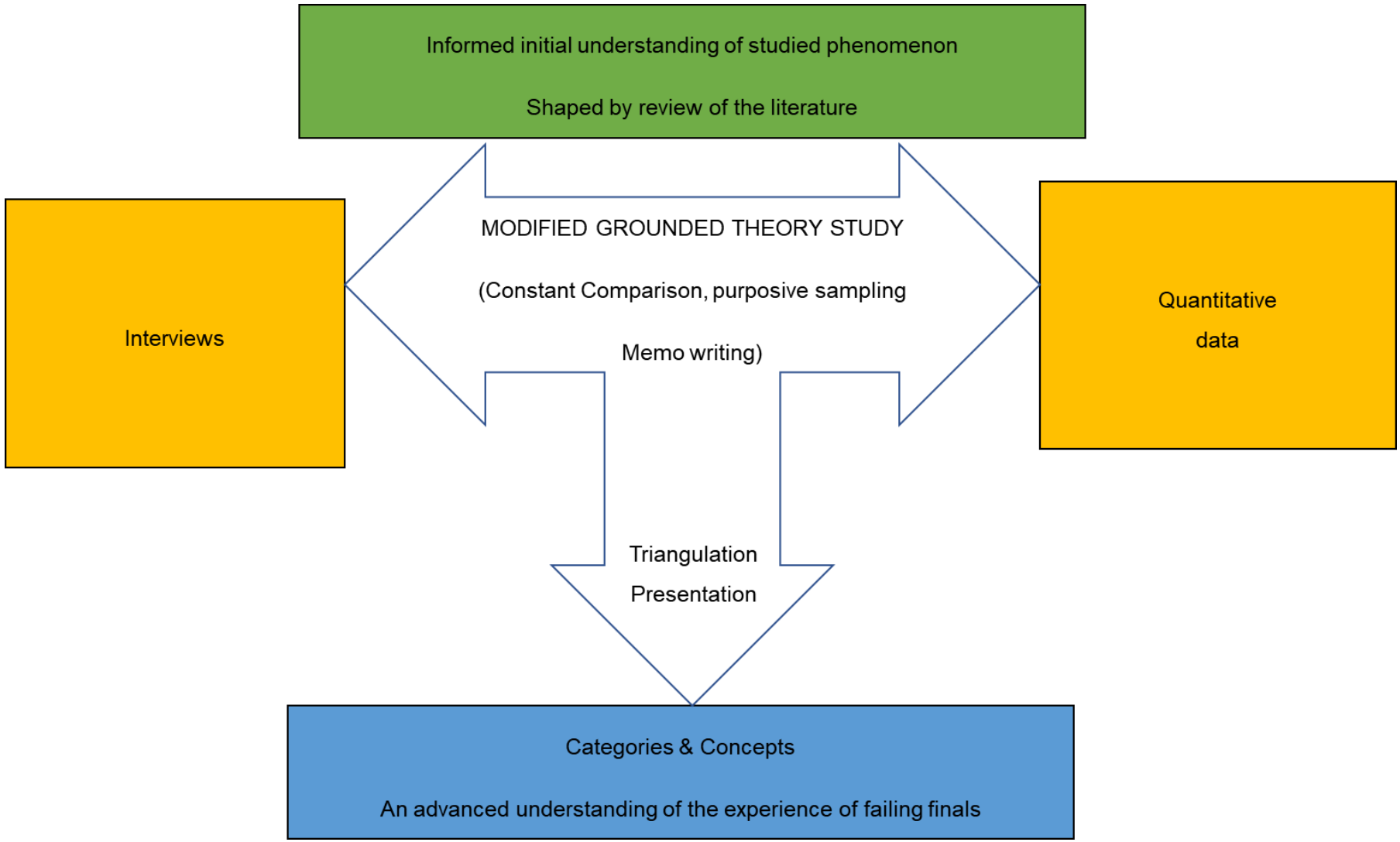

Figure 3-1 Overview of the study

3.3. Part B: Methods: Quantitative Element

3.3.1. Participants and sampling

All students sitting finals in 2015 were asked to complete a research pro forma; this would include some students who were resitting finals and some who would go on to fail finals. This was done with the permission of the medical school on the first day of term at the induction day when the whole cohort was together.

All foundation doctors beginning their first foundation year in Northern Foundation School in August 2015 were asked to complete the research pro forma. This was done with the permission of the head of the foundation school, and the pro forma was distributed at the induction day for the foundation trainees when the whole cohort was together. For those doctors who had failed finals, the option to give details to find out more about taking part in the qualitative aspect of the study was on this pro forma.

At each induction, a short presentation was given to explain the purpose of the research, to highlight the components of the pro forma and to inform the participants about confidentiality and other research governance issues. It was emphasized that participation was entirely voluntary.

3.3.2. Data collection

This aspect of the study was used to capture quantitative data around two key theoretical parameters of the study, namely self-esteem and identity. The pro forma was also used as a means to recruit for the qualitative arm of the study. No literature was found where these measures had been used in medical school populations. Given the relatively small numbers of failing students in each of the cohorts surveyed it was not anticipated that any statistically significant differences would be found. Nevertheless if differences were noted, it would add strength to the notion that failing does impact upon self-esteem and professional identity.

A pro forma was developed in order to capture data around self-esteem and professional identity (Appendix A). The pro forma consisted of some basic demographic data and also had a question to identify if the participants had failed their finals. It also consisted of two separate questionnaires to assess self-esteem and professional identity.

Many rating scales for self-esteem have been identified. Rosenberg's scale (Rosenberg, 1965a) was chosen as it is the most widely used and has been validated over many populations including students in higher education.

Various tools exist for assessing professional identity, although considerably fewer than for self-esteem. The Professional Self Identity Questionnaire for the Health and Social Care Professions was chosen, developed by Cameron (Cameron, 2004). The literature pertaining to and supporting its use has been highlighted in the literature review chapter. One of my supervisors (BB) had used it several times and supported its validity in this research.

3.3.3. Analysis

A machine-read form of the questionnaire was used. The data were scanned and formatted into an Excel spreadsheet (Microsoft Corporation, 2018) using the Speedwell system (Speedwell, 2021).

The data were analysed using basic descriptive statistics.

3.4. Part B: Methods: Qualitative Element

3.4.1. Participants and sampling

Final-year students who had failed were asked via the medical school office if they wished to partake in a series of interviews discussing their experience of failing finals. Six out of twenty potential students expressed an interest. These were all consented and interviewed at a location of their preference (Appendix B: consent form). This was either in their clinical placement or in the medical school between September and October 2015. The interviews were all undertaken by myself.

Of these six final-year students, four agreed to be re-interviewed towards the end of their resitting year; this was completed in April 2016. Of these four, three agreed to be interviewed for a final time after they had been in their foundation-year jobs for several months. These were interviewed in their place of work between October and December 2016.

Of the foundation-year doctors who completed the pro forma, twelve reported that they had re-sat their finals examination. Five out of the twelve indicated that they were

willing to be interviewed. All five consented and were interviewed in their place of work between September and October 2015. All but one had graduated from Newcastle University. Again, I undertook all the interviews.

In grounded theory, data are collected to develop a hypothesis. Sampling is targeted to produce meaningful data. As data are gathered, the research methods are changed to facilitate further data collection. Three key components of grounded theory are described, i.e. iteration, constant comparison and theoretical sampling (Lingard, 2014). Iteration is the process whereby the researcher constantly compares sections of the data and through this, hopefully identifies patterns and connections that lead to codes and categories (Watling and Lingard, 2012). Theoretical sampling also requires the researchers to select the most relevant data source based on emergent categories rather than being constrained to pre-identified samples (Kennedy and Lingard, 2006b). Data are collected until no new data are elicited, i.e. when data saturation has occurred.

In using modified grounded theory, a more adaptive approach to sampling was taken. Instead of theoretical sampling, a purposive sampling approach was taken. This is a common and recognised approach to sampling in qualitative methodology and involves the researcher actively selecting the most productive sample to answer the research question. The purpose of the research was to explore the experience of failing the finals MBBS examination. The sample chosen comprised students and foundation doctors who had had and who were having that experience. Within purposive sampling, a number of different approaches are described (Benoot *et al.*, 2016).

These are described in Table 3.3.

Type of sampling	Description
Maximum variation sampling	This involves selecting participants across a broad spectrum related to the field of study.
Homogeneous sampling	This focuses on participants with similar traits or characteristics.
Typical case sampling	This uses demographics to select participants out of a large cohort.
Extreme / deviant case sampling	This uses individuals who are unusual or extreme.
Critical case sampling	This selects participants based on an important or 'critical' characteristic.
Total population sampling	This is where the entire population is included in the sample.
Expert sampling	This uses experts from a particular field as a sample to examine an issue.

Table 3.3 Different types of purposive sampling

This study used critical case sampling, the critical factor being the shared experience of failing finals. In using critical case sampling, the purpose is to 'yield the most information and have the greatest impact on the development of knowledge' (Cohen and Crabtree, 2008).

3.4.2. Data collection

Interviews formed the largest part of the research project. I planned to interview final-year medical students from Newcastle University who had failed their finals and were resitting, as well as foundation doctors who had failed and were starting work in the Northern region. The final-year students were offered the opportunity to be re-interviewed as they went through their resitting year and when they were in post having passed finals. This gave the methodology a longitudinal component that would allow for analysis of how the experience of failing changed with time.

The strength of interviews is that they allow a deeper exploration of the studied phenomenon, i.e. the experience of failing. An experience is complex but when one considers the implications, hopes and expectations of sitting medical finals and failing

them, this adds to those layers of complexity. An alternative approach could have been to use questionnaires. The response rate to questionnaires can be low, with typical response rates being about 50%, when 60% is seen as acceptable and 80% as desirable (Fincham, 2008). Thus, the findings from a questionnaire in relation to experience may have lacked the richness to generate a more complete understanding of the experience of failing. Moreover, a questionnaire presupposes that you know in advance what the right questions are to ask. Given the lack of literature about the experience of failing, constructing a questionnaire based on previous research would be challenging and potentially not allow exploration of areas that emerge from the data. Hence, interviews were undertaken in order to explore what the experiences were, how they were constructed through those around them and how the support they received was experienced.

Interviews provide an opportunity not only to understand what the experiences are but also how they are constructed within the social contexts. Furthermore, in keeping with the grounded theory methodology, it is possible to explore and to analyse ideas and concepts as they emerge.

Interviews were planned to last approximately 60 minutes.

A semi-structured interview was used, broadly based on the stages as described by Ritchie and Lewis (Ritchie and Lewis, 2003). Distinct question sets for the final-year and foundation-year samples were drawn up using an iterative process in discussion with supervisors. There was much overlap in the question sets (Appendix C). These were not planned to be used in a formulaic way but as a topic guide for the interviewer, as per the usual approach to semi-structured interviews.

Prior to being operationalised they were discussed, and their face validity checked through a meeting with a teaching fellow, i.e. a doctor who has finished foundation training and who is employed in a teaching capacity, and who had failed finals several years ago. After consideration of that meeting, several questions were added, for example, regarding exploring the role social media had in the participants' experiences.

I started the interview by putting the research participant at ease, introducing the research before moving on to ask whether the interviewee had any specific questions

that they would like to raise. Next, questions in the topic guide were covered. I tended not to keep too closely to the order of questions within the guide. This accounted for the variation in times. Rather, I let the interviewee dictate the pace and order of the interview. Active listening techniques were used throughout the interview to keep the participant engaged. Towards the end of the interview, if there were any areas which had not been covered, I would draw attention to them. Next, I would try to summarise my understanding of what had been discussed in order to ensure that I captured the participant's voice. Lastly, I thanked the participant for taking part in the research both at the time and by means of a thank you letter later.

In general, the first interviews were more structured. Questions were less probing, and I tended to keep closely to the topic guides. As the research proceeded, I asked more closed questions in relation to the emerging concepts and challenged the assumptions that were apparent. Having sampled participants regarding emerging concepts, I was able to ask more detailed specific questions. For example, the experience of failing was likened to a grief reaction in early interviews, and so I was able to ask and to explore the grief analogy with subsequent participants.

In the later interviews, I presented the key emerging findings in order to determine to what extent they resonated with the perspective of the interviewee.

3.4.3. Recording and transcribing the interviews

Interviews were recorded on an Olympus voice recorder and uploaded onto a hard drive. The data were kept on my university computer and backed up on an external hard drive. At all times the data were kept password-protected and secure.

The recordings were then transcribed by a professional transcription service. Personal identifiable information was removed. The time between recording and transcribing was approximately one month for each set of interviews.

During the interviews I made my own notes of emergent ideas and themes and any relevant non-verbal communication, e.g. a participant becoming tearful. I reflected after each interview and kept a diary of the interview.

3.4.4. Data analysis

Description of the analysis methods used

I chose to use a thematic data analysis strategy based on the method proposed by Charmaz (Charmaz, 2006c). This had coherence with the broad approach to the work, i.e. of modified grounded theory, and would allow identification, interpretation and meaning to be accessed from the data. There are a number of stages to the analysis which proceeds in tandem with the sampling and memo writing which are described below. Data were organised by means of Excel, version 16.0. Transcripts were initially saved as Word documents and then imported into the Excel document. In addition, I completed a research diary to document major decisions and to generate an audit trail on the Excel database.

Analysis strategy

Familiarisation with data

The first stage of the strategy was to familiarise myself with the data. Transcripts were read twice as part of the familiarisation process. Initially, the Word document was printed and read from start to finish and checked for accuracy. This involved highlighting and commenting on data extracts. Although time-consuming, this was an important part of the familiarisation process.

Initial code generation

The second stage of the process involved generating initial codes. A code is a unit of data which cannot be broken down to a smaller unit (Braun and Clarke, 2006). The process of generating these codes is known as initial coding and is the first step in moving from concrete statements towards making analytic interpretations (Charmaz, 2006c). Initial coding involves segmenting and categorising data with a sort name. Unlike other forms of analysis, such as framework analysis, the codes generated were grounded within the data and not preconceived. This is in keeping with grounded theory methodology as originally described by Glaser and Strauss (Glaser, 1965).

Typically, codes are active and refer to a relevant feature of the data. An example of an initial code is illustrated in the following data extract which was coded under the code ‘relationship with others’.

How I found out, well, I found out I'd failed because one of my friends jumped on me in my bedroom and gave me a hug and told me... [in commiseration]

This initial stage involved coding all the data and is described as 'line by line' by Charmaz (2006). I analysed the first ten interviews by this method in order to allow new ideas to emerge.

Development of categorical framework

The third stage of analysis involved generating a categorical framework by the method of constant comparison. Categories are a set of codes that aggregate together and share similar properties. This stage involved printing off all the 'free codes' and then organising them with my supervisor BB into a framework. The free codes were printed and then cut out and set out on a table. We grouped similar codes together into categories.

Memo writing

The next stage involved writing memos about the emergent categories in which I tried to understand what was happening. The key purpose of memo writing is to generate ideas through writing and elevating key categories.

An example of how codes aggregated together is described in relation to 'relationship with others' where the following categories were identified:

A. family / circumstances
B. avoidance / difficulty
C. with other resitters
D. other people's reactions / feelings
E. connections
F. support from others, i.e. not academic
G. others' perception of failed student / stigma

Mapping exercise

As the categorical framework became increasingly complex, it was further refined by means of a mapping exercise. These maps were reviewed with the supervisors; in a sense, this was like the sorting process that involved cutting out and grouping the data categories that had occurred earlier.

Development of new categories and overarching themes

By referring to the data in relation to the research question, new categories and overarching themes emerged. For example, it was recognised that there was a theme of the data that was exploring the longitudinal changes in the experience of failing of the participants. As will be seen, this is how one of the results chapters is framed. Hence rich categories were built and a 'bottom up' framework was constructed to address the research questions.

Whilst categories were being collapsed, analysis of new data proceeded in tandem using a more focused coding strategy (Charmaz, 2006c). Rather than code all data extracts as previously, the coding for the final eight interviews became more active. As the analytical direction became increasingly clear and the major categories emerged, I was able to code greater extracts of data and look out for new codes that had not previously been covered. Furthermore, during the interviews, I tended to test out emerging ideas and to raise concepts which previous interviewees had identified. Thus, the analysis process became more deductive than inductive. To quote Charmaz (2006, p. 116), 'the analytic corkscrew was tightened'.

Construction of broad conceptual framework

The last analysis stage involved constructing overarching conceptual frameworks. Ultimately, this stage involved building grounded theory by looking at relations between major categories, thereby building concepts. At this stage, the analysis became more analytic than descriptive. The memos helped drive this process as, through the writing, I was able to see possibilities and to establish connections between categories.

Towards the coding of the final few interviews, it became apparent that no new concepts emerged, theoretical saturation was reached and analysis ceased. Furthermore, no new memos or codes emerged.

Triangulation

Triangulation is a process to ensure quality within the analysis process (Bryman, 2008). It involves comparing the findings in relation to the studied phenomenon with findings from other sources. I used three types of triangulation processes to ensure the quality of the data.

Triangulation with supervisors

Firstly, two of my supervisors (GV and BB) reviewed the transcripts and categories which emerged and fed back comments. BB made comments on Word transcripts. This was helpful in cross-checking the initial codes. Throughout the analysis stage of the research, I also met regularly with both GV and BB to discuss findings. These discussions informed topic guides, decisions about sampling and memos.

Reflexivity

This is a means of attending to the effect of the researcher on the construction of knowledge within a piece of research.

Malterud (2001) stated:

> *A researcher's background and position will affect what they choose to investigate, the angle of investigation, the methods judged most adequate for this purpose, the findings considered most appropriate and the framing and communication of the conclusions.* (p. 483)

Ways in which reflexivity has been considered included an awareness of my position in the medical school as a sub-dean and an appreciation of the power differential that that may lead to. As a white middle-class male, my positions of privilege were also important to consider as part of the reflexivity of the study. Correspondence with study participants did not include my title nor did I introduce myself to students using that title. Newcastle is a large medical school and I was relatively new at that point, and so it is unlikely that any participants had any prior knowledge of me, and I had no knowledge of them.

For the area of the medical school for which I am responsible, namely, Teesside, discussions took place about how, if resitting students there were to take part in the study, I could separate my role as a researcher and as a lead for their academic and pastoral support. Arrangements were put in place such that this role for these students was undertaken by another senior faculty member. Consideration was given about where the interviews took place. The participants were offered a choice and I travelled to their choice. This was usually their place of work in a neutral location, such as the Education Centre. I was aware interviews at the Medical School Building, of which I

am part of the establishment, could potentially change their ease of disclosure for it was this establishment that had failed them, so to speak.

In developing the design of the study, supervision was a key mechanism through which to explore any issues relating to my position and background within the proposed design. Supervision notes were kept across the whole project; these provided an audit trail of how different positions were explored and ruled in and out.

Yearly thesis progress meetings with academics external to the work also provided a safeguard to the method and methodologies chosen.

As a psychiatrist, an interview was a format that I was familiar with and given the nature of the research questions focusing on experience, using interviews would allow the researcher to work with the participants to generate knowledge about their experiences as well as capture a sense of the emotion experienced in telling their stories. Interviews provide a format so that this could be contained and explored. I had to be mindful that, with my background as a psychiatrist, I was potentially bringing a particular lens and viewpoint to the work. This could add strength to the work but potentially lead to some assumptions or viewpoints. Again, supervision provided a platform for my supervisors to pick up and to challenge any assumptions, as did the opportunity to present the work to get critique and challenges to any as yet unearthed assumptions, or to unveil blind spots.

A reflexive journal for each interview was kept. This allowed me to document my reflections and ideas pertaining to reflexivity contemporaneously at that moment and then to consider themes that may have arisen across interviews. This allowed me to capture my ‘inner voice’ and then to reflect on, to discuss and to act on any particular issues or narratives that were relevant to my position in the research process. An example of this was in the naming and/or the description of certain individuals within the medical school with whom I was familiar. Clearly, I had to distance myself from my own ideas and feelings about these people and listen to what was being described by the participants. As a psychiatrist, I have training in holding different positions in my mind and in dealing with emotional dissonance; these skills helped me in this area.

In working with the data, one has to be mindful of being grounded in the data and of bringing any of one’s own assumptions and viewpoints into the data. One way to

minimise this is to keep to the data analysis strategy described above in a strict and reflective way. Central to this is the process of memoing which seeks to capture thoughts, ideas and assumptions during data analysis. Being aware of the possibility of forcing data to fit compared to listening to the data was also important. The thesis had started with some initial areas for exploration; there needed to be a mechanism to not make these 'fit' the data. The use of supervision, reflexive diaries, yearly quality assurance, progress meetings and presentation through the triangulation described below all sought to minimise this.

Triangulation with workshop and conference presentations

Over the course of the project, I facilitated five workshops / presentations as listed in Table 3.4.

Name of workshop	Date	Comment
AMEE Conference	August 2016	The quantitative data were presented as were the initial codes
Newcastle School of Med Ed research afternoon	December 2016	This focused on the codes and was part of the triangulation process
Institute research presentation seminar	April 2017	This focused on methodological soundness as it is a forum for challenge and constructive criticism
Board of Medical Studies presentation	April 2018	This is the main decision-making body of the medical school and initial analysis and preliminary recommendations were shared
Ottawa conference	February 2020	This shared the analysis and preliminary recommendations on an international stage

Table 3.4 Workshops presented over the course of the research

3.5. Ethical Approval

Ethical approval for the research was granted by the Newcastle University Faculty of Medical Sciences Ethics Committee on 1st April 2015 and given the approval number 00866/2015.

All research subjects read the relevant participant information sheet and signed a consent form, stating their agreement to take part in the study (Appendix D).

I have thanked the participants and am extremely grateful for their honesty and willingness to take part in the research. Those who wished to be specifically informed of the results of the research have been identified and have been given details for follow-up information to be disseminated.

3.6. Chapter Summary

In this chapter, I have outlined the methodology, theoretical underpinnings and data collection methods. A modified grounded methodology has been selected as the main thrust of the work as the area under investigation is new. Assuming that the studied phenomenon, the experience of failing, is likely to be complex, the social constructionism paradigm will allow in-depth exploration. A relative ontological perspective along with a subjective epistemological position is congruent with such a stance. By using mixed methods, with interviews supported by quantitative data, potentially, a rich and deep data set can be collected.

The analysis strategy was based on grounded theory methodology as described by Charmaz (Charmaz, 2006b). As such, concepts which were grounded within the data, were generated and tested. The analysis process involved going from a more descriptive to an analytic level by means of initial coding, category generation, mapping, focused coding and concept generation. Furthermore, findings were extensively triangulated.

Since the purpose of the research is to explore the experience of failing finals it is reasonable to suggest that the methodology and social constructionism stance are coherent with the research question. Moreover, as grounded theory is particularly suited to developing the understanding of social phenomena, the methodology is coherent with the intent of the study, which is to develop the support students, who find themselves in that position in the future, have access to.

Chapter 4. The Use of Quantitative Scales to Explore Self-Esteem and Professional Identity

4.1. Introduction

This chapter will present the quantitative element of the thesis. As described in the methodology chapter, the approach to the research questions was using a mixed-methods study with a sequential exploratory type of mixed methods approach. Self-esteem and professional identity have been identified as two possible frameworks within which the experience of failing Finals can be viewed. However there is very little in the literature about the profile of cohorts of medical students or F1 doctors with respect to these constructs. It was therefore felt to be important to establish a baseline measure of these psychological aspects of self in order to provide a context within which to view the qualitative data.

This chapter will present those results and provide commentary on how they broaden and inform the broader thesis.

Firstly, some of the methodological considerations that pertain to this aspect of the work will be described. Then, the response rates and the demographic data from each of the populations will be presented. Then, the data pertaining to the Rosenburg self-esteem scale will be described and finally, the results from the use of the professional identity self-questionnaire will be described. The chapter will end with a discussion to consider the implications of the results and how these data fit into the broader work.

4.2. Methodological Considerations

This aspect of the research used a paper questionnaire. This contained basic demographic data, whether the respondent had failed finals or not, and two scales to measure self-esteem and professional identity, respectively. The scales used are described in more detail below.

4.2.1. Rosenberg self-esteem scale

Self-esteem was measured using the Rosenberg self-esteem scale which is the most recognised and most widely used scale of self-esteem (Schmitt and Allik, 2005). It has been used on a large variety of populations and across cultures, and has been used

extensively in education, for the most part in school education but also there has been significant use in higher education. As described in the literature review, the link between failing examinations and its impact on self-esteem has been well-established in higher education populations although not in medical student populations. This work will seek to address that gap albeit in a small way as this is not the primary focus of the work.

The Rosenberg self-esteem scale is described as a 10-item scale that measures global self-worth by measuring both positive and negative feelings about the self. All items are answered using a 4-point Likert scale format with anchors ‘strongly agree’, ‘agree’, ‘disagree’ ‘strongly disagree’ scored from 4 to 1. Five items are positively worded and five are negatively worded and scoring is reversed.

The 10 items are displayed below in Table 4.1.

Item number	Item
1	On the whole, I am satisfied with myself.
2	At times, I think I am no good at all.
3	I feel that I have a number of good qualities.
4	I am able to do things as well as most other people.
5	I feel I do not have much to be proud of.
6	I certainly feel useless at times.
7	I feel that I’m a person of worth, at least on an equal plane with others.
8	I wish I could have more respect for myself.
9	All in all, I am inclined to feel that I am a failure.
10	I take a positive attitude toward myself.

Table 4.1 Items of Rosenberg self-esteem scale

The self-esteem score is taken as the sum of all scores. Typical scores on the Rosenberg scale are around 22, with most people scoring between 15 and 25 in student populations (Martín-Albo *et al.*, 2007). The range is from a minimum score of

10 to a maximum of 40. A score of less than 15 suggests low self-esteem may be an issue.

4.2.2. Professional identity

The questionnaire was developed and validated for use by Cameron (Cameron, 2004). This has been described earlier; however, the three aspects of identity used to describe the results are presented again below for convenience:

- Centrality is the amount of time thinking about being a group member.
- In-group affect is the positivity of feelings associated with being a member of the group.
- In-group ties are the perception of similarity, bond and belongingness with other group members.

The latter two highlight the affective (feelings) aspect of group membership. This is salient as part of this work is trying to examine the emotional experience of failing and how others affected the experience.

4.2.3. Statistical analysis

Basic descriptive statistical tools were used to explore the data. A t-test was used to compare self-esteem between those who had failed and those who had not. The aspects of identity described above were also compared between these two groups. All data are mean ± SD. A regression analysis was also completed for the data pertaining to the self-esteem and professionalism identity scales.

4.3. Results

4.3.1. Response rates

The response rates were:

- Out of a cohort of 350 foundation-year doctors, 306 completed questionnaires, giving a response rate of 87%.
- Out of a cohort of 351 final-year medical students, 273 completed questionnaires, giving a response rate of 78%.

These represent high response rates when compared to most survey data within medical education (Phillips *et al.*, 2016).

4.3.2. Demographic data

Table 4.2 and Table 4.3 summarise the demographics of each study population.

		First time successful	Resitters
Age-group (yrs)	20-25	188	2
	26-30	27	2
	31-35	6	0
	36-40	2	0
	41 or over	1	0
Gender	Male	114	2
	Female	112	2
Marital status	Single (never married)	205	3
	Divorced	1	0
	Married / civil partnership	8	1
	Cohabiting	10	0
	Widowed	2	0
	Prefer not to say	0	0

Table 4.2 Demographics of the medical student cohort

		First time successful	Resitters
Age-group (yrs)	20-25	227	8
	26-30	51	4
	31-35	8	0
	36-40	3	0
	41 or over	1	0
Gender	Male	142	7
	Female	147	5
	Blank	1	0
Marital status	Single (never married)	218	8
	Divorced	14	2
	Married / civil partnership	67	1
	Cohabiting	1	0
	Widowed	0	0
	Prefer not to say	0	1

Table 4.3 Demographics of the foundation doctor cohort

The demographic data presented would be in keeping with a typical cohort of medical students (General Medical Council, 2018). Newcastle has an accelerated programme where graduate students condense the first two years into one and then complete the remaining three clinical years. This would account for a number of students above the age of 26 years.

Four students (1.5%) and twelve F1s (3.9%) indicated that they were resitting the final year in the questionnaire. However, 15% of students did not respond to this question compared to only 1% of F1s.

4.3.3. Self-esteem scale results

In Table 4.4 below are the results from the Rosenberg self-esteem scale for the student and foundation doctor populations, comparing the self-esteem scores for those who failed finals to those who did not.

		First time successful	Resitters
Self-esteem: total	Student cohort	20.50 (4.51)	18.75 (4.03)
	FY1 cohort	20.76 (4.54)	18.75 (5.03)

Table 4.4 Comparison of Rosenberg scale self-esteem scores (mean ± SD), of first time successful and resitters in student and FY1 cohorts

As the comparison was underpowered due to the low number of resitters, there was no significant difference using a t-test analysis. However, in Table 4.5 below, the results of a regression analysis indicate a trend for resitters to have lower self-esteem.

Self-esteem	Self-esteem Regression analysis				
		Estimate	Standard error	t-value	p-value
	Intercept	21.5027	0.2764	77.809	< 0.05
	resit.final.year	-2.1207	1.1296	1.877	0.061
	gender.female	-1.6852	0.3887	4.335	< 0.05

Table 4.5 Results of the regression analysis of self-esteem scores in relation to resitters and female gender.

There is a significant effect of gender with females scoring 1.68 lower than males (beta = -1.68, $p < 0.5$) across the whole data set, controlling for whether or not they were resitting.

4.3.4. Professional identity results

In Table 4.6 below, comparisons are made of professional identity across the three aspects of identity between the whole student group, the whole foundation doctor group and the resitters within those groups.

		Centrality		In-group affect		In-group ties	
		First time	Resit	First time	Resit	First time	Resit
Mean score	Students	3.64 (0.73)	3.94 (0.85)	4.05 (0.74)	3.88 (0.52)	3.50 (0.69)	3.44 (0.66)
	FY1s	3.35 (0.66)	3.21 (0.59)	4.22 (0.56)	3.83 (1.08)	3.61 (0.63)	3.33 (0.67)

Table 4.6 Comparison of aspects of professional identity between all students and all FY1s.

In Table 4.7 below, the results of the regression analysis for centrality are presented.

Aspect of PI scale	Regression analysis				
		Estimate	Standard error	t-value	-value
Centrality	Intercept	3.34080	0.04042	82.662	< 0.05
	resit.final.year	-0.02748	0.17569	0.156	0.876
	groupstudent	0.30925	0.06106	5.065	< 0.05

Table 4.7 Results of the regression analysis of centrality

This shows a significant effect of students compared to F1s, with student centrality, overall, being higher.

In Table 4.8 below, the results of the regression analysis for affect are presented.

Aspect of PI scale	Regression analysis				
		Estimate	Standard error	t-value	p-value
Affect	Intercept	4.22273	0.03835	110.12	< 0.05
	resit.final.year	-0.33672	0.16668	-2.02	0.04387
	groupstudent	-0.16904	0.05750	2.94	0.00343

Table 4.8 Results of the regression analysis of affect

This shows a significant effect for both, i.e. student affect is lower than F1 affect, and resitter affect is lower than non-resitter affect.

Finally, in Table 4.9 below, the results of the regression analysis for ties are presented.

Aspect of PI scale	Regression analysis				
Ties		Estimate	Standard error	t-value	p-value
	Intercept	3.60465	0.03832	94.065	< 0.05
	resit.final.year	-0.22035	0.16630	1.325	0.1857
	groupstudent	-0.09971	0.05748	1.735	0.0834

Table 4.9 Results of the regression analysis of ties

There were no effects regarding ties in this data set.

4.4. Discussion

4.4.1. Key findings

Response rate

The data for the final-year students were gathered on one of the induction days at the beginning of the year, before the students were sent out to the region to begin their clinical placements. In the group, it is of note that only 4 identified themselves as resitting. As highlighted in the previous chapter, there were 15 students who failed that year. As they were repeating the year, the resitting students may have thought that the induction days were unnecessary and did not attend despite them being compulsory. This potentially led to a reduction in the numbers in the group which, in turn, meant identifying statistical differences in the group was difficult.

Demographics

Whilst some trends were noted in the demographics, for example, in the foundation doctor data, there were more participants who failed that were older and had been divorced; there were insufficient data to draw any statistically significant conclusions from this data set. This could be the insufficient number in this data set that would fail to identify a difference should it exist, or it may be that no difference exists. The only

way to know would be to repeat with a larger sample, for example, using the UKMED database (Dowell *et al.*, 2018). This is a large database which collates data from UK medical schools in a central place and researchers can apply to draw data from it. This was beyond the scope of this research.

Self-esteem

As stated earlier, there is little in the literature about the use of the Rosenberg self-esteem scale in medical students. The results obtained were consistent with data published on other student populations (Martín-Albo *et al.*, 2007). In this work within the final-year medical student cohort, there was a small difference between the resitters and others regarding self-esteem; the resitters appeared to have lower self-esteem but this was not statistically significant. This would be understandable; the survey was collated right at the beginning of their second final year when they were most likely to be feeling low in confidence and self-worth as they embarked on their final year again. Describing these feelings will be a focus of one of the qualitative chapters.

There was little difference in the self-esteem scores for the foundation doctors who had passed first time and for those who had passed second time. Finding any difference between these groups was always more unlikely given the resitters had passed and were starting work, something they had been working towards for some time. It was likely that their confidence would not be too different from their peers who passed first time. Exploring how confidence and self-esteem change in the students who fail and then go on to become foundation doctors will be described later in this work.

There was a significant effect for gender found in the data set. This would be in keeping with other studies of self-esteem on student populations which have highlighted lower self-esteem in females (Kling *et al.*, 1999).

Given this indication of a difference between resitters and other students, further work using larger cohorts may be of value in exploring if there were a true difference in self-esteem between students resitting and their respective cohorts. This could lead to the use of specific interventions that look to boost the self-esteem of this group.

Professional identity

The professional identity questionnaire identified a statistically significant difference between the student group and the foundation doctor group regarding in-group effect and in-group ties. In both aspects, there were higher in-group affect and in-group ties in the foundation doctor group compared to the student group.

Regarding the in-group affect, it would be in keeping with their point of professional identify formation that the group of newly qualified foundation doctors had positive feelings associated with becoming a doctor and gaining a formal professional identity compared to the student doctor identity. They had been working towards this point for a number of years and this was also before they started work, when the reality of being a doctor comes into focus.

In-group ties were also higher and again, that would be in keeping with a new sense of positivity attached to the doctor identity. However, what is interesting is that in-group ties refer to the perception of similarity, bond and belongingness with other group members. This was greater in the foundation doctor group despite many of them having never met each other; they were a disparate group of doctors from several different medical schools. Approximately one third were Newcastle graduates. This compared with the student comparison group in which this aspect was lower despite the fact that, at the time of data collection, they had been together as a cohort for 4 years. This could be related to the large size of the cohort (over 300 students) meaning they struggle to feel a sense of in-group ties. It could also be related to the fact that some of the cohort will be new into the year for several different reasons. Approximately 70 students will have intercalated at the end of year four and so will be new. Some of the cohort will be students resitting finals, others may have failed year four examinations or had to take time off for personal and health reasons. Thus, the sense of in-group ties may be less than expected despite the cohort having been ‘together’ for four years. Finally, the fact that the foundation doctors were now doctors and no longer students may provide the identity that causes the similarity, bond and belonginess within that group.

It should be said that there were no statistically significant differences between the failures and their respective comparison groups across any of the aspects of the professional self-identity questionnaire. As with the self-esteem scale, it might be that

any difference between the resitters and their respective cohort was small and there was an insufficient number in this sample to detect a difference, or no difference may exist.

As the creators of the scale noted, self-identity is a state of mind and intrinsically unstable (Cameron, 2004). Given what the participants were going through, either starting a new year of medical school or starting work as a doctor, the timing of the use of the scale, especially in the student group, was potentially too soon. By waiting until they were more embedded in the year, it may have been possible to examine something more stable when making comparisons.

4.4.2. Methodological considerations

The use of scales is well-established in quantitative methodology and is central to the exploration of distinct aspects of phenomena across social psychology (Loewenthal and Lewis, 2018). The scales used in this work are well-established and fit for purpose in the particular metrics they seek to examine. However, by their very nature, they are limited when exploring complex issues, such as the particular experience that this work seeks to examine. They will give a certain aspect or dimension but only ever that.

Also, as is highlighted above, in order to establish the significance of a finding, there first needs to be a difference and then the difference needs to be big enough so that the sample size used will detect it. Whilst these data suggest a difference, there is not enough of a difference or a big enough sample size to confirm this statistically.

In order to approach the research questions, a different approach is needed, i.e. one which will concentrate on fewer individuals but give scope to explore their experiences in more of an individualist way yet with the constraints and rules that mean that validated and meaningful conclusions can be drawn from their contributions. This will be the focus of the remaining results chapters.

4.5. Chapter Summary

These data showed an apparent effect on aspects of identity and a possible effect on self-esteem. This suggests that self-esteem and professional identity may be appropriate constructs through which to explore the experience of failure. However, using a positivistic paradigm has limitations when trying to explore lived experience.

Using a different approach to understanding knowledge, i.e. an interpretivist standpoint, will allow a deeper exploration of the actual experience beyond the glimpses these data have shown. It is this rich data set describing the qualitative aspect of the work that will cover the rest of the results of this thesis.

Chapter 5. Understanding the Experience of Failing Over Time: the Journey

5.1. Chapter Overview

Whereas the previous chapter looked at the quantitative data, this chapter is the first of four examining the qualitative data. This chapter will focus on building a description of the participants' experience of failing through their 'journey' to qualification and beyond, i.e. over the different time points of data collection, and will focus for the most part on the emotional response to failure. The remaining results chapters will look at the data through the lens of some of the main theoretical concepts, i.e. self-esteem, professional identity and attribution theory. For the most part, these later chapters will consider the cognitive component of failing. As a reminder, the interview data were gathered at three time points:

1. Just after failing
2. Just before resitting finals
3. After passing second time and in work

The main body of this chapter explores aspects of the narrative through the themes that emerged in the context of the time points highlighted above. The main themes explored will be the emotional journey of failing and how the support for students was experienced alongside that. The chapter will be rounded off with the personal positive impact of the experience on the participants, i.e. trying to capture where this journey left them. The structure of how the results are presented is summarised in Table 5.1 below.

Chapter section	Emotional set	Context / mitigators
Deep dive: 'jumble of emotions'	Initial reactions: • shock • frustration • anger • sadness • stupidity	Systems: unexpected failure; nature of initial support from medical school Social context: friends graduating; support of family / friends
The slow climb back	Emotions persist: • anger • sadness • stupidity Then move to: • repetition and boredom • anxiety and fear	Systems: lack of choice; impersonal; missed learning opportunities Social context: help on the ground in clinical placements
Reaching new highs: where the emotional journey leads to	Seeing the positive	Professional: better doctor Personal: better person; better perspective

Table 5.1 Structure of presentation of results in this chapter

5.2. Participants

Before presenting the results of this chapter, this would be a good point to introduce the participants and highlight how the longitudinal data are presented. Table 5.2 gives pseudonyms, the ages of the participants, the stage at which they were first interviewed, and highlights how many times they were interviewed.

Participant pseudonym	Age	ID letter	Stage when first interviewed	When interviewed
Clare	25	A	Medical student	Just after failing Just before second finals Just after starting foundation
Alex	27	C	Medical student	Just after failing Just before second finals Just after starting foundation
Emma	23	E	Medical student	Just after starting foundation
Amy	27	G	Medical student	Just after starting foundation
Natasha	24	I	Medical student	Just after failing Just before second finals
Paul	26	K	Medical student	Just after failing Just before second finals Just after starting foundation
Niamh	28	M	Foundation doctor	Just after starting foundation
James	24	O	Foundation doctor	Just after starting foundation
Haslina	25	Q	Foundation doctor	Just after starting foundation
Jonny	24	S	Foundation doctor	Just after starting foundation
Lewis	26	U	Foundation doctor	Just after starting foundation

Table 5.2 Participant information

For the medical student participants you will see colours used in the quotations used below; these denote the time point at which the interview took place for the medical student.

1. Just after failing in green, noted as ‘Just after failing’.
2. Just before resitting finals: in red, noted as ‘Just before resitting’
3. After passing second time and in work: in blue, noted as ‘FY1’

All the foundation doctors’ quotes which took place after passing are in black, noted as ‘FY1’.

5.3. Deep Dive: ‘Jumble of Emotions’

‘Tell me, where is fancy bred? Or in the heart or in the head? How begot? How nourished?’ Shakespeare, The Merchant of Venice, Act III, Scene 2

Firstly, I will consider the emotional experience of failing finals, and how that experience may reflect the different aspects of emotional response described, including whether this is of ‘the heart’ or ‘the head’, a question that has vexed authors, philosophers and scientists for many years, such as in the song Bassanio is listening to in the quote above as he contemplates declaring his love for Portia.

Participants described changing emotions following failure; the pattern/sequence varied but the main observation was that there was a dynamic response which will be explored in this chapter. Exploration of the emotional impact of failing, especially in the initial period after finding out that they had failed, was a significant part of this data set. As will become apparent, the raw emotion and emotional roller coaster that the participants experienced highlights the traumatic nature of this life event for many of these individuals. When one thinks of a roller coaster, one thinks of ‘ups and downs’. As will become apparent, there are not many ups, especially in the initial period after finding out about failure. If one is using the roller coaster analogy, the best way to describe the experience of the cohort would be of a plunging deep down followed by a gradual ascent to the same height and, for some, a bit higher than before.

It is the down of that roller coaster ride that is described in detail here with feelings of shock, frustration, anger, sadness, stupidity, boredom and anxiety all described. These are described roughly in the order that they appeared for the participants, and this is expressed below. As will be described later, this is a somewhat simplistic way to present this, given the emotions experienced are individual and often experienced simultaneously. However, it broadly represents the order emotions were expressed in

the data set and emerged through the process of data analysis described in the methods chapter.

5.3.1. All mixed up

Prior to describing the emotional experiences of failing in a linear fashion, this next section will aim to give a sense of the complexity and transitional nature of the experiences of the participants. Several participants described feelings changing and being in transition, particularly in this period after finding out they had failed. This tended to get less so as the resitting year progressed. The notion of 'going through' something or having been on a journey was a common narrative as well as feelings of having been 'up and down'.

Emma, FY1: So upset, to grumpy, I don't do angry, so I just do grumpy, upset, grumpy, don't care, to upset, to grumpy, to angry… [re how feelings have changed from when failed].

Natasha, Just after failing: You go through a kind of a process of emotions.

Participants often described several feelings in the same few sentences, often negative, but sometimes positive and negative. These seemed to particularly centre around the time when they first found out that they had failed. Whilst experiencing positive feelings might seems surprising given the circumstances, the data often revealed participants trying to see the positive in the difficulties they were facing.

Amy, Just after failing: Everything is sort of jumbled, so I guess, oh, I guess definitely upset for, maybe, definitely a few days and I guess that would come and go in waves and then everybody graduated in July, so kind of like, I went to my friends' graduation. I was kind of quite happy and I guess sad on that day and then as time went on it was, OK, kind of like […].

5.3.2. Shock

I now move into describing the emotional experience of failing, particularly in the initial period after finding out about the failure. These will be described roughly in the order in which the data suggest they were the dominant experience but as highlighted above, emotional experiences are individual, transient, can be multiple and simultaneous.

An initial feeling of shock was common with the feelings being described of not being able to process or to comprehend finding out that they had failed.

Paul, Just after failing: Obviously, the first reaction was just shock and just being really upset and because it's a big deal, life event, so that was the stage of it, really.

Niamh, FY1: On the day it was like shock, it was a shock… [tearful].

In the quote above, the participant is saying 'like shock', as well as 'a shock', so it seems that they are making the comparison with physical shock, rather than using 'shock' in a lighter, vernacular 'surprise' sense.

Shock is defined as a sudden, upsetting or surprising experience or event (*The Cambridge dictionary of psychology*, 2009). Suffice to say, finding out that you have failed your medical finals is sudden, upsetting and surprising. In the medical and psychological literature, a psychological or mental shock is captured in the diagnosis of an acute stress reaction. The descriptions of this recognise a psychological and physical component, the latter driven by the autonomic nervous system. In the interviews, one got the sense of a physical as well as an emotional reaction to finding out about failing. The psychological component describes feelings of being dazed, then low mood, anger, despair, anxiety and withdrawal. These are descriptions that chime very much with this data set.

Only 15 to 20 students per year fail finals in Newcastle out of a cohort of 350. Thus, when they find out it is them, it is little surprise that it comes as a shock as they may have not previously countenanced it.

Clare, Just after failing: Initially very, I mean, initially very frustrating, and I just felt very upset and I went home and didn't do much, didn't really comprehend it for a bit.

5.3.3. Frustration and anger

Feelings of frustration and anger were described to follow on from the shock. Frustration is an emotional response to unfulfillment. It is related to disappointment, anger and annoyance (Crossman *et al.*, 2009).

There is no option to resit in the same academic year on Newcastle MBBS course currently. The fact that students had to resit a whole year rather than be able to resit within the same academic year was a common source of frustration. The implications of this are significant in terms of separation from their year-group, loss of income, loss of job placement and housing issues.

Participants described that some of their frustration was in relation to the practical knock-on effects of failing, such as the financial implications, challenges around having to change living arrangements and jobs.

Amy, Just after failing: So I think, basically, it kind of felt like the rug had been pulled out from under me because I had somewhere to live and I had my job sorted out and then, just at the last moment […].

Feelings of frustration were often closely associated with and followed by feelings of anger in the initial period after finding out about failing. The anger often appeared as being rather unfocused. This may add to the sense of unfocused and repressed anger that was apparent at the interviews.

Natasha, Just after failing: […] myself and the medical school, but I'm not angry at a particular person. I'm not particularly furious, I think I'm just angry at the situation.

Most of the anger was externalised; only one participant described being angry with themselves.

Natasha, Just after failing: I guess I'm also angry at myself because I blame myself for not being as prepared […].

Several participants spoke about being angry at the 'system'. Potentially adding to this was the sense that the participants may have feared railing against the 'system' as they perceived it could affect their long-term academic or career prospects.

For the most part, this was the medical school and sometimes related to not having been warned that they were potentially at risk of failing, i.e. a sense of there having been no warning shot, as previously highlighted.

A common source of anger was the lack of warning from the medical school. The sense that no one told them that they were at risk of failing often led to feelings of frustration and anger at the medical school. In the final year of the course the students all have to do low stakes summative clinical assessments. These are an indicator of performance during the final year. Most students who fail finals pass all of these, so they are a poor predictor of failure. This may be what the students are referring to when they are indicating that they had no warning shot during the year.

Alex, FY1: Unexpected, in the sense that the medical school didn't tell me; it was unexpected, and all of my tutors didn't tell me. I wish I'd known about it.

In addition, some of the anger was around having to sit the whole year again and not being able to resit within the same academic year or understand particularly why they had failed. This area will be discussed again later when considering academic support.

Clare, Just after failing: I was, yes, angry, more at the system.

Natasha, Just after failing: Yes, because like I said, I think that a big stem of my anger was that I was open. I did tell you everything and you told me I was OK and you told me I would pass.

One interviewee highlighted that they were not angry and felt frustrated with others for being so. It seemed that this participant did not want to identity with this angry group.

Niamh, FY1: I was frustrated with that. I don't see myself ... [with other resitters who were angry].

This anger was, for some, carried on to later time points in the year as can be seen in these second interview descriptions below. It seemed that participants were working through this feeling at different rates.

Clare, Just before resitting: I still, I still feel that, like, I don't know, I still feel that the whole system is a bit, I don't know, it still makes me angry to think about the system.

Natasha, Just before resitting: I was angry before the last time we spoke. I was very angry and that was because that was all that I thought I could be.

5.3.4. Sadness and low mood

After the initial feeling of shock, frustration and anger, feelings of sadness and low mood were common. This may represent part of the journey of dealing with a stressful situation; when the fight and flight reaction has subsided, one is left with the reality of the situation and feelings of sadness and despair start to prevail. A sense of 'being gutted' was often mentioned.

Niamh, Just after failing: I felt horrendous, that was awful. I didn't think I'd get so emotional, yeah, it was really hard... [finding out had failed].

Lewis, FY1: I guess, it was gutting. It was a horrible feeling, actually, I remember it quite well.

Many participants were tearful which seemed to represent the intensity of the emotion even though, for some, it was some time ago. Many of them spoke of having cried at the time and on a number of occasions afterwards.

Emma, Just after failing: I don't like to say, I get upset when I think about it, yeah, I don't talk about it… [tearful].

Even for those interviewees who had passed and were working, and for whom the whole experience of finding out they had failed was over well over a year ago, sadness and tears were noted at the interviews.

Niamh, FY1: […] and then on the day that I found out, it was something like […] I'm a very confident person… [tearful].

One participant highlighted how they had considered the symptoms of depression from their psychiatry rotation and noted how they fulfilled some of them.

Paul, Just after failing: I've certainly been through episodes of low moods and whether or not it's clinical depression […] I've certainly had low moods. I've had anhedonia and like, I felt that my appetite has gone down […] the symptoms […] after reading about it from psychiatry.

Medical students and doctors diagnosing themselves, together with the presentation and stigma of mental illness in medical students and doctors in training, is a well-recognised issue (Cohen *et al.*, 2016). Whether or not this student met criteria for a diagnosis of depression, one cannot know. Whatever it was, the sadness was profound, which was something that came across from all participants.

In this student's case, recognition of possible symptoms was on the background of no history of mental health problems, which contrasted with other participants who failed and who had background mental health issues. This is further considered in later chapters.

A number spoke of how feelings of being sad or being depressed lasted several weeks or even months but gradually eased, although still did come back in waves, one participant even mentioning that they thought it could take five years to recover.

Haslina, FY1: So I had to stay home for a while and just not […] I don't want to meet anyone and so I guess, yes, I felt really depressed. So actually, just like two, I didn't […] it took me the whole summer holidays, so probably, about one, one or two months.

One participant spoke about just not thinking about failing as it was too painful.

Emma, Just before resitting: I think you feel less bad as long as I don't think about it but when I think about it […] yes, as long as I'm not reminded it's alright.

The sense of sadness and loss was compounded by certain events, such as seeing friends celebrating on Facebook, when their former year-group graduated or when their former year-group started work as doctors. This highlighted how social relationships and external influences also impacted on feelings as they were experienced.

Amy, Just after failing: […] and then when everybody started work that was like, that was quite sad as well, just because, I don't know, it was that kind of feeling of being left behind.

Jonny, FY1: Yeah, it wasn't pleasant. The main thing that stuck with me was that when everyone went back for their graduation, I couldn't go. There was no joy even when I passed again in January. That's when my official graduation was. It wasn't anything, you know.

One can see the strength of identification with their previous cohort and the ongoing sense of loss despite academic recovery.

Further socio-contextual factors were captured when two participants spoke about how their sad feelings related to the culture of success in medicine and how failing had humbled them.

Paul, FY1: I think as a lot of medical students, they'll […] they're not use to failing really through school and through everything else, so it's certainly been very humbling.

Hasina, FY1: Really awful because, because as I say, being a medic normally, you're like the top of the school, always achieving well and suddenly, you have to repeat a year which is so different.

5.3.5. A hangover effect?

As has been described above, there were intense emotions felt in the period after failing. As one might expect, these carried on for some as they began their resitting year. Feelings of being depressed, sad and tearful were common in this period. They were sometimes associated with a feeling of being stupid. This was particularly noticeable after feelings of anger and frustration had subsided.

Alex Just after failing: Cos' I'm really stupid… [tearful]… and seem like a bit of a failure, which I think is my personal opinion in general.

Niamh, FY1: I do believe in myself, and I hate the fact that for the first six months, until just after January, I was preoccupied. I was starting to think that people think that I'm stupid and that's when I got depressed. I started to feel crap.

As described above, one participant had the anxiety that others would perceive them as stupid given they were resitting but, as will be highlighted later in the results, this was very much a perception on their part rather than being due to any actual experiences. Another had the sense that they were not as good as their former year-group as they had progressed, and they were a year behind.

Niamh, FY1: To be honest, I think, like, it was shock and then it was coming to terms with it. When I came back, I found it hard because actually, I'm somebody that always gets very involved, but I feel, like, a pre-conception that you are stupid.

Emma, FY1: Like, I always feel like I'm not as good as everyone else because they're now F1s […].

5.4. Aspects of Academic Support in the 'Jumble of Emotions' and Beyond

The experience of academic support experienced in the aftermath of failing and the feelings described above are closely interlinked. As described above, particularly after finding out they have failed, the students are experiencing an intense emotional reaction. The medical school wants to and has an obligation to support them in this time. However, given that, certainly initially, many blamed the medical school for failing, one can see how this creates tension. The students' experience of their first meetings, both in terms of their reflection on the timings of these meeting, how they were delivered, and the process of allocation will be explored next.

In order to capture the longitudinal aspect of the support students experienced across the year, the structure of the support over the year is captured in Table 5.3. The emotional impact of the immediate post failing period and experience of student support in that period is described above. The next section will focus on themes related to student support that emerged across the rest of the resitting year, namely, lack of choice, missed opportunities and help on the ground.

When	Who	Focus
Immediate post failing	Senior officer from medical school	Pastoral support
Immediate post failing	Lead for pastoral support from medical school: ongoing support over year	Pastoral support
Post failing: variable	Senior officer from medical school	Academic feedback, remediation plan
Start of resitting year	Senior officer from medical school	Academic feedback, pastoral support, remediation plan
Start of resitting year	Sub-Dean for base unit to which student has been allocated	Academic feedback, pastoral support, remediation plan
Start of resitting year	Educational supervisor (Minimum of 3 meetings over the year)	Academic feedback, remediation plan
Start of resitting year	Locality lead for pastoral support	Pastoral support in the base unit
Mid-way through resitting year	Senior officer from medical school	Academic feedback, pastoral support, remediation plan
Mid-way through resitting year	Sub-Dean for base unit to which student has been allocated	Academic feedback, pastoral support, remediation plan
Just before finals	Senior officer from medical school	Academic feedback, pastoral support, remediation plan
Just before finals	Sub-Dean for base unit to which student has been allocated	Academic feedback, pastoral support, remediation plan

Table 5.3 Structure of academic support across the year

5.4.1. Timing

The medical school tended to try and meet all the students on the day that they found out that they had failed; the focus of that meeting being more on wellbeing rather than a dissection of their performance. The latter was covered in subsequent meetings later on in the resitting year.

Many students spoke of appreciating the initial support. They recognised a flexibility from the medical school in terms of timings and appreciated the support given. From the description of emotions highlighted above, one could suggest that during this initial meeting they were more in the shock phase of processing the information and generally, the meetings were described as containing and viewed positively, especially in terms of timing. It was only later that feelings of sadness and anger came more to the fore.

Amy, Just after failing: No they were quite good, I think, in terms of timing of […] because I think we had a meeting with […] I can't remember who it was with […] it was a meeting with someone in the medical school, like, the day that we found out about our results and I guess that was quite nice. We were kind of in shock, I guess, but that was quite nice of them to talk to you and then, from what I remember, they gave us a week, they gave us […] so they met up with us again.

Some students spoke about being overwhelmed at that first meeting and not being able to process the information because of this, but it helping to understand what was going to happen next.

Natasha, Just after failing: I can also understand that some people might find that difficult because they're not ready to come to terms with that and it's too overwhelming, but for me, it helped me put my head in order.

Interestingly, one of the students commented on the hidden agenda of that initial meeting. As noted above, the focus was on wellbeing but a subtext was to screen for any concerns that they were a risk to themselves, given the devastating news they had just received.

Niamh, FY1: I met somebody immediately after they told me to make sure I wasn't going to kill myself, and that's fine.

Regarding the timings and frequency of meetings, some students reported feeling overwhelmed with the number of meetings, with some repetition. Meetings with a senior officer, lead for assessment, lead for pastoral care, sub-dean for a base unit and educational supervisor were all possible within a short space of time, and so it is little wonder that some students picked up on this. The balance between the medical school wanting to be helpful and making sure that the student has the support they need versus a more student-centred approach which involves asking them what they need and then co-ordinating it appeared to be a common theme emerging from the data.

Alex, Just before resitting: Oh, God, do I have to answer that question? I think there's a lot of [...] I don't know really […] at the beginning of the year it was just, everyone just descended on me in terms of tutors and things, and there was so many of them that I had to basically say back off to a lot of them, no, not having twelve tutors […].

5.4.2. Delivery

In terms of the delivery of the student support in the next meeting, where the focus was on academic considerations, it would be fair to say that there was divided opinion. A number of students found it very dissatisfying and upsetting. This was in relation to the individual who gave the feedback, who was a senior academic of the medical school involved in assessment. Some students named the person, others did not for fear of some sort of retribution but alluded to the role, so the individual was identifiable. Students felt that this individual was unsympathetic, belittling and pushed the reason of failure onto the student.

These meetings tended to be a while after finding out that the students had failed, i.e. several weeks. The meetings, in contrast to the initial meeting, tended to focus on why the students had failed by looking through their examination performance. It may be that the individual involved was poor at conducting these meetings, but it may be that the timing meant that the students had moved away from the initial shock of failing and were angrier and that this was being played out in that instance. Also, given its focus on the academic performance of the student and what will be explored later around attribution bias, it may be that the feelings of anger and frustration described above are being projected onto the academic conducting the meeting.

Alex, Just after failing: My feedback session with a certain someone was […] his feedback sessions were meant to help you and make you feel a bit better about failing or something along those lines. To which the first thing I was told was that the written paper was really easy, to which I said, 'that's not really making me feel any better.'

Haslina, FY1: OK, Professor X, he gave us the results and he gave, he, he broke the news in such a bad way. I guess, like, because we didn't get the result he was just trying to bargain and say that it was our fault, saying I did better in the ESR [Essential Senior Rotation] exams, but he just says, like, he doesn't […] he just sort of belittled because he just says, like, oh, but it was actually this you needed to say, that in the ESR, you had better results or they say like, if you got an F or something and if I pass he would be like, oh, you didn't get an M.

Others were very positive about their experience of meeting this individual. They noted the pragmatic approach and focus on areas that they needed to improve on. This could

be about ‘fit’. Some will appreciate a more business-like pragmatic approach whilst many others struggle with this and wanted or needed a more holistic containing style of meeting. It could also be related to timing in that the participant may have been ready to identify problems and solutions, whereas some participants clearly were not in that place.

Natasha, Just after failing: Then, very soon after the Professor X, who went through my exam details in depth which I think was very helpful to me cos’ it was a very matter of fact business […] what went wrong and this is what we’re going to do to fix it, and I really appreciated him sitting down and saying this is where you went wrong, this is where you need to improve because that’s something I, as a person, have always enjoyed. I always enjoyed feedback. I enjoy being shown areas in which I can improve.

One student who did not graduate in Newcastle spoke about finding out they had failed through e-mail and then not seeing anyone from the medical school for some months after failing. This was in part due to their medical school being in Ireland. Again, they described an impersonal and pragmatic approach.

Jonny, FY1: It was very poorly done. It was just an e-mail. Nobody gave me a ring. I went back over to view the transcripts just to see exactly where I went wrong. I saw a couple of people then, but I didn’t really speak to them… [other fellow pupils].

Jonny, FY1: I did bump into one of my professors, she was a professor of paediatrics. She knew about it, but she couldn’t really help. It was, literally, I bumped into her on my walk back to my car. It wasn’t like a planned thing.

Several students commented that it felt that the initial meeting was scripted and that the medical school was somehow just ticking boxes and not engaging with them on a personal level. To some extent, this is true and from personal experience of conducting meetings with students who have failed examinations, one does have to follow a script in order not to forget anything. Something which emerges from the data is the lack of personal touch or connection with the failing students. However, given the likelihood of student appeal of outcome, this may explain the mechanistic approach to the interview.

Lewis, FY1: With the, I guess, I don’t know, I had one to one with X, like, I mentioned what didn’t feel like they were, it felt like they were just, like, a sort of jumping through hoops sort of exercise and it didn’t feel like it was actually that much support beyond the meetings […] not, not, because not really came of, came of the initial meeting when I was talking about possible things we could do to try and make sure I was supported.

Alex, Just before resitting: I think they just go the wrong way about it. I'm not really sure how. They can just make you feel more uncomfortable than actually supporting you. I don't, I can't really pinpoint why. It was very much kind of […] there was a script, and they followed a script of how to help people.

There was a sense that the university wanted to support students, just that it was not going about it in a tailored individualistic way.

Clare, FY1: I think [the] university did try quite hard to meet up with you and ask if there was anything that they could do, what they could do to help and that kind of thing.

Alex, Just before resitting: So it felt overbearing to start off with and then my personal tutor was, she was a little bit mad but, she's good but she gets, she gets more anxious about me than I get about me, a bit more stressful with […] but she's really good.

The support offered by the pastoral support lead in the medical school was experienced as positive and the main individual involved was named by several students. This was described as more personal and in-depth and was appreciated by most students. One student spoke about a programme of support for resitters in another medical school and felt there were areas Newcastle could improve.

Natasha, Just after failing: He then referred me to X, the pastoral tutor and I spoke to her several times in depth about my situation and everything, and she directed me to a lot of the different services that were available to me.

Paul, Just before resitting: I have to say with my sisters she's at, she was at a different medical school and I think their programme with the resitters was, maybe, the pastoral support was a lot, well, was better at that than, than […] but that's a preference and it depends what you mean by better, it was more hands on, anyway.

5.4.3. Allocation

The allocation of which hospital in the regional medical school a medical student will be placed for their clinical year is a charged issue at the best of times. This seemed more so for these participants as this must be done over the summer when they have just found out they have failed. Completing this prior to the resitting year led to students feeling frustrated, not listened to regarding their requests and the circumstances around them.

The medical school had to balance the demands of where students wanted to go with a number of other factors:

- Where they are spaces
- Health and personal circumstances
- The need for a change or not from their original hospital
- Rarely, the region's willingness to take them back

Much of this information is privileged and cannot be shared with the student so they cannot understand the rationale or balance trying to be achieved. This inevitably leads to frustration.

Amy, Just after failing: People in the medical school said that because of my second chance I would get put with one of my, with one of my friends and we could get put in Northumbria and then they, kind of like, they were kind of like you'll definitely get that and then they backtracked on that and put her in Tyne and me in Weir. They put us in, like, somewhere that we weren't going to go which was a bit of a shock because… [allocated somewhere, felt isolated].

Having considered the recollections and experience of the summer after failing, now to look at the next point in the journey, which is to consider the emotional experience and support in the repeated year of teaching and learning.

5.5. The Slow Climb

This represented a slow climb out of the jumble of predominately negative emotions and is described below under the headings of:

- Groundhog day
- The fear factor: the final bite of the cherry

5.5.1. Groundhog day

Having considered the emotional fallout of failing, which for the most part, constitutes the immediate aftermath of failing, I now consider a point later in the year when the students are back into their resitting year. As the year went on, the emotional fallout of failing seemed to pass. Once into the year, participants often cited a sense of repetition and feelings of boredom as being a key theme.

The notion of jumping over a series of the same hurdles was shared by several participants. Some thought that this made the year easier in a sense, given they knew what those hurdles were; others spoke about learning the same material again, and there was a sense of frustration at the futility of this.

Clare, Just after failing: A lot of stuff feels like repetition and jumping over hurdles that you've already jumped over again. Some of it feels very much like jumping over things you've already done but then I think, all the different hurdles that you have to go through the final year, will I mess up on them again?

There was a sense of having done this already the first time and that this was meaningless, 'did not count' and that you were starting from square one, so to speak. Others felt patronised especially at the beginning of the year when doing induction, for instance. One spoke about how they worried that they would have a sense of complacency that might lead them to failing their finals a second time.

Alex, FY1: You've got to this again, you've got to jump through the hoops, you've got to get your logbook signed, you've got to do this. It's like, well, this is bullshit because I did it the year before. It's like, I hadn't forgotten how to take a blood pressure from two months ago and you still had to kind of do all these things and it just felt pointless.

This was particularly noted to relate to having to apply for jobs and do the SJT, etc., again. However, others spoke about feeling better prepared for such events, particularly the prescribing skills assessment.

Alex, Just before resitting: So, you forget that when your resit the year you've got to go through all the admin process again and it's so stressful having to wait for your SJT results, having to wait for the deanery and then having to rank all your three hundred and ninety-one jobs and having to wait for that. It's just a bit of a nightmare.

This sense of boredom and repetition was more apparent in the initial interviews. When interviewed again, the students were more phlegmatic noting that doing the year again allowed them to focus on areas that they had not had the chance to explore in their first final year, that it was almost 'like a year of revision' and there was comfort in doing the same material again. For some, it had allowed them to do other activities, such as audit, that they could not or had not done the first time or to help out on the wards more and learn the job of medicine rather than passing an examination.

Clare, Just after failing: Whereas this time last year it was more struggling to remember everything and it's, like, the feedback was less useful because it would be more things that I knew but I hadn't, whereas now, it's, it's more a chance to kind of think about smaller things, so which is good.

Paul, Just before resitting: I think doing things that you've done before that you know and reinforcing has been really useful and worthwhile, and it's gone very quickly.

The sense of not doing anything different the second time round also led some to question whether they would pass a second time as nothing had changed per se. There

was a separation in some participants' minds between 'passing the year', i.e. passing all the in-course assessments and not 'passing the exam', i.e. failing finals. It seemed that there was a tension between learning to pass the finals examination and preparedness for working as a doctor. This is a common tension and the data suggested that participants felt the need to do something different.

Alex, FY1: […] and because the year before I didn't do very well and failed my exams, kind of doing it again was, I don't know, it kind of just felt like I was going to fail them again, so what was the point of doing them?

Emma, Just after failing: I don't really want to be sitting around wasting time and just doing exactly the same as I did last year so something has to change.

In repeating some rotations, participants described this as confirming their dislike of some specialities, but others noted that in doing some rotations again, they were surprised by enjoying it a lot more than the first time. Some said that they suspected that they had a foundation of knowledge that allowed them to engage in a different way and to some extent the first-time round, they had 'not felt ready'.

Natasha, Just after failing: For example, last year, I hated Obs and Gynae because I didn't know anything but hopefully, this year, when I do Obs and Gynae again I'll actually have knowledge of it. So I will be less likely to shy away from clinical encounters in fear of being questioned, and now I actually enjoy it more.

One reflected that they had always been in the 'middle of the pack' academically and through having done the rotations before, it felt 'nice to be assured and to be confident in each rotation'.

Paul, Just after failing: I think, on reflection, in every, in all the other years, I've kind of been, not necessarily fighting but, like, certainly middle of the pack, not top of the pack, whereas I'm not saying I'm top, like, it's nice to be assured and to be confident in each rotation having done it before.

5.5.2. The fear factor: the final bite of the cherry

The chapter started looking at the emotional fallout from failure. It then moved on to describe the sense of repetition that the students felt as they went through their second final year. Towards the end of the resitting year, in the period leading up to their second and last finals, many participants highlighted feelings of anxiety, fear and stress.

The sense of panic in the year-group as finals approached was mentioned by a number of people, although several noted that they did not feel the same panic as they had

done the year before despite the stakes being so high. This may be related to what several participants noted, i.e. that when asked questions or set a task in the resitting year, whereas in their first attempt they would have panicked, in the resitting year, the sense of having done it before gave them a confidence to be able to answer questions and volunteer for tasks in a way that they had not been able to do the year before.

Natasha, Just before resitting: I feel that I need to pass and I need to study but I don't think it has set in like the panic that I did last year. I think it hit me earlier last year and I think it will come later.

The fear that a small thing could go wrong and that this would jeopardise their future medical career was shared by several of the participants, as was the fear that their strengths could be eroded as they worked on other areas.

Clare, Just before resitting: It's just that there so, like, fragile things that I felt could go wrong and that, that still worries me about, you know.

The sense that this was the 'last bite of the cherry' clearly led to stress being experienced by most participants in the weeks leading up to sitting finals again.

Emma, Just before resitting: I think I probably feel it more internally now than ever before because there's so much pressure and expectation on passing this time around.

Natasha, Just after failing: … which obviously fills me with anxiety thinking, oh, if I have a bad day I could ruin my second and only other attempt. So there is that… [feelings about doing finals again as they have changed].

Others mentioned other factors adding to this stress or the stress of taking the examinations in the first place, such as health issues or family problems. This area will be picked up again later.

Clare, Just before resitting: Stress on top of that and then having not slept which, just was making me feel […] in the night I wasn't in, I wasn't feeling very well and I think the stress of feeling that I had to do it anyway, that there was no way around it at all.

A number shared a fear of having already worked hard to pass first time, leading them to consider what and how they would do anything different in order to pass second time.

Niamh, FY1: I thought when I found out that I had failed, I thought […] I had really worked hard […] Oh God, next year I'm going to be even more stressed, I'm going to be working so much harder, it's going to be even worse.

The anxiety of going to find out their results and that they had passed the second time overshadowed the achievement for several people.

Having had to take another year and being more experienced was recognised as something that helped with the transition to foundation-year doctor for some. One participant highlighted their need to feel under pressure and stressed by clinical teachers in the resitting year in order to help them pass.

Natasha, Just after failing: I said, well, to be honest, someone who's going to put me on edge and invoke those feelings of anxiety rather than someone who's going to make me feel at ease… [re type of teaching requested by her].

A sense of anxiety across the whole year was mentioned by one participant who highlighted the support they had from a tutor to help them with this; the lack of such a tutor or someone to confide in regarding failing was an issue for another participant.

Paul, FY1: […] when you're feeling a bit jittery and a bit self-conscious, and I think that throughout the year she, kind of, was very encouraging.

Lewis, FY1: So the other anxiety, actually, was who'd be around and who I'd be able to confide in when things weren't going so well. That was a little bit of a source of anxiety.

Emotions shifting and being mixed were mentioned in the period preceding finals as they had been just after failing, which would be in keeping with the description of an acute stress reaction albeit in a very different context, i.e. the stress of having to pass versus the stress of having just found out they had failed.

Emma, Just before resitting: Probably about the same, but it's coming up towards exams so I don't know. It's been a bit up and down.

Having considered the emotional experience of the resitting year by participants, the next section seeks to describe the academic support that was meant to sit alongside the participants as they went through this challenging time.

5.6. Aspects of academic support in the resitting year

5.6.1. Lack of choice and need for bespoke support

The medical school is obviously keen to support students who are resitting but potentially, they are also keen to be seen to support them. By having a series of meetings across the year, an audit trail of support exists which may not exist if the

student were given a choice and chose not to engage. Given the high stakes nature of failing the resit examination, one can understand the medical school's need to have evidence of support, but this possibly comes at the price of the student feeling homogenised.

Alex, Just after failing: It was less like 'do you want to come and see someone?' but more like 'we've made you an appointment, you have to come in now.' It would be quite nice to be able to say that you needed to and get whoever you wanted to come with you.

Natasha, Just before resitting: […] but otherwise, like, I feel like I haven't had that much or that I haven't, now I think about it, I can't think of anything that we've really sort of said. I mean, I know that they've mentioned in passing that they'll open up a clinical skills lab, but I haven't seen a notice in the common room. I haven't had an email about it, so actually. I'm not sure… [re what was different for them in the resitting year].

Some students commented on not being sure what they needed or expected from the support offered to them as students who were resitting. Also, some felt there was a lack of co-ordination between what was offered from the medical school and what was being offered in the clinical placements. Students described support being 'chucked at them' and feeling that it lacked co-ordination and failed to see the whole of them.

Alex, Just before resitting: No one knew how to deal with it and they were just chucking things at me. I don't know, it was just because they didn't really understand it, they didn't really know how to help. And if they didn't know how to help they were kind of passing you on to someone else that wasn't […] the last thing that you want when you're feeling rubbish already is being passed from one person to another.

Natasha, Just before resitting: I think so, I think the support sort, it's, it's all […] what I would say [...] it's more of a general orchestration sort of thing.

5.6.2. Missed learning opportunities

With hindsight, several participants felt that there were missed opportunities for the medical school to have put things in place in their first fifth-year which may have helped them. This may have been in the form of support that had not been offered when they felt it should have been.

Alex, FY1: […] but looking back on it, I probably should have had these things in place the year before. I would have done far better.

Natasha, Just after failing: The only thing that I would say, which again relates to me rather than as a whole, that, like I said, with my partner being depressed and things, I

did ask for pastoral support and I didn't receive pastoral support before I sat finals for the first time.

One highlighted that they had not been offered the possibility of taking time out and coming back to do the year again when they had highlighted issues in their first sitting of the final year. What the student was saying was that the medical school should have been more proactive in asking them if they wanted to take time off. It may be that such conversations were had but have not been remembered and this could be an example of attribution bias that will be explored in more detail later.

Natasha, Just after failing : I poured my heart out about all these things that were going on in my life, and they were like 'well, what do you want me to do to help?' and I said 'well, I don't know' because I told my friends but they don't understand, like my friends outside of medicine understand, my boyfriend, and my family, and all of these things. I think that's always going to be nagging me. Why did no one ever say 'have you considered not taking finals given the stress that you are under?'

5.6.3. Help on the ground

There seemed to be a distinction between the support provided by the medical school and that provided by the trusts who hosted the students in their resitting year. One participant spoke about being grateful for support around planning their timetable to avoid replication, and another spoke about deciding whether to tell tutors that they were resitting so that they could offer them more tailored teaching.

Emma, Just after failing: I've had a word with my tutors about timetables so that it's more suitable for me…[to avoid repetition].

A number of participants spoke of being assigned a teaching fellow to support them over the resitting year. Teaching fellows tend to be doctors in training who take some time out to concentrate on teaching. They tend to have been qualified for only a few years and so can relate to the students' experiences of sitting finals with a much fresher perspective than older faculty. The 'near peer' educational experience of being supported by teaching fellows is a positive that many medical students note in feedback, not just those that are resitting.

James, FY1: This year we had some teaching fellows. I had some individual sessions with them, really, and I had help towards the end. I had, like, a weekly session with one of the consultants on the ward where we just saw patients and did a lot of practice, exam practice, really. I think that was the best.

For the most part, the participants were positive about the experience of support 'on the ground' in their clinical placements, noting a desire to help and being assigned to more senior people. This seemed to contrast with their experience of support from the medical school, which appears much more mixed. However, whilst students felt supported, they commented on there being little tailored support for them and just being encouraged to use what was available and to ask for help should they need it. One student commented on how a member of staff felt conflicted between offering extra help for them but being told that they could not by the medical school, and also being seen to favour this group over other higher risk groups, such as international students. Interestingly, there is no such edict from the medical school to not offering extra support to resitting students. This may have been offered as an excuse due to lack of resources or, as alluded to, not wanting to give any particular group preferential treatment.

Clare, Just before resitting: They change, like, the people that you're in contact with. They chose people who are quite experienced, so there are definitely things that they do and I think it's probably hard for them too, really. I don't know exactly what it is that would be useful but [...].

After graduation, several participants were able to reflect on the confidence and belief instilled in them by certain key individuals. This may relate to a working hypothesis explored in the next chapter that some participants had low premorbid confidence. This was even more dented by failing and they really needed someone to boost their confidence and esteem as they approached the resitting year.

Natasha, Just before resitting: I think that is still very true because I think that if you have a lovely, friendly clinician who kind of holds your hand and smiles at you and gives you all these clues, you feel more comfortable in your own abilities. Naturally, it's an innate sense of security in what you're saying.

5.7. Reaching New Highs: Where the Emotional Journey Leads

Despite the overwhelming negative emotional journey described above, most of the participants were able to recognise that there had been some positive elements to emerge from their experience. Often, they did not see this in the immediate aftermath of failing but, in retrospect, either within the resitting year or after that had passed. Then, they were able to reflect on the positives that had come out of what had been a very difficult experience. These positives were both personal and academic. This section will focus on the personal positives, in keeping with the chapter focus of

describing the personal emotional experiences of failing. It seems apposite to end the chapter with the personal positives that many described.

The adage of time being a healer seems borne out as people described feelings changing but then gradually, things improving. The effect of failing through gradually becoming more positive did seem to have lingering or 'hangover' effects referred to by a couple of participants.

Emma, FY1: […] but I think it's still like you were saying before, like the hangover effects. It still felt like quite a traumatic experience and still kind of lingering there, so that on the back of everything else that's going on, so […].

5.7.1. Personal growth and change: 'failure is good for you'

Several participants reflected on how failing had changed their attitude to failure. Those we recruit into medical school tend to be perfectionist high achievers who are used to success (Henning *et al.*, 1998). Being someone within a medical school who meets students who fail much lower stakes assessments within the course, I know how hard many of them take these 'failures'. Failing finals represents the ultimate failure with the consequent difficulties described above. That said, with the benefit of hindsight, some could see failure being a good thing and this was captured in the quote below:

Clare, Just before resitting: I think failing is good for you and I think a lot of people in medicine, like you, can get through without failing and that's lovely, but I think if you actually fail it makes you less afraid to fail, makes […] you are less afraid to be stupid and makes you less afraid to admit when you are wrong.

5.7.2. See the bigger picture

Several participants described how failing had led them to being 'braver'. One described being braver in a sense that they had a newfound confidence to try new things outside of the world of medicine and enjoyed a new hobby as a consequence. Another reflected in a similar way how 'being stopped in their tracks' had given them an opportunity to get a better balance in life, looking after themselves better and not making medicine the main focus. Several spoke about how failing had made them realise that medicine was not the most important thing in the world and had given them a better sense of perspective, a better balance to their lives and a sense of identity beyond medicine. One participant spoke about how, if they had failed the resit and were not able to become a doctor, they had reconciled that by realising that other doors would open and that there was more to them than just a medical career.

Natasha, Just before resitting: I had to sit down and think with myself what would I do. Well, I could do anything. I have other strengths. I have, like, skills that are transferable and because of that I will be able to have a successful career in whatever I chose.

Lewis, FY1: In terms of other things as well, I'm trying to think, really, from an organisational standpoint as well and just how, about how I've lived my life, I guess. I think I've tried to improve that as well, just simple things like getting enough sleep and drinking, eating the right thing, like exercise. Making sure I've got a nice balance in my life is something that I've really strived for this year which I don't think I, I necessarily had two years ago when I re-sat.

For others, the positives that came out were looking back at the support they had received from friends and family and how it had led them to cherish such relationships much more. One spoke about how it had restored their faith in people. A typical quote around this is given below:

Lewis, FY1: These are friends and colleagues who I'm quite close to, so I found they were actually the biggest source of, source of help, just because they'd done it before. They'd done the exams as well and had passed, you know, you know, like, whatever they did probably did work.

For others, the bigger picture was much more pragmatic in that they had another year without having to pay taxes, do night shifts and work long hours! One spoke of having a final long summer off which meant they had been able to spend some quality time with their family which would not have happened otherwise.

Alex, Just after failing: It's good that I'm not doing house jobs yet […] not paying taxes. I don't know. I guess the grass is always greener on the other side, isn't it?

5.7.3. A better person and better doctor?

Although going through a difficult time and getting on the other side of it, several participants were able to describe that they had a greater appreciation for suffering and that would help them both in medicine and in life in general. Another talked about being taught humility through having been humiliated, and how this had given them a greater sense of empathy.

Paul, Just after failing: Rather than before, I might have been more into the research element, and I feel that I'll now […] it will help me to understand patients and maybe see, be less cynical about the thirty-six-year-old who drinks bottles of wine and takes lots of drugs.

Niamh, FY1: It's helped me develop as a person. I don't really believe that I was going to be a bad doctor, but it definitely helped me in personal development.

Several participants described feeling much more willing and able to ask for help in the future.

Lewis, FY1: I think I was [a] very independent learner in that I just always […] I never asked for help either. One of the problems […] that's another mentality that changed […] I was more willing to say to people, OK, like, what's the best way to get through this situation or what? I encountered problems with this, how should I best learn from that?

Others highlighted how failing had 'toughened them up' which meant they were more enabled to deal with future life adversity and also much more sympathetic to failure in others than they had been before.

Lewis, FY1: I like to think it has […] actually, there are a few things that I was hoping to carry over from that final year and I think the confidence was the main thing, the confidence to take on more things, like, if, if the opportunity's there not shy away from, from doing things that do make you feel uncomfortable because it feels like you learn better, actually, when you're in those situations.

5.8. Discussion

5.8.1. Key findings

The unique aspect of this work was its lens onto the experience of failing over a series of time points; this allowed data to be captured on the emotional journey the students took as they responded to failure.

It was clear from the data that the students went through a series of stages moving from shock and frustration, to anger and then sadness. As the students re-started the year, they experienced feelings of stupidity, a sense of boredom as they did the same things again and then significant anxiety as they approached finals for the second time knowing that if they failed, they would not become doctors. Finally, they reached a resolution and were able to feel positive about the experience.

A grief reaction?

One way to conceptualise the emotional journey would be to compare it to the grief process. The Kubler-Ross (1969) model described five stages of grief:

1. Denial: in this stage, individuals believe that the situation is somehow mistaken and cling to a false, preferable reality.

2. Anger: when the individual recognises that denial cannot continue, they become frustrated and angry.
3. Bargaining: the third stage involves the hope that the individual can avoid a cause of grief.
4. Depression: during the fourth stage, the individual despairs at the recognition of their situation.
5. Acceptance: in this last stage, the bereaved accept and move on.

A common analogy used to describe the feelings experienced by the participants was that of a grief reaction, as described above. One participant did not see this comparison; many others did although qualified this by saying that they had missed stages. I certainly recognised a process like this in the interviews and the data above supports anger, depression and acceptance as common stages of the experience of failing.

However, the denial and bargaining stages appeared absent. Whilst denial was not seen, the sense of shock and frustration at the result could be formulated as representing this to some extent. Not explored at interview but from experience, most students who fail finals appeal against the result. Almost all appeals are unsuccessful; this may represent the bargaining described in this Kubler-Ross model.

A new type of adjustment disorder

No one would argue that failing an examination is stressful and one could argue that failing an examination like the finals examination in medicine, which has such high stakes and so many potential negative consequences, could be viewed as very stressful. An adjustment disorder is described in the psychiatric literature as a reaction to stress where individuals go through a range of emotions as they process a trauma (World Health, 2004). It is conceived as a maladaptive response to a significant psychosocial stressor which causes distress, preoccupation with the stressor and functional impairment.

This work postulates that the experience of failing finals is the equivalent to an ‘academic adjustment disorder’. Whilst it could be argued that their response was not maladaptive, certainly from this data set, it would appear that participants were still processing their experience as they re-started their resitting year, and many described that it only being after Christmas, i.e. 6 months after failing, that they started to recover

and be more fully engaged in the programme. Thus, it was maladaptive in the sense that they were not in a position to engage with learning in their resit year.

The symptoms experienced in an adjustment disorder range through sadness, hopelessness, lack of enjoyment, crying spells, nervousness, anxiety, desperation, feeling overwhelmed, thoughts of suicide and performing poorly in school or work. Adjustment disorders are one of the most common psychiatric disorders, with a prevalence of 1-2% in the general population (Carta *et al.*, 2009). The course of adjustment disorders over time is poorly understood. One study noted a prevalence of 19% at 3 months and 16% at 12 months in a cohort who had suffered physical injury (Bryant *et al.*, 2010).

When dealing with students who fail, the old adage of ‘time is a great healer’ is clearly salient; the question is how much time is enough? The current system in Newcastle means that students have to resit the whole year if they fail finals. As stated earlier, almost all of them pass the second time and the majority do very well. This contrasts with many medical schools, where the opportunity to resit is available in the same academic year. This is the model Newcastle will shortly be adopting.

Clearly, students desire the opportunity to graduate within their cohort for all sorts of reasons. Will failing finals be as big a deal when you have the opportunity to resit 3 months later and graduate with your friends? Will 3 months be enough to get over the stress of failing and remediate the academic issues that have led to failure? For most students the answer will be yes. The danger, though, is that in the desire to pass with their cohort, some will resit the same year and fail as they have not had sufficient time to remediate academically or to process the stress of failing; they do not have any further opportunity to resit and would therefore not become doctors.

What about the majority who do pass? They will be delighted to be graduating with their cohort and starting work but will have missed out on the opportunity to have more time to improve academically leading to examination achievement, will have lost the opportunity to be seen as a resource for other first-time final-year students and the sense of self-worth that that engenders. They will have missed out on all the help, support and affirmation that they would receive in their resitting year and how these impact on them as a person.

In dealing with students processing failure, the concept of an adjustment disorder may provide some awareness and insight into how best to support them. In these data, the support from the central medical school often jarred with participants in the timing, delivery and personnel involved.

Raising awareness of the concept of an academic adjustment disorder may go some way towards breaking down the stigma in having an emotional reaction to failing. As described above, participants were questioning their mental health and like many medical students, did not seek help to explore the issues that they were facing. The reasons for this are many but shame, stigma of mental illness, the culture of the doctor being invulnerable and fear of how it might affect their future career are all recognised as feeding into this situation (Wallace, 2012).

Students experienced the current support as homogenous and not tailored to their needs. One of the lessons from this work and the data described is that different students will want different things at different times. Giving students choices of when, who and what they need would be in keeping with modern teaching practice (Wright, 2011). This needs to be balanced against the perceived risk for the institution, i.e. their concern about being blamed if the student fails again and claims they were unsupported.

5.8.2. Comparison with the literature

Previous research

From the little research previously carried out that looks at the experience of failing, the emotional reactions of those who fail described above chime with the previous work that was highlighted in the literature review.

The literature that focused on personal experiences of failing highlighted the emotional reactions to failing, issues around who was to blame for failing and a sense of isolation (Agapoff; Cleland *et al.*, 2005; El-Sbahi and Khan, 2019). The work by Patel et al. (2015b) that mostly, closely resembles this work, highlighted the ‘emotional trauma’ of failing and the anxiety the students often felt prior to and after examinations. The authors reported how the participants’ social and academic problems interacted with their personal and professional relationships. These are resonant with the findings

described above (Patel *et al.*, 2015a). These data build and expand on this as they were able to track changes over time.

Explanatory models

Considering a model of coping with stress and trauma will allow an understanding of some of the processes underpinning the experiences of the failing students. The transactional model of stress comes out of the explanation of emotion described by Lazarus. Stress results from:

> *a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her wellbeing.* (Lazarus and Folkman, 1984)

It is the perception of the mismatch between the cause of the stress and the capacity to cope that is the source of stress; this allows for many personal factors that will determine one's ability to cope. Of the factors described in the literature that contribute to this personal ability to cope with stress, the most relevant to this study are self-esteem and locus of control.

Self-esteem as a concept has been described earlier. It makes sense that those with a greater sense of self-worth have a greater ability to cope with stress and this is borne out by research in this area (Galanakis *et al.*, 2016).

Locus of control describes how people see the relationship between events and themselves (Rotter, 1966). As an aspect of personality, locus of control draws the distinction between individuals who have a strong internal or external locus of control. Someone with a strong external locus of control will view their life as more controlled by external factors than those with a strong sense of internal locus of control. The latter will see themselves as more self-deterministic and self-defined, i.e. not under the control of external events. Either position can lead to stress. For those with a strong external locus of control, life events will be out with their influence as something 'done' to them which can lead to stress and by extension, through the theory of learned helplessness, to depression. Those with a strong internal locus of control tend to blame themselves when, in fact, they have been subject to events beyond their control (Roddenberry and Renk, 2010). This self-blame can be stressful. Locus of control is

one dimension that contributes to attributions in attribution theory that will be expanded upon later in this work.

5.8.3. Limitations

In describing a journey of failing and creating a narrative around the order of the experiences as I have done above, one is trying to capture individuals' lived experiences and put an order on them, so to speak. As I have already highlighted, these experiences are individualistic and with things often happening simultaneously. However, in the analysis of the data, enough patterns did emerge to give a narrative to describe the journey. This can be refined and added to in later work, potentially.

Whilst some of the data are captured close to the time points that they are exploring, some are asking participants to recall how they experienced something from some time ago. This was particularly true for the foundation doctor participants. Some of what is described above will be subject to recall bias. Recall bias is a systematic error that occurs when participants do not remember previous events or experiences accurately or omit details; the accuracy and volume of memories may be influenced by subsequent events and experiences (Sedgwick, 2012). The memory of events which have a high emotional content or involve trauma are more susceptible to this sort of bias (Colombo *et al.*, 2020).

5.9. Chapter Summary

This chapter has described the 'emotional roller coaster' that is failing finals and how the support is experienced through that process. In describing the experience, a new idea has emerged of an academic adjustment disorder which seeks to capture the idea of the range and journey of emotions participants described and which will hopefully be a useful concept to emerge from this work. It will be re-visited later in the discussion chapter.

In describing the experience of support from the medical school, it is hoped that this can be used to suggest changes in how students are supported through a significant failure event in Newcastle and also, other institutions.

Finally, the chapter described the many positives that emerged from this difficult experience; this theme will also be picked up in subsequent chapters.

Having presented data relating to the emotional journey of failure, in the following chapters, the focus becomes more cognitive as the results are explored through the three key theoretical frameworks of self-esteem, professional identity and attribution bias. The next chapter will focus on the first of these, self-esteem.

Chapter 6. How Does Failing Affect Confidence?

6.1. Introduction

The previous chapter looked at the emotional journey of participants as they came to terms with failing their finals examination. This chapter will focus particularly on one aspect of self-esteem, namely, confidence. As would have been noted from the literature review on self-esteem earlier in this work, this is a broad and complex concept and for the sake of clarity in data collection and the write-up, the word confidence was used as a proxy for self-esteem. This is an established proxy in the self-esteem literature although the concepts are slightly different. Self-esteem is an evaluation of one's own worth, whereas confidence is more specifically trust in one's ability to achieve a goal (Judge *et al.*, 2002).

One could argue that confidence, as part of self-esteem, is an emotion, so why separate it? There are several reasons for this. Firstly, confidence is a discreet entity within self-concept, where emotions exist as multiple elements. Secondly, confidence is much more a trait rather than a state. Emotions tend to be more fluid, whilst confidence tends to be a more stable description of self (Snyder and Lopez, 2009). Clearly, confidence will change over time and hence, inevitably, this chapter will have a longitudinal aspect. The confidence data are presented to some extent in the sequence that they were experienced. However, I wish to reiterate that these experiences are fluid and overlap.

This chapter considers more how the participants think rather than how they feel about failing, the latter being more related to the internal processing of failing i.e. emotion. This is the first of three chapters that examine the cognitive experience of failing rather than the emotional aspect and hence, focus more on what the participants think about what they do, i.e. the external processing of failing (Zellner, 1970).

The focus of the chapter will be to capture the narrative themes of how participants described how failing affected their confidence over their resitting year and on into working as foundation doctors.

This chapter's structure is set out below:

- **Just not a confident person:** premorbid confidence, and confidence and difficulties in preparation for first finals.
- **Confidence and the context of failing**: takes a knock, then confidence in flux, and confidence and others.
- **Grasping the nettle**: confidence and engagement in the resitting year.
- **Effects on practice**: confidence and becoming a doctor, and then confidence and careers.

6.2. Just Not a Confident Person

This section considers how participants viewed their confidence leading up to when they sat finals the first time. It considers how they described their perceptions of their confidence in general and, more specifically, considers their confidence regarding academic matters as they came to sit finals the first time.

6.2.1. Premorbid confidence

A significant number of the participants described not being confident people before the experience of failing finals. The act of failing seemed to hit these harder in a way. The lower premorbid confidence meant that some set their expectations lower and failing was not a surprise.

Alex, FY1: Second year… [last time they felt confident].

Natasha, Just after failing: Yeah, I've never been confident in my own abilities.

One person identified how they put more work in to compensate for their lack of confidence.

Niamh, FY1: I think also the fact that I am good at what I do. I know I am intelligent and I know I'm able to pull things together well.

Others reported being confident people before and that has not changed.

6.2.2. The first crack of the whip: confidence and difficulties in preparation

Academic background issues were a common narrative. Many spoke about being in the 'middle of the pack' academically. One participant talked about how having taken an intercalated year out meant that they lacked the clinical exposure and were not in 'a medical mind-set'.

Clare, Just after failing: I don't feel that I underprepared. I think that I came in to last year in not a really particularly good position because I intercalated the year before and I did, I did quite a lot of slightly less clinical SSCs before that, so it's been a very long time out of medicine and I intercalated in something very different […] kind of a very good year […] I would not change that for the world but it meant that I wasn't in a very medical mindset.

Others spoke about how the nature of the course and its assessment had enhanced their confidence at times and at others, had eroded it, leading them to second guess themselves as they approached their resitting year.

Alex, FY1: You're always very unsure about anything and every time anybody asks you anything you're quite unsure about the answers to them. You always have to double check and it just kind of feels that you need to be a little bit more spoon-fed, which isn't the way I like to work.

Others spoke about their perceived strengths and weaknesses with regards to their broad abilities as a medical student. Many described focusing on knowledge as that was where they lacked confidence, although this potentially came at the expense of being underprepared regarding skills.

A number of the participants spoke about the pressure they put themselves under and the way to relieve this was to do more work. A few mentioned not working as hard in the resitting year compared to when they did finals the first time. Several spoke about getting the balance of their approach wrong, focusing too much on the knowledge component and not enough on the clinical.

Paul, Just after failing: I think that if you wanted to reflect deeply, I'd say that in terms of finals I feel that my knowledge […] I felt I spent quite a bit of time in the book reading and book knowledge-wise last year, obviously spent on the wards taking histories and doing examinations but there [I] was quite exam-focused [in] my preparation and finals-focused.

Emma, Just after failing: I don't know if I just passed or if I failed other exams before so I wasn't, like, really confident, but I was mostly worried about the knowledge part of it rather than skills. I felt like my skills were OK and communication was OK. It was the knowledge and I worked really hard on that and then that was OK. I passed those bits.

One mentioned dissonance between the academic and the clinical, where in the clinical sphere he had been told that he was doing well and this had given him confidence, but this had been punctured when he had failed the written paper in finals.

Paul, Just after failing: So I had that kind of side whereas in the hospital they said that they had no concerns about me. So yes, so I guess my confidence was, kind of, having received both, kind of, sets of feedback, it left me, kind of, unsure.

This lack of perceived ability in some cases led to them avoiding seeking advice and feedback from more experienced and senior clinicians, and if they sought this, it would be from FY1s as they feared the feedback would damage their already fragile confidence.

Amy, Just after failing: I would hate getting watched, watched kind of doing histories and I would really shy away from, kind of, apart from, kind of, like, mini-CEXs. I would shy away a lot from, kind of, like, authority figures.

How confidence played a part in failing is also something that comes out of the data, from a perception that confident people do better at examinations, to feeling not able to engage in clinical teaching due to lack of confidence.

Lewis, FY1: I mean, previously, I hadn't been that confident a person. I'd been on, on the ward and shy away from an opportunity. I wouldn't answer questions for fear of getting things wrong and for fear of making a fool of myself. That would often be an overriding feeling, actually.

Others highlighted how their confidence affected them in examinations with several highlighting how lacking confidence had caused them to underperform under examination stress.

Natasha, Just after failing: […] and in my opinion, I did crumble under the pressure but that comes from a basis of not being confident in your own skills.

Haslina, FY1: Yes, I was [...] I think that can also be portrayed because yes, I think I lacked confidence and I think that actually, kind of, shown in exams… [premorbid confidence].

Some of these students described how lack of confidence led to them failing as they were plagued by self-doubt in the single best answer written assessment and would second guess themselves, despite what they felt was a good knowledge base. Lack of confidence could also affect their engagement in clinical teaching with a reluctance to speak up in sessions.

Alex, Just after failing: Absolutely, 'cause it was SBAs and it's a lot of doubting yourself and then because all the answers are correct on SBAs then you're doubting your own answer… [how it affected performance in finals].

Alex, Just after failing: Well, I could do that but I could do that as well and I'd just keep changing answers... [because of lack of confidence].

One participant spoke about how doing poorly in the national prescribing assessment and the situational judgement test used to rank for FY posts had affected his confidence, and that the medical school had highlighted their concerns about his level of performance.

Paul, Just after failing: I felt that I certainly could have passed and I felt that, compared to peers who had passed, I feel that I was as ready as them. I felt my confidence had been shaken from the SJT and the PSA exams.

Several mentioned about having background issues in relation to reading and comprehension that may have affected their confidence in being able to perform.

Paul, Just before resitting: SJT is always, like, is not my strength. It's a skill which involves, like, rapidly sifting through information and, and it's just, I, I find that difficult.

Niamh, FY1: I might not be able it quickly and I've been diagnosed as […] not diagnosed […] I am a wee bit slow at reading comprehension and I think that's something I know. I've always known it.

One participant spoke in quite a fatalistic way that they had a sense that they were not going to pass as they felt nothing good could happen to them. This may represent an underlying confidence issue or be reflective of their emotional state at the time of the interview.

Alex, Just before resitting: I don't know it's, in a way, I kind of almost expected to fail because I didn't think I deserved to pass but not because I didn't think I was intelligent enough […] just I don't know […] I just didn't kind of think […] I don't ever think anything good is going to happen to me, so, I don't know.

6.3. Confidence and Context of Failing

Now to consider how participants described their confidence in the context of after failing, firstly, describing how it was knocked by failing, moving on to capture how participants described the fluidity of their confidence and finally, to capture how interactions with others affected confidence.

6.3.1. Confidence takes a knock

It was clear from the data that failing dented most people's confidence.

Jonny, FY1:That's one of my thoughts as soon as I got the results. I thought perhaps I should be doing something else… [that confidence shattered].

Some spoke about having to put on a front of confidence, others, how they had somehow deserved or needed it. This lack of confidence led to some participants expressing ongoing self-doubt and a tendency to be cautious.

Alex, Just after failing: No, I think it's just, kind of, I feel like I don't have the confidence anymore on the stuff I was good at. It's been just a front put up and [I] have no confidence to do the stuff I was good at.

Alex, Just after failing: […] but I'm more […] I doubt myself a lot more for things. I second guess everything that I do and I'm very cautious about how I approach things 'cause I always feel I can do something wrong now.

Amy, Just after failing: I completely lost all of my confidence in paeds because it was like my first A&E shift that we did and there was a kid with bronchiolitis and just, I was so nervous and anxious that, like, when I saw the kid it didn't have recessions but then when the doctor came in to look they were, like, this child has recessions and I was, like, I can really see it now but then I absolutely freaked out and panicked. I was just going to kill everybody that came in the room.

Some identified and thought about how failing may have affected them if they had let it and spoke about a determination to not let this happen. They were almost able to recognise that failing would affect their confidence and chose not to let it.

Paul, Just before resitting: I think from the beginning I knew that the biggest hurdle this year would not be my clinical competence, it would be the psychological factors and maintaining my, my confidence and belief and keeping it together

6.3.2. Confidence in flux

A number of participants described confidence as being fluid and recognising it had and would change with time.

Emma, Just after failing: It still seems quite fresh. I know it was a couple of months ago, but term has just started again now and it's, yeah, getting back into it and […].

Alex Just after failing: It's three months in. I think it's going to take a bit of time. I don't know, I think I just need to be a bit more confident and get my confidence back, if that makes sense.

Amy, Just after failing: I don't know, kind of, like, my knowledge of how, where I am. I'm at a better starting point than a lot of people this year. I feel that's kind of confidence building, if that makes sense.

Some could reflect on a specific time when they could remember starting to feel more confident. This tended to be after Christmas or after an assessment that had gone well.

James, FY1: I think probably after Christmas. I think I felt a lot more confident. In the second term. Building up to the exams, I just got more confident.

Haslina, FY1: Yes, that one, yes, and then, when they give the feedback, it was quite positive and that's when I started to get, that's when I got my confidence back up, like… [when doing ESRs].

Some participants described a mixed state depending on what you were talking about, e.g. clinical versus academic confidence, almost feeling more or less confident at the same time. This was paralleled in the previous chapter where mixed states and a fluidity of emotions were also noted.

Clare, Just after failing: I don't think I feel that much different. I feel in, in some ways, I feel more confident. Sometimes, I feel less confident.

Alex, FY1: I mean, I do have days where I do feel, like, well, I can actually do this and I do have days when I feel, like, I really can't do this, but that's probably normal.

Paul, Just after failing: I go through phases and largely, I felt positive and good about it because […] and I've been able to, kind of, embrace it, I think, and I see it as a fresh start… [when asked re confidence].

As can be seen, whilst confidence is thought to be a more stable concept compared to emotion, there was considerable flux as participants negotiated the transition back into learning. For most, this was a temporary situation and their confidence gradually stabilised and returned.

6.3.3. Confidence and others

The importance of others in the experience of failing was a strong narrative throughout the work. This section considers it specially in relation to confidence.

Some participants mentioned how being dislocated from their previous year-group led to a sense of social isolation that impacted on their confidence.

Natasha, Just after failing: So actually, I was a bit more socially isolated, and that's why it has knocked my confidence.

Others described how they got confidence through being with others they knew both in their year and in the hospital, i.e. with FY1s who had been in their year.

Haslina, FY1: So I guess, in a way, it has been different from the previous ones, the last time around. You know a lot more than your colleagues and I guess that sort of makes you feel a bit more confident.

Amy, Just after failing: I know people that are now F1s here and so it's quite nice to […] like, they treat me, they don't treat me any different. They kind of treat me as, like, I should be an F1.

One mentioned having always been confident but in their resitting year feeling more self-aware and conscious about what others may think of them.

Paul, FY1: I think I've always, actually, been quite confident, self, like […] I hadn't been aware of this at the time, really, but looking back, I think I've been quite comfortable in myself and then […] but this is the first time, really, where I felt pretty self-conscious and like, oh, what will people think and […].

6.4. Grasping the Nettle: Confidence and Engagement

During the resitting year, many participants spoke about an ability to engage in the course in a way that they had not when they had sat for the first time. This tended to be more apparent in the later interviews where participants were either well into their resitting year or had graduated. An improved confidence led to more engagement with the course in the resitting year. This seemed to be related to the fact that they had done the year before, so felt more confident in engaging in the course both in didactic and clinical teaching.

Clare, Just after failing: I was a bit less confident about whether, actually, I was right about something whereas this year I've [been] fairly confident about saying that I know something which means that I know the second question isn't stupid, so, so probably engaging more.

Amy, Just after failing: [What] I'm trying to say is I lost all my confidence there and I never liked to do A&E and so I actively, kind of, avoided going to A&E but just, kind of, like, this time, because I've got my confidence back, I love going to A&E.

Feeling more confident to speak out in teaching and to volunteer for tasks was also something several of the participants mentioned. This was related to the fact that the fear of 'being shot down' was reduced as they had done it before and so knew that they had the knowledge and skills in a way that they had not the year before. The added benefit of this was that they got feedback on their performance rather than that of others, as one participant highlighted.

Lewis, FY1: […] and have the confidence just to go headfirst into whatever […] learning opportunities come up and that's going to be the best way that you're going

to come through the year, just not, I mean just not being afraid of getting things wrong and look silly.

Natasha, Just before resitting: […] and the biggest confidence builder isn't actually when you're doing the clinical work yourself, it's more when they ask you things and you automatically know the answer and you feel less put out by it. But that means that when you do say something, and you say it with conviction, people see that confidence in you and […].

Some mentioned a newfound 'clinical' confidence that stemmed from having been there before and in some cases, to getting good feedback on assessments or teaching which fed into this improved confidence.

Natasha, Just before resitting: It's not the idea that you are resitting. It's not the idea that you've done this before so therefore they must know more but it's when, when, like, you've heard something on an examination, a murmur […] I had an ejection systolic murmur and the consultant is like, really, and you're, like, yes, that is what I heard and it's when you say that with conviction and you believe it that other people believe in you.

Natasha, Just before resitting: […] but then it's through comparison of yourself to others and realising that you did know the answer, you did fine, you did illicit the correct signs and that begins to grow over the course of the year and […].

Lewis, FY1: […] because I remember actually getting my first mini-CEX back and I'd got merits across the board which was a first for me, like, I'd generally been a very average to poor student around medical school and that gave me the confidence to think, actually, it's nothing to do with you, it's just you need to carry on working and work in a smart manner.

Many reported a growing sense of confidence as they approached finals for the second time; this was put down to being more confident with their knowledge as well as a 'slickness' that was not there before.

Paul, Just before resitting: So I think that we've not long to go. My confidence is fine and hopefully, it's going to build towards finals with obviously, the understandable stresses of finals.

Lewis, FY1: I think if I try to think back to it, I think I did feel more confident, actually, having done the year again, just because I just feel what appears in my own head is that it's just a year's extra experience of seeing more patients, seeing more symptoms and signs, and learning to do the job better as a whole.

6.5. Effects on Practice

This last section will consider how confidence was affected as the participants moved into working as foundation doctors.

6.5.1. Confidence and becoming a doctor

Those who passed on their second attempt reported feeling more confident in the workplace because of that experience. Many described being changed by the experience for the positive in that they had come through a difficult time and they were now more confident. A number spoke of building confidence in the resitting year to be a FY1 and using it to make the steep learning curve at the beginning of the job less steep, so to speak.

Paul, Just before resitting: A hundred per cent, I'm going to be a much better F1 now than I would have been this year.

Niamh, FY1: 150%, if anything, I knew it all so well, I had done the thing, I had done that job that year, and the year before.

Even of those who already felt prepared, many acknowledged feeling 'more ready' having had another year. Of those interviewed as working FY1, many noted the transition over the first month of work which was more to do with logistics than medicine. Several commented that they felt they were functioning at a higher level than the other FY1s who had not resat due to more ward time spent in the resitting year.

Alex, FY1: Whereas the other F1s who did it the first time around, so, they've very much, kind of like […] I know what I'm doing, this is what I want you to do, this is the answer to this.

Niamh, FY1: I wouldn't have been as confident. I know I wouldn't have been as confident because there, the apprehension, everyone… [if had passed first time]… I don't think I would have been as good at my job as I am now, and if anyone tells you any different, they are lying.

A number made the distinction between being ready to pass the examination and being ready to be a doctor. They spoke about being ready for the latter but potentially not being able to get over the hurdle, i.e. the examination, that allowed them to do it. Ironically, many spoke about focusing more on being more confident as a doctor and focusing their learning on that than preparing for the examination in their resitting year.

Paul, Just before resitting: My objectives have been much less focused on finals. They are a hundred per cent focused on finals but there's more to final year than passing finals. It's about preparing you for F1 and beyond.

Paul, FY1: […] but I feel like the extra time on the wards doing the work as a foundation doctor […] I think for some of the year, I felt like I was a foundation doctor.

However, for one or two individuals, failing represented a distinct change and a feeling that failure had made them less confident.

Alex, Just before resitting: Academically, I think I feel less confident, but I think that's just because I failed last year, so I'm getting more anxious now it's getting more towards exams. I would probably say I was less confident overall as a person than I probably was beforehand.

6.5.2. Confidence and careers

Failing led to some reflecting that it had allowed them to reconsider their careers and widen their goals rather than restrict them. This was related to a newfound confidence through having done things again and enjoying them more the second time or not being afraid to take time out and how it may be beneficial in the longer term.

Niamh, FY1: I was someone who […] er […] who was keen to take a year out after this year because I actually knew, I knew I was going to make a doctor. I wasn't concerned. I wouldn't have done that the year before because I think I would have been worried. Oh, you take a year out, you'll lose your clinical skills […] but I've done so much of it… [confidence to take a year out].

One participant highlighted the fact that in their original final year, they had not got a foundation job but as a consequence of having done better in the situational judgment test (SJT) in their resitting year, had been allocated a foundation school place which had boosted their confidence.

Paul, Just before resitting: Whereas now I've got a job and it's all absolutely fine and that, psychologically, it makes a big difference I think... [why more confident].

However, one participant said that on finding out that they had failed, their confidence was shattered, and they questioned whether they should have a career in medicine at all, even now they had qualified.

Jonny, FY1: I wasn't particularly confident beforehand, but it's definitely made me think maybe I shouldn't [have] been doing medicine.

6.6. Discussion

6.6.1. Summary of results

Even before sitting finals, the majority of participants described some aspects of what I have termed a lack of premorbid confidence, i.e. they had confidence issues before failing. This may have been related to issues outside of academia which affected their

ability to engage with the course, such as a health or personal issue. Also, often as well as these issues, they described a lack of confidence in their academic ability that could be traced back to their academic performance to date and self-perception of academic capability.

Clearly, failing had a significant negative effect on all participants' confidence and for some, reinforced their negative self-assessment of their abilities. This then spilt over into their resitting year as they processed how they would go about being successful a second time and were filled with self-doubt, especially around written multiple-choice examinations.

That said, their confidence gradually started to return as they realised in the resitting year that they had more knowledge and know-how than their new year-group. This meant that they were often more emboldened in teaching in a way that they had not been before and then on receiving positive feedback, their growing confidence was reinforced. A number of participants reflected that this position led to a new sense of belonging and contributed to their confidence building. As students who were resitting, they were sometimes treated differently, and some teachers would give them enhanced tasks to do or offer them other learning opportunities, knowing that they had done the course once already. Again, this led to improved confidence. Lastly, this improved confidence led to a different approach to learning; many of the students had been book-focused in their first final year and reflected that this had not worked. They often chose to be much more patient and work-focused. They often spoke about putting their energies into ward work, seeing patients and doing the job of a junior doctor.

Many medical schools allow for a resit of their finals examination within the same academic year, that is, after a short remediation period. This means that the failing student can hopefully pass and graduate, and start work with their year-group. This work suggests that there are significant benefits from the experience of having to resit the whole year. The confidence that the students take from already having a core knowledge above their year-group and 'a last roll of the dice' attitude leads to a different level of engagement with the programme that then leads to more confidence, feeds back into the engagement and learning, and so on. As they approach finals, they feel more prepared, albeit anxious given the high stakes, but they are not paralysed by this anxiety and seem to be able to ride it, in almost all cases, to considerable examination success. This confidence is then carried through to feelings of being much more

prepared to work as a foundation doctor and therefore enjoying it in a way that would not have happened if they had passed first time.

6.6.2. Compare and contrast to literature

As has been described earlier in the literature review, confidence and self-esteem are broad and complex subject areas. How do these results fit in with modern notions of self-esteem?

Literature that explores the relationship between self-esteem and examination success has been summarised at the beginning of this work. Studies, such as that of Choi (2005), give empirical support to the notion that higher self-esteem leads to exam success. As already highlighted, students who resit finals currently have a year to overcome the crashing low of failing and to build up their self-esteem over the course of the year, as described above. This puts them in a position that when they resit, they are more confident and feeling better about themselves and consequently, in the majority, significantly outperform their previous performance and indeed, their new year-group.

Another part of this work considers aspects of social identity theory and more specifically, professional identity. The links between self-esteem and social identity are well-established and described earlier. As the students came to realise that there was a prestige and worth in their role as ‘resitters’, this was an identity that they were more comfortable at adopting given the associated confidence and self-esteem that flowed from its perceived status from the other students. Some students spoke about their reluctance to be seen as a ‘resitter’, as will be explored later. However, even these students spoke about the positives of the resitting experience in terms of the confidence it gave them.

The notion of self-esteem being a sociometer has been described more recently (Leary and Baumeister, 2000a). By this, self-esteem is seen as a measure of the success of social interactions and belonging. Within this, an emphasis is placed on relational value, which is the degree to which a person regards his or her relationship with another, and how it affects day-to-day life. Confirmed by various studies and research, if a person were deemed to have relational value, they would be more likely to have higher self-esteem (Leary, 2005). The relational value of being a resitter and the

associated self-esteem that comes from it appears to sit comfortably within this theory. This will be explored more fully in the next chapter which considers identity.

6.6.3. Limitations

As highlighted in the chapter introduction, the term ‘confidence’ was used as a proxy to consider self-esteem within the interviews. At interview, it seemed more intuitive and less formal to ask participants about their ‘confidence’ rather than their ‘self-esteem’. There is a risk that two separate constructs are being talked about. Whilst self-esteem is a broader construct about how much self-regard one has for oneself, confidence is narrower, considering more specific situations, for example, ‘how was your confidence as you approached finals for the second time?’ Confidence was used as it provided a language that could be more granular when looking into these more specific issues although clearly, there is a relationship between the two. As confidence grows, it feeds into self-esteem and vice versa (Campbell, 1990; Brown and Marshall, 2006). The word ‘confidence’ and discussion of confidence flowed very naturally from the participants without the need for prompting and exploration in the interviews. It was clearly something at the forefront of the participants’ minds and, as can be seen from the results described above, is a fluid and complex issue to explore.

6.7. Chapter Summary

A resitting year allows time for confidence to grow. Confidence then begets confidence, which leads to a better performance in finals and better preparedness for practice.

Chapter 7. The Resitter Identity

7.1. Introduction

In the previous chapter, we considered confidence as an aspect of self-esteem and how this was affected across the resitting year. We now move on to consider another aspect of self-concept, identity. The identity literature is broad and this work looks to utilise relevant theory. One type of identity theory is social identity theory. It considers how individuals behave in relation to the perceived status and legitimacy of certain groups. A broad description and relevant literature are found earlier in the thesis.

To remind the reader, the two core premises of social identity theory are as follows. Firstly, within society, there are distinct social groups that stand in status and power relations with each other. Secondly, membership of a group provides members with a social identity which gives its members a description and evaluation of what it means to belong to that group. This leads to the phenomena known as the in-group (us) and the out-group (them). Group members of the in-group will seek to find negative aspects of the out-group in order to enhance their own identity (Tajfel and Turner, 2004).

Earlier in the thesis, professional identity theory was introduced. This views identity as more individualistic with individuals having multiple identities, e.g. as a spouse, sibling or professional. The professional identity develops and sits alongside the existing personal identities (Cruess *et al.*, 2015). As will become apparent, these aspects of identity are related and interact.

With having to resit the whole year, students start stage 5 again with a whole new year-cohort and often in a clinical base where they have not been previously. No distinction is made for them as a resitter. They are treated the same as the other students who are taking the final year for the first time. How the participants view themselves within this resitting year and with their new contemporaries will be considered here.

The data show different ways in which students' perceptions of themselves changed. These are interpreted as reflecting different aspects and processes of identity. Firstly, the chapter considers participants' notions of how they saw (identified) themselves within their new year-group and their perceptions of how they were viewed by others are explored, with a new identity appearing to emerge, that of the resitter. Next, the

chapter considers who these participants were as students and how their experience as learners shaped the resitter identity. The chapter rounds off with how they viewed themselves after passing finals at the second attempt and how their identity as a doctor was shaped by the experience of failing.

Despite being treated as part of the new final-year cohort, these data show different ways in which students' perceptions of themselves changed. These are interpreted as reflecting different aspects and processes of identity which, I argue, support the notion of a 'resitter identity'.

7.2. Resitter identity: Who others think I am: A super student?

A sense of identity is influenced by many things, not least how you think others perceive you (Turner and Reynolds, 2003). In this next section, I will explore issues pertaining to relationships with others in order to explore this further, and how this supports the notion that there is a resitter identity that is distinct from the other students.

7.2.1. A source of insights and experience

A common strand for many of the participants was that having already done the final year once already, other students, doing it for the first time, recognised this and wanted to ask them about their experience. This covered multiple areas; clinical knowledge and knowledge of assessment were frequently referred to. It appears that others saw a distinctiveness in the resitters that they could use.

Natasha, Just after failing: I actually find that, that helped me make friends, actually, because when it comes to tutorials and stuff, and everyone feeling meek and quiet, and they don't really want to contribute and I'm very happy to, and I want to share.

This led to resitters being seen as 'experts' in final year, which softened many of their attitudes to being in that position. The knock-on effect of this is that it gave the resitters a boost of confidence and self-worth that they never experienced in their first final year. This may have played a part in working through the emotions and disappointment of failing as they started to see advantages in being a resitter, and that others identified that advantage too (Loh, 2013).

As well as having insight into the academic aspects of being a final-year student, the resitters had also been through the process of applying for foundation jobs and done things, such as the situational judgement test (SJT, used to rank for foundation-year

places) and the prescribing skills assessment (PSA, a national prescribing examination). This meant that they were frequently deferred to for advice on how to negotiate these processes. Whilst being able to support others in this, there clearly was an advantage to them having already done this once, as it is a frequent source of stress and uncertainty in final years, and so having negotiated the process once, this was identified as being less onerous. This appears to be reinforcing something distinctive about their own experience and capability which sets them apart.

One participant spoke about striking a balance in sessions between answering questions but not being annoying by dominating things and giving others the chance to be involved. In this, they are clearly recognising a distinction between themselves as a resitter and the others, but also recognising that in order to fit into this new group, they need to be aware of the nuances in etiquette in order not to alienate themselves from the group.

Being a resitter did have another side though. One participant felt that with their previous experience came its own pressure, i.e. an expectation to know more and to know what to expect. As will be described later, this perception was internal, that is, not related to what anyone said; this was more of a self-perception of an expectation to be better.

Natasha, Just after failing: […] guess we'll see, especially when it comes round to mini-CEX's… [an assessed clinical encounter]… and mock exams and things, and when they might think 'well, she's done it before, she should do well' maybe if I don't do well, or do well, whatever, however I perform, I think there's always going to be some form of connotation given that they know that.'

Considering how identification with different groups varied will now be explored, firstly, to consider how identification with their old year-group was experienced.

7.2.2. Their old year-group

Clearly, the participants had established bonds and an identity with their old year-group who had passed. That said, the relationship with their year, who had passed, appeared to be ambivalent. There was an element of the participants that was jealous of them progressing, but the flipside was knowing these people in their clinical placements and this being described as a big source of personal and academic support.

The difficulty and upset of watching their friends graduate were issues some participants highlighted. Whilst they were, on the one hand, happy for them, on the other, it was tinged with disappointment.

Clare, Just after failing: I didn't really know how to manage it, and watching your friends go on and graduate and stuff, that was difficult.

Others avoided conversations or Facebook around the time of graduation and when their cohort started work as doctors. Some mentioned the difficulty of staying off social media, knowing there would be posts about their friends enjoying success and knowing it would be difficult. Clearly, there is ambivalence here about wanting to be part of their friends' celebrations but feeling disconnected to them and losing a part of their common bond with that year-group.

Amy, Just after failing: So, like, they didn't want to go on social media because it's, kind of, too upsetting, people going 'I passed', 'I passed', 'I passed' and graduation…[friends who also failed].

Emma, Just after failing: When they're starting their jobs and you know everybody is happy about and excited about starting something new and I didn't want to see it… [on social media].

Others spoke about a more physical withdrawal from the year-group, of being more reclusive or not feeling part of social activities because their cohort had moved on. The sense of their old year 'moving on' and the participants not, was noted by a number of resitters. Some reflected that this led to struggles in keeping in touch with their core friendship group, affecting the way they used social media and other more peripheral friendships withering. The challenge of this, when their friends were working and had possibly moved to other parts of the country, was also noted.

Alex, Just before resitting: Sort of, well, we never, sort of, go out and do stuff, but I don't know, I think I've been more of a recluse this year and just, kind of, tried not to do anything.

Their new resitter identity appeared to be jarring with their identification with their old year-group.

7.2.3. Connections

This was a rich and common issue. As students often move between years, mainly due to intercalating, they often find themselves reacquainting themselves with people

who they have previously known. These data consider how much participants identified with these ad hoc groups.

Alex, FY1: I had a really, really nice group for final year and some of my intercalator friends were in final year. There weren't that many of them, but they were there, but it felt fine. I didn't feel different to them.

Their sense of connectedness was variable, some feeling more connected to their old year, others to their new. Some talked about a sense of dislocation and isolation both in their new year and from their old. The sense of isolation and anxiety of joining a new year was noted more in the initial part of the resitting year and changed over time as they became more connected to their new year-group and as they began to experience the benefits that have been described of the resitter identity.

Alex, FY1 - You just, kind of, got thrown back into a new year-group of which you hardly knew anybody and […].

Others said it had not really affected their relationship or connections to their year-group or groups of friends.

Clare, Just before resitting: Like I said, most of my, most of the people I know are actually FY2s from my original year, and then the people who I was with last year, a lot of them are other intercalators, and I've stayed in touch with them and they were, everyone is very supportive, everyone wants to help, everyone is generally, completely, like […] I wouldn't say it's changed the relationships at all.

One highlighted the positives of being in a new year-group who they perceived as less competitive but brighter.

Owing to people moving between year-groups, resitters were often identified as people who had taken an intercalated year which caused misunderstanding and some embarrassment, as they explained that they had failed and were resitting or had resat.

Alex, Just after failing: […] and some of the tutors know me already and why you're not an F1 which is really hard 'cause you go out to hospitals and they're all, 'What rotation are you on now?' 'What are you doing?' 'Why haven't you started your job?'

7.2.4. Support from others

There was a strong emphasis from many participants about the wealth of support from friends, junior doctors in clinical placements and other clinical staff. This had been a very positive and affirming experience for many resitters. There appeared to be something about the resitter identity that engendered this support and warmth to these

individuals, and that was a very different experience from when they had sat the final year the first time. Here, social relationships and professional identity potentially overlap.

Clare, Just after failing: Everyone has been very supportive which I think, it was a chance to reassess and realise how lucky I am to have so many people around me who really care about you, which was nice.

Lewis, FY1: These are friends and colleagues who I'm quite close to, so I found they were actually the biggest source of, source of help, just because they'd done it before, they'd done the exams as well and had passed, you know, you know, like, whatever they did probably did work.

Participants highlighted the emotional support provided trying to help them, how others helped them to see the positive and the offering of practical help. Many people shared their experiences of failing and the participants often found that particularly supportive and helpful. This normalised the experience and offered a sense of hope to the students as they came to terms with failing.

Paul, Just before resitting: I think that also, speaking to doctors, because my dad's a doctor and quite a number of his colleagues, they contacted him and I've spoken to them and they, people that you wouldn't expect to, professors and consultants, had to resit finals.

Many cited the importance of support from friends over that provided by the medical school**.**

Clare, Just after failing: It's not necessarily, you don't know how they can support you and it's not that, because a lot of the support that you need isn't from the medical school, it's from your friends, your friends around you, so it's good that they offer.

The reaction of others very much mirrored the reactions of the students who failed, namely shock, frustration and anger. Like family members, participants spoke about friends thinking it was a joke. This again fits in with a common narrative of both participants and friends having no 'warning shot' that they were going to fail; hence, the shock, surprise and disbelief experienced.

Clare, Just after failing: I'd say a lot of my friends were angry. On my behalf, a lot of my friends were very frustrated.

Some highlighted the other side of being around other medical students who, on the one hand are supportive but, on the other, are driven, focused on finals and consequently, hard to be around at times.

Clare, Just after failing: […] not let it affect, like, how people behave around you because the trouble with having all your friends being medical students is that everyone gets into this weird mindset with finals, and finals become the only thing that matter and actually, they're not the only thing that matters.

7.2.5. With other resitters

The relationship with other resitters was varied, with some participants highlighting that the common shared experience was valuable to them, and others not being able to or choosing not to engage with other resitters. Again, this highlights the juxtaposed nature of the resitter identity. Some participants want to and did identify with other resitters and recognised the benefit of shared experience and a source of support. Others, however, wanted the opposite, not wanting to identify with them and just to move on in being subsumed into their new year-group, whilst enjoying the benefits of the status that being a resitter brought. There was a tension between the resitting students who feel that they have a distinct identity as a resitter and those that did not see that and just wanted to identify with 'normal' students.

Amy, Just after failing: They're very, they're like, we haven't had in-depth conversations about it. I'm also in a group where two other people have failed so there's three of us in the group. I guess just them being able to share experiences with each other, being, like […].

Paul, Just after failing: There are a few other people in the group who are also in the same situation as me within the year which also certainly helps, I think.

One participant talked about how meeting resitters who had passed and who were working as foundation doctors and noting that they were very confident. These doctors, who had resat, stated that they had benefited from an extra year and had been affirming and reassuring to the participants as they started their journey of resitting.

Haslina, FY1: At the same time, I remember, like, when I did my first time round and I know someone who repeated I was and actually I feel, like, oh, why did they repeat? They are so good and then it must have been an unlucky day for them and I didn't think any more about it.

One reflected that as a foundation-year doctor who had passed, they had volunteered to teach final-years, especially ones who were resitting. They potentially identified with them and wanted to support them.

Haslina, FY1: I did tell one of the teaching fellows, because I know a couple of people who resit the year, here, now and I was. I volunteered to give some help to them, some support to them because I know how it feels like.

One spoke about how being a resitter gave them an identity that made them distinct and 'special' in a way they had not been before. Participants appeared to be identifying with a wider group, despite being isolated.

Alex, Just before resitting: So it's quite nice for them and, it's quite nice to not be the one that everyone ignores.

7.2.6. Family

In considering the identity of these individuals, i.e. who they were and how this was influenced by others as they dealt with failing, the role of family was clearly important. They were often a significant source of support for participants. This ranged from parents to spouses. Like peers, a number of family members expressed shock, disbelief or even thought it was a joke that their loved one had failed.

Natasha, Just after failing: Pretty much shocked really, like, because I've never, I've never failed anything at medical school.

Haslina, FY1: Oh my God, it was so awful. I told my parents over the phone about my results and yes, they seemed OK and then, when I came back home, my dad bring me to a corner and he said to me, 'it's not true, right?' He thought it was a joke, so that was the worst part, the worst part because I felt, like, I disappointed him and it seems, like, he didn't even believe it as well but then yes, but then, they become supportive and they make sure I'm OK.

Failing has some practical implications with regards to family, such as having to stay with family or looking after family members, but there was a tendency to see the positive in much of this. One participant spoke about his girlfriend supporting him, but how he had supported her as she started her FY1 job. As the year progressed and she became established, she supported him more as he resat his finals.

A small number of participants described family as unsupportive. This was then related to being non-supportive throughout, i.e. they did not want their child to do medicine anyway.

Another participant spoke about the culture stigma of failing in Southeast Asia and how they were acutely aware of this for their family.

Haslina, FY1: Also, your social standing because I'm from X. It's such a small country. People know you and I've always been a top student and then people, people kind of know.

The above notwithstanding, the dominant narrative was that being a resitter had a positive effect on their relationship with family.

Paul, Just after Failing: - I guess everyone's been very supportive and nice about it and I think that, that really helped, my family have been really supportive

7.2.7. The flip side of the resitter identity: is there a stigma to the resitter identity?

Clearly, failing finals and resitting is seen as a major negative life event by participants and others. Thus, when considering the impact of failing on the identity of the students and how they are seen by others, it is prescient to consider whether there is a stigma associated with failing as this will affect the identity and self-esteem of the resitter, i.e. if there were a stigma and negative connotations to failing, students would struggle to identify with being a resitter and that would increase their sense of shame at failing which, in turn, may affect self-esteem.

The idea of there being a stigma associated with having failed was not borne out from what the participants sensed from others. A number spoke about how others did not know how to react when faced with finding out that they had failed but that there was very little negativity or a sense that they were being seen as inferior in any way.

Clare, Just after failing: Not really no, no one's been, like, negative about it. I think some people, maybe, don't really know how to react to it or don't know what to say but it's not, but that's actually not been the majority of cases. Most people have just been, like, very understanding.

In fact, the opposite was apparent, with several participants talking about how clinicians shared stories of their own failures or the failures of others who had gone on to be very successful. These individuals appeared to identify with the position the participants found themselves, i.e. as a resitter and wanted to share the potential positives of that identity.

Despite this, several participants spoke about not being open about having failed, especially after they had started work and they thought that they may be seen as somehow inferior. Others mentioned wanting a fresh start and that sharing that they had failed may lead to some preconceptions or unwanted advice. Several participants who were not open about having failed spoke about a fear of being 'found out'.

James, FY1: I think it's just about anything really, kind of feel like […] I don't know, people might look down on you a little bit. I think it's more my perception rather than actual… [of stigma].

Haslina, FY1: Yes, because, yes, I was really worried about my, I was really worried about how they'd think about me which I really shouldn't care but then, yes, yes, yes, just really bad. I think both because, because I felt like if I did something bad and I said oh, I repeated a year and they'd say, that's why she, that's why she repeated the year, she's so bad.

One participant reflected on their own reaction the year before to someone who had failed finals, simply thinking, 'Why on earth are you in that position?' Another remembered thinking that someone must have had some personal issues and that's why they had failed as they seemed so competent. Similarly, another participant found themselves in a similar position and remembered thinking that it must have been an unlucky day for them. This has some overlap with attribution, which is explored later in this work.

One participant shared a story of how his wife had become angry about the comment of a fellow student and defended him about this, but this really was the only incident where negative comments were heard or even perceived.

That said, a number of the participants did feel an internal stigma and sense of shame at having failed. This was related to some of these not having been open with clinical colleagues as they might be seen as clinically weaker.

Emma, Just after failing: […] but I mean, I don't feel stigma from other people, I think I create that myself.

James, FY1: I think it's just about anything, really, kind of feel like, I don't know, people might look down on you a little bit. I think it's more my perception rather than actual… [of stigma].

Jonny, FY1: […] because you would feel like [...] I wouldn't want people to think they have got to treat me any differently. I second guess any decision I make or anything I say… [if knew he has failed].

7.3. The Resitter Identity: A Better Learner?

Here, I examine how the students' changing identity may have shaped their approach to learning, and how their engagement with the resitting year may have affected the participants' approach to teaching and learning. The data support the notion that, as part of the resitter identity, a different approach to learning was apparent.

As a resitter, there appeared to be a new learner emerging as part of that identity. The participants were aware that if they failed the resit, they would not become doctors and so they had nothing to lose and so felt emboldened to volunteer themselves in a way that they would never have countenanced in the previous year. As mentioned earlier, a number of these students identified themselves as having lower confidence before failing. Now, with a year's knowledge and experience and a sense of 'all of nothing', a strong narrative emerged of being a different learner in the resitting year.

Clare, FY1: Maybe I was more outspoken, slightly, but I don't know how much it changed it, really. Maybe I was more likely to volunteer for things.

Many spoke about being more proactive in teaching and more willing to answer questions and put themselves forward for tasks as they had done them before. Some noted the added benefit they got from this as they received feedback on their performance rather than watching others get feedback tailored to them. Consequently, some participants felt under less pressure than their first year of finals, meaning that they could take time off in the evening and at weekends.

Clare, Just after failing: I think I'm probably engaging more because I have more questions […] because my questions, last year, would maybe be a little bit more answered in teaching sessions.

Amy, Just after failing: I've been quite happy to contribute and just, like, for example, my mini-CEXs at the end, like, I don't know it was a thing on asthma and I just, kind of, like, hadn't really particularly had to revise for the end of, this end of things but just, like, I could see the BTF guidelines in my head.

There appeared to be additional benefits from being based at different hospitals and being exposed to different teachers in resitting year which contributed to this new approach to learning.

Clare, Just before resitting: You work with different people who have slightly different styles and different things, so yes... [when asked about learning in their resitting year].

Several participants spoke about a different approach to clinical learning in their resitting year. They highlighted spending more time on the wards and doing the job of being a doctor as being their focus, rather than book learning; this was often despite the fact that they had failed on the knowledge component of the finals examination. Often, they reported having worked very hard for the written examination but had still failed, so could not see the point of repeating that again and hoped by doing the job of

medicine that the requisite knowledge would flow from that. Several mentioned that they had been driven to try something different as if they worked the same way as they had the year before they could to some extent expect the same result. They appear to be describing that this is changing their way of 'being' as a learner, and reflects a different way of seeing themselves.

Amy, Just after failing: I want to spend, and kind of learning things, because I don't think we ever get taught about, I've never been taught about how to do a discharge summary and so I just, kind of, want to do that. That's such a huge part of being on the wards.

Niamh, FY1: I had pushed myself very hard on the course and the knowledge was up to date and it wasn't that I didn't understand what was going on. For me, it was more mental preparation for finals that I needed so I found it very hard for the first six months and then the second half of the year, when it was in hospital-based practice, I was able to take control of my own learning and put my energy into what I wanted to. [It] was a lot easier.

Several participants highlighted an initial inertia when starting back into the resitting year, and how it had taken a while to get engaged with the course, but once they were 'in the zone' they were enjoying the year. It appeared that once the resitter identity crystallised it allowed a different level of engagement with the course.

Niamh, FY1: […] but at that point, in the first six months, I was behaving like […] I felt rude. I wasn't engaging in the teaching as much as I normally would […] because I was so fed up AND I wasn't enjoying medicine.

Some participants spoke about feeling patronised and that the learning was not being tailored to their needs, having done it once already. This could relate to the fact that the students who are resitting are just pooled into a new group and cannot be identified as distinct in any sessions. Other participants spoke about wanting to be anonymous and not being seen as distinct from the other students. Clearly this makes it challenging for the education providers to meet the needs of these distinct and different identities. It appears that participants were describing feeling different and so have a distinct identity, but varied in terms of how they wanted to use that identity, or for it to be recognised.

Clare, Just after failing: I've been back at uni. I've not necessarily wanted to tell everybody who does the teaching, or something like that, because I don't want to be taught […] I don't want to be treated any differently for a final year.

Many participants said that consultants and general practitioners who knew they were resitting tailored the learning to them and in many instances, gave them additional responsibilities. Resitting meant that they often had more opportunities than in their initial final-year and so they had an enriched experience of teaching and learning. Several highlighted the opportunities afforded to them and the permission given to them by senior tutors to use their time more flexibly than if they had been taking the year for the first time. It seems that these educators were identifying a difference within this group; hence, they were treated differently.

Alex, Just before resitting: The consultants that you have on the wards are supportive in terms of resitting and things, sort of getting you to do different stuff so you're not just going through all the same stuff again, so that's quite nice.

7.4. The Resitter Identity: Who am I Now?

This next section will focus mainly on data in the latter data collection points, i.e. just before finals or when the participants had passed and were working as doctors. Under the umbrella of identity, it will consider how participants viewed the whole experience of failing and how it had affected who they were.

This will be considered under 3 subheadings:

- A better doctor
- A better person
- Someone with more options

7.4.1. A better doctor

The positives of approaching finals for the second time and starting work with better knowledge and skills was a common theme.

Haslina, FY1: It felt alright, it felt OK. Yes, I feel more confident on being a doctor now because I think I wasn't as prepared last year.

Paul, FY1: […] but I think that doing the extra year again and spending more time on the wards and more time on my clinical skills and everything, has made that transition smoother and easier, so it has […] certainly hasn't done me any harm at all.

Some participants reflected that finals had been easier owing to an improved knowledge base but higher stakes as if they failed, they would not have become doctors. This improved knowledge base had other advantages, as participants often

did better in other components of the final-year assessment such as the PSA and SJT. This, in turn, led to a better ranking for foundation-year posts which led to more confidence, both as they approached finals and also as they started work.

James, FY1: [I] just had, well, more experience but also done more work for the exams, done more practice seeing more patients and presenting back and going through questions with more senior doctors… [in resitting year].

As already highlighted, participants reflected on a different approach as they prepared for finals, seeing the emphasis as less about books, and more and more about patients and the job of medicine. This, in turn, led to a sense of readiness of all the participants as they started to get ready for the work of a doctor and strengthened their identity as a doctor.

Haslina, FY1: In a way, I feel, like, because I think last year, like, when I, when I did my first attempt, I was more focused on being an exam student, passing exams. I didn't really care about being a doctor in the end because you want to pass the exams. I now have the knowledge, I guess, about clinical stuff and your relationship with the patient and I was more focused on that and spent more time in the hospital and I guess, I developed the professionalism of being a doctor.

Some of the participants spoke of being asked to do more things in their role as foundation doctors as they had got more experience, were given a greater responsibility and were ready to take on more than they were given in the resitting year.

Haslina, FY1: Yes. In the beginning, people were saying, like, how they were with being a doctor. They were scared for me. It was, like, no, I'm just ready now.

Being a source of support and knowledge to 'new' final years as they started was an affirming experience for some participants. As someone who had resat, they felt that they had more experience and insight to share with them, as well as greater confidence in their new roles as foundation doctors.

One student spoke about how in their first sitting, they had fallen out of love with medicine, and this had been compounded by failing finals. They spoke about having been angry and disengaged for the 6 months. However, as their anger subsided and they started to feel useful in the course, and especially in the General Practice and Hospital-Based Practice course, their confidence improved and their desire to be a doctor returned. When interviewed as a foundation doctor, they were very positive and really enjoying being a doctor.

Clare, FY1: It's probably made me like medicine more, actually, because I've had time to learn it in a bit more detail and get a bit better at it which makes things easier, which makes it more enjoyable.

Some participants spoke about being able to highlight weaknesses and to improve in a way that they had not been able to before. This may have stemmed from a great confidence in their own abilities following passing finals the second time but could be related to the next section, looking at personal change.

7.4.2. A better person

I think failing is good for you and I think a lot of people in medicine like you can get through without failing and that's lovely, but I think if you actually fail it makes you less afraid to fail, makes you are less afraid to be stupid and makes you less afraid to admit when you are wrong.

The above quote from Paul just before he resat his finals is an example of a common narrative that came from the participants, i.e. that failure is tough, but it has all sorts of positives in terms of how it has influenced who they are.

First, being from a high achieving profession and experiencing failure gave the participants a greater sympathy for failure both within and outside the profession. Failing is often not talked about in medical circles and a culture of high achievement and perfectionism exists (Henning *et al.*, 1998). One participant talked about having been taught humility.

Paul, Just before resitting: I think it has, I think it's certainly softened me. It's been very humbling, and I have had to eat a lot of humble pie.

A number of participants spoke about how failing had given them an understanding of suffering. As they had never suffered themselves in life up to this point, they described how the experience of failing had changed them. For some, this was a greater sympathy for those who fail but for others, it was much more central to their relating to patients. Some described that failing had led to a greater sense of empathy for patients as they had now suffered themselves and so could identify more with their suffering.

Natasha, Just after failing: So I think that that's something which I've learnt, processed and it's helped me, actually, and you're not that important, me not getting, me not getting through won't […] I guess, other people have got their own things to think about, other things to do but it has been a real process.

Another participant spoke about how going through the experience of failing had made them more aware of suffering.

Paul, Just before resitting: I don't think this experience had directly influenced that decision, but I think, I certainly think it will make me a better GP and more empathetic and hopefully, a knowledgeable GP.

As described earlier in this work, the participants went through a range of emotions as they came to terms with failing. Several commented on the change in them that they could now have an ability to step back from initial feelings after failure or bad news and process them in a more mindful way and move on to accept them quicker. This led to a sense that they had a better ability to process adversity in their life in the long-term.

Paul FY1: It's probably made me less sensitive about things and probably just 'so what, I can manage, whatever', but it's a bit hard to tell what's to do with finals and what's to do with what happened because of finals, if you see what I mean.

Some reflected that failing had toughened them up and that they felt stronger. The flip side of that was that some spoke about being more willing to ask for help.

Lewis, FY1: I think I was [a] very independent learner in that I just always, I never asked for help either, one of the problems […] that's another mentality that changed, I was more willing to say to people, OK, like, what's the best way to get through this situation or what? I encountered problems with this, how should I best learn from that?

One participant talked about how failing led them to realise that they had an identity beyond medicine. Many students found the course all-consuming and failing gave them a wake-up call to see life beyond medicine. One commented that this led to a desire to do other things, e.g. new hobbies. Failing gave them a bravery to step away from the work of medicine and to experience other things. A sense of having been stopped in their tracks which led to re-evaluation and a better balance to life, i.e. work, exercise and diet, was also mentioned.

Natasha, Just before resitting: [There's] more to me than medicine. It made me realise that there's more to me than psychiatry, there's more to me than GP or things that I have considered because why can't I work in any role?

A common and strong narrative was how what the participants experienced had restored and enhanced their faith in people. Many spoke about the support that was given to them by friends and by some medical school staff.

Clare, Just after failing: Everyone has been very supportive which I think, it was a chance to reassess and realise how lucky I am to have so many people around me who really care about you, which was nice.

After passing finals and reflecting on what they would say to someone who was resitting, participants emphasised the need to accept their situation and to 'move on', so to speak. They also highlighted the need to accept feedback and not to get drawn into rationalising issues or 'blaming the system'. Being open about resitting and asking for help and support was also seen as important. Focusing on the clinical aspect of learning and not the books was also something that they wished to share, as well as not being drawn into the anxiety of others and focusing on yourself.

7.4.3. Someone with a new career identity?

Broadly speaking, failing did not seem to diminish the hopes and ambitions of the participants; if anything, it seemed to enhance it. Like many at this stage, there was uncertainty about what they wanted to do with confounding factors, such as the state of the NHS and contractual issues, playing a part in this uncertainty. Some talked about the fact that having an extra year gave them time to 'take stock' and to explore and to revisit some specialties. In these areas, they felt more comfortable doing them a second time and therefore more confident and more likely to consider them as a career. This sometimes led to a more phlegmatic approach to career paths and being open to taking years out, as after failing and passing, they came to realise that losing a year was nothing and that other opportunities could enhance their experience.

Alex, FY1: So, I always have, like, a mindset of […] I came to medical school really wanting to do paeds and kind of throughout it I've really enjoyed the whole psych, GP and A&E stuff. Now, I've got that sort of goal it's, kind of, how to get there because I can see it, but I don't know how to get there yet, kind of thing, so.

Others spoke about feeling more confident overall, having gone through a difficult time and feeling more emboldened to look at areas which previously, they might not have considered.

Lewis, FY1: I'm doing surgery at the moment. [I] never actually harboured any ambitions of doing surgery but at the moment, the more I'm doing, the more I spend time with the people and work with the people who are actually encouraging me […].

Niamh, FY1: You totally change that perspective because […] I would like to do paediatrics, I want to work in hospitals, I'm keen to do […] I like respiratory medicine. I do like lots of different things. I think in terms of my perspective its changed in the

sense that I'm less keen to specialise. I want to work and travel […] see as much medicine as I can.

One participant questioned their long-term commitment to medicine but qualified this, saying that throughout the course they had doubts about a long-term career in medicine. However, they appeared conflicted, talking about wanting and needing to work in medicine before possibly stepping away.

Another reflected that if they had failed, other doors would open and they could and would have gone on to have a career in something else.

Clare, FY1: If it doesn't work, I'm going to go and work for a delivery driver, so I will do something else… [in jest].

Few participants thought having failed would affect their prospects. Some talked about wanting to go into uncompetitive specialities so it would not matter, others expressed uncertainty whether it would affect their career. One spoke about affecting their confidence in doing postgraduate examinations which they perceived as harder than finals.

Haslina, FY1: Yes, because you feel that I have already failed the exam and people say, like, that they always pass and you, kind of, feel worried about the next exam because they've said it's even harder and they really want to fail you so I'm kind of worried like you'll fail… [re post grad exams].

However, for most, failing was seen, in retrospect, as a positive in the ways described above.

7.5. Discussion

7.5.1. Summary of results

Identity is a fluid and complex concept. It is made up of our past experiences, current relationships and the future person we are on our journey to become. This chapter tried to capture aspects of this.

The data support a distinct resitter identity. The resitters felt that they were different from the other students and others saw them as different too. Any initial sense of embarrassment seemed to dissipate as the advantages of the resitter identity became apparent.

Rather than facing isolation and a lack of acceptance into a new year-group, the participants described a ‘special’ status having been conferred on them. This led to a resitter identity building within the new year-group. The students sitting for the first time saw them as a vital source of help and insight into what was to come. Coupled with this, was the fact that when others found out that they had failed, the responses they got were unanimously supportive, sharing the students’ anger and shock, and relating stories of their own failure. To some extent, the reactions of others contributed to the sense of injustice felt by the students which weighed into the attribution biases that will be explored later in the work.

Combined with their perceived special status, the resitting students described a very different experience of learning in their resitting year. Having had a year’s experience, they had knowledge and skills; the first-timers did not. This, combined with a ‘last chance saloon’ attitude, led to a great willingness to engage with clinical learning which led to specific and often positive feedback. This obviously led to improved confidence that led to more engagement, and the cycle continued. One supposes that this positivity, in part, helped the participants to process the trauma of failing and to navigate their way towards a more accepting place on the emotional roller-coaster previously described.

The author is conscious that he is painting a very rosy picture of what many described as a difficult experience. However, of all the study participants, there were none who provided a contrasting voice once they had overcome the initial reaction to failing. This very much relates to one of the dominant themes of the data that is explored in other chapters, i.e. that of ‘seeing the positive’.

Rather than a sense of isolation, the participants described a sense of connectedness as their exiting friends, who were now working, supported them and often encouraged them to see the positive. Any sense of stigma about being a resitter was internal to the participants, as they processed their sense of shame at having failed and turned the corner to see the positive.

Many participants reflected that they focused much more on the work and practice of being a doctor than spending time building up knowledge from books and private study. Were they identifying more as the doctors they thought they should be and trying to take on that role as a defence against the disappointment of failing? There was little

in the data to suggest this; instead, the findings may reflect that they had studied hard in their failing year and that had not worked and so they chose a more clinically-based approach that, in turn, led to some of the positive reinforcement described above.

Those participants who were interviewed as qualified doctors described being much more comfortable with the doctor identify than if they had passed first time. They recognised and reflected a number of positives in terms of their ability as foundation doctors and in their careers going forward. Many also reflected on how the whole experience had affected aspects of themselves outside their doctor identity.

7.5.2. Compare and contrast to literature

In the results above, there appears to be a coherence with the broad literature on social identity and professional identity. The data do support the notion that the participants did form their own identity, i.e. that of the resitter.

In-group versus out-group?

In considering the experience of the resitting students regarding their sense of identification with a group, the data above highlights many of the features of identity theory around the concept of in-groups and out-groups. These have been described earlier (Burford, 2012). There seems to be a process of moving from wanting to be anonymous and being embarrassed of being a resitter, to a loss of the student identity and the emergence of the resitter identity. One feature of this is the idea of social influence as it pertains to group theory. In social influence, in-groups are differentially influenced by some in-group members. One could postulate that resitters occupy such a position, as their knowledge and experience provides them with a unique perspective to socially influence other members of the group (Kelman, 1958).

One counterargument to the existence of a resitter identity was how little identification there was between members of the resitter in-group. Some spoke about a sense of connection to other resitters, others highlighted a sense of wanting to distance themselves from them. This may be, in part, structural given how few resitters there would be in any one location whilst resitting. To some extent, this is what made them different. Secondly, minimal group theory describes the notion:

> *that individuals will express in-group favouritism even when there is minimal in-group affiliation, no interaction among group members, anonymity of group members, no conflicts of interest, and no previous hostility between the groups.* (Diehl, 1990)

The resitters felt different and others saw them as different and therefore they could transition into this new identity.

In-group favouritism is a well-described phenomenon where in-group members favour in-group members (Hewstone *et al.*, 2002). The main body of students in the year could have potentially viewed the resitters as the out group and not confirmed this favouritism on them. However, this was overcome by the social influence that their identity conferred. The extension of the theory is dislike for those who might be seen to be in the out-group. This was not supported by the data; resitting students did not perceive any negative comments from others and any negativity about their position as a resitter was linked to their own internal self-appraisal and not from outside per se. Negative self-appraisal has been linked to those who have low self-esteem (Swann Jr *et al.*, 2007). As has been explored in the previous chapter, low self-esteem was a feature of this group, especially initially.

Self-esteem, stigma and identity

Some researchers have postulated a direct link between self-esteem and social identity theory (Martiny and Rubin, 2016). Self-esteem is predicted to relate to in-group bias in two ways. Firstly, successful intergroup discrimination elevates self-esteem, i.e. seeing yourself as distinct and ‘above‘ other groups, i.e. being a final-year medical student as opposed to a fourth-year brings esteem. Secondly, threatened self-esteem brings about intergroup discrimination. This theory has been challenged and the empirical evidence is mixed (Turner and Reynolds, 2003). In these data, the first tenet of this theory appears to hold up with the resitter identity being linked to esteem. The second tenet of discrimination does not seem to be borne out by the data as already highlighted.

Many theorists have considered stigma and in recent times, stigma and identity theory have become closely aligned. Of all the theorists who have written about stigma, the writings of Goffman (1963) are probably the most helpful. Goffman made a distinction between the virtual and actual social identity. The virtual social identity relates to the

assumptions we all make on meeting individuals as to how that individual ought to be. The actual social identity is the attributes and characteristics the individual possesses.

Goffman ('Deviance and Social Stigma,' 2021) further described three categories of the stigmatised:

1. The stigmatised are those who bear stigma
2. The normal are those who do not bear stigma
3. The wise are amongst the normal who are accepted as stigmatised and wise in their condition.

The latter are a group:

> *whose special situation has made them intimately privy to the secret life of the stigmatised individual and sympathetic with it, and who find themselves accorded a measure of acceptance, a measure of courtesy membership in the clan*. (Goffman, 1963)

There is resonance with this and the resitter group. If the resitter group were to see themselves in the second category, they would not outwardly bear the stigma and so may choose to try and hide it. This was expressed by some participants, especially initially. However, as they started to appreciate the positives of the resitter identity, one could speculate that they became more of the 'wise group'. As has just been explored, there was no negativity towards a resitter identity; hence, there appeared to be no negative effects on the resitters' self-esteem. In fact, the opposite was true; in finding a 'wise' position in their new social group, resitters boosted their self-esteem.

Linking again to the previous chapter, there is a relationship between stigma and self-esteem described in the literature. The natural assumption is that being stigmatised is associated with low self-esteem (Crocker, 1999). However, some theorists highlight some of the self-protective properties of stigma (Crocker and Major, 1989) which, in these data, is defined as any stigma that was felt to be more than a self-stigma, i.e. a feeling of being inferior to others as assessed by the self (Major and O'Brien, 2005). This is described in the literature whereby self-stigma occurs when people internalise these public attitudes and suffer numerous negative consequences as a result. However, it is clear from the data that others did not hold negative public attitudes to

resitting students and any negativity felt was more likely due to negative self-appraisal than any stigma per se (Leary and Terry, 2013).

Emotion and identity

Linking back to the emotional journey, the above has been described in the context of the participants processing the emotions of failing. It could be that the emotions needed to be processed before they had the capacity to engage back in the course and to see themselves as having a place, i.e. an identity as a resitter. It could be postulated that they 'park' their existing identity as they process the emotion and see if and how their existing identify fits in their new circumstance. This is recognised in identity control theory where emotion-focused strategies are described to cope with negative emotions (Burke). This theory recognises both emotional and cognitive responses under this umbrella (Stets and Tsushima, 2001). Cognitive strategies may be to try and to see the positive in something and this is well-recognised in this data set. The other is more of emotional coping, such as seeking and receiving support, again something that is described in this work.

Professional identity

The work of Cruess, Cruess and Steinert (2016) has been seminal in conceptualising professional identity formation in doctors. One of the central tenants of their description of the development of professional identity within the medical profession is the importance of transitions and the need for support during transitions. This would have coherence with what is being described above given the significant change and transition these participants have to make as they come to terms with failing and start to work out their place in their resitting year (Teunissen and Westerman, 2011). Cruess, Cruess and Steinert (2016) highlight the potential significance of transitions in the formation of professional identities and highlight emerging literature that suggests that times of transition lead to new identities (Loh, 2013; *Teaching Medical Professionalism: Supporting the Development of a Professional Identity*, 2016). This lends weight to the notion that a resitter identity could emerge at such a significant time of transition.

7.5.3. Limitations

In trying to conceptualise a resitter identity, the concept of professional identity has been stretched to its limit. No such concept as the resitter identity has been described in any existing literature, although with individual identity having been socially constructed and in the mind of the knower, one could argue that identity could be extrapolated to a large variety of social groups.

7.6. Chapter Summary

Using the notion of identity and professional identity within the resitting students provided an insight into how they perceived themselves and how they fitted in within the resitting year. The data supported that there was a resitter identity that was separate from the identity of the other students.

In the next chapter, we examine how the attributions of the resitter group were experienced and how these may have impacted on the aspects of the self explored in this and the previous chapter.

Chapter 8. Attribution: 'Whose Fault is it?'

8.1. Introduction

Attribution bias is a social psychology theory that looks at how people provide explanations for their and others' behaviour. Students often struggled to attribute their failure to themselves. Frequent issues to do with the unfairness of the examination, lack of warning that they were at risk of failing, having to do a whole year again and all the implications of this related to the sense of anger and frustration described earlier. Many felt that they were treated in a homogenous way, and whilst recognising what the medical school was doing, wished it could have been more tailored to their individual needs.

This chapter will seek to present the narratives around the issues described above in the context of current attribution theory. The discussion will seek to identify key themes from the data and highlight how this chapter relates to other aspects of the thesis.

Attribution theory is a large body of knowledge. One way to describe these data is to use the notions of internal or external, and stable or unstable attribution variables, which were described in the introduction (Weiner, 2010). These are introduced again below in Table 8.1.

Variable	Brief description
Internal	That an outcome of behaviour is due to an internal or dispositional factor, e.g. motivation or ability
External	That an outcome or behaviour is due to situational factors
Stable	An event or behaviour is due to stable or unchanging factors
Unstable	An event or behaviour is due to unstable factors or factors that can change
Controllable	A factor that one can alter or change
Uncontrollable	A factor that one has little ability to alter or change

Table 8.1 Variables used to consider aspects of attribution

In Table 8.2 below, achievement attributions as a function of locus, stability and controllability are presented. How these variables may interact is described in order for

the reader to understand the relationship of these different aspects of achievement attribution. As part of this, a potential emotion that could be associated with that interaction of variables is suggested. For example, one's innate academic ability is stable, internal and uncontrollable. One possible emotion from failing may be shame because of one's lack of ability. Another example would be when someone lacked effort in preparation for an exam; this is internal, unstable and controllable. This could result in them feeling guilty.

	Internal		External	
	Stable	Unstable	Stable	Unstable
Controllable	Typical effort	Lack of effort	Consistent help or hindrance from others	Unusual help or hindrance from others
Associated emotion	Gratitude	Guilt	Anger	Frustration
Uncontrollable	Ability	Mood	Task difficulty	Luck
Associated emotion	Shame	Interest	Boredom	Lucky

Table 8.2 Achievement attributions as a function of locus, stability, and controllability

In this chapter, I look at these attributions though 3 different approaches: firstly, considering the internal attributions, i.e. the individual factors that may or may not have affected failing and whether these were attributed by the participants to their failure; secondly, the external attribution, that is, the external factors and how these were perceived in their contribution to failing; and finally, those factors relating to attribution that were at play in the period up to and after resitting for the second time.

8.2. 'My' Fault: Exploration of Internal Attributions

Some students identified **background health issues** as affecting their performance on the day or in preparation for finals. Those that mentioned being ill on the day spoke about knowing that if they had not presented themselves for the examination, they would have had to resit the year. Participants described having minor illness that meant that they were not at their best, but not so debilitating that they could not physically still

sit the examination. This would be in keeping with university policy whereby an extenuating circumstance prevents a candidate from sitting the examination, but with no resit within the same academic year, the only option is to resit the whole year and do finals in a year's time.

Clare, Just after failing: I wasn't feeling a hundred per cent through all of my exams but I was fine for my MOSLER at the end, but when I first took the first exam I really wasn't feeling that good that day and I mean, it was nothing very serious, it wasn't anything, that's the problem. It was on that, kind of, borderline between where you say something or do you not? […] just feeling a bit fluey, a bit grim.

Amy, Just after failing: I was not well last year and I spent my entire time, kind of, I worked so hard to be mentally well, I don't know, I just I don't know.

For one participant, dealing with major mental health issues related to a traumatic event was a significant factor in failing and in dealing with failure. This participant struggled to 'see the positive' and seemed particularly hard hit by failing. They spoke about being determined to sit finals the first time despite having been advised to take time out.

Alex, Just before resitting: I don't think it's like, I wouldn't say it was, like, a grief process, it's probably more [..] did I […] I don't know, it's […] in a way, I, kind of, almost expected to fail because I didn't think I deserved to pass but not because I didn't think I was intelligent enough, just, I don't know, I just didn't, kind of, think […] I don't ever think anything good is going to happen to me, so, I don't know.

Alex, FY1: So I had post-traumatic stress disorder and I was being stubborn and I said no, I said, I'm going to be fine. I'm going to sit my exams and I'm going to be fine. I wasn't fine, I'd barely went in since January that year and he was, like, are you sure you're fine, are you going to be fine?

Academic background issues were a common narrative. Participants' pre-conceptions of their own abilities were, for the most part, negative, with a common narrative of lack of confidence and lack of ability. This has been previously highlighted in the chapter about confidence. These data considered how participants reflected on this in the context of attribution.

In exploring this, one needs to consider the notion of ability as being stable or fluid. The literature identifies the difference between fluid and stable attributes. Fluid attributes are those that are inherently unstable and cannot be used to predict future possible behaviour with any degree of certainty. Mood state would be a good example of a fluid attribute. Conversely, stable attributes are those that can predict future

behaviour, for example, GCSE results as a predictor of life-time earnings (Weiner, 2010).

Regarding background health issues, for the most part, participants were attributing their failure to more fluid notions. However, with regard to academic background, it appeared to be a more stable attribute that they were describing, i.e. their past performance and previous attainment.

When considering intelligence, more recent work describes the difference between crystallised and fluid intelligence (Cattell, 1963). Crystallised intelligence involves knowledge from prior learning and past experiences, whilst fluid intelligence refers to the ability to reason and to think more abstractly. By the very fact that these students were medical students, this puts them amongst the top 2% in terms of academic intelligence in the country. That said, these students were struggling to see that and were attributing their abilities based on their perceptions of their crystallised intelligence, mainly through the lens of examination performance against their cohort.

Alex, Just after failing: It wasn't, like, I was really bad at anything in particular just, sort of, average of every single speciality that was all quite similar, I don't know […].

Emma, Just after failing: I mean, I'd never been somebody that excelled. I just passed or I failed other exams before so I wasn't, like, really confident but I was mostly worried about the knowledge part of it rather than skills.

One participant talked about having taken an intercalated year out and therefore having been out of clinical medicine for a while as being an issue and not being in 'a medical mind-set'.

Clare, just after failing: I don't feel that I underprepared. I think that I came in to last year in not a really particularly good position because I intercalated the year before and I did, I did quite a lot of slightly less clinical SSC's before that, so it's been a very long time out of medicine and I intercalated in something very different […] kind of a very good year […] I would not change that for the world but it meant that I wasn't in a very medical mindset. I was playing catch up, like, I felt, you know, like, I was, I was way back, so it was a lot to catch up and not feeling, like, you had much knowledge to start with was hard.

Others spoke about their perceived strengths and weaknesses with regards to their broad abilities as a medical student. This lack of confidence in some cases led to them avoiding seeking advice and feedback from more experienced and senior clinicians

and if they sought this it would be from FY1s as they feared the feedback would damage their already fragile confidence.

Amy, Just after failing: […] because I wasn't very confident, like, kind of, Dr X, my educational supervisor for this year and previously, I would, kind of, I would hate getting watched, watched kind of doing histories and I would really shy away from, kind of, apart from kind of, like mini-texts, I would shy away a lot from, kind of, like, authority figures.

Several mentioned about having background issues in relation to reading and comprehension that may have affected their performance.

Niamh, FY1: I might not be able to quickly and I've been diagnosed as a wee bit slow at reading comprehension and I think that's something I know, I've always known it.

Paul, Just before resitting: SJT is always, like, is not my strength. It's a skill which involves, like, rapidly sifting through information and, and it's just, I, I find that difficult.

Some participants had had **significant personal issues** in the background. Family illness and relationship problems were the common areas of problems. One spoke about the end of a long-term relationship after they had found out that their partner had been unfaithful for a number of years. The loss of the relationship was, it seemed, conflated with the loss of failing but also with seeing the positives in these two difficult events. Another spoke about having to look after their partner who had mental health issues and how this had been a strain on them and led to their partner blaming themselves for the failure of the final examination.

Alex, Just before resitting: […] sort of, from a more, sort of, personal side, I do, kind of, feel the PTSD stuff hasn't really changed, so that in a way, that's not, like, there's no different to how I felt this time last year than I do now, so I don't know, because that kind of contributed to me not doing very well in my exams and not being able to concentrate.

Natasha, Just after failing: […] because I do question whether that had an effect, but I don't blame him but he does blame himself and that caused our relationship to break down after five years.

In considering all these different factors, it is interesting to note that there was no consistent narrative of attribution of these factors to failing finals in terms of the number of comments that blamed these internal variables. They were very much in the background; however, it seemed to be a common contextualising thread amongst all the participants that they wanted to express. Instead, the blame was placed on the

medical school in not highlighting or supporting them around these issues, as will be described in the next section.

8.3. The Exam's Fault: External Attributions

Having described some of the internal factors, I now turn to the focus of most of the participants' narratives as to why they failed, i.e. the examination and the medical school. Having said that, for the most part, participants did not attribute their failure to internal factors. There was a strong narrative on external attribution, i.e. to blame something else. This inherent bias is unsurprising given what we know about attribution bias and which has been described earlier. Over the next part of this chapter, I will describe the different aspects of the attributions participants made during their interviews. These are presented via the subheadings below:

- It's not fair
- The system is flawed
- Second time round: shifting perspectives?

8.3.1. It's just not fair

Some participants described an unfocused attribution, where they did not identify any particular cause but just highlighted their perceived unfairness of failing. This narrative, for the most part, related to participants in the immediate post failing period when, as has been described, emotions were running high and rational dissection of reasons for failing were probably not to be expected.

Natasha, Just after failing: I mean, I think maybe things would have been different if I felt like I deserved to fail, but I feel like I didn't. I understand and I respect their decision, and I know that my performance was bad on that day but you just, kind of, attribute it to […] well, when anyone does an exam they always feel like they could have done better. It's the worst exam that I've sat. I've done awfully but you always have that small voice that it hasn't gone that badly, you're just making it worse.

In making attribution about the unfairness of the finals examination, students spoke about several different issues. Comparison with classmates who had passed and who were perceived as less able and who should have failed were common. Interestingly, this was projected to the thought of them being doctors whilst others were not. It was less about the exam but more about the role that passing brings and the perception of unfairness that they were in that role with the money and prestige it brings yet did not

deserve it. This contrasted with some of the participants who felt that they were 'better' then these others and did deserve to pass and to be a doctor.

Clare, Just before resitting: […] because I still think it's very unfair in lots of ways and there is a massive […] like, some people, like, I don't know, thinking about some people who go on to be F1s and then thinking about some people who are not F1s.

Natasha, Just after failing: Yeah, especially when it's not people that you'd consider. I mean, there's always going to be people that you know of on the course that maybe you think they don't put the effort in. They're lazy, they don't seem to know the answers when questioned…[who fail].

The other side of this was one participant highlighting that a very high performing student had failed and how this brought the integrity of the examination into question.

Haslina, FY1: I guess because I know one of them, because, fair enough, because he always, actually, [is in the] top one per cent of medical school, yes of all the year, so when I, all of us thought it was quite weird how he actually failed.

There also existed a middle ground where one participant highlighted the fact that an average student had failed. So, whatever the level of ability of the students there seemed to exist an attribution that the examination was somehow unfair.

Natasha, Just after failing: It was those sorts of people that you would assume wouldn't do well. He wasn't, like, that the person I know. He was just standard, doing pretty well, you wouldn't have thought… [he would fail].

One participant pointed out their perceived injustice of someone who had failed every previous year but had passed finals. Again, this fed into the rhetoric that pervaded around the examination and its perceived unfairness versus its actual unfairness.

Alex, FY1: I don't know especially, like, when there are F2s who were, like […] there was an F2 who's failed 2nd, 3rd and 4th year and had to resit but you get to resit on that same year and he's passed, but then passed final year the first time.

This is a common issue in the medical school where a story within the student body, which is often skewed or where all the information is not or cannot be available to the student body, spreads around and feeds into a particular narrative, e.g. 'finals must be unfair because James failed'.

The unfairness of just failing, that is, being very close to the cut score was a common narrative. This often led to feelings of anger and frustration. The idea of being just a bit unlucky and it not being 'my day' was one that was often shared. Luck can be seen as

an external unstable attribution variable. This has been described as the 'ultimate attribution error' (Pettigrew, 1979). In this, one attributes the out-group's (the students who passed) behaviour as due to some chance or circumstance, i.e. they were lucky and I was not.

Emma, Just after failing: Generally, yeah, but because it was such a small margin it's just a bit frustrating… [tearful].

Amy, Just after failing: […] and then because I failed by, I think it was less than 1/2 percentage, that was quite gutting.

Lastly, to contrast the above, in a few participants there was a sense of it being a 'fair cop', that is, they recognised that they had not performed on the day or were not good enough to pass. This was very much the exception, where they were attributing their failure to themselves, i.e. to a stable internal variable, such as 'I was just not good enough' compared to a more unstable interval variable, e.g. 'I just did not perform well enough'.

Lewis, FY1: I think I knew it was my clinical exams, actually, that actually, I think I could of passed but I wasn't, ultimately, I wasn't surprised when I found out I'd failed but I knew there's definite gaps in my knowledge and I think, yes, it wasn't a complete surprise, essentially.

James, FY1: So it was on the MOSLER I failed, just got […] I didn't do particularly well on a couple of situations, really. I think it was because, like, I felt, like, I probably should have been able to pass but I didn't, and I was upset about that. Initially, it felt, like, I probably was ready and then to be fair I probably wasn't quite where I thought I was.

Interestingly, one participant described neither not performing on the day nor having the requisite knowledge and skills but something broader and more ethereal, i.e. just not having been 'prepared for it' or it was just not their time. One can speculate that they may have meant being ready to be a doctor or just not ready to go through the process of sitting the examination. Either way, they were attributing something to themselves in contrast to the majority of participants.

Niamh, FY1: In my own opinion in hindsight, I don't think I failed because I was stupid, I think I failed because […] I genuinely think it was meant to happen because I wasn't mentally prepared for it.

8.3.2. The system is flawed

Blaming the system that requires the students to have to resit the whole year was very common and is at the heart of this piece of work. It is because of this concern in the student body that the medical school has changed its curriculum to allow a resit of finals within the same academic year.

For some, this was seen as the injustice of how bad luck, for example, an illness or accident, could mean that you had to resit the year. Interestingly, this was often not something they had seen but they were projecting a perceived unfairness onto a 'what if' scenario.

Clare, Just after failing: I think, like, the thing that was the most frustrating thing for me was the fact that, and this isn't really necessarily about me it's just the system, is that if you have a student who is really ill, like diarrhoea and vomiting the day of their MOSLER, [and] that they have no other option apart from retaking the year, and I found that very frustrating.

Clare, Just after failing: On, like, a general level, that's the only option that you have and that still makes me quite angry […] that I just don't feel that's fair or that if you break your leg or whatever, and I know this doesn't happen to many students, but I think it happens.

At the time, Newcastle was one of the few remaining medical schools that required a full year's resit after failing finals. This was commented on by several participants who noted the relative lateness of the Newcastle finals, meaning a resit period was not possible.

Clare, FY1: It's also interesting speaking to people from other universities because this is actually very unique situation to Newcastle where you have to resit the whole year with only one set of finals. Everyone else I've spoke to, they all have sets of resits even in final year. Even if it's one set of resits, they have resits and they don't have to redo the whole year. I don't think anywhere else has that.

Amy, Just after failing: I don't know, but talking to other medical schools I didn't see the value of it before, but we seem to be quite a weird medical school. They haven't switched over yet but we do our finals very late and then if you don't complete it, like, if you don't pass then you have to resit the whole year but there's other med schools that we talked to who do their finals in fourth year and then if you fail you've got, like, a chance to do it again, like, later on in the year.

Many talked about not having been aware that they may have been at risk of failing; many mentioned that they have passed the in-course assessments that run throughout the final year. This led to a false sense of security meaning that failing was even more

of a surprise, which obviously intensified the emotional response that has been described earlier and led to a narrative that the medical school was somehow responsible for not warning them that they were at risk of failing. There was a strong sense that the medical school failed in not warning them that they were at risk of failing.

Natasha, Just after failing: When you speak to anyone in final year, when clinicians talk to the students they say 'everyone's going to pass, we want people to pass, no one really fails' and I think that was so drilled into us, that 'don't worry about it, you'll pass, we want you to pass, you're safe, you're fine' that when I met someone who hadn't passed that was a surprise.

The unfairness of just failing, i.e. being very close to the cut score was a common narrative. Thinking about what might have been had they answered one question differently was something several of the participants mentioned.

Clare, Just after failing: It was a very small margin and feeling that there was very little difference between me and the person who got one question more right, which was the situation, so, and just not knowing because I was […].

Emma, Just after failing: You don't need to get just a pass mark you need to be better than […] but just being so close if I'd have done something slightly different then I wouldn't be in this situation. I just, kind of, think back. If I had of just said something else or if I had of done one extra thing then I wouldn't be in this situation.

Related to the early comments about the so called 'rumour mill', one participant spoke about a rumour that thresholds had been changed to mean that a certain number of people passed. This is not how these thresholds are calculated and this is clear in the Degree Programme Handbook. Yet the rumour emerges and has power as it gives an attribution that the reason I failed was that the system was changed under me.

Paul, Just after failing: Yes, that, that's what many students feel and, which maybe, probably is not correct but that is a perception based on the fact that apparently, yes, the written paper was, according to people who resat last year, was apparently quite a lot harder this year, yet the pass mark was five per cent higher… [that a set number fail every year].

Currently, the issue of differential attainment looms large over both undergraduate and postgraduate medical education (Woolf, 2020a). Only one participant mentioned this although it would be unsurprising if many others did not think about it. This was not specifically asked about and participants may have been reluctant to raise it given my position in the medical school and as a White middle-aged man.

Haslina, FY1: I don't know, it's quite hard but I found it a little bit off. I don't know because when, because when I see the people who failed there was like sixteen, seventeen of us; two thirds of us are not White.

This participant is clearly expressing a potential attribution bias within the medical school in terms of differential attainment around ethnicity.

8.4. Second Time Round: Shifting Perspectives?

The final part of this chapter will describe the data as they pertain to the attributions approaching and after the participants sat their finals for a second time. This, for the most part, represents a different time period from the data described above and as described in previous chapters, is in a period when the emotional turmoil of failing has, for the most part, become quiescent and the participants are more accepting and 'just getting on with it,' as by this point, they were either just prior to finals or had passed and were working as foundation doctors. These data again chime with results presented in the confidence chapter. However, in this chapter, they are being considered through the lens of attribution theory.

8.4.1. The second time

Given the pressure of having to sit for a second time and knowing that failing would mean never being a doctor, the participants had to demonstrate a considerable ability to regulate their anxiety as finals approached for the second time.

Clare, FY1: It was obviously a bit nerve-racking because you knew it was going to be the be all or end all.

Haslina, FY1: You prepare so much but you also feel like things could happen how it did the first time round and yes, I guess things. There's so much going on. I think if you fail that's it, like, you know, you can't be a doctor anymore, you can't pursue it anymore.

In recognising this, one participant highlighted that this external pressure was controllable by their own perception of it, i.e. they were able to utilise a controllable internal, albeit unstable, attribution to manage this anxiety. In recognising that anxiety could affect their performance, participants were correctly attributing an internal, unstable variable and acknowledging that making it 'controllable' was necessary to succeed.

Alex, FY1: Whereas everyone else was kind of, like, well, you failed last year, this is your last chance and that made it really, really worse. You need to pass these exams this time and it was, kind of, that sort of pressure, on the pressure that you can choose to put upon yourself and someone else doing it as well.

As described in other parts of this work, by the time the participants are approaching finals a second time, they have undergone significant personal change and growth, and I postulate that is, in part, what is being seen here.

8.4.2. Seeing the light

Several participants described their examination success to having been better prepared and having extra clinical experience. In this, they are describing what is the hoped-for consequence of the medical school stipulating a year to resit, i.e. a mature learner who is better prepared to pass and to be a doctor. However, these were in the minority and, as described above, many participants were still struggling to see these benefits and were still stuck in a strong external attribution bias to the examination and the medical school.

Clare, FY1: It was better. The WRISKIE I did very well in. I got over 90% in that but that's making sure you write down the right thing but I guess I had done so much more of it. I was quite well prepared for that one the first time and did quite well in it the second time. I do think I was significantly better prepared.

Paul FY1: […] because of the high stakes and even though you're thinking I was very much fine and the probability of me not getting through again was absolutely minimal because of the extra clinical experience.

Paul, FY1: […] and everything else, but then, objectively, it was nice to see, looking at my marks that, for example, the one that I didn't get through the previous year by 1%, so I got 60% in it when I failed finals, then when I resat finals I got 78.8%, or something like that.

Interestingly, one participant highlighted that they had an unfair advantage in being able to remember the questions from the year before. In passing, they are still attributing their success to some perceived unstable external attribution rather than to their own abilities.

Alex, FY1: […] but there was no […] you couldn't see your paper because 40% of the questions are exactly the same. It's probably the reason why I did quite well because I remembered the answers from the year before and looked them up.

8.4.3. I told you it was unfair

Having passed finals and having much improved results appeared to reinforce the external attribution above that finals was unfair, i.e. the logic being if I could do so well now, it would have been the examination's fault that I failed the first time.

Clare, FY1: To be honest, I don't think the reason I failed my finals makes a tiny bit of difference to starting work because I passed all of my clinical things. I still don't feel it was fair.

In summary, the data said that some of the blame was shifted from the system to the self over the resitting year. These participants recognised that they were better prepared second time round and some were potentially unprepared first time. However, for others, even a year down the line, they still saw the assessment system as flawed and were still very much externalising blame.

8.5. Discussion

8.5.1. Summary of results

Using attribution theory as a lens through which to view the results has highlighted several areas that give depth to the data and provide a platform for the analysis.

The first area explored in the results chapter considered internal attributions and highlighted that background issues are present all too often in students who fail. Suffice to say that, as supported by the literature, and in many academic's experience, background issues are common in students who fail. What is interesting about these data is that they specifically look at this through the lens of attribution. With regard to background issues in this data set, the theme that emerges is that whilst students frequently cite these issues, there is not a strong attribution bias towards them. Students, when looking back, tended not to look to these internal aspects to attribute their failure but to more external factors which I will expand on and aim to explain in due course.

Going forward, using the metrics that are collected on students, it may become possible to predict students who are likely to fail more realistically and more accurately, and to be able to offer support.

The next part of the chapter presented the data pertaining to external attributions. There was a strong narrative within the data set, with the need to attribute and to blame something other than the self for failure a common theme. As described in the results above, this varied from a non-specific blame to frequent concerns being expressed about the fairness of the finals examination and issues about how the students were not warned that they were at risk of failing.

Regarding the perceived lack of warning that participants were at risk of failure, throughout the year, students sit a number of in-course clinical assessments that are in the same style as their clinical final examination. This provides an opportunity for feedback and are low stakes summative. It is exceptionally rare that students fail through this route. By far, the majority of students pass these assessments; however, they are given rich written feedback on their forms that could highlight potential weaknesses across assessments. However, these are often not read and certainly not read together by students as all they are often concerned with is passing. There is recent literature that highlights the predictive value of feedback comments on low stakes assessments with respect to future poor academic performance (Ginsburg *et al.*, 2015a). There is a real issue of failure to fail on behalf of examiners in this assessment, so much so, that in the new curriculum, the assessment will be entirely formative (Yepes-Rios *et al.*, 2016). This will mean that there are even fewer means to identify students who might be at risk of failing. In response to a paper on failure to fail, a published letter encourages the medical education community to move towards 'blame free' educational support for learners (Mak-van der Vossen, 2019).

Lastly, looking at the data after they have qualified, when interviewed as doctors, the participants were much more reflective, recognising the benefits of resitting much more and seeing how it had allowed them to be better prepared to be a doctor and often how it had changed them, for the better, as a person. That said, there still existed an anger and frustration at the medical school, that despite all the positives, many still felt even after starting work as a doctor.

8.5.2. Compare and contrast to literature

Here, I will seek to explore the results in relation to the existing theory that has been highlighted in the introduction and literature review chapters.

Weiner's three-dimensional model of attribution

In the introductory chapter, I introduced Weiner's three-dimensional model of attribution and revisited it at the beginning of this chapter (Weiner, 2010). It purports that individuals have an initial affective response to the potential consequences of the internal and external motives of the actor. I will seek to highlight what notions of achievement attribution have been described in the results highlighted above using the eight different potential explanations for task performance and match them to emotional reactions described in the data. I then provide a narrative explanation of what may be occurring. This is captured in Table 8.3 and Table 8.4.

	Internal		External	
	Stable	Unstable	Stable	Unstable
Controllable **Potential associated emotion**	Typical effort Frustration	Unusual high effort Frustration	Consistent teaching and assessment approach Containment	Inconsistent teaching and assessment approach Frustration / anger
Narrative in relation to results above	Common reaction seen in context of typical effort, i.e. studying 'normally' and low reward, i.e. failing.	Common reaction seen in context of high effort, i.e. studying hard and low reward, i.e. failing.	This was noted after passing finals for the second time when participants accepted that they had developed through the support of others, although not that of the medical school.	A consistent perception of a narrative of the unfairness of the exam exists as described above, potentially driving feelings of anger and frustration.

Table 8.3 Understanding achievement attributions as a function of locus, stability and controllability

	Internal		External	
	Stable	Unstable	Stable	Unstable
Uncontrollable	Ability	Mood	Lack of warning	Illness
Potential associated emotion	Acceptance / non-acceptance	Sadness	Anger	Unlucky / frustration / powerlessness
Narrative in relation to results above	Some participants talked about knowing that they were not the strongest academically, and they accepted that they should have failed; this was rare. Many cited how they knew others who had high ability but who had still failed, and this drove feelings of not being able to accept their result.	Certainly, sadness was common in participants as they adjusted to the many and varied losses through failing finals.	Not being forewarned about the possibility of failure was a common narrative. This often led to feelings of anger and being let down by the medical school.	Being affected or others being affected by illness or accident was highlighted by some participants as being an external and uncontrollable external event that left them feeling frustrated at the bad luck that they or others had had.

Table 8.4 Understanding achievement attributions as a function of locus, stability and uncontrollability

As can be seen in the above, these data link to previous chapters where the emotional reactions to failing were explored. This adds an understanding of the emotional reactions of the participants in relation to their experiences and their attributions in relation to these experiences.

Now, I will describe other notions of attribution described in the literature and their relevance to the data described above.

Task performance attribution

This attribution concept considers how people make attributions related to the cause or consequences of how well they or others did in a task (Kovenklioglu and Greenhaus, 1978). In failing finals, the participants must resit a whole year. In terms of a consequence of failing, this is a significant driver of much of the emotion and attribution that has been described over the previous chapters. The practicalities and consequences of having to sit a whole year have loomed large across this data set and it is this concept that helps us understand the driver for many of the external attributions that have been described. Participants see the consequences as being so significant, they seek to attribute to more external factors, as to attribute to internal factors could affect their self-esteem, i.e. if they 'owned' their failure themselves, given the significant consequences, the effects would be detrimental to their self-esteem and consequently, mood (Fitch, 1970).

Self-serving bias

This is a cognitive or perpetual distortion to protect or boost self-esteem, i.e. the belief that one tends to view success as due to your own qualities (self-enhancing bias) whilst failure is externalised (self-protecting bias) (Larson Jr., 1977). Initially thought to be just ego-serving, later ideas supported that there was also a cognitive component, especially for the self-enhancing aspect. Generally, people expect to succeed and will therefore place responsibility for success on themselves. If they were to try hard to succeed, they would associate success with their own effect and exaggerate the amount of control they had over the success. If they were to fail, they would tend to look for external, self-protecting biases in order to protect their self-esteem.

This data set is replete with such examples. Looking back, minor illness at the time of the examination was described above as a factor that contributed to failure. If these

participants had passed, it is unlikely that they would have given this a second thought but in looking back, they are using a self-serving bias to externalise an internal issue, i.e. their illness as the blame for their failure.

Another common issue which the participants described in their narratives was of a lack of warning of their failure. Described above is the notion of examiners failing to fail in in-course assessments and this potentially affecting the perception of how well participants were doing in their resitting year. Again, participants are using a self-serving bias to blame the medical school for not warning them. In my experience, many medical students, after they hear they have passed these assessments, do not examine the feedback in the free text comments that often highlights areas to improve. The tension between low stakes summative and purely formative models of assessment lie at the heart of this conundrum, that is, by ensuring the exam would have repercussions if failed, albeit minor repercussions, the focus becomes on passing. If it were purely formative, students would not engage to the same extent and prepare in the same way, and then ask for more summative type assessments (Dolin *et al.*, 2018). Interestedly, as has been described in the self-esteem chapter, when the participants do well in these same assessments in their resitting year, they see this very much down to their improvement rather than the nature of the assessment.

It is worth considering the relationship of the participants' attribution of current failure and their perception / blame of the subsequent process and lack of warning. One of the criticisms of attribution theory is that feedback can influence how an individual perceives the cause of an event (Roese and Vohs, 2012). In this data set, participants' experience of the feedback they received about their failure and during their first final year could have influenced how they looked back at other issues to do with failure, particularly meaning that they focus their negative attributions on the medical school due their negative experience and lack of feedback that the medical school provided.

Actor/observer difference

People tend to attribute other people's behaviours to their dispositional factors whilst attributing their own actions to situational factors. For example, Sarah failed because she lacks confidence whereas I failed because the exam was particularly hard that year (Watson, 1982). Interestingly. almost the reverse of this was found in the data above. Where others failed, participants still looked to externalise the blame, for

example, John failed finals despite being really bright and therefore it must be something wrong with the exam rather than he must have had a bad day or he did not perform on the day. It could be that the depth of feeling against the medical school is playing a part in this. One of the issues the medical school has been wrestling with in recent years is the acknowledgement that with increasing numbers, a disconnect has become more apparent between the students and the medical school. Also, blaming the institution rather than any particular individual was common in the narratives explored. Potentially, it sat better with participants to blame an institution rather than any individual which makes sense since delivery of medicine is a group enterprise but also makes sense in the context of the disconnect of students with the institution.

No idea

Of note, is that there were no participants who had 'no idea' why they failed; there was always a sense of blame on something from all the participants. Clearly, after such a big event in anyone's life, it is normal to search for reasons and the meaning behind it and it would seem from the data that as participants moved through their experience of failing, there was a shift of the attribution from a strong external attribution bias to a more balanced stance where blame was still attributed but this was tempered with seeing the positive (Burger, 1991).

Some participants 'took it on the chin' and accepted that they were not good enough or prepared to pass. Given the relationship between self-esteem and attribution, i.e. the need to blame other factors to preserve self-esteem, it would be interesting to consider if these participants potentially had more innate self-esteem than others (Major *et al.*, 2003).

8.5.3. Limitations

By the study's very nature, participants are described and assigned attributions retrospectively. They are viewing things that have happened some time ago in this data set rather than at the time. This is one of the main criticisms of attribution theory, with many arguing that it is best at considering past events rather than understanding the formation of future goals (Roese and Vohs, 2012).

One of the other criticisms of attribution theory is that it is reductionist and views people as being rational, logical and systematic in their thinking (Semin, 1980). It is clear from

this data that emotion plays a significant role in the participants' experiences of failing. However, in using Weiner's three causal dimensions, it has been possible to use this theory to understand the emotions and associated attributions of the participants (Weiner, 1985).

In considering alternative theory to contrast the cognitive model described above, in the psychodynamic literature one well-described phenomenon is that of blame or defensive attribution. It is described as a neurotic defence in which blame is attributed in one way as a means to conserve one's own idealised image (Kline, 1993). Whilst I am aware I am mixing cognitive and psychodynamic models in this description of what may be occurring, this model does fit with the findings of the results with a weak negative blame attribution to the self and a strong negative blame attribution to other factors, for example, the examination and the medical school.

Finally, regarding the issue of differential attainment, there is a growing quantitative literature in this area but there is little about the lived experience of minority ethnic groups (Woolf *et al.*, 2011). There was potentially a missed opportunity in this work to explore that domain but hopefully, there is potential for future work in capturing the experience of such groups.

8.6. Chapter Summary

In this final results chapter, we see the data and the theories that have underpinned the data connecting. Understanding and exploring the attributions made by the participants provides an insight into the emotional journey they described as well linking to their self-esteem. In the discussion chapter that follows, this drawing together of data and theory will be expanded on in order to articulate a model so as to understand the experience of failing and how particular strategies can be used to support students who find themselves in this situation.

Chapter 9. Discussion: Growth Through Trauma? What Does the Experience of Failing Tell Us?

9.1. Chapter Overview

All health programmes are significantly regulated with university scrutiny, as well as that from external regulators. Courses like medicine reach a crescendo in final year, when traditionally, a high stakes assessment takes place that candidates have to pass in order to graduate and to get provisional professional registration. Failing this examination takes on even more importance when the institution requires candidates to resit the whole year, as this clearly has significant practical and financial implications.

Research evidence around failing examinations has centred on who fails, highlighting some common characteristics of those who fail medicine degrees (Fergusson *et al.*, 2002). More recently, the focus has shifted within the literature to looking at how to remediate those who fail and to try and spot those who are at risk of failing.

There is very little medical education research which has specifically looked at how students experience failing. Work, to date, that most closely resembles this study has pointed to the 'emotional trauma' of failing, the complex personal and academic issues involved, and negativity towards the medical school (Patel, 2011; Patel *et al.*, 2015b). This work has picked up and provided new knowledge and more depth to these areas.

This thesis looks at the experience of medical students who failed finals in Newcastle University where, at the time of the research beginning, a resit year was mandatory. Many institutions can allow a resit within the same academic year. With many students unhappy that Newcastle did not afford them this opportunity, in their most recent curriculum review, Newcastle changed their assessment and timings, such that a resit within the same academic year would be possible from the year 2022-23. There is little research evidence that looks specifically at the length of remediation periods and this work considered this from the perspective of the experience of the resit year.

This work sought to examine students' experience of failing with the need to resit a whole year central to that experience. It aimed to describe a theory of how failure was experienced in order to drive improvements in how students may be supported in that event. Whilst 'failure' has negative connotations, these data also identified a number

of positive effects, and some of these positives only arise because a whole year has been taken prior to the resit examination. This work therefore illuminates some of the implications of the decision to change the length of the remediation period and what might be gained and lost in light of that.

In the next section, the principal findings of the work will be articulated and integrated. How this work complements and challenges the current literature will be highlighted as well as how the work sits within the current context of remediation. After this, the strengths and limitations of the work are highlighted.

Thereafter, the wider implications of the findings will be discussed, including ideas and suggestions for practice change that could improve the experience of failing for medical students.

Finally, the main conclusions of the work are described.

9.2. Principal Findings and Fit with the Literature

9.2.1. Early findings, i.e. exploration of current literature

As highlighted above and in the literature review, there have been few studies looking at the experience of failing in medical students. Furthermore, there is no literature that examines the experience of failing with a longitudinal approach. A longitudinal approach allows change over time to be explored. This work has gone some way to filling that gap.

There has been a developing literature on remediation in recent years which has highlighted the need for a broad systems approach, experienced staff to be involved in remediation and the need to identify those students with background issues who are often at higher risk of failing earlier (Winston *et al.*, 2010b; Maher *et al.*, 2013; Adkoli and Parija, 2019). This work will consider these issues later in the chapter when describing potential interventions.

Finally, the three theoretical lenses are described through which to view the data. These have been previously described and are summarised in Table 9.1 below.

Theoretical lenses	Brief description and relevance
Self-esteem	Self-esteem is a disposition that a person has which represents their judgments of their own worthiness (Olson, Breckler and Wiggins, 2008). The experience of failing and its effect on self-esteem were explored in this work since confidence is part of self-esteem and refers to one's own confidence regarding skills and abilities.
Identity	Social identity considers how individuals behave in relation to status and group membership. Professional identity is the notion that individuals have multiple identities, of which one may be that of being a professional. Social identity and professional identity are used to understand the experience of failing through identity literature. This allowed exploration of the participants' sense of self and their relationship with others.
Attribution theory	Attribution theory refers to the systemic errors humans make when attributing the reasons behind their or other people's behaviour and sits within the field of social psychology. Using attribution theory allowed an understanding of some of the process of 'blame' that was apparent from the data.

Table 9.1 Summary of theoretical lenses used in the thesis

This chapter will look to integrate these concepts with the results and consider how they inform the interventions that are described in this work.

9.2.2. Main findings from modified grounded theory study

The main findings are summarised in Table 9.2 below and then expanded upon in the subsequent text.

Main findings
The academic adjustment disorder is a novel concept that captures the emotional journey and experience of failing.
The thesis highlights the positives experienced in resitting, particularly resitting a whole year, and describes a resitter identity. This sits as a challenge to current medical education practices.
It highlights the need for bespoke, co-created support around failure sitting in the context of a systemic approach to failing within an institution.
The participants almost entirely lay the blame for their failure on external factors. This has significant implications for those who support students who fail.

Table 9.2 Main findings from the thesis

The model of the experience of failing derived from data, using a modified grounded theory approach, is shown in Figure 9-1. The different areas of this are also further explained and contextualised in the text below. The central and original finding of the thesis is the concept of the academic adjustment disorder. This represents a novel framework that helps understand the experience of failing in this context. This figure tries to capture this in diagrammatic form.

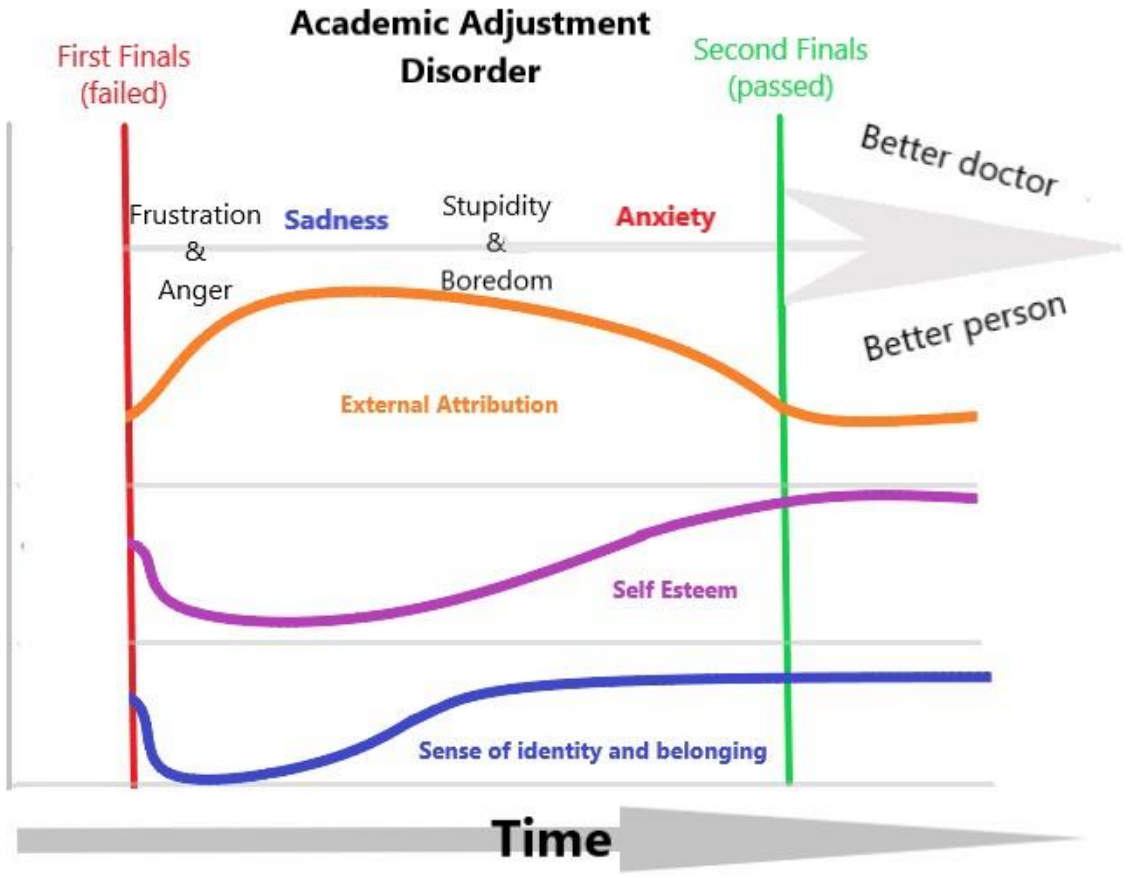

Figure 9-1 A proposed model of the experience of failing MBBS finals examination

In describing this model, a number of headings are used that seek to capture the essence of the model. These follow the longitudinal course of the experience and are defined in Table 9.3.

Component	Descriptor
The starting point	This considers the personal factors that participants described that may have shaped their experience of failing.
The fall	This considers their experiences in the period in the aftermath of failing.
Rebuilding	This explores the period after the fall as the participants come to terms with failing.
Second time round	This component looks at the participants' experiences of the period as they approached finals for the second time.
A different doctor / a better person?	This part looks to capture how participants reflect on how failing has shaped them after passing and starting work as a doctor.

Table 9.3 Descriptors of the components of the model of the academic adjustment disorder

The starting point

This work did not look at any parameters of the participants that failed from before they failed. To examine student records and to interrogate previous performance was outside the scope of this work, given its focus on how failing was experienced. That said, the participants all had had individual journeys that took them up to the point where they failed and in interviewing them, a number of times, aspects of their 'premorbid' life were inevitably discussed. Some of the narratives that were identified around this are described below.

One of the narratives that emerged from the interviews was that this group of students appeared to be lacking in confidence beforehand. A number described how they lacked confidence in their first final year and how that had affected their learning, i.e. not putting themselves forward in teaching situations.

Another narrative that emerged from the study was participants often describing themselves as 'middle to bottom of the pack' academically. There were no participants who described themselves as academic high achievers and therefore failing was not totally out of the blue, given their past performance. However, many did describe failing as feeling like a massive shock, often sharing a sense of frustration and anger at the

medical school that there had been no warning shot, or sense that they were at risk of failing. A consideration of the concept of 'failure to fail' and the use of narrative analysis of feedback to aid detection of weaker students has been raised in previous chapters.

Given that the participants expressed a narrative of lacking in confidence and being academically average or weak before failing, it could be supposed that they represent a group of individuals who are vulnerable to failing. All examiners will tell you that in clinical examinations, a portrayal of confidence is a key element of a successful candidate (O'Donoghue *et al.*, 2018). However, I would suggest that many students approach their finals examination in a similar state of feeling that they lack confidence but pass. Further research to explore how a combination of average academic performance and low self-esteem or confidence could be used is worth exploring. Confidence and academic performance lend themselves to more formal approaches to quantifying them. This could lead to being able to identify students who may be at a higher risk of failing and to work with them in order to improve their confidence and academic performance, therefore reducing the chances of failure.

The final common thread that emerged from the data was that the participants who had experienced failure were carrying significant 'baggage' with them. By this, I mean many described stressful personal issues and/or health issues that were in the background that they carried with them into sitting their final examination. Whilst there was not a strong theme of participants seeking to blame these issues for their failure, they do highlight them clearly in the narratives as colouring their experience of sitting their finals examination. Given the strong external attribution bias towards the examination and the medical school, it is interesting that participants did not seek to place blame on these factors but more assigned their concerns to how the medical school advised or supported them regarding these issues.

As highlighted in the literature review, all three of the above factors have been associated previously with being at risk of failing, i.e. lacking confidence, previous academic performance, and health and personal issues (Ferguson, James and Madley, 2002; (Maher *et al.*, 2013). The current work supports this earlier body of literature, but what is unique about this work is its longitudinal approach to considering how issues change and interact over time. This will be elucidated on further in this chapter.

The Fall

This is the part of the model that occurs in the period after finding out that the participants had failed. This is the part of the diagram above immediately after finding when the most complex and intense emotions were described as well as the biggest changes in confidence, identity and attribution.

As illustrated by Paul, there was strong narrative of the complex and significant emotions that were felt by the participants in the period after failing. Feelings of shock, frustration and anger were common to all the participants.

Paul, Just after failing: Obviously, the first reaction was just shock and just being really upset and because it's a big deal, life event, so that was the stage of it, really.

It was in this state that many of the initial meetings with the medical school took place and it is, therefore, understandable that narratives around that experience were highly emotive. Most found the meetings impersonal and not particularly helpful, especially the ones that took place immediately after failing. Participants could see the sense of the meeting but given the emotional turmoil they were in, many spoke of not being able to take in what was being said. With the meeting being seen as functional and rather impersonal, this may have contributed to the growing external attribution bias to the medical school. If medical school staff were seen as not being attuned to the emotional state, it is understandable that the meeting felt impersonal.

Why might the senior staff not be attuned to this? In some cases, it would have been obvious that the student was upset and distressed. In these cases, some staff may not have felt comfortable or trained to deal with this level of distress. There is literature supporting the link between dealing with student distress and stress in university staff (Gillespie, 2001). I am a psychiatrist, hence, trained to acknowledge and to deal with people's heightened emotional state and feelings. Despite this, I find supporting students in this situation challenging. The staff who do these meetings are normally the most senior people in the medical school, which given the gravity of the situation, would seem appropriate. However, they may not have the requisite skills to deal with students at this point.

There is another group of participants that were potentially going through these emotions but who were not 'letting them out' as they were so overwhelmed.

Natasha, Just after failing: I can also understand that some people might find that difficult because they're not ready to come to terms with that and it's too overwhelming.

Staff meeting them would have been unaware of the emotional turmoil these participants were in and therefore not aware of how their emotional state may have impacted on their engagement in the meeting. It is hoped that this work will drive awareness of the many and mixed emotions students experience after failure.

It is established that failing something would have an impact on your self-esteem (Linn and Zeppa, 1984; Brown and Dutton, 1995). This was certainly the case in these data, where many described a feeling of their confidence taking a hit. This was both a narrative in the interview data as well being given some validation through the trends noted in the quantitative data looking at measures of self-esteem between those who failed and their peers. My sense from the data was that whilst self-esteem was dented after finding out about failing, participants were more caught up in the emotions described above, i.e. anger, frustration and shock, and it was only later that as they processed these feelings and moved towards feelings of sadness and loss that the effect of failing on their self-esteem really took hold. This would be in keeping with established literature on low mood and its negative effect on self-esteem. Low mood is characterised by a negative view of the self, and self-esteem is one's opinion of one's self-worth (McKinzie *et al.*, 2006).

The data described a high external attribution bias with little acceptance of personal responsibility for failing. What explains this? Given the stakes of failure, the potential effect on self-esteem and the emotional turmoil described in this work, it may offer a protective mechanism if people who fail in these circumstances look to blame something other than themselves. Not externalising blame could lead to a more damaging loss of self-esteem and add to the emotional turmoil of failing. Having something to blame acts to defend against these feelings and maintain integrity of the self. This is well-described in the psychiatric literature where internal attributions, i.e. blaming oneself, lead to a cycle of low mood, which leads to more internal negative attributions and a downward spiral ensues (Greenberg *et al.*, 1992a). This sort of self-serving bias serves to allow the individual to maintain cognitive control of their environment and also serves to protect self-esteem (Taylor and Doria, 1981).

Feelings of anger were spoken about by many, with angry feelings often being most common during the initial period after failing, although it should be said that these feelings remained for some. In the interviews, the sense of anger was palpable at times.

Clare, Just after failing: I was, yes, angry, more at the system.

Why might this be happening? As has been described in the attribution results chapter, there was a high attribution bias towards the examination and the medical school by individuals who failed. This external attribution was at its most intense initially. There is evidence from social psychology research that anger influences attribution, with attribution postulated to control anger responses (Krieglmeyer *et al.*, 2009). Thus, it is likely that external attribution bias allowed the participants to control their anger at the situation.

During this stage, the participants were left to cope with a long summer break that was different to the one they had anticipated, were plunged into a new year-group, and had to resit a course that they had already done, whilst their own year peer-group started work as doctors. In the data, they described a loss of identity and sense of belonging. When the students found out they had failed, term was finished and many had left the university. None had any planned contact with their clinical group or year-groups. Thus, they were left to rely on support from family and friends when they found out they had failed. For the most part, it appeared that family and friends shared the same feelings as the participants, namely shock, frustration and anger. Participants frequently spoke about how important the support of family and friends had been at this time. With family and friends sharing similar reactions to the participants, the participants likely felt understood and listened to. This contrasted with the support from the medical school which was perceived as business-like and lacking empathy. This led to participants utilising those in informal roles and not seeing any purpose in those who had formal roles. This situation could be postulated to be part of the factors that led to anger and a strong attribution of blame to the medical school. Successful support and remediation strategies are seen as important parameters of a robust medical programme (Kalet *et al.*, 2017).

The data suggest that many of the participants approached their first days as a second time round final-year student, joining a new year and placement group, with some

unease and trepidation. Many spoke about feeling disconnected and anxious about integrating into a new year-group. However, the support and welcome they received from their student colleagues and from the clinical teachers was cited as a very positive experience for many of the participants. Newcastle Medical School has one of the largest year groups in the UK and this will make it hard for any individual to know all their year-group and people move between year-groups for several reasons, the most common being intercalation opportunities. Hence, there was a sense of anonymity for these students as they started to find their feet in their new year-group and started to come to terms with the emotional and practical fallout of failing. Linked with an understanding of identity formation, the concept of communities of practice provides a framework for understanding clinical learning in which it emphasizes the social nature of learning. The lack of identity and sense of belonging to a community of practice could help explain the students' initial lack of engagement with learning (Cruess *et al.*, 2018).

At this stage, it is important to emphasise that the diagram above is an aid in order to try to highlight the general trends that the data narrate. It is therefore reductive and cannot highlight each person's journey or the complex multiple emotions that were highlighted in previous chapters. Of note, participants described a mixture of emotions at once and that their feelings shifted quickly at this time. Earlier in this work, I coined the notion of an 'academic adjustment disorder'. Just like in an actual adjustment disorder, the initial period after a traumatic event is the period associated with the biggest variation in emotions and shifting of affective states (Carta *et al.*, 2009).

Rebuilding

The period after the initial shock and anger at failing is described next. As described in the last section, as participants started their resit year, initial anxieties about starting were tempered due to a sense of anonymity and the support that they received from others. For the most part, most were open and honest about the fact that they had failed and were met with the same sense of surprise, shock and frustration in these near total strangers as they had been by their own friends and family. Peer students were sympathetic, often colluding with the narrative that the exam was flawed, that they had been unlucky, and it could happen to anyone. There would seem to be a phenomenon of a shared attribution bias! These first time final-year students still sought to blame failure on external attributions and factors rather than internal ones.

Natasha, Just after failing: I mean, I think maybe things would have been different if I felt like I deserved to fail, but I feel like I didn't. I understand and I respect their decision, and I know that my performance was bad on that day but you just, kind of, attribute it to, well, when anyone does an exam they always feel like they could have done better. It's the worst exam that I've sat.

One well-described social psychology model that may help understand why fellow students and teachers blame other factors for participants failing is in-group bias. If peers and clinical educators identify with the experience of these individuals and see them as similar to them or part of the same group, they will tend to look for patterns or causes that favour the participants, and therefore themselves (Billig and Tajfel, 1973). There is a body of knowledge that links this with self-esteem, i.e. that one of the key determinants of group bias is the need to support self-esteem, and a positive identity and association with a positively evaluated group supports self-worth (Aberson *et al.*, 2000).

Also, there are links with social identity theory. According to social identity theory, there is a continuum between personal and social identity. Shifts along this continuum determine the extent to which group-related or personal characteristics influence a person's feelings and action (Trede *et al.*, 2012). This means that their individual characteristics are minimised regarding their failure as that supports the self-esteem and identity of the group, i.e. the system must be at fault if people fail, so if I were to fail, it would not be my fault.

As the participants started the year, however, they described a number of factors that helped them start to see themselves as distinct and 'special' within their new year. The resitter identity started to emerge and its link to self-esteem started to be seen (Aberson *et al.*, 2000). As they had already done the year before, they had a distinct advantage over their peers in terms of both knowledge, clinical skills and know-how. Regarding knowledge and skills, participants described feeling in a position whereby they could more actively engage in teaching than they had done the first time around, therefore get more bespoke teaching and feedback, where feedback was often positive. This led to improved confidence. Having negotiated final year once and having been through the different processes, such as applying for foundation jobs, sitting examinations, such as the prescribing skills assessment, and having experience of the assessment process within the year, they often acted as a source of information and support for their peers. This gave them a status which they have never enjoyed

before; they became special and different. Another factor that contributed to this 'special' status was the fact that once their clinical educators learnt that they were resitting, they reported often being singled out for other learning opportunities and responsibilities. In the quote below, Lewis describes the help he got from friends who had passed first time.

Lewis, FY1: These are friends and colleagues who I'm quite close to, so I found they were actually the biggest source of, source of help, just because they'd done it before. They'd done the exams as well and had passed, you know, you know, like, whatever they did, probably did work.

Educators, knowing that they had done the speciality before, seemed to be confident to open other learning opportunities for these students, perhaps because they wanted to give them a different experience from what they had done before and therefore keep them challenged and engaged. Also, this was potentially driven by the sense of support and empathy that the participants experienced from others, who recognised the traumatic nature of failing and wanted to do everything they could to support the student in passing on their second time.

With this special status in mind, the participants generally described their confidence building as their year went by. The sense of being a new year-group in which they enjoyed a special status as well as the positive affirmation they described experiencing in terms of their clinical learning experience and performance, all contributed to a gradual recovery in their self-esteem.

In this period, the initial feelings of anger, shock and frustration shifted towards sadness and loss. Loss of an opportunity to start their career, maintain a relationship with their year-group and earnings were all described.

As they started final year again, many spoke of a sense of boredom, knowing they were going to do the same again as they had done the year before. However, once they got started there were many unexpected positives of being a resitter which eased this sense of boredom. This was especially true after Christmas when the course moved into core medicine and surgery rotations and participants spoke about taking on more clinical responsibilities, not focusing on their book learning but more on the job of being a doctor. This is illustrated in Niamh's quote below.

Niamh, FY1: I had pushed myself very hard on the course and the knowledge was up to date and it wasn't that I didn't understand what was going on. For me, it was more mental preparation for finals that I needed so I found it very hard for the first six months and then, the second half of the year, when it was in hospital-based practice, I was able to take control of my own learning and put my energy into what I wanted to. [It] was a lot easier.

What Niamh describes can be understood in the context of work-based learning, which encompasses a consolidation of expertise at work with formal knowledge and learner-managed rather than academic-managed learning. This supports integrated experiential learning in the clinical workplace (Attenborough *et al.*, 2019).

From the narratives explored in this work, several areas seem to explain why this potentially occurred. Firstly, many described working incredibly hard for their first finals and failing; there was a sense of not feeling able to do that again, only to experience the same outcome. On the back of this, participants recognised the need for a different approach. Not one of the participants spoke about doing the year again in the same way as they had done it the first time. Many spoke about making their focus on doing the job of a doctor, rather than working for the examination. This is the strapline from the medical school regarding the approach to final year that students should take. It is hard to know what makes this penny drop. Doing finals the first time and failing, and then experiencing the trauma of this, appears to shift their perspective from one of a student identity to that of proto-doctor identity. The resitter identity seems central to this, with the many positives giving an impetus to engage in the programme in a different way. Going through something difficult and traumatic appears to necessitate a change in participants in order to get something positive out of it; this phenomenon is expanded upon shortly.

During this period, external attribution was still very much to the fore, although there was evidence that such attitudes were softening. As self-esteem improved and the initial emotional reaction was processed, the external attribution appeared to lessen to some degree. This would be in keeping with findings in the literature described previously, where low self-esteem is associated with a tendency to externalise attribution and vice versa, for higher self-esteem (Federoff and Harvey, 1976) .

One of the overwhelming narratives that came across in the interviews was the need 'to see the positive', that is, participants clearly described the tumultuous nature of failing and the effect it has on their self-esteem and identity. However, there was a

fundamental desire to see something positive come out of it. This phenomenon is described in a school of psychological thinking called ‘positive psychology’. Positive psychology is a movement that has grown steadily since it was defined by Martin Seligman and Mihaly Csikszentmihalyi (2014) in the late ’90s as:

> *the scientific study of positive human functioning and flourishing on multiple levels that include the biological, personal, relational, institutional, cultural, and global dimensions of life. (p. 279)*

It has been the subject of academic research as well as contributing significantly to the field of organisational behaviour and influencing popular culture(Seligman and Csikszentmihalyi, 2014). Learning through failure is a recognised and described phenomenon in positive psychology (Muro *et al.*, 2018). It postulates that failure leads to learning resilience, that failure contributes to personal growth and that it fuels determination (Seligman, 2011). The PERMA model of positive psychology describes five elements, i.e. positive emotions, engagement, relationships, meaning and accomplishments (Seligman, 2018). One can see how many of these have resonance with the resitter experience. The positive emotions that emerge from an enhanced sense of status and identity give meaning to failing and to accomplishments in the form of passing finals well and being better prepared to be a doctor.

Participants will likely have imbibed this positive psychology message from a number of sources as it is described to be part of Western culture (Pedrotti *et al.*, 2009). It appeared that they defaulted to it, given its inherent characteristic of supporting self-esteem and affirming personal identity and growth.

Second time round

The participants described their self-esteem and sense of identity as building across the year. However, as the second finals approached, the narrative changed. The stakes were clearly very high. If participants were to fail again, they would never be a doctor and so the overriding emotion described at this time was anxiety. That said, from the narratives explored, it did not appear to paralyse participants as they approached and did their finals again. Clearly, they all passed, or they would not be in the study, and many passed with significantly higher marks than their first attempt. Why were they able to ‘keep their nerve’, so to speak, and even improve their performance?

The answer seems to lie in the new sense of identity participants described, whereby they are seen as different and special and are looked to as a source of support and knowledge. Participants' identities were very different from when they approached finals the first time. Then they were reticent, middle of the pack, anonymous doctor wannabes, now they were fully engaged learners, with status, and as Amy describes below, acting as the doctors they want to be. I postulate that the confidence and positive identity they have acts to bolster their self-concept and allows them to overcome their anxiety and to perform, and in fact, to perform very well.

Amy, Just after failing: […] like, people, kind of, like, ask me, kind of, like, […] I suppose it's different to this year and, kind of, like, what do you think we should do about this and have you got any tips or advice and stuff: […] like, one of my friends she's kind of, like, using me as a teacher.

I propose a virtuous learning circle of the resitter identity, confidence and workplace learning, triggered by the academic adjustment disorder and resulting in personal change and growth and preparedness (Figure 9.2).

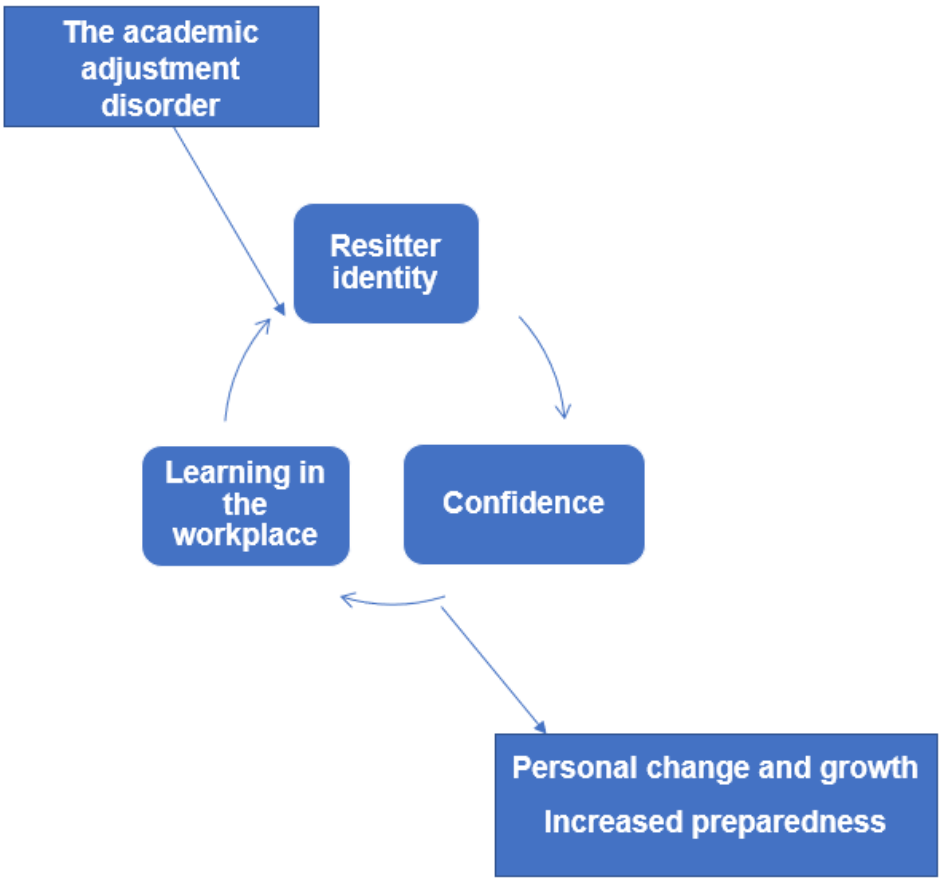

Figure 9-2 The virtuous circle of the resitter experience

The link between low self-esteem and anxiety is well-established, with low self-esteem being associated with a predisposition to anxiety. Greenberg's paper postulates that self-esteem has an anxiety buffering function. Also, the concept of self-esteem is described in terror management theory, where self-esteem is again described as a means to overcome fear (Greenberg *et al.*, 1992b; Greenberg and Arndt, 2011). In this cohort, one could postulate that one is seeing this effect, with the improved self-esteem described above compensating for and buffering the anxiety as the high stakes assessment approaches.

Regarding professional identity, what is its relationship with anxiety? In a study of undergraduates looking at the relationship between social identity and test anxiety, it found a relationship between social identity and anxiety, i.e. the greater the social identity, the less the anxiety (Zwettler *et al.*, 2018). The authors of this study postulated that supporting and developing social identity can be used as a resource to enhance mental health. Interestingly, it is likely that it was test anxiety ('exam nerves') that the participants in this thesis were experiencing, and it could be postulated that the resitter identity provided protection against this.

A longitudinal cohort study in medical students in the UK noted that anxiety was significantly positively related, and professional identity significantly negatively related to burnout (Monrouxe *et al.*, 2017). Whilst a direct relationship between anxiety and professional identity was not examined, it adds some validation to the notion that a positive and strong professional identity could help reduce anxiety. The resitter identity potentially provided this.

In Chapter 8, we noted that the final examination was often a source of blame for failing, with a strong attribution towards the examination and the edifice of the medical school. To some extent, this may have contributed to the participants' anxiety as they approached sitting this same examination again, since they had clearly narrated in their post failure narratives that they did not trust the process. However, surprisingly, this was not a feature of the narratives of experience at this time point. Whilst the sense of external attribution remained, there were no reports of not trusting the examination. Again, this may be related to their view of 'seeing the positive' and setting aside their concerns about the process, as to do otherwise would have increased anxiety and self-doubt as they approached this critical second time round final examinations.

A different doctor / a better person?

One of the strengths of this work was my ability to follow its participants across their resitting year, and for some participants, into the workplace. This required some considerable footwork, but provided rich data, as meeting participants as practising clinicians in a workplace starkly contrasted from my initial meetings with them in the period after failing finals. Here now were professionals, who were approaching one of the biggest transitions in medical training, from student to paid clinician, with confidence, optimism and an improved resilience to whatever their prospective careers might throw at them.

Having passed finals and now embarking on work, what may have contributed to this transformation? Certainly, approaching work with boosted self-esteem and having survived a difficult experience equipped them in a way that others who had passed first time did not have at their disposal. Some spoke about the fact that if they could get through the experience of failing finals, they could get through anything!

One of the possible explanations that lay behind this and that was articulated by some participants was their approach to their final year, especially the latter half. Through this resit period, they tended to focus much more on the job of the foundation doctor rather than on passing the examination which had been the focus on their first failed attempt. Consequently, they felt much more equipped to make that significant transition. As illustrated by Haslina, they all reflected how much more prepared they were for work than they would have been had they passed first time. This work supports the concept that significant transitions are important in professional identity formation and that the resitter identity appeared to smooth that transition (Loh, 2013; *Teaching Medical Professionalism: Supporting the Development of a Professional Identity*, 2016).

Haslina, FY1: In a way I feel, like, because I think last year, like, when I, when I did my first attempt, I was more focused on being an exam student, passing exams. I didn't really care about being a doctor in the end because you want to pass the exams. I now have the knowledge, I guess, about clinical stuff and your relationship with the patient and I was more focused on that and spent more time in the hospital and I guess I developed the professionalism of being a doctor.

In the initial conception of this work, one of the things I was curious about was to explore how the experience of failing affected the participants' ambitions. I considered that having failed might curtail their ambitions and they might feel that they needed to

‘settle’ for a speciality that was perceived to be less challenging. In fact, the opposite was the case, with a narrative apparent about feeling emboldened, given what they had been through, to be braver in their choice of specialty or a desire to move regions or even consider other careers outside of medicine. There was a sense from the participants that having been through the experience of failing and come out of it, they could achieve anything(Jackson *et al.*, 2007).

Another aspect of the participants’ experiences that was clear from the data was a sense that they often reflected that they were a better person, not only a better doctor. One of the areas that this was described was in a sense of feeling more resilient (Seligman, 2011). This link sits very much in the realm of positive psychology again.

Some, like Paul below, reflected on being more empathic, describing that having been through their own difficulties, they could now better connect with others’ issues and challenges (Lim and DeSteno, 2016). Clearly, both latter characteristics could make them better doctors.

Paul, Just before resitting: I don’t think this experience had directly influenced that decision, but I think, I certainly think it will make me a better GP and more empathetic and hopefully, a knowledgeable GP.

Finally, once the participants had started work, there was still a sense of an external attribution bias to the examination and the medical school although it had softened for most. Participants were more phlegmatic about failing, recognising the many benefits that the resitting experience had given them.

9.3. Strengths and Limitations of this Work

9.3.1. Strengths

One of the main strengths of the study was the methodological coherence between the theoretical stance, methodology and data analysis strategy. In designing the study, much time was invested in discussing methodological issues of paradigms with my supervisors.

A second strength was the degree to which I immersed myself in the phenomenon under exploration. By being centrally involved in the medical school, presenting ongoing work to different audiences and facilitating workshops, I became involved in the world of ‘the experience of failure’ for six years. Immersing totally in the area under

study is a key part of undertaking a modified grounded theory study. In particular, it enabled me to develop a comprehensive understanding of the phenomenon as well as helping to keep the findings grounded within the relevant contexts.

Finally, the trustworthiness and authenticity of the work will be considered. As outlined by Bryman, Becker and Sempic (2008), trustworthiness is defined by the four criteria of dependability, credibility, confirmability and transferability. This framework will be used to judge the research.

Trustworthiness

Dependability: Dependability is similar to the concept of reliability in quantitative research. Specifically, it refers to the extent to which the researcher justifies choices made during the study. I have ensured that the study is dependable by completing an audit trail of decisions relating to sampling, analysis, reading and meetings. In addition, I have completed a research diary which outlines how choices were made and problems formulated in the research process.

Transferability: Qualitative studies are often criticised for a lack of reach, due to the small numbers of research participants in comparison to quantitative studies. However, the aim of qualitative research is not to produce generalisable results, but rather to advance understanding of concepts and to provide other researchers or clinicians with greater knowledge. Qualitative studies aim for a highly transferable study, which means a study whose findings others can utilise in their own contexts. Since I took the findings to other local and national contexts by means of workshops and the findings resonated with staff attending the conferences, I would argue that the study has a large degree of transferability.

Confirmability: Confirmability parallels concepts of objectivity and refers to the extent to which it is apparent that the researcher's personal values have influenced the research. I addressed the issue of confirmability by means of reflective research diary entries. Invariably, my values influenced the data collection and analysis; however, I tried to make these explicit.

My role as interviewer: Throughout the interviews, I 'worked' with the participants to generate greater knowledge about their experience of failing. For example, I probed in depth difficult areas such as the emotional fallout from failing and how they explained

their failure. Throughout the interviews, I checked my understanding of what was being said in order to ensure that I had captured the participants' perspectives rather than forcing my own. Lastly, throughout the interviews, I aimed to focus on getting the interviewee to consider what was happening in relation to their experience of failing and what might have helped to support them.

Credibility: Credibility is similar to the concept of internal validity. Being aware that I might influence the findings with my own perspectives, I was keen to obtain feedback on the findings from others researching or working in the area. I submitted abstracts to and presented at conferences for feedback. The feedback they gave did not theoretically alter the frameworks; hence, the study has a degree of credibility.

Based on the arguments presented above I propose that the findings have a satisfactory degree of trustworthiness.

Authenticity

Authenticity is the second broad criteria used to judge a qualitative study (Lincoln and Guba, 1985). Authenticity is a concept which is more characteristic of the qualitative research domain and refers to the 'fairness' of the research. If qualitative research concerns examining a phenomenon, then ultimately it must be fair in the exploration and encompass multiple theoretical perspectives. By triangulating my findings by using interviews as well as presentations and workshops, I argue that a fair representation has been achieved.

In terms of the criteria which Charmaz (2006) proposes to evaluate a modified grounded theory study, specifically, I argue that this study is robust. Charmaz explains how a good grounded theory study is one which is useful and where the theory fits closely to the data. Furthermore, she describes how the findings should have rich conceptual density and explain the phenomenon. My findings hope to have an impact on the educational setting. I have developed a model of understanding of the experience of failing and the data supported the concepts which emerged.

A critique that Corbin and Strauss (2008) advocate is that, to keep data pure, the literature review must not proceed until after theory development has occurred. In this respect, I was not faithful to the original grounded theory methodology. However, I refrained from introducing literature to influence analysis where concepts were

developed and abstract links made. Furthermore, some grounded theorists argue that it may not be possible to avoid introducing a priori ideas and therefore do not adhere as closely to this principle.

9.3.2. Limitations

The major limitation of the study is that most of the findings related to the spoken word. All data were collected by interviews. Inherently, both these data collection methods are limited by the fact that they rely on the memory of previous accounts of what happened, and some memories may be distorted. Moreover, power differentials may limit what is actually said by the interviewee.

A second limitation was the fact that I only did a limited member check. The data from the interviews were not taken back to members in order to check their understanding.

Six out of twenty potential students expressed an interest. This represented quite a large ‘non-interest’ rate. Given the emotional turmoil that was subsequently described in the data, it is likely that some potential participants did not have the emotional capacity to want to take part. Another potential reason for low participation could also be explained by the data. I have described the anger with the medical school which was particularly acute initially. This is when this request for participants was sent. Potential participants may have not wanted to ‘help’ the medical school given how upset and angry they were, especially then. One participant made a comment about other ‘non-white’ resitters. This was the only such comment that considered issues of equality, diversity and inclusion. There could be a lack of representativeness with regard to considerations of equality, diversity and inclusion in the sample and therefore a missed narrative in this work.

This study was undertaken on a part-time basis over 6 years. This does raise questions as to the currency of the findings. Over the course of the work, Newcastle now no longer requires a year-long resit period and therefore, this was potentially the last chance to study the experience of failing in that context. However, other issues have become more salient, for example, differential attainment and the increase in academic appeals which may have added a more contemporaneous view of the studied phenomena (Hogley *et al.*, 2020; Woolf, 2020b).

Lastly, a limitation of the study could be that it is not certain if what has been developed 'works'. The limitation lies with the study design whereby no framework for evaluation of recommendations is factored into the project. Ultimately, as I was unsure of what I would find, it would not have been feasible to design an evaluation phase a priori. The study, in keeping with the grounded theory methodology, is more an exploration.

Despite these limitations, I argue that, on balance, the trustworthiness, authenticity and methodological coherence make this a rigorous study.

9.4. Further Research

Gaps in research and future research that could build on this work are described below.

This work views failure through the eyes of students and gives a voice to their experience of failure. In order to further deepen the understanding of the experience of failure, capturing staff's narrative around the experience of dealing with students' failure and providing an understanding of the academic narrative in the process of assessment and failure in medical students would be beneficial.

Clearly, this work represents one point in time in one medical school. In order to add further to its rigour and generalisability, capturing similar data across other institutions would add to the depth of understanding of the phenomenon of failing. Newcastle has a Malaysian campus running the same medical degree course. Understanding students' experience of failing in a different culture would be interesting and build on some of the data in this thesis and existing literature which suggested that there may be differences (Kim and Jeon, 2008).

The use of self-esteem indices to augment other academic performance and performance data in order to highlight at-risk students in this work gives weight to the use of already validated self-esteem scales being used as part of the metrics that may be used to identify at-risk students. Already, medical programmes are using data stored on their systems to identify at-risk students (Foster and Siddle, 2020). Further work to examine the use of quick, easy to use and well-validated tools to inform algorithms as a potential predictor of at-risk students has the potential to add a further metric that could be used with emerging artificial intelligence and big data to support institutions to identify and to support students at risk of failing.

The UKMED data base captures postgraduate data across a number of parameters and allows linking of this with undergraduate metrics (Dowell *et al.*, 2018). Using this to compare the trajectories of whole year resits compared to shorter remediation periods would explore further the premise that this thesis sets out, i.e. that there are significant benefits in longer remediation periods. If this research demonstrated that those who failed and resit a year were more likely to succeed in postgraduate examinations, it would add weight to the argument to consider longer remediation periods.

Outlined in the next section are several strategies that could be used to get around the issue of improving the experience of failing students. Further work could look at formal evaluation of these ideas. This could be in the form of more quantitative work or work that looks to compare the experience of failing students from a qualitative perspective considering changes made.

As has been discussed previously in this work, the Newcastle MBBS programme is moving to a 2-month remediation period in 2022. Repeating a similar sort of work to this thesis in order to capture the experience of failing when a short remediation period is being used would be fascinating. With no prospect of having to resit a year, the experience may be very different in a positive way although this may be offset by the fact that if a student were to fail the resit, they would never be a doctor.

Whilst this work specifically looks at failing a high stakes assessment in medicine, the hope is that the principles could be applied to high stakes failure in areas beyond medicine too. Further study of the experience of high stakes, e.g. finals, in other subjects would be fascinating to see if there were similarities or differences in students' experiences of failure from different subject areas.

9.5. Implications and Recommendations for Educational Practice

When considering how this work could influence educational practice, there is a need for an integrated strategy looking at how one improves the individual experience but within the context of a broader institutional approach, as no one specific intervention will significantly affect students' experiences of failure. In order to compartmentalise this area so as to make it more digestible, I have described the recommendations in terms of what might be done before failure and what might be done after. I then go on

to describe in more detail issues pertaining to the training of staff and finally consider the issue of length of remediation period.

9.5.1. Before

In this section, I consider what could be done before failing, in order to lessen the impact of failing for students.

Changing culture regarding failure

In Chapter 5, I described the shock at failing that participants experienced. Medical students are high-achieving bright people who have often never experienced failure. Creating a narrative within institutions about the possibility of failure and how to learn from it may go some way to changing how students experience failure. Clearly, this is easier said than done, with a philosophy from primary school onwards that is driven by assessment and the fear of failure. Whilst medical schools can try and influence governmental educational policy, they have control over their own assessment philosophy and strategies, and with the use of assessment strategies like programmatic assessment, as described later, they can breed a culture of continuous improvement and the need to learn from assessment rather than to just pass it.

Developing policies and procedures in conjunction with students at institutional level would be an important step for many academic institutions. Then, within these processes, looking to work with and give students as much choice as is feasible and being collaborative in the approach would add to this sense of empowerment and go some way toward addressing some of the power imbalances that are built into current practices.

Being proactive in talking about what will happen in the event of failure could be an important step in order to make students more informed that failure is a real possibility. As has been alluded to in this work already, failing is often a taboo subject; being more explicit about it is more honest and transparent. Then, informing students of the process and support that is available to them in the event of failure will hopefully reassure them that if they do find themselves in this position, the institution is caring and responsive in its consideration of them.

Anticipating needs

One of the frustrations that participants in this study described clearly was the lack of a warning shot or any sense that they were at risk of failing. Developing systems to help identify students at risk of failing is something academic institutions have been wrestling with for years. However, with the advent of artificial intelligence and big data, the aspiration of developing sophisticated systems to highlight students who are more at risk has never been closer.

Big data refer to the increasing number and type of metrics that can be used to inform artificial intelligence algorithms in trying to identify students who are more at risk of failing. From this work, a couple of metrics that could be considered would be self-esteem data, identifying students with complex personal or health issues and finally, using identity questionnaires to help inform such algorithms. Clearly, this work is not designed to formally assess these parameters but the quantitative and qualitative data both support further exploration as possible useful metrics. Giving students this information early will potentially allow them the ability to identify themselves as being at risk. This may be more powerful than the institution telling them they are at risk, albeit with the appropriate support to interrupt and act on the information provided.

Earlier in this work, I referred to work that looks at detecting themes in written feedback comments that may, when drawn together, provide a means of identifying students at risk of failing (Ginsburg *et al.*, 2015b). In this thesis, students who failed finals often passed all their in-course low stakes summative clinical assessments. Having a means to quickly analyse the text of these feedback events and use it to inform likelihood of examination success are another hope of the use of big data and artificial intelligence. Interestingly, in the Newcastle new MBBS curriculum, the in-course assessments are now purely formative; you could argue that the need to support students to make the best use of the written comments has become even more important.

Programmatic assessment

Programmatic assessment is a modern assessment strategy that has very much become one of the ascendant assessment strategies in current medical education practice. The architect of programmatic assessment, Van der Vleuten, describes it as:

> *an integral approach to the design of an assessment programme with the intent to optimise its learning function, its decision-making function and its curriculum quality-assurance function. Individual methods of assessment, purposefully chosen for their alignment with the curriculum outcomes and their information value for the learner, the teacher and the organisation, are seen as individual data points. The information value of these individual data points is maximised by giving feedback to the learner. There is a decoupling of assessment moment and decision moment. Intermediate and high-stakes decisions are based on multiple data points after a meaningful aggregation of information and supported by rigorous organisational procedures to ensure their dependability.* (Schuwirth and Van der Vleuten, 2011)

Thus, high stakes decisions are made on a number of data points and the need to run a traditional high stakes finals examination is made redundant, thereby by lessening the impact and considerable distress that has been described in this work of failing such assessments (Schut *et al.*, 2021).

During the writing up of this work, the world has endured a global pandemic. One of the many consequences of this was to have to make graduation decisions in a way that had never been done before. In the first wave of the pandemic, UK medical schools were asked to graduate final-year students early in order that they could support the workforce. In the Newcastle University MBBS course, approximately 70% of the cohort were graduated early based on the data that were already gathered. The other 30% were put through further assessments at a later date. How these early graduates fair in their careers will be much studied, and some of the anecdotal reactions of the students and their teachers were interesting. Some students felt robbed of their chance to prove their competence. Many were relieved!

If these now doctors as a cohort were to go on to have successful careers measured against available metrics, it would add further credence to the programmatic assessment credence that high stakes final assessments are no longer necessary or educationally sound practice.

9.5.2. During and after

Now, I consider what strategies could be put in place after students find out they have failed. This will be described by considering who are the staff best placed to support

students at this time and then to consider what skills and training may best support them in this role.

The right people for the job

The data described an impersonal and business-like experience of meetings after failure. Consideration must be given in considering which staff are best suited to support the students and when. As has been described earlier, the most senior staff in the medical school are used for the initial meetings. These are often individuals with whom the student has no particular relationship and who are probably perceived as part of the institution that has failed the student, given the significant external attribution bias that has been described. It may be that these meetings should be conducted by someone with established skills in supporting students in difficulty, such as someone from the student support team rather than a member of the academic staff who is often not best placed to deal with the emotional fallout that has been described. Giving the student choice regarding who they wish to speak to would bring a sense of agency into this dynamic for the student, as well as providing some continuity, as the student is likely to identify with someone they already know. Then, supporting and empowering that person would be key in the success of these meetings. Buddying up the person with a senior member of the academic staff to give the necessary process knowledge or doing the meeting jointly could be suggested.

A powerful tool could be the use of students who have failed to provide support to resitting students. When conducting the interviews, participants frequently spontaneously provided a narrative around what they would want to tell students who found themselves in the same position. Near-peer support could provide a sense of support around the experience that staff would find hard to articulate as they have not experienced it. Such students would need to be carefully selected, briefed and supported. Given how traumatic failing is for some students, there would be a risk of re-traumatising them through supporting students in the same situation. This would need to be monitored and the use of supervision and support for students who were potentially providing this role would be essential.

Finally, consideration could be given to the role of a student supporter in meetings post failure. This is the norm when it comes to disciplinary type meetings when the role of a student supporter is well-described in many universities. The support could be a

friend, someone from the academic staff with whom the student has an established relationship or possibly a student with lived experience of failure. The latter could be developed and supported from the student body and be a vital source of near-peer support as well as providing a unique and hopefully positive perspective on the experience of failing.

Skills

One of the key ideas this research has developed is the notion of an academic adjustment disorder, a concept that emerged from its longitudinal approach. This is the cacophony of emotions that are experienced in the event of failure. Developing an awareness of this both within staff training and in the broader educational literature will be one of the key outcomes of this research. A recent paper reinforced this in highlighting how infrequently emotion was considered in the design of remediation approaches (Mills *et al.*, 2021).

Thus, consideration should be given to the training of the people who take these meetings regarding acknowledging emotions and understanding how the emotional state will impact on their ability to think and to recall the meeting. Developing key skills of listening and being able to contain psychologically heightened emotional states would be essential skills for individuals who find themselves conducting these meetings.

As well as developing an understanding of what the students' experiences are, it may be of benefit to provide staff a language and to develop resources in order to articulate to the students what is happening. As a student in this position, having someone explain that having a range of emotions is normal, that they will change with time and will tend to quiesce with time might be very reassuring.

Understanding where an individual is on their journey of experience of failing will allow more effective and bespoke conversations. For example, asking if they were very angry and frustrated may be helpful as these would be common feelings, and many participants described finding meetings hard to take in when they were feeling like this. Acknowledging this, and asking if they wish to continue or when might be a better time for them might make the whole experience more collaborative, effective and empowering for the student. An early discussion about the individual experience of when support is needed could lead to an agreement of when meetings could take place

and would provide the students more of a sense of control and ownership of their support.

Increased confidence, better examination performance, better preparedness to be a doctor and increased sense of resilience and a broadening of career aspirations are some of the positives described in the results of this work. Outlining the positives out of failure would be another key recommendation. The positives need to be described and articulated as part of staff training and in educational articles as well as to students in terms of a broader approach to speaking more openly about failure. However, what is clear from these data is that the timing and approach of these conversations are key. Many participants spoke of clichés being given to them, such as 'strength coming from failure' and 'learning from adversity', when they were just not in a place to hear it. Consideration should be given of when and how to 'see the positive'. This will depend upon each individual's position on their journey of experience of failing, as this will inform their receptivity to such a message. Certainly initially, it should probably be avoided, but there will be no hard and fast rules and it is inevitable that people will get it wrong but moving to a more bespoke informed collaborative approach should help improve the experience of those who find themselves having to deal with failure.

The year has been lost: long live the year!

The recent direction of travel in medical education has been to allow for a resit within the same academic year. Many medical schools have moved finals earlier in order to allow this including the institution of this study, where the first cohort of students, who will not have to resit the year, will hopefully graduate in 2022. This thesis argues that there are many benefits to a year's resit that will be lost if the current trend continues and remains. By allowing a short remediation period, institutions are signing up to getting their students to a point where they can just 'fall over the line', so to speak. They are graduating doctors who are 'good enough' but not the best that they could be, one could argue. The use of a year-long remediation period comes with its consequences, there can be no doubt, but this work highlights the many benefits that the time spent living through the experience of failing brings and the confident, adept and resilient doctors that result from it. This work will hopefully, through its dissemination, create a debate about the lost benefits from a short finals remediation period.

9.6. Study Impact

As well as generating theory, a grounded theory study must also succeed in producing useful findings (Charmaz, 2006c). Usefulness can be judged in terms of impact.

The work has already been shared within my own institution and has influenced the role out of support in the new curriculum with training of staff and consideration being given to the who and when of support meetings for students who have failed.

Initial findings have been presented at international meetings and have brought about many questions and debates. It is anticipated that the work will be shared more widely through publication in due course.

The work builds on the previous literature describing the emotional fallout of failing by Patel et al. (2015b). Its significant contribution is to broaden out the understanding of the emotional fallout into that of an academic adjustment disorder and through its longitudinal approach, allow an understanding of where this difficult experience leads.

9.7. Conclusion

Failing finals is a difficult experience for medical students through which, however, they appear to undergo significant development. The work highlights that support for those who fail examinations should be tailored to the individual, but also sit within the context of a systemic approach to failing within an institution in order to give the best opportunity to access the many positives that can come from the experience.

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Appendix A: Quantitative Question Set

This questionnaire asks questions for some basic demographic information and about your self-esteem and professional identity.

You will be asked to complete the questionnaire once.

You do not have to complete the questionnaire, which is anonymous.

You have been asked to give your student number so that this can be used to link to the outcome of the finals examination.

AGE-

GENDER- **Male** **Female**

MARITAL STATUS- **Single** **Divorced** **Married**

Instructions: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle SA. If you agree with the statement, circle A. If you disagree, circle D. If you strongly disagree, circle SD.

	Strongly Disagree (SD)	Disagree (D)	Agree (A)	Strongly Agree (SA)
On the whole, I am satisfied with myself.	SD	D	A	SA
At times, I think I am no good at all.	SD	D	A	SA
I feel that I have a number of good qualities.	SD	D	A	SA
I am able to do things as well as most other people.	SD	D	A	SA
I feel I do not have much to be proud of.	SD	D	A	SA
I certainly feel useless at times.	SD	D	A	SA
I feel that I'm a person of worth, at least on an equal plane with others.	SD	D	A	SA
I wish I could have more respect for myself.	SD	D	A	SA
All in all, I am inclined to feel that I am a failure.	SD	D	A	SA
I take a positive attitude toward myself.	SD	D	A	SA

For the questions on this page, think about the group 'doctors', in general.

	Disagree strongly	Disagree a little	Neither agree or disagree	Agree a little	Agree strongly
I have a lot in common with doctors.	1	2	3	4	5
I feel strong ties to doctors.	1	2	3	4	5
I find it difficult to form a bond with doctors.	1	2	3	4	5
I don't feel a sense of being ''connected'' with doctors.	1	2	3	4	5
I often think about the fact that I am going to be a doctor.	1	2	3	4	5
Overall, the fact that I am going to be a doctor has very little to do with how I feel about myself.	1	2	3	4	5
In general, the fact that I am going to be a doctor is an important part of my self-image.	1	2	3	4	5
The fact that I am going to be a doctor rarely enters my mind.	1	2	3	4	5
In general, I'm glad I am going to be a doctor.	1	2	3	4	5
I often regret that I am going to be a doctor.	1	2	3	4	5
I don't feel good about the fact that I am going to be a doctor.	1	2	3	4	5
Generally, I feel good when I think about myself being a doctor.	1	2	3	4	5

Appendix B: Consent Form for Participation in an Interview

Following second-time successful medical students into practice

I, the undersigned, confirm that (please tick box as appropriate):

1.	I have read and understood the information about the project, as provided in the Information Sheet	☐
2.	I have been given the opportunity to ask questions about the project and my participation.	☐
3.	I voluntarily agree to participate in the project.	☐
4.	I understand that I can withdraw at any time without giving reasons and that I will not be penalised for withdrawing, nor will I be questioned on why I have withdrawn.	☐
5.	The procedures regarding confidentiality have been clearly explained to me, e.g. use of names, pseudonyms, anonymisation of data, etc.	☐
7.	The use of the data in research, publications, sharing and archiving has been explained to me.	☐
8.	I understand that other researchers will have access to this data only if they agree to preserve the confidentiality of the data and if they agree to the terms I have specified in this form.	☐
10.	I, along with the researcher, agree to sign and date this informed consent form.	☐

Participant:

_____ _____ _____

Name of Participant Signature Date

Researcher:

_____ _____ _____

Name of Researcher Signature Date

Appendix C: Student and Foundation Doctors Question Sets

Question set: students

Explanation of background to study

Lead off

How does it feel to be starting the year again?

What did you think/feel when you saw the results?

Was it a surprise?

Why do you think you failed the final year?

How have your feelings changed over time?

Did social media play a part in the issues you faced after finding out you had failed?

How does it feel different to last year?

What was sitting the finals examination like?

How could support be improved do you think?

Can you tell me what the benefits of resitting have been?

What have been the downsides? Explore personal, psychological, financial and social aspects.

Self-esteem

How did failing finals make you feel?

How has this changed?

Has it affected your confidence and if so, how?

Has your confidence been dented by having to resit final year?

What about how good you feel about yourself? Was that affected?

How did you feel telling family / parents?

How did you feel telling medic / non-medic friends?

What effect have these feels had? E.g. in relation…?

Do you think there is a stigma in failing? If so, tell me more about that…

Identity

Do you think if you had passed you were ready to start as a FY1?

Do you think about your peers from last year starting work?

Do you socialise with them?

Do you feel closer to being a doctor?

How has resitting made you feel as a doctor?

Do you feel part of your year-group?

How do you think others see you if they know you have had to resit finals?

Explore how it has affected relationship with own year-group, family and professionally.

Will you tell people in your new final year-group?

Will they already know?

Career

How do you think you will feel about repeating the year in the future?

What do you want to do in medicine in the long term?

Has resitting had an effect on your career choice?

Do you think it might have an effect going forward?

Do you think it will affect your chances of having the career you want?

Question set: FY1s

Explanation of background to study

As with student questions, start with a broad ‘How does it feel to be starting F1?’

Lead off

What was resitting the final year like?

Tell me about the worst aspects of repeating the year.

How did that compare to the first time?

What was sitting the finals examination like?

How did you feel when you saw the fail?

What was your immediate reaction?

Why do you think you failed the final year?

What was the immediate period after finding out you failed like?

Did social media affect play any part in any issues you faced in this period?

How did you feel when you passed?

Have your thoughts on this changed over time?

Did you feel supported in the period after failing before starting the year again?

Did you feel supported in your resitting year?

What support did you use?

Did you feel people gave you the time you needed?

How could support be improved do you think?

Can you tell me what the benefits of resitting have been?

What have been the positive influences that have most benefited you?

What have been the downsides? Explore personal, psychological, financial and social aspects.

Self-esteem

How did failing finals make you feel?

Has it affected your confidence and if so, how?

What about how good you feel about yourself? Was that affected?

What effect have these feelings had? E.g. in relation to…

How are you feeling about starting as a FY1? Has your confidence been dented by having to resit final year?

Is repeating the year something you think you will tell people about?

Do you feel there is a stigma to failing?

What other things may have contributed to how you felt being a final-year student who was resitting? E.g. names on lists…

Identity

D0 you think if you had passed the first time you were ready to start as a FY1? How about now, are you feeling ready?

How has resitting affected how you feel as a doctor?

How do you think others see you if they know you have had to resit finals?

Explore how it has affected relationship with own year-group, family and professionally.

Will you tell people in your new FY1 year-group? How about other doctors or staff you work with?

How did you feel when others were talking about being a doctor?

Did your sense of belonging to your previous year-group change? If so, how?

Did you identify with others who failed in your year?

Career

What do you want to do in medicine in the long-term?

Has resitting had an effect on your career choice?

Do you think it might have an effect going forward?

Do you think it will affect your chances of having the career you want?

What would you say to someone in your position now? What advice would you give them?

Appendix D: Approval Letter from Research Ethics Committee

Dominic Paul Johnson
School of Medical Education
Newcastle University
Medical School
Framlington Place

Faculty of Medical Sciences
Newcastle University
The Medical School
Framlington Place
Newcastle upon Tyne
NE2 4HH United Kingdom

FACULTY OF MEDICAL SCIENCES: ETHICS COMMITTEE

Dear Dominic,

Title: Following second-time successful medical students into practice
Application No: 00866 2015
Start date to end date: 01-04-2015 to 31-03-2021

On behalf of the Faculty of Medical Sciences Ethics Committee, I am writing to confirm that the ethical aspects of your proposal have been considered and your study has been given ethical approval.

The approval is limited to this project: **00866/2015**. If you wish for a further approval to extend this project, please submit a re-application to the FMS Ethics Committee and this will be considered.

During the course of your research project you may find it necessary to revise your protocol. Substantial changes in methodology, or changes that impact on the interface between the researcher and the participants must be considered by the FMS Ethics Committee, prior to implementation.*

At the close of your research project, please report any adverse events that have occurred and the actions that were taken to the FMS Ethics Committee.*

Best wishes,
Yours sincerely

K. Sutherland

Kimberley Sutherland
On behalf of Faculty Ethics Committee

cc.
Professor Daniel Nettle, Chair of FMS Ethics Committee
Ms Lois Neal, Assistant Registrar (Research Strategy)

*Please refer to the latest guidance available on the internal Newcastle web-site.

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