Exploring the sources of stress and challenge facing Sixth form students.

Lewis Coates

A thesis submitted in partial fulfilment of the requirements of Sheffield Hallam University for the degree of Doctor of Philosophy

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Candidate declaration

I hereby declare that:

1. I have not been enrolled for another award of the University, or other academic or professional organisation, while undertaking my research degree.

2. None of the materials contained in the thesis has been used in any other submission for an academic award.

3. I certify that this thesis is my own work. The use of all published or other sources of material consulted have been properly and fully acknowledged.

4. The work undertaken towards the thesis has been conducted in accordance with the SHU Principles of Integrity in Research and the SHU Research Ethics Policy, and ethics approval has been granted for all research studies in the thesis.

5. The word count of this thesis is 68,791 words (excluding references, contents pages and appendices).

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Abstract

This PhD research programme aimed to explore a branch of British education known as Sixth Form (SF) and how they perceive and manage their stress and what factors may be potentially stressful for students studying at SF. Sixth Form students have been largely neglected in research (Stoten, 2014a). The last dedicated study into SF sources of stress conducted by Dobson (1980) over 45 years ago. Using the model of Selye's General Adaptation Syndrome (1951) as a basis for the general effects of stress. Furthermore, Cavanaugh *et al's* (2000) challenge-hinderance model also be used to explore how individual students perceive stress and whether SF students perceive obstacles to their learning as a stress or a challenge. Due to COVID-19 and the ensuing lockdowns, a unique opportunity arose to explore the effects of online learning on SF student's self-efficacy and ability to undertake their studies over lockdowns and the subsequent challenges that students faced upon returning to face-to-face learning.

Four studies were conducted to explore this topic area with Study 1 exploring SF student perceptions of stress via an online questionnaire perceived stress scale (Cohen, S. et al., 1983), brief COPE scale (Carver, 1997) and the academic self-efficacy scale (Chemers et al., 2001). Study 2 followed the initial study by utilising focus groups to further explore students' sources of stress and what factors may affect student stress. Study 3 was an online questionnaire that focused on the effects of COVID-19 and lockdowns on student engagement with their studies and surveyed the students on their retrospective thoughts on studying over lockdown. Finally, Study 4 used semi-structured interviews to explore the effects of lockdown and online learning on SF students and the sources of stress that students may have encountered now they have returned to school. Data was examined using a mix of statistical analysis and Thematic Analysis as proposed by Braun and Clarke (2006).

Analysis showed that there were several major stresses that students contended with over their time at SF such as transition from GCSE to A-level, perception of stresses, gender, returning to school after lockdown and fear of failure. Furthermore, students perceived stress as a multi-dimensional web that threatened to affect their academic success and viewed any stressor at this time through the lens of academic achievement and what effect it would have on their final A-level examinations. Research in this thesis also revealed that there were important mitigating factors of stress too such as a positive relationship with teachers, willingness to reach out for support and happiness with their subjects. Some students seemed view stress as a challenge to be overcome rather than a debilitating stress.

Ultimately the research in this PhD programme aims to provide a modern understanding of the sources and perceptions of stress for SF students in England. Additionally, this research will provide a basis for future research to better understand a branch of British education that has been neglected in recent times.

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"The Lord does not rescue people by sword or spear; for the battle is the Lord's, and He will give it into our hands" – 1 Samuel 17: 47

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Chapter 1: Introduction, main concepts & literature review

Introduction

Dobson (1980) explored the sources of stress for Sixth Form (SF) students using a 50-item questionnaire to investigate what SF students viewed as sources of stress in their academic career across Sixth form education. Dobsons study, to the researcher's knowledge, was the last dedicated study into the sources of Sixth Form stress. Due to the lack of research into this specific area, there is currently limited understanding of the specific sources of stress that SF students face, how it affects them and what factors may influence stress or mitigate it. Subsequently this also limits the understanding of how SF students may manage those challenges. Moreover, the events of COVID-19 and the subsequent lockdowns were a unique and unprecedented event that affected the student population of the UK. Despite this, these events provided an opportunity to explore how SF students contended with the challenges that they faced across the lockdown periods and their return to school.

This thesis used a mixed methods approach to explore SF students' sources of educational stress, how it may affect their ability to undertake their courses, how they tackle the challenges that they face, the factors that may help or hinder stress management and how these sources of stress may have changed over the 45 years since Dobsons original study.

The researcher also authored a published paper about stress in Sixth form (Coates, 2023) while undertaking the research for this thesis. This paper was used to reflect on the researchers' own sources of stress and what challenges that the researcher faced over their time at Sixth form.

Purpose and history of Sixth forms

Sixth Forms are a branch of the British education system and are populated by students past the compulsory education age (16), who willingly choose to further their education through their time at SF which is generally academically intense and aims to provide students with a mastery and knowledge of the subjects that he or she has to learn while also providing the student with academic tools to further their own education, such as independent study and research (His Majesty's Stationary

Office, 1951). SF institutions are generally attached to an existing school but can also be independent colleges that are detached from a parent school (Schofield, 2022). For this research, SF will relate to both the attached and independent institutions. For this thesis, only SF institutions will be used. Though A-levels can be undertaken in other types of colleges (e.g.: technical colleges, independent colleges) they were not used as a comparison with SF institutions in this PhD as the research was focussed on SF students undertaking their studies specifically at SF institutions.

SF institutions can trace their history back to the formation of Roman Latin schools, after this point there were many educational reforms which caused the Latin schools to expand and eventually some developed into universities, like Cambridge or Oxford universities. Others continued as local grammar schools to serve the local areas in which they were situated. Gradual educational reform from the Educational Reform act 1944 and further reforms in the 1950's and 60's set the foundations for modern SF institutions (His Majesty's Stationary Office, 1951), following this the distinctive traditions and academic culture behind the grammar schools in England and Wales were preserved while the grammar schools themselves were redeveloped to provide more opportunities to schools and students for a tailored educational experience for those students seeking education after the compulsory leaving age.

Students in England enter SF, usually as a progression from GCSE in the term following the end of GCSE examinations. SFs are split into two main years: Lower sixth (L6/year 12) and upper Sixth form (U6/year 13), at the end of the upper sixth form year, the main, formal examinations are undertaken. SFs contribute to the student populace of British universities due to their rigorous focus on academic subjects, out of the 85% of students in sustained education in the UK, 48% roughly, attend SF (both independent SF colleges and attached school SF's) (The Department of Education, 2012) with 49% of SF and college students progressing to university in 2018/19, with the remaining 51% of students being split between: employment (24%), not sustained/not in formal education, further education (6%) and unknown (4%) (Department for Education, 2019). These factors have caused SFs to be touted as the highest standard for university entry, with the students being widely seen as the elite students of Britain (Stoten, 2014a).

Ultimately the purpose of SF is to provide a focussed education in the local area in which the school is situated to provide students with the opportunity to foster independent learning skills as SF students are required to undertake large periods of independent study across their time at SF, to build individual study skills and to foster deeper engagement with their studies (Stubbs et al., 2022). In turn this provides the student with academic tools in preparation for prepared for university entry. Despite being a core part of the British education system, the institutions exist only in England/Wales and several commonwealth countries such as: Jamaica, parts of India and Trinidad and Tobago. Seemingly, Sixth Form in England & Wales is on the one hand; an institution where rigorous academic work is undertaken, comprised of students who contribute significantly to university entry in Britain; whilst in contrast, one which has been largely neglected in research (Stoten, 2014c) which is why this PhD thesis will aim to address some of the paucity in the research regarding SF and provide exploration into what the main sources of stress for SF students are as well as exploring how students may manage the stress that they encounter and what factors may affect this.

Structure of the thesis

This thesis will consist of seven chapters in total. **Chapter 1** is a brief explanation of the purpose and history of SF followed by a literature review which will provide a background to the explanation of stress and its effect on students in academia. Due to their being a disparity in the amount of research into SF students specifically, literature on GCSE and Undergraduate students will be explored and used as a base and comparison to speak about the potential stresses and challenges that SF students face. Due to the paucity of research into SF students in general, there is only very limited literature that the researcher can discuss and dissect for the purposes of this PhD programme, however, GCSE and university literature will be spoken about as a parallel to draw some potential similarities between those students and students in SF. The goal of this PhD programme of research is exploratory in nature and aims is to provide a contemporary basis for future research and provide a understanding of sources of stress for SF students.

Chapter 2 is the general methodology chapter and explains the aims of the research as well as the ontological and epistemological underpinnings of the research and a critique of the approaches taken as well as a summary of the ethical considerations. The design, procedure and participant base will also be explained along with the methodology of the studies involved with this programme. Ethical considerations are also highlighted, and an explanation of data protection and anonymity are given.

The focus of **chapter 3** is on the first quantitative study (Study 1) which explored the sources of stress for SF students via an online questionnaire. The aim of this initial study was to gain a broad understanding of what sources of stress SF students may encounter over their studies but also to investigate how pressures may increase throughout their time at SF and what factors may affect the perception of these challenges. A brief explanation of the schools involved is given along with some background to the school's history. Following this the methodological information about the study is explained along with the purpose of the study and research questions, design, participants, demographic data of the participant base and how students were recruited to the study. The analysis is then reported, and the main findings explained with a brief discussion of the findings in relation to the literature as the final section of this chapter.

Chapter 4 is the discussion of a qualitative focus group study (study 2), which emphasized the exploration of students' perceptions of stress from chapter 3 and placed more emphasis on how students felt about their time at SF as a whole and to explore more deeply the main factors which exacerbated or alleviated their stress throughout their studies. Furthermore, the FGs were utilised to ascertain which stresses/challenges were universal across a student's time of SF. Beginning with an introduction to the study and an explanation of the reasoning behind the study the chapter then describes the methodology of the study and how this study was conducted. The focus group interviews are then analysed using Thematic Analysis (TA), as set out by Braun and Clarke (2006), with the four main themes and related sub-themes being explored. The final sections of the chapter are a summary of the findings from the TA and a discussion of the findings in relation to the literature.

Chapter 5 includes a brief explanation of background to the schools involved and the research questions for the third study. Study 3 was a quantitative questionnaire which surveyed student

experiences while learning online during and after the COVID-19 lockdown periods. This study links to both studies in chapter 3 & 4 as an extension of the exploration into the stress/challenge that students may face across SF with a particular focus on the events of SF and the effect of online learning/lockdowns on students' ability to engage with their studies. The study aimed to explore how the events of COVID and lockdowns affected student's self-efficacy and ability to study as well as gauging levels of anxiety pre, during and post lockdowns. Furthermore, this study also investigated what stresses or challenges students may have faced across lockdowns along with investigating whether there were any gender differences in the ways that students managed their stress. The remaining parts of the chapter consists of a breakdown of the methodology of the study with an explanation of the removal criteria and the analysis of the data gathered from the online questionnaire followed by a brief discussion of the findings in relation to the literature and potential shortcomings of the study.

Chapter 6 is the fourth and final study of the thesis and is a set of qualitative interviews that focus on the effect of COVID-19 and students' perceptions of undertaking their A-levels over the lockdown period. Like chapter 4 & 5, an investigation into what helped and hindered student stress management and engagement will also be undertaken as well as a deeper exploration of how students engaged with their studies during lockdowns(s) and what challenges/sources of stress that they may have faced, however, a specific focus is placed on the effects of COVID-19/lockdowns and what sources of stress their thoughts on the effects of online learning. The chapter begins with a brief introduction followed by the methodology, how participants were recruited, explanation of the content of the interview questions, the procedure and ethical considerations. The analysis and results section follow this, using Thematic analysis as set out by Braun and Clarke (2006). The three main themes and related sub-themes are explored in this section and the thematic relationships that the themes have. Following this a summary of the findings are given along with a discussion of the findings in relation to the literature set out in Chapter 1.

Chapter 7, the final chapter, provides and integrative discussion of the results of the studies. A brief explanation of the findings of the studies will be given along with a detailed discussion of the results

in relation to one another and the existing literature set out in Chapter 1. How the findings of this PhD research correspond to the existing literature on SF and the comparison literature of GCSE and university students and how the general trends of the research in this PhD programme correspond with the trends in the literature. Finally, a summary of the findings and concluding thoughts are given as an end section to the thesis.

As this PhD programme is exploratory in nature there will be an increased focus on discussion on the limitations of the research and what could be done to improve the studies within this thesis. As there is a paucity of research around SF students, there will be greater opportunity to also discuss future research and to use the seminal research in this PhD programme as a basis for future studies into the sources of stress for SF students and how they can better manage their stress. In the concluding section of the thesis a summary of the content and findings will be given along with closing comments about the potential use and implementation of the results found in this research.

Main concepts within this PhD.

Stress and General Adaptation Syndrome (GAS)

Stress is a common factor in everyday life and a stressor(s) are generally seen as life experiences or events that disrupt the homeostatic balance between one's environmental demands (pressures) and an individual's resources (Núñez-Regueiro & Núñez-Regueiro, 2021). Hans Selye (1973), mused that "everybody knows what stress is and has felt it, but nobody really knows what stress is" (Selye, 1973, p. 692). Selye's own definition of stress is that the body responds in a non-specific way to any types of demand. The multiplicity of definitions for stress has created disagreement amongst scholars about what the true definition of stress is and has prevented a unifying definition of stress from being constructed (Hernandez-Martinez et al., 2011). Many definitions of stress have occurred over time to synthesize a common definition of stress, one such definition was formulated by Vigil (2005) who theorised that stress was in fact a stimulus, response and interaction between the individual and their environment, where a stimulus creates an alteration in an individual's homeostatic system. Though

this may be a more grounded definition of stress, it fails to account for individual differences in response to stress and assumes that any change to the homeostatic system is a stressor. There are many stimuli that cause changes to the homeostatic system that are not stressful such as exercise or breathing (Darabi, 2013; Vigil, 2005). Furthermore, despite being difficult to define stress is generally accepted as a concept in academic research as it has measurable and tangible effects on the health and wellbeing of an individual (Darabi, 2013; Reis et al., 2010).

Selye, formulated a model on how stress affects someone's body and the general stages that someone experiences over prolonged stress. Eventually this culminated into the theory of General Adaptation Syndrome (GAS) which is anchored by the notion that stress occurs when a demand of a situation or the perceived demand of a situation exceeds one's ability to cope (Selye, 1956; 1946). There are three general phases to the GAS with the Alarm phase being the initial response to a threat or perceived stressor from the body, high amounts of adrenaline and noradrenaline are released, and the body enters a "fight or flight" response mode (a breakdown can be seen below in Table 1). This prepares the body for any threat or perceived threat and senses are heightened, heart rate and blood pressure increase, and a galvanic skin response is activated. Following this initial stage, if the stressor is not dealt with the body will enter resistance mode, where lower levels of stress hormones are released in lower amounts than the alarm stage, but instead of being released in a large amount all at once, stress hormones are released consistently over time in smaller amounts. In this stage, one may feel irritable, uneasy and lack concentration as the body is still trying to handle a stressor. If this continues the body will enter the exhaustion phase where the emotional, physical and mental reserves are spent and the individual may feel fatigued, exhausted or depressed as the body has a greatly diminished ability to cope with stress. Prolonged exposure to this stage may lead to further health complications (Selye, 1936, 1951). An example of GAS that is prevalent in the real world is that of work-related stress. This is recognised as a prominent issue with stress accounting for a $300 billion cost per year to the economy of the USA and £117.9 billion per year in the UK (McDaid et al., 2022) Similarly, in Japan stress in the workplace has become such a problem that the term "Karōshi" (過労死) has been coined as a phrase to describe individuals who die from overworking or who become so stressed that they

take their own life. Karoshi is a serious issue and is estimated to be related to 745,000 deaths per year as of 2021 (Pega et al., 2021). Viewed through the lens of Selye's GAS; many workers may experience the stages of GAS with many being taken ill when they reached a prolonged period of the exhaustion stage or may pull away from society following mental collapse and become "Hikikomori" (引きこもり) or socially withdrawn, generally a reaction to extreme stress or societal pressure (Tamaki & Angles, 2013). Stress can have profound impacts on individuals as well as societies, workplaces and educational institutes. Despite it having profound effects on people and societies, stress is also temperamental in nature and the effect it has on someone differs from person to person. Factors that may affect stress in academic arenas are personality, resilience, environments, propensity for mental health conditions, existing medical conditions, sleep quality and many other factors (Carskadon, 2002; Fink, 2016; Martin & Marsh, 2009; Núñez-Regueiro & Núñez-Regueiro, 2021). Despite stress being difficult to fully define, stress is a well understood factor in everyday life and has now been described as an epidemic of the 21st century (Fink, 2016; Macaskill, 2013; Royal College of Psychiatrists, 2010).

The inability to solidly define stress could be a point of criticism for those looking to study or critique stress. This point is used as a critique of Selye's General Adaptation Syndrome by McCarty and Pacak (2000) who note that Selye's definition of stress was nebulous and allowed for great amount of contradiction in research and practice. Furthermore, McCarty and Pacak stated that if Selye's view on stress was to be believed and that the effect of stress had the same effect on everyone and was uniform in its route, then there should only be one type of stress related disorder. However, Selye also addressed this potential criticism by arguing that factors such as: genetics, environment and other such factors also play a part in the accentuation or inhibition of certain aspects of the GAS. Though this was addressed, Selye argued that if the conditioning factors were stripped away, the nonspecific effects of stress would still be uniform from person to person. Moreover, Selye's work focuses heavily on the endocrine system and adrenal cortex which has been supplanted by the notion that stress is mediated by multiple neural and neuroendocrine systems working in tandem, rather than just the adrenal system (Mason., 1972; McCarty & Pacak, 2000). In essence Seyle's biological basis for GAS

may have been challenged but despite these criticisms McCarty and Pacak give credit to GAS in its flexibility of application and tolerance for individual differences in personality, resilience to stress and other factors that may mitigate stress. Interestingly, despite being seen as a weakness the Selye's definition of stress has contributed to it being used in a plethora of disciplines and subjects from Psychology to life sciences research (McCarty, 2016a, 2016b) indicating that Selye's definition of stress has a common usage throughout many subjects, thus allowing it to be a definition that is universally accepted and understood in research, harkening back to Selye's musing that: "everybody knows what stress is and has felt it but nobody really knows what stress is either".

As the work in this thesis is foundational in nature with no concrete frameworks surrounding the effects of stress on SF, a general framework of stress was chosen to be the basis of the work in this PhD project as Selye's GAS theory (see table 1) provides a broad and general theory of the effects of stress that fits in well with the exploratory nature of this PhD research. As student mental health is becoming an increasingly prominent issue in the UK (Macaskill, 2018) it is pertinent to explore and expand the knowledge into a section of British education that has not been researched in several decades. Furthermore, the effects of COVID on the student population have been striking with students feeling isolated, depressed and anxious due to the events of lockdown and the effects of online learning on their ability to engage with their studies (Catling et al., 2022; Catty, 2020). It is anticipated by utilising the flexible and broad nature of Selye's GAS model that a better understanding of the effects of stress on SF students may be gained along with understanding how students can manage their stress. Furthermore, Selye's GAS model is flexible enough to allow room for individual perceptions of stress and personality differences that may mitigate or exacerbate stress, models such as Cavanaugh *et al's* (2000) challenge-hinderance model highlight that individual perceptions are important in the mitigation/exasperation of stress. In sum, this thesis will focus on the exploration of individual students' experiences of stress over their A-levels and try to draw out general themes and patterns from the data with Selye's GAS model being chosen due to its flexibility when dealing with individual perceptions and experiences.

Table 1: Stages of Selye's GAS (1973).

Phase	Physiological response	Effect
Alarm	Cortisol and other stress hormones sharply rise in preparation of "fight or flight" response.	Responses become sharper and senses heightened. Galvanic response and heartrate increase.
Resistance	Body attempts to recover itself following initial stress response. Stress hormones are still released in lower but constant amounts as body still perceives some sort of threat (stressor).	Concentration may be affected, tiredness, irritability, lack of concentration may occur. If the body is given no clear signal that the stressor has been dealt with (eg: end of examination period) then the body may reach the exhaustion stage.
Exhaustion	Stress response continues with increased stress hormones taking a toll on the body.	Mental, emotional, and physical reserves are spent. Body has a greatly reduced ability to cope with stress and one may feel exhausted and fatigued. Prolonged periods of this stage may lead to other health conditions such as heart issues or atherosclerotic issues.

Stress vs challenge

Generally, stress is seen as a negative phenomenon that is undesirable and damaging. There may be, however, a differentiation between the perceptions of stress; those stressors which are seen as goal relevant and manageable (challenging) may be seen as a motivating factor and a boon to wellbeing, while unmanageable and burdensome stresses (hindrances) can hamper performance (Travis et al., 2020).

Over the years, research has begun to highlight some slightly different aspects of stress and has postulated that some stressors, called "challenge-hindrance" stressors may have positive and negative consequences simultaneously (Cavanaugh et al., 2000; LePine et al., 2005; Widmer et al., 2012). This has become known as the "challenge-hindrance model" (Cavanaugh et al., 2000). It has been suggested that feelings of genuine challenge can be evokers of positive emotion (Rodell & Judge, 2009). Genuine challenges and a more positive weighting towards challenge rather than hindrance can trigger positive self-evaluations and consequently foster a building of self-esteem (Widmer et al., 2012). Akin to the Yerkes-Dodson law (1908), the challenge-hinderance model can cast stress in a positive light especially if the individual can discern some personal, positive growth outcomes from the stressor in question. In contrast there is also the potential for hindrance type stress which may also

occur where a stress is perceived to interfere with performance or goals leading to individuals feeling trapped or seeing no value in what they are doing (Horan et al., 2020). Exploration into what factors may contribute to a SF student experiencing a "hindrance" type stress or a "challenge" type stress would be important to explore to gain a more in-depth understanding of the stress management of SF students.

Academic stress & pressure

As previously discussed, stress is a response to internal or external stressors that trigger a psychological or physiological response that can disrupt the homeostatic balance between one's environmental demands (pressures) and an individual's resources (American Psychological Association, 2023; Núñez-Regueiro & Núñez-Regueiro, 2021). Academic stress is a derivative of stress which is related to the pressure and stress that is perception of stress caused by examinations and assessments. Academic stress is a concept that is an increasingly researched phenomenon in education over the past number of years in North America and Europe but, has not been as widely researched until recently in Britain (Putwain, D., 2007a). Putwain highlights this in his 2007 paper that there had only been a single reference in UK based literature to the effects of test anxiety on students (Putwain, D., 2007a; Sarnoff et al., 1959). Despite being limited in research in the UK, academic stress and test anxiety linked across academia and are understood to be considerable sources of stress for students of all ages (Banks & Smyth, 2015; Putwain, 2009). Stress, whether academic, personal or any of its derivatives can be a motivating factor to some degree (Yerkes, Robert Mearns & Dodson, 1908), but can also be highly detrimental when experienced over a prolonged period as Selye noted in his theory of General Adaptation Syndrome (Selye, 1936, 1973) and lead to psychological or physiological illness. Students in general may suffer from many sources of stress especially when it comes to academic pressure or examination stress (Brown et al., 2022; Roome & Soan, 2019) and personal changes as well as stresses related to changes in puberty (Yan et al., 2018) with academic stresses and pressures providing an exasperating effect.

SF students are also not exempt from the demands of examinations and the stresses that many occur with such pressures. Despite there being little research regarding SF since 1980, Dobson's research indicated that most SF students in the study did find that preparation for exams and difficulties in understanding academic work were two of the greatest pressures that caused significant academic stress in SF students.

Coping & resilience

Coping can be defined as an effort to diminish threat, harm and loss or to reduce associated distress (Carver & Connor-Smith, 2010). When facing threats or stresses individuals will utilise ways to reduce tension and anxiety within these situations by employing unconscious or conscious coping techniques. Carver et al (1989) explored how individuals respond and confront stressful situations in their lives and found that personality of an individual can also play a significant role in how one tackles a situation (Carver & Connor-Smith, 2010).

Alternatively, resilience can be seen as an individual doing well despite the negative circumstances around them, with resilience-stress theories proposing that resilience is when individuals encounter stressful or challenging situations that their positive assets (such as personality or dispositions) can be activated to help support them and cope with the situation, thus making them more resilient to the stress (Fletcher & Sarkar, 2013; Li & Yang, 2016; Masten, 2011). Although resilience isn't limitless in its mitigation capabilities. Literature indicates that there may be situations where the hindrances/stresses are severe or numerous enough that coping mechanisms are overwhelmed and, in the case of undergraduate students, burnout can occur or situations where the students disengage with their studies which can lead to course attrition (Skinner & Pitzer, 2012; Yorke & Longden, 2008).

Students are faced with challenges and stresses that are generally academic in nature or from the academic expectations placed upon them to achieve (Cheng., 2010; Stoten, 2012), and may engage in coping behaviours to mitigate the effects of the pressures placed upon them. Ainscough et al (2018) explored the adaptation, coping and resilience of undergraduate students and aimed to identify what hindrances undergraduate students may face along with how students who previously failed had been

resilient and persevered through their failure into improvement on the course. Findings revealed that undergraduates had a broad range of hindrances with “academic commitments” being most frequently reported indicating that an increasing academic pressures and expectations may be a cause of significant stress for undergraduate students. The study also indicated that students reported that their coping mechanisms consisted of planning more and managing their time better but ultimately literature had indicated that by the time an undergraduate reaches their first year of university, their time management and planning skills are often underdeveloped. Indicating that students had not developed sufficient skills to cope with academic pressures by the time they had reached university. Furthermore, Patalay and Fitzsimons (2021) indicate that a substantial minority of 17-year-olds in the UK are experiencing high psychological distress, many of whom study at A-levels or attend SF institutions indicates that there is a lack of understanding around whether students in SF are coping with their stress in a productive or unproductive way. Though not directly related to SF students, these findings highlight the importance of understanding how students of all ages cope with the challenges that they face and whether the coping techniques which students are employing are positive or negative coping methods and how they respond to hindrances.

Ultimately, coping and resilience are important factors not just for individuals when they face stressful, challenging or threating situations and is a way to mitigate the stressful situations that students may face across academia. It would be an important point to address regarding SF to gain a better understanding of how SF students cope with the academic challenges that they encounter, furthermore, what factors may help mitigate these stresses and make a SF student more resilient to academic pressures.

Audit culture

Audit culture can be defined as a symptom of educational reform where the institution’s implementation of mechanisms which closely monitor and scrutinise teaching quality and institutional effectiveness (Shore & Wright, 1999). Since 1994, subsequent reforms to educational policy led to new inspection regimes, expectations from learners and professionals and a move towards a more

market-based view of education and the introduction (Stoten, 2012), which makes up the foundation of what is commonly known as audit culture. Though these mechanisms aim towards improving quality for institutions it can create the routine judgement of teaching quality and performance has led to pressure being placed on teachers and students alike to adhere to a strict orthodoxy where students and teachers alike are evaluated on performance indicators such as external examination results and lesson observations (Ball, 2003; Stoten, 2014b). Subsequently this has placed increasing expectations and pressure on students who, in turn, begin to perceive education less of a mutual relationship with teachers but rather a pressure to achieve progressively higher grades by using only model answers rather than independent thought and learning about their own subjects (Cheng., 2010). Subsequently, some research suggests that audit culture has led to students not engaging with self-directed learning and deep learning into their subject caused by schools favouring a mathematical construct of achievement rather than students mastering their own subjects (Stoten, 2014a). Ultimately, this has led to public examination s and assessments becoming a measure of school and teacher performance (Putwain, 2008; Roome & Soan, 2019). in turn a requirement is now placed on students to "achieve" more and more without engaging with deeper learning and an increased onus is placed on the student to be increasingly more self-efficient in their studies.

Academic Self-efficacy

Academic self-efficacy refers to an individual's conviction that they can successfully perform academic tasks at varying levels (Bandura, 1997; Ferla et al., 2009; Schunk, 1991). While academic self-efficacy is also linked heavily with a sense of an individual's knowledge about themselves and the perception about themselves in academic situations (Ferla et al., 2009; Wigfield & Karpathian, 1991) it is also linked with motivation when engaging with those tasks along with engagement with said task (Pajares & Schunk, 2001). The concept of self-efficacy has especially been of interest to the international research community too and student self-efficacy and engagement with work has been studied in many parts of the world (Akomolafe et al., 2013; Chemers et al., 2001; Cheng., 2010).

In a meta-analysis of 59 studies of academic self-efficacy, Honicke & Broadbent (2016) aimed to investigate the strength of the relationship(s) between academic self-efficacy and academic performance, highlight what mediating and moderating factors have been investigated to explain the relationship between academic self-efficacy and academic performance in university students and to highlight what the longitudinal evidence of the meta-analysis suggests about the relationship.

Findings suggested that there was a moderate positive relationship between academic self-efficacy and academic performance, indicating that self-efficacy factor does have a positive bearing on a student's academic achievement. However, there were several factors which influenced a student's academic self-efficacy and ability to engage in their studies, these factors were: academic procrastination, effort regulation, deep processing strategies, parental involvement and goal orientations. Despite the meta-analysis finding that there is a moderate relationship between the two factors, it is not a simple relationship as there were also numerous inter and intrapersonal factors which influenced the students level of academic self-efficacy indicating that there needs to be some level of personal resilience and motivation to change and/or engage with their studies and a realisation that there may be short term discomfort or stress in order to become more academically resilient (Skinner & Pitzer, 2012; Yorke & Longden, 2008) without becoming too burdened that they become overwhelmed (Fletcher & Sarkar, 2013).

Literature also indicates that there is a potential difference between how males and females are affected by academic stress and the effect it has on their academic self-efficacy. Ye *et al* (2018) studied the relationship of academic stress on academic self-efficacy in Chinese high school students. The study gathered 695 participants from several high schools in urban China and found that there was a negative relationship between the level of academic stress that a student experienced and their academic self-efficacy. Indicating that the more stressed a student was academically, it had a negative effect on their ability to undertake their academic tasks and harms their confidence in their own ability to engage with their studies. Furthermore, Ye *et al* studied the moderating effects of gender on the relationship between academic stress and academic self-efficacy. It was demonstrated that females felt the effects of academic stress on their academic self-efficacy more than males. This also supported the

previous study which found the same relationship between gender and depression (Liu & Lu, 2012) indicating that there are several factors that adolescents contend with that can affect their mental health and academic self-efficacy. Furthermore, rapid biological and cognitive changes occur in this period of development which exacerbate the effects of academic stress (Byrne et al., 2007; Yan et al., 2018) and by extension, harms academic self-efficacy.

This interest into student engagement has also produced means of attempting to measure academic self-efficacy with the Academic self-efficacy scale (Chemers et al., 2001) being formulated to measure a student's self-efficacy and their confidence in undertaking academic tasks but also measures the self-efficacy of students and their confidence in undertaking self-study and time management (further explanation of this scale in chapter 3).

This PhD programme will also incorporate the academic self-efficacy scale in an attempt to investigate several key areas: general feelings of self-efficacy, student confidence in undertaking their academic tasks, what relationships may occur between academic self-efficacy and perceived stress and what effect COVID/lockdown/move to online learning may have had on student's self-efficacy. For the sake of this research academic self-efficacy will be split into its component parts: academic self-confidence and self-regulated learning.

Academic self-efficacy will be investigated as, to the researcher's knowledge, there has been no studies using academic self-efficacy in relation to SF students ever undertaken and would provide an important opportunity to explore and further understand SF students' self-confidence and efficacy regarding the challenges that they may face across Sixth Form.

Literature review

Academic pressure, audit culture & student mental health

Academic stress is becoming an increasing global issue with researchers in the USA in the past couple of decades declaring that there is a crisis of mental health care (Kadison & DiGeronimo, 2004; Macaskill, 2012). In Britain, mental health is a growing concern issue with the mental health

foundation (2018) finding that 74% of the general populace feeling the effects of stress at some points over the past year with 51% of adults feeling depressed. Similarly, students in Britain have been subject to the increasing prevalence of "audit culture" where examination rankings, league tables and the critical focus of increasing student achievement has become the benchmark for school and teacher performance (Putwain, 2008).

Subsequently audit culture causes significant pressures for teachers to push for higher grades from their students and for students to achieve ever increasing grades year upon year. Students in Britain contend with annual examinations from year 7 (11 years old) up until the end of compulsory education (18 years old) with mounting pressures are placed upon students regarding academic achievement and exam grades from year 9 (13-14 years old) (Roome & Soan, 2019). Students undertaking formal examinations are under a significant amount of stress (Connor, 2001; Roome & Soan, 2019) and most British students will have experienced formal examinations from year 9 until they enter university, leading to a six-year period of mounting academic, examination and audit-related pressure. It is reported that 37% of students in Britain suffer from stress related illnesses along with depression and/or anxiety by the time they reach undergraduate level (Okolicsanyi, 2022) and 13% of students experiencing debilitating stress in key stage 4 (GCSE level) (Putwain, 2009) and in turn potentially leading to the resistance and even exhaustion stages of Selye's GAS model (Selye, 1936) where mental and physical illness begin to emerge.

The rise of audit culture and increasing pressure to achieve is also having a tangible effect on the mental health of students in higher education (Royal College of Psychiatrists, 2021) with audit culture manifesting as continuous testing, causing long-term exposure and pressure to maintain academic standards. In turn this causes an increasing number of students to seek mental health support (Macaskill, 2013). Regarding SF students, the sparsity of research over the decades (Stoten, 2014a), has led to a diminished understanding of what stresses and challenges that SF students face and what other challenges these students may face when compared to Dobson's (1980) original study. The research within this PhD programme will aim to understand the sources of SF students stress from a

modern perspective and try to understand the challenges that an under-researched section of the student populace faces.

Perceived stress

A derivative of stress that has also been researched is that of perceived stress (Cohen, S. et al., 1983; Denovan et al., 2019; Reis et al., 2010). It can be assumed that "objectively" stressful events take a toll on the individual but many of these events are mitigated by personal views on the stressor, personality and perceptions of stress (Cohen, S. et al., 1983; Lazarus & Folkman, 1984). An individual may respond to events physically and mentally in different ways due to the perception of stress, similarly, there are differences in what level of perceived stress can be overwhelming for individuals and what potential negative effects can occur from this (Cohen, S. et al., 2007). An important difference between stress and perceived stress is that perceived stress is not about measuring or quantifying the frequency of stressful events of the amount of stress that someone is under, but rather, how and individual feels about events and whether they feel about the general stressfulness of their lives and their ability to handle such stress (Varghese et al., 2015). In essence, perceived stress is more of an individual response to stress which links with Seyle's GAS theory as there are individual situations where the demand of a situation or *perceived* demand of a situation may exceed the resources available to an individual to cope (Selye, 1946, 1956).

Surprisingly there had been no psychometric model made for this concept of stress up until this point, Seyle's GAS theory had allowed for the implication that individuals can perceive their own stress and thus uniquely accounts for one's perception of stress. However, the idea that stress can be uniquely perceived by individuals originates from research undertaken by Lazarus and Folkman (1984) who theorised that stress was a relationship between an individual and environment when the individual was presented with a stressor that exceeded the individuals' resources to deal with that stressor, ultimately leading to an endangering to the individual's wellbeing. In essence, the PSS (Perceived Stress Scale) measures how stressful an individual perceives a stressor or event while allowing for mitigating factors such as personality and resilience.

In terms of the definitions of stress, Seyle's comments about stress being difficult to define but experienced by everyone also holds true here where perceived stress is heavily influenced by the individual's propensity to react to what they identify as stressors. This flexibility would go some way to explaining why Selye's theory on GAS, Lazarus and Folkman's theories on stress and Cohens theories on Perceived stress have been widely used in research; due to their ability to measure a series of reactions and responses that everybody has to various stressors in their life. Moreover, individual differences are accounted for and avoid the pitfall of over defining stress to the point where it is no longer applicable to the general population. GAS draws its strength from this very concept which has allowed it to be utilised greatly in many fields of research.

Similarly to Selye's GAS model (1951), the perceived stress model (Cohen, S. et al., 1983; Lazarus & Folkman, 1984) was chosen for this current study due to the model accounting for individual differences in the perception of stress. Selye (1964, 1974) also coined the term "Eustress" which relates to stress that is more positive in nature or beneficial, much like the ideas of Yerkes and Dodson (1908) where a certain level of arousal was beneficial to performance. It is the utility of Selye's definition of stress that allows it to be applied to many disciplines and research, such as is found within this PhD programme. Though there is no strict definition of stress, utilising the ideas of eustress and stress together as well as considering individual student perceptions of will allow a more flexible exploration SF student's stress. Furthermore, this will allow room for other individual considerations such as the perception of whether an event is a challenge to be overcome or a stressful burden, much like how the challenge-hindrance model describes perceptions of stress (Cavanaugh et al., 2000).

Existing literature on stress in the Sixth form population

Though SF students are subject to the exacting standards of A-level examinations, they have been neglected in research (Stoten, 2014c). Thus far little literature exists into the sources of stress for SF students with Dobson (1980), with only a few tangentially related studies existing such as Female SF

students' experiences and academic demands and coping (Stubbs et al., 2022) and perception of A-level courses (Nash et al., 2021). There are also some niche studies into SF students such as: religious beliefs (Francis et al., 2008), pervasive effects of universities on the SF curriculum (Reid, 1972), and case studies into the curriculum structure of SF (Taylor et al., 1975). Overall, there has not been a dedicated study into the sources of stress for SF students and how they overcome these challenges. The closest to this topic would be the Stubbs (2022) who explored how students cope with the stresses that they face and what time-management strategies students utilised. Though this study may have been useful in understanding how SF students utilised time-management strategies, it was entirely focused on female participants and did not represent male SF students.

The last dedicated study into SF stress sources was Dobson (1980) who explored the sources of SF students' stress by using a self-made, self-report questionnaire of 51 items pertaining to potential areas of stress that the students may be experiencing. Distributed in the spring of 1979, the study consisted of 223 male and female arts and science SF students (146 males, 77 females) from several SF institutions from West Yorkshire to the Lake district which included both rural and industrial areas. The questionnaire was distributed to the head teachers who in turn distributed to the students in paper form. The data was analysed by using a mix of t-tests, correlational analysis and principal components analysis.

Dobson's study found that almost all students felt stress to some degree but 66% of SF students felt that examination pressures contributed significantly to their overall feelings of stress and that it caused them to feel a lot" or "extreme stress". The study also found that students did not just experience academic stress as a unidimensional construct but rather were experiencing stress in a multidimensional way with "examination pressures" being the biggest cyclical source of stress, and other pressures contributing to the overall feelings of stress. It was further found that there was a general difference in what both males and females found more stressful. Females generally reported that "little knowledge of the standards of work required by the teacher" (Dobson, 1980, p. 74) was a point of stress while males reported that "monotony of daily routine" (p74) and "making notes in own

books" (p74) seem to be a greater source of stress with examination stress being shared unanimously by both male and female students.

In sum, examination stress came in cycles and rose and fell but was ever-present, however the pressure of examinations and other issues may cause an exasperation of examination stress with most males and females both experiencing stress to some degree but differing on the specific factors that influenced/contributed to the sources of stress.

Though examination pressures were the main source of stress for the students, it was the other stresses which fed into and exacerbated examination pressures for many with "personal problems" correlating highly with the overall stress of the student. In Dobson's study, stress as a motivating/positive factor was not considered as stress, to some degree can be useful for engagement and motivation (Yerkes, Robert M. & Dodson, 1908). Subsequently, the need for further exploration into what factors may cause stress as well as inoculate/build resilience against stress or mitigate stress is needed and what factors may be seen as stressful or as a motivating factor. Though Dobson (1980) did not extensively explore why these differences may occur it was commented that the personality of the individual may affect what the student finds stressful/a source of stress and to what degree. Interestingly this supports the idea of perceived stress, three years before Cohen *et al* (1983) published the paper on perceived stress. Though Dobson indicated that personality had a bearing on the perception of stress, there has been, to the researcher's knowledge, no contemporary research into the factors which may contribute to stress in SF, nor has there been research into what may mitigate stress in SF students.

Though there is little in the way of literature pertaining to SF and stress, Daly, Chamberlin, and Spalding (2011) conducted a pilot study of four focus groups consisting of 19 participants from one independent SF college in the south of England to examine the relationship between heart rate and distress when undertaking oral exams for a language-based A-level. Heart rate monitors were used to examine potential "triggers". Results suggested that participants encountered two types of anxiety: Pre-exam anxiety (relating to revision, preparation and mock examinations) and exam day anxiety (time to complete exams, arrival and seating in the exam hall). Most students felt that test anxiety was motivational to a degree with only 3 participants saying that test anxiety caused significant

impairment. Results of this study provides support for the idea that anxiety can be a motivating factor for examinations. In future it would be pertinent to exploration into which factors may help or hinder engagement with studies and what factors may mitigate stress and/or anxiety regarding academics. This study was a pilot study and only focussed on a very small and fixed sample size which was a single SF in the South of England and would be not only difficult to extrapolate the findings to other SFs in the country. One issue that the study encountered that created a methodological dilemma was that the students A-level teachers were required by the school to observe each focus group to gain the schools continued participation. This may have harmed the student's willingness to speak openly in the focus groups and pressured them to speak in a socially desirable manner due to the presence of the teacher.

Another limitation of this study is the fact that it does not examine factors which may affect student experiences such as gender or perceptions of test anxiety. Although it is impossible for any study to incorporate every factor which may affect participant perceptions of stress, it is important to examine some factors, this criticises of the study from Daly, Chamberlin & Spalding themselves highlight the limited use of this study as a meaningful comment on SF perceptions of test anxiety.

Though this study was only an initial exploration and a pilot study it does provide support to the findings of Dobson in that examination pressures were a significant contributing factor to the overall stress of a student undertaking A-level examinations. A wider cohort of students from several SF's may be needed from the south and north of England to explore the effects of anxiety more thoroughly. Additionally, this study did not explore non-academic factors which may affect academic stress, leaving out potential major influences on student stress. Furthermore, due to being in the south of England, there may be cultural and economic factors which may or may not be at play in Chamberlin, Daly and Spalding's study that were not taken into consideration such as the North/South divide in educational quality (Jopling, 2019).

There have also been several studies looking at aspects of SF education and culture such as: religious beliefs in SF students (Francis et al., 2008), effect of weight of schoolbags on musculoskeletal systems in schoolchildren (Whittfield et al., 2001, 2005), ethos of SF institutions (Briggs, 2005),

predisposition towards learning (Hodkinson & Bloomer, 2000), test anxiety (Chamberlain et al., 2011), and mindfulness and stress reduction on academic attainment (Bennett & Dorjee, 2016). Though there has been some research into SF students themselves and the effect that ethos, thoughts on learning and mindfulness, very little research has tackled the sources of stress for SF students, the effect it has on them and how the students overcame this.

In relation to the effects of COVID-19 on SF students, there are a few papers which relate to SF students. In a report Bhopal and Myers (2020) explored the impact of predicted grades on students' mental health, to explore support systems available to A-level students and to analyse demographic factors to explore whether there were any differences in the effect of predicted grades on students. Findings suggest that students fear being known as the "COVID generation" and that it may affect employers' perception of them due to the students in COVID being given their predicted grades instead of undertaking formal examinations. Similarly, Mccarthy (2024) explored the effects of uncertainty caused by the cancelling of examinations. Results indicated that students were disappointed that examinations had been cancelled and felt as if they had been robbed of their academic goals. Although these studies are related to SF students, the studies focussed on general A-level students which would have included SF institutions as well as vocational and academic colleges that offer A-levels. Though some interesting insights into the effect of COVID and predicted grades was found, still little exists into SF students' sources of stress nor the effects of COVID on SF students specifically.

In relation to exam pressures and text anxiety, Hodkinson and Bloomer (2000), used a set of 12 qualitative one to one interview to explore the culture of the institution of one SF and how it affected student's predisposition towards learning. It was found that the at last the SF institution in the study had retained the elitism and expectations of achievement from the previous grammar school system which led some students to feel not only institutional/elite pressure but also pressures towards class and race too. This in turn places pressure onto students to achieve and to uphold/conform to the elite academic culture surrounding SF and subsequently adds to Stoten's (2014a) view that SF students are Britain's elite students and increases the burden of audit culture (Putwain, 2009). Furthermore, that

students were aware of the status of A-level qualifications and the elite status of the SF institution that they attended. According to the study these factors, placed additional pressure on them to achieve academically, indicating that not only did the expectation of academic achievement pressure the students but also the culture and standing of the institution itself. Similarly, this would support the idea from Dobson (1980) that pressure is placed on the students from several places at once and that examination pressures and expectations to achieve are ever present in SF education.

Some contemporary studies that have explored the academic demands placed on SF students (Stubbs et al., 2022) and the perceptions of students studying for A-level examinations and its effect on resilience and SF students' perceptions of their studies (Nash et al., 2021). In the study by Nash et al, the term "stressful" was the most used term when students were asked to describe their experience of SF education. Additionally, results indicated that SF students found the experience of studying A-levels to be demanding and anxiety inducing, hence the term "stressful" being used so often. Ultimately, Nash et al, commented that more needed to be done to support the resilience and mental wellbeing of SF students in this crucial part of life and highlighted the importance of a teacher's role in facilitating an environment where a student can be honest about their mental health to allow a natural building of resilience.

The results by Nash provide support to Dobson's (1980) idea of stress as a multidimensional model as the students in Nash's study felt as if the rising demands caused the previous challenges of education to be exacerbated. The study was conducted in the first four months of the COVID-19 pandemic and were negatively affected when it came to collecting responses as the students who may have otherwise answered the survey were preoccupied with the move to online learning. Though Nash argues that students reflected on their experiences of A-levels prior to the pandemic, there is no guarantee that students' responses will not have been affected by the turbulence that the COVID-19 pandemic caused and thus is limited, nor its effects on the students and the results cannot be taken as a pure reflection of only A-levels and SF education itself.

In relation to Nash's research, the doctoral thesis by Stubbs et al (2022), used sixteen interviews with female A-level students aimed to further the understanding of student thoughts on studying A-levels.

The main points that arose from this study were that students found A-levels particularly stressful when compared to GCSE examinations and were on one hand expected to achieve and found that A-level studies very challenging. Especially towards the onset of examinations and the large step up from GCSE to A-level rather than the incremental increase in academic difficulty (Hernandez-Martinez et al., 2011; Nash et al., 2021; Stubbs et al., 2022). Academic pressure did increase from year to year throughout secondary school, but students in Stubb's thesis the female pupils that were interviewed expressed the sentiments that academic pressure had increased naturally in school over each year but the transition to SF carried with it significantly higher academic pressure, expectations and workload. Additionally, students expressed that the complexity of the workload also made it difficult to manage the workload in A-levels. The increase in complexity and workload from GCSE to A-level seemed to be a shock for SF pupils, especially when it is unexpected or if they feel unprepared. In essence SF pupils did feel the pressure from the transition between GCSE and A-level, however, in Stubb's thesis, the specific sources of stress were not the focus of the research but rather mental health of the students prior to COVID and how COVID affected that and some of the support needs that the students required. This was especially true for those who did not employ stress management strategies or who were not aware of many strategies, indicating that there may be some sort of resilience factor providing mitigation to stress for students who employed these strategies vs those who did not. Many students also saw A-levels as a culmination of pressures from the culture of the school.

It is worth mentioning there are also several reflective, anecdotal studies regarding SF education. Morley (2020) who wrote of her experiences in SF with mental health difficulties. The reflective paper provided some key insights into the struggles that SF students face, namely: the pressure put on students to perform, and that students can begin to link grades with their own self-worth. Interestingly, Morley reflects that the SF institution itself reinforces this negative relationship with grades by rewarding and incentivising students that chase grades even to the point of illness, while pressuring students who do not spend all their time and energy on study. The reflections in this paper do support Dobson's (1980) findings and the findings of Hodkinson and Bloomer (2000) where students are

acutely aware of the pressure to perform and that the main source of stress for these students is examination pressure. Morley finishes by discussing on the idea that there are many pressures put on students in general and the pressure to achieve is almost tangible and is constantly reinforced by the institution itself to uphold academic success.

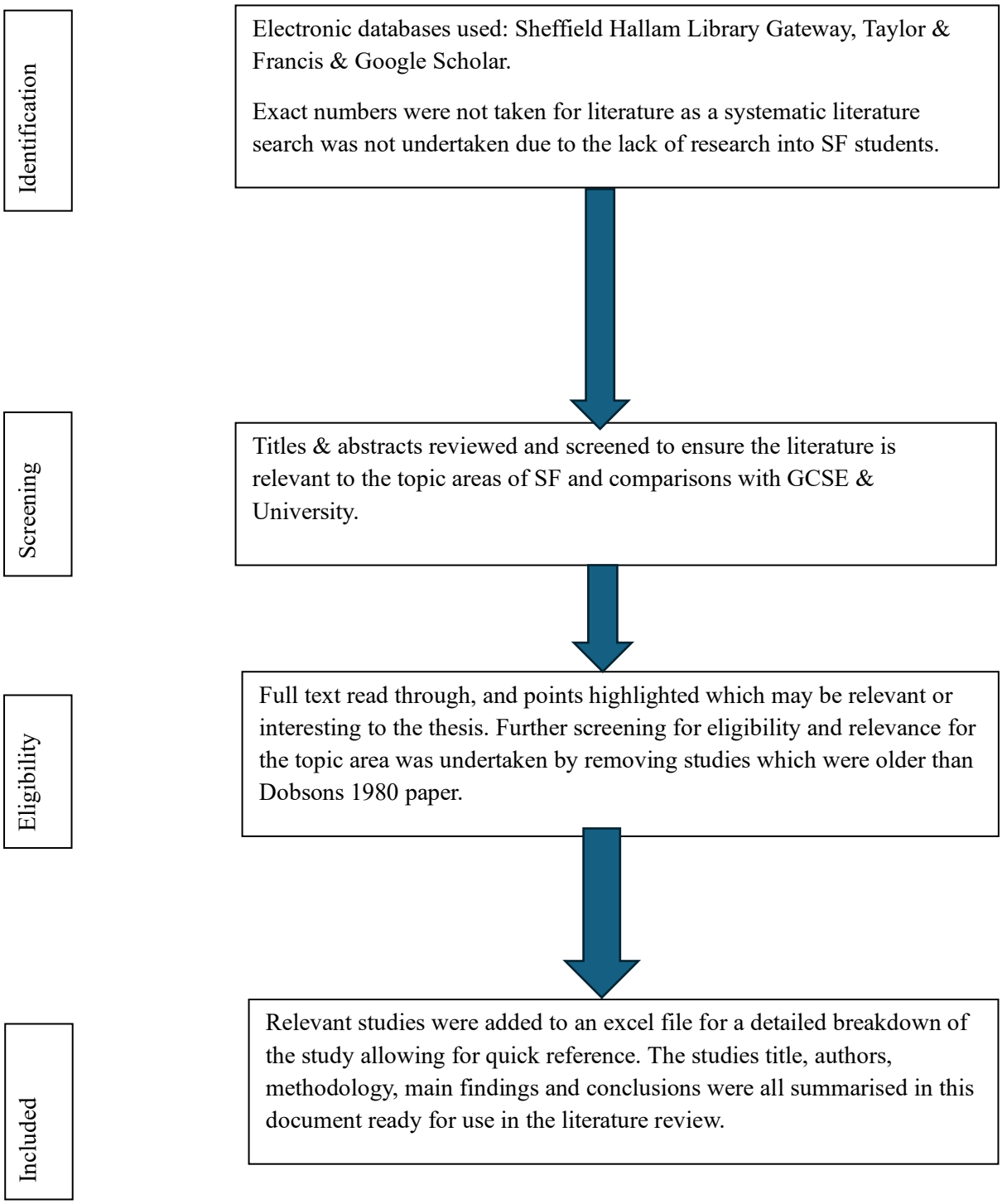
Similarly, Coates (2023) reflected on this where he speaks about his general experience of SF stress and what was expected of SF students overall. Coates reflects on how SF students are presented with a myriad of life choices and changes from social, academic, personal, and familial pressures to the expectations and lack of support felt by SF students when undertaking their studies. It is argued that students can be affected by life events or changes causing a domino effect that severely disrupts not only the student's mental health but also their ability to undertake their A-level studies. Coates argued that the pressures and life choices presented to SF students specifically creates a very precarious situation where a student is carrying a heavy burden without feeling supported by the academic institution that they are striving to achieve for. Furthermore, Coates hypothesises that the cognitive, physical, and academic changes along with life pressures such as university choice, relationships and family all exacerbate the stress.

Both Morley (2020) and Coates (2023) in their reflections also mention that SF did contribute to a strengthening of their character. Morley indicates that she benefitted from realising that linking grades to self-worth was not a worthwhile endeavour and that it is inherently unhealthy to hyper focus on academics at the expense of your own health and wellbeing. Coates reaches a similar conclusion that grades are not a measure of a student's self-worth but also that the hardship that a SF student may face may make them more resilient in the future thus in a way helping them reach the standard that is expected of them at SF and beyond.

Although the literature into SF students, stress and wellbeing is lacking, there are some points that provide a base for further exploration: How have these sources of stress changed over the years since the initial findings of Dobson (1980)? How has the multidimensionality of stress changed and are students still affected by the same sources of stress as previously found? Furthermore, addressing the question: Is SF an inherently negative experience for students or does it have the potential to catalyse

personal growth? Moreover, to explore what support SF students require and where the main stresses are originating, especially in comparison to GCSE and Undergraduate students. Literature indicates that SF students have stress put on them to academically achieve but there has not been sufficient contemporary research into what support needs they have and how they may differ from GCSE students. Despite some studies broaching the surface of the experience of SF education and student perceptions on A-level studies (Nash et al., 2021; Stubbs et al., 2022) but, there is still a lack of research exploring the main sources of stress of SF students. This programme of research aims to explore the sources of SF stress and student experiences in an exploratory and personal manner. Additionally, in the UK, compulsory education was extended until 18 years of age, which will open avenues of research to ascertain whether some students in SF want to be there compared to students who may be forced to be / rather be undertaking other activities such as work. It is envisioned that these studies will contribute to an under researched area and allow better understanding of the sources of stress for SF students as well as a deeper understanding into the perceptions of A-level studies by SF students. Most recently, the effects of COVID may have changed the sources of stress for SF students too, with the global pandemic and subsequent lockdowns causing widespread cancellations of examinations. Further exploration of the effects of COVID-19 will occur later in this thesis in chapters 3, 5 & 6.

As there is little literature to draw upon since Dobson's original study, GCSE and undergraduate student literature will be drawn on as a comparison of what stresses may be present throughout the education system and what sources of stress may be present for SF students and if there are any differences in how sources of stress are experienced in SF compared to GCSE/undergraduate degree. Due to this, a systematic literature review could not be conducted, however, a screening of the relevant literature was still undertaken for SF, GCSE and University literature. Further screening occurred through a thorough read through of the paper and highlighting of key findings and points within that may be relevant to the topic area(s). A more detailed explanation of literature screening can be found below and a breakdown of the literature summary for the literature in Appendix E


Identification
Electronic databases used: Sheffield Hallam Library Gateway, Taylor & Francis & Google Scholar.
Exact numbers were not taken for literature as a systematic literature search was not undertaken due to the lack of research into SF students.
Screening
Titles & abstracts reviewed and screened to ensure the literature is relevant to the topic areas of SF and comparisons with GCSE & University.
Eligibility
Full text read through, and points highlighted which may be relevant or interesting to the thesis. Further screening for eligibility and relevance for the topic area was undertaken by removing studies which were older than Dobsons 1980 paper.
Included
Relevant studies were added to an excel file for a detailed breakdown of the study allowing for quick reference. The studies title, authors, methodology, main findings and conclusions were all summarised in this document ready for use in the literature review.

GCSE education & literature

General certificates of secondary education (GCSE's) are an English, Welsh and Northern Irish form of secondary school finishing qualification and are aimed to provide pupils with the basic general education needed to enter the workforce or further education. GCSEs also allow pupils to choose some of their own options to tailor their education to an area of the workforce in which the pupil may want to enter. GCSE courses are split into two years: Year 10 and Year 11 (Y10 & Y11) with Y11 generally being the year in which pupils undergo their formal examinations.

In contrast to SF courses, many countries around the world have a form of secondary finishing qualifications (ages of 14-16/17) which are usually awarded at the age of 16-17, these may include: High school diplomas (USA), National diploma (France) and Sotsugyō Shōsho (卒業証書) (Japan).

Studies into GCSE students' wellbeing and stress have also been more widely researched due to GCSE students having an international counterpart/comparison, thus a generalisation factor to international students of the same age and that GCSE education is compulsory so a bigger cohort of students is available to research at just over 643,000 pupils undertaking their GCSE's (16 year olds undertaking examinations) in 2023 (OFQUAL) compared to 415,000 SF students over both years of SF in 2023 (Education skills & Funding Agency, 2024). As previously mentioned, GCSE students also undertake examinations and will suffer the effects of examination pressure much like SF students. Despite the large numbers of both GCSE student and SF students, GCSE students have been more widely researched compared to SF students, perhaps due to the unique nature in which SF as an educational period was created and having no substantial international counterparts, while GCSE and Undergraduate study has numerous international counterparts.

This may be the first time that students are given several subjects to prepare coursework material for or may be the first subjects where students may have to dedicate substantial times to revision or have

been exposed to this intensity of work (Roome & Soan, 2019). The years pertaining to GCSE education are predominantly examination based and usually the first times in a student's life where they are faced with exams that can affect their future.

GCSE students stress and exam stress

Exam stress as a construct focusses on the potential for effects on wellbeing, emotional health, health outcomes and educative consequences (Putwain, 2007). Since the early 1990's teachers and schools alike have been concerned about the curriculum changes to education in Britain with the changes from 2014 onwards being of particular concern for the mental health of A-level and GCSE students (Ofqual, 2013) as reforms around this time placed more pressure on students to excel in examinations and increased the difficulty of the curriculum content comparted to previous years. Subsequently this has coincided with an increase in the number of students requesting support and counselling along with the increased reporting of adverse effects on mental health (anxiety, depression, suicidal thoughts & self-harm) (Putwain., 2020). A driving force behind these changes is that of the teachers, students and schools all being held to increasingly high standards on examination results and teaching observations creating a strict orthodoxy where examination results become the main metric of success for students, teachers and the school (Ball, 2003; Stoten, 2014b).

Research conducted by Roome and Soan (2019) interviewed GCSE students who had just finished their formal examinations to explore what factors affected and alleviated their exam stress as well as what effects it had on their wellbeing, mental state and health. It was found that students who took on the idea of directly tackling the examinations or mastering them (mastery mindset) usually dealt with examination pressure in a better way as the mindset alleviated the exam stress somewhat while those who avoided tasks/challenges generally had a more negative mindset towards mastery of a task. Though Roome and Soan's studies focussed on GCSE it is unclear how many of these students may have transitioned to SF education as GCSE education is compulsory in the UK and all students must stay in education, while SF is not compulsory and pupils may choose apprenticeships, SF, part time work or technical courses at colleges.

In relation to mindsets towards learning and the effect of educational pressure, Katsantonis et al (2022) examined the relationship between student mindset towards academic undertakings in adolescence and found that 11-year-olds had relatively high wellbeing and self-esteem while 14-year-olds had lower scores in both, and the students had begun to adopt a negative mindset. With a general trend of lowering wellbeing and mindset over adolescence overlapping with the start of a student's engagement in GCSE programmes (Brown & Woods, 2022). These findings suggest that students' wellbeing and self-esteem is being negatively impacted by academic pressures from GCSE as well as the other physical and mental changes brought about by puberty (Katsantonis et al., 2022).

Ultimately, there are several factors which affect pupils in the GCSE age range from sleep quality to academic pressures. Students who are in this age range may react differently to each of these pressures and perceive stresses differently. The literature indicates that, much like Dobson's (1980) findings, students seem to be experiencing stress and pressure in a multidimensional way, where one or more of these pressures culminate and begin to affect students' ability to perform academically and undertake their schoolwork. Using a general understanding of GCSE student's sources of stress, it may help to provide a general understanding of some of the sources of stress that SF students may encounter. Especially, as Morley (2020) and Coates (2023) mention that the jump between GCSE and A-level is significant and reflect that SF requires a hyper-focus on academic studying over the two years of SF that they had not previously experienced in their two years of GCSE. An understanding of the sources of stress for GCSE students will provide a general understanding of how SF students may be feeling at the beginning of their A-level journey and what sources of stress students may be likely to encounter.

Undergraduate and university education

Undergraduate students are present in most, if not all, countries around the world in some capacity and provides a large part of the educational system in many countries for students who are above 18 years of age (or 17 in Scotland and Ireland). In recent years further education students in the UK have been further incentivised to attend university through the introduction of student maintenance loans.

These changes have indeed allowed more working-class people to be educated (Finnegan & Merrill, 2017), however, the influx of students also puts financial pressures on students in the form of debts, many students are unable to attend university without the use of loans and subsequent financial burden (Macaskill, 2018), or alternatively work part time across their studies, which adds further burden to a student. Reforms to this system in 2016 removed the part-grant part-loan system and replaced it with a full loan system and since then has caused working class or underprivileged students to be subject to increased financial worries (Macaskill, 2018). The financial burden that students take can limit or constrain graduates in the long term by stifling decisions about housing, employment, family formation and savings amongst other things (De Gayardon et al., 2018, 2019). Furthermore, the continual increase of student fees from £1000 in 1998 to £3000 in 2004, to £9000 in 2012 in England has caused English students to be burdened with the highest debt in Anglophone countries (Kirby, 2016), with Scottish students not paying tuition fees and Norther Irish students paying only £5000. In 2014 the average estimated time to payback tuition fees for English graduates was 27 years compared to 8.5 years in Australia (Hillman, 2014). Ultimately, student course fees and university entry create a double-edged sword for UK students seeking to enter the higher education system. On one hand lifelong benefits such as increased access to higher wages and social engagement (Brennan et al., 2013). On the other hand, financial pressures are increased, and long-term life choices can be limited by financial burdens (De Gayardon et al., 2018, 2019).

Undergraduate students' relationship with academic stress

Among British undergraduate students, stress and the need for stress support has been rising (Royal College of Psychiatrists, 2010) with university examinations, assessments and the increase in auditing of students being a source of stress for many (Macaskill, 2018; Roome & Soan, 2019). Additionally, many students perceive the pressures of undergraduate degrees and job prospects to be a tangible source of stress for them (Posselt & Lipson, 2016).

Research by Denovan and Macaskill (2013) found that students who have transitioned to university were suffering from a multitude of stresses that were not necessarily academic in nature but

contributed to the academic stress of university. In an Interpretive phenomenological analysis of 10 students, it was found that three main themes arose around student stress: the changes experienced with the transition to university, living away from home, expectations of university, support networks and their usage and difficulties (includes academic difficulties). Once again this supports the findings of both Dobson (1980) and Hodkinson & Bloomer (2000) that students experience stress in a multidimensional manner and that students are acutely aware of what is expected of them in academic institutions and despite there being a myriad of personal and academic stresses that affects students, academic commitments were the most frequently reported among the stresses faced (Ainscough et al., 2018). However, although semi-structured interviews were used in this should be taken with some caution as it is only a small sample of the wider undergraduate student population in 2013/14 of 2.3 million students (Higher Education Statistics Agency, 2015), furthermore the specific factors such as gender differences not researched in Donovan and Macaskill's study which, may have limited the scope of the research and limited the utility of the findings as the specific factors that contributed to stress in males and females as some research suggests that female university students are likely to experience higher levels of stress than males (Graves et al., 2021).

Jones (2011) researched whether first year university students were prepared in their writing and numeracy skills for university. 80 undergraduate students from the university of East Anglia were given diagnostic performance tests in writing and numeracy to gauge proficiency in these areas. In the literacy tests, students were given blank sheets of paper and were asked to write but not told how long for. After 10 minutes they were asked to stop writing and were assessed on grammar, punctuation and fluidity of writing. Diagnostic maths tests were already given to the bioscience students at the university and were used to feed into a related mathematics course in the study. Results indicated that to some extent, students were prepared for university but there were several students who did not have mastery of basic literacy and numeracy skills required for university. It was also found by Jones (2011) that the structure of A-level courses did not account for these skills but were solely focussed on achieving grades rather than cultivating skills. In turn this caused stress for university students as some needed to work harder to achieve basic skills to achieve at university further adding to the idea

that SF education may foster habits of strict academic achievement above personal growth or wellbeing. Though students were getting minimum grades in their previous GCSE's and other courses, there seemed to be some disparity between what level of literacy and numeracy students were operating on and what was required of them at university.

As student mental health, is a growing global concern (Kadison & DiGeronimo, 2004; Macaskill, 2012) so is concerns surrounding student resilience and coping with stress (Brewer et al., 2019) as there is a growing number of undergraduate students reaching out for mental health and stress-related support (Royal College of Psychiatrists, 2021). Although university may present some sources of stress and challenge that students may not have encountered before, there has been literature into how undergraduate students begin to cope with university education and become more resilient. In reviews of literature surrounding higher education and resilience, the key role of resilience was highlighted in allowing students to overcome challenges, engage with their studies and manage their wellbeing (Beltman et al., 2011; McAllister & McKinnon, 2009; Reyes et al., 2015).

There are various sources of stress for each stage of education which bring new challenges to the students. For Undergraduate students in the UK, it seems to be that they are presented with various non-academic pressures such as financial burdens that exacerbate their academic stress and pressure while GCSE students are presented more with new academic stressors and social/biological stressors. Although undergraduate students may be presented with numerous sources of stress, there is also opportunity in higher education to develop one's own resilience and coping skills and be able to better manage challenges, though this would be dependent on an individuals' personal values, mindsets, outlook on life and strengths that they can draw on to tackle stressful situations. Perhaps the same can be said for SF students and the way in which they tackle or learn to manage their stress.

Rationale for present research

It is possible to extrapolate some general ideas about the state and sources of stress from SF students by drawing conclusions from GCSE and undergraduate literature. It would be pertinent to assume that SF students suffer from pressures of academia just as GCSE and undergrad students do, however, the

specifics of the sources of stress, which stresses are prominent and what may catalyse those pressures are still largely unreported. In a similar vein it may be possible to assume that undergraduate students experience stress in a multidimensional way with one or several major sources of stress being exacerbated by outside or smaller stresses, but the environments of university and SF institutions are very different with SF institutions largely retaining the strictness and discipline and universities allowing greater freedom and a more casual atmosphere as students are treated more as adults.

Research seems to suggest that in each stage of education there are different stressors between the educational stages but several perennial stresses that appear throughout all levels of education. Examinations/assessments, future choices and academic pressures seem to be ever-present while financial issues and homesickness seem to relate more to undergraduates, university entry and expectations pertain to SF students while GCSE students seem to struggle with personal choices and first formal examinations. Using GCSE and Undergraduate literature on student stress, stress management and what sources of stress these students experience as a base, this thesis will aim to explore the sources of stress for SF students. In doing so, this programme of research will aim to tackle an under researched area of British education (Stoten, 2014a) with the aim of providing an understanding of how to better facilitate student management of stress and help understand what stresses/challenges that students in SF contend with in the modern day.

Aims of the research

The aim of this research is to explore SF students' experiences of study, the sources of their stress, how they coped with the challenges that they faced and how the effects of COVID-19 may have impacted their studies. The aim of this PhD is to explore SF stress management, sources of stress, and how it was influencing them academically. Furthermore, the support needs of these students were explored and their methods of coping or tackling the challenges that they face. There were three broad aims of this PhD programme of research are as follows:

- To explore the perceived sources of Sixth form student's stress via mixed methods and provide a basis for future research into SF sources of stress and what factors may mitigate and exasperate stress.
- To provide an updated understanding of how students in SF perceive and tackle the stresses/challenges that they face across their time in SF.
- To explore how students felt that COVID affected their studies and what stresses and challenges they may have encountered across lockdown(s).

Chapter 2: General methodology

Introduction

This section will state the position of the researcher, research philosophy of the studies and a case for the analytic methods will be described. This section will also describe the procedure of the quantitative and qualitative methods of the research. The studies were split into two sections: the studies pertaining to the exploration into general SF stress (studies 1 and 2) and secondly, how COVID-19 will have affected sources of student stress (studies 3 and 4) a full summary of the studies can be found in table 2 below. Details of the online questionnaires and interviews have also been given, and the analysis conducted on each method; statistical analysis for quantitative and reflective thematic analysis (TA) as set out by Braun and Clarke (2006). Lastly, ethical considerations will be detailed as the research program is based on young people, therefore guidance set out by the BPS ethics board (Research Board, 2014) and Sheffield Hallam's own ethics committee was followed.

Table 2:
Breakdown and timeline of studies

Sources of SF stress	COVID-19 related studies
Quantitative survey pertaining to perceived stress, academic self-efficacy and coping. – **Study 1 undertaken January 2020**	Quantitative survey focussing on perceived stress and academic self-efficacy and effect of COVID-19 fallout on studies. – **Study 3 undertaken December 2020 – May 2021**
Focus groups exploring the main stresses that students face at SF and the support that they may need. – **Study 2 conducted on 9th February 2023.**	Semi-structured interviews pertaining to personal student stress, challenge, and support over COVID-19 lockdowns. - **Study 4 undertaken March – April 2022**

Underpinnings of psychological research

Psychology offers a diverse and wide range of analytical techniques, theories and theoretical caveats that can be utilised in many ways, however, there are several philosophical underpinnings to research which must be addressed in research (Denscombe, 2000). One major underpinning is that of Ontology, which is the study of being and existence which incorporates a seeking to understand the fundamental categories of what exists in the world (APA Dictionary of Psychology, 2023; Burr, 2015). Ontology is a part of philosophy that deals with the fundamental nature of being and how different

aspects of being interact with each other. Elements of this philosophical stance are highly relevant to Psychology; emotions, thoughts, experiences, consciousness, and many other concepts that Ontology looks at can be drawn into psychological concepts such as personality, identity, worldview, and many other aspects of human thinking. Within Ontology, there are two prominent schools of thought: "Relativism" and "Realism". Relativists will argue that beliefs are formed by experiences and that reality in and of itself does not exist per se but rather a reality is constructed by what an individual experiences and how the individual uses those experiences to create representations of the world. In contrast, a realist may argue that beliefs are 'testable' and exist outside of an individual reality, therefore they can be subject to scientific testing (Poucher et al., 2020). Psychologically speaking, this relates to the objectivity of studies and the need to seek and test knowledge and theories outside of our own experience, even if that knowledge does not comply with our experience or worldview.

Epistemology on the other hand is the study of nature and knowledge and how we come to know the world. Psychologically speaking, when we begin to speak about the world, we also begin to build representations of the world around us. Talk itself becomes a way in which we construct ideas and accounts of what the world is like. Epistemology theorises that there is no "objective absolute truth" but rather truth is constructed over time via the layering of experiences from many individuals (Burr, 2015). Epistemology is used in Psychology as it goes some ways into explaining how cultures, schemas, thoughts, and personalities can be constructed by the language we use and the interpretation of the world around us.

Both an Ontological and an Epistemological approach need to be understood as both components make up the "worldview" of the researcher. In turn these factors will influence how one constructs, interprets, presents and their studies and results (Poucher et al., 2020).

Approach of this PhD research

This research aligns with the "relativist" approach as more emphasis is placed on the experiences of the SF students and how it has affected them and their worldview, however, there is still a reality that is being tested via the use of quantitative online surveys and qualitative interviews. Although the

interpretation of these will be used to initially explore the experiences of SF and their sources of stress as well as a student's personal experience through qualitative methods.

Critical realist approach

Realism is a philosophical approach that relates to scientific enquiry and that what are senses show us is the truth but that there is a reality that is independent of the mind (Saunders et al., 2009). A derivative of Realism is that of Critical realism is a philosophical approach that focuses on two main ways in which people experience the world. Firstly, experience itself and what sensations it conveys. Secondly, the mental processes that occur after the event (Saunders et al., 2009). Using the critical realist approach it is assumed that the sensation and experience of the word that participants experience contains truth but also that there is a reality that is independent of those sensations too. Subsequently the use of quantitative surveys and qualitative interviews are used as a mixed methods approach to form a greater understanding of the topic at hand and the sensations that participants felt and the main themes or realities that are experienced. Though sensations and experiences may differ regarding the same event there will be common understandings throughout each, giving the data a unique interpretation but also common threads. An example of this would be that students may find the myriads of challenges or stresses in SF study difficult to contend with, especially when a significant negative life event occurs outside of academia. This specific issue is spoken about by the researcher in a reflective article on experiences of SF education (Coates, 2023). This may have influenced the researcher's interpretation of the results or data; however, it did allow the researcher the ability to understand the students experience from an epistemological and relativist point of view with the realist backbone to the research being the exploration of SF stress.

It is important to note that the individual experience and the experience of the world and an independent reality are not necessarily separate. An understanding of meaning may be derived from these experiences. The individual views and experiences of the students on exams, assessments, views of SF institutions, outside stresses and reflection on their time at SF, if researched will help lay the foundation for a greater understanding of what sources of stress SF students may experience and what

it means, fundamentally to be a SF student. Another prominent epistemological approach was considered which was "positivism" where only observable results made from scientific testing and repeatability can make legitimate claims on knowledge (Bar-Ilan, 2009). For the purposes of this research a positivist approach was not deemed appropriate for this programme of study, as the data would be heavily interpreted by the researcher who in turn has their own biases and experiences that have shaped his understanding of the area. It could be argued that the findings of this programme of study are subjective and not objective. The research did not set out to prove an objective truth or a hard scientific finding, but rather to explore an under researched area of British education (Stoten, 2014c) and to provide an initial base of literature which others can work from to understand the experiences of SF students and their stress. Thusly an critical realist approach was chosen to understand the data.

Position of the researcher

I am currently undertaking a PhD programme in psychology as a prerequisite to become a lecturer in psychology as this is a requirement of the role. Furthermore, in the future I aim to become a counsellor/therapist focussing on the management of stress and existential thinking. I have worked closely with students as an exam's invigilator for my old high school and as a demonstrator and then an associate lecturer for the Psychology and Education departments. Further engagement with students was also gained when I began to supervise third year undergraduate students along with my position as a PhD representative for two years.

When I attended SF, I found the experience to be extremely challenging with several extreme personal issues and heavy academic pressures culminating in a period of acute and overwhelming stress that had a catastrophic impact on my mental health at the time. One thing that I did notice that even though some unique circumstances happened to me that worsened the stress that I felt, many other students who had just started SF were also in the same position and struggled deeply. Later, when I was undertaking my MSc, I realised that

SF had been more stressful than most of m MSc and the entirety of my BSc. This begged the question of why was SF so severe compared to university, why did I feel more supported in university than at SF and what were the causes of this? When I undertook my MSc programme, I decided to research the literature around SF students and what their main sources of stress were, only to find that there had been little to no research into SF students since Dobson's (1980) paper on the sources of stress for SF students. The memories of my own time at SF and the discovery that little research had been undertaken into SF students that it provided an impetus to undertake this PhD programme and prompted the publishing of a paper detailing my experiences at Sf and thoughts on why this occurred (Coates, 2023).

Along with my own personal experiences of SF working with students of various ages has highlighted that there are numerous and mounting pressures that are placed on students, especially those in SF who are expected to achieve so much and make important decisions in their lives but have not been adequately supported or researched by the academic community. I would like the findings of this thesis to help SF students manage their stress throughout their SF journey and to help teachers and staff understand the pressures that SF students face while at SF.

Design

A mixed method approach was utilised in this research. Mixed methods as a tool for psychological research has grown exponentially over the past several decades (Dures et al., 2011) and is defined by using both qualitative and quantitative methods to investigate a topic (Dures et al., 2011; Yardley & Bishop, 2015). Mixed methods are also very effective at exploring topics that are complex and are being researched using "bottom up" experiences such as perspectives that incorporate the multi-dimensionality of individual experience and everyday life (Dures et al., 2011; Mason, 2006). Furthermore, mixed methods are effective at utilising "triangulation" to investigate a broad topic by using several approaches and methods. This approach allows the researcher to move away from a

conventional one pronged or “normal” approach to exploring data and allows the researcher to tackle research by using several theoretical approached or types of data (Flick, 2024).

Subsequently, the research approaches aim to draw out narratives, conclusions and themes by using mixed qualitative and quantitative data to more broadly explore the perspectives of the students who were studying at SF. The use of questionnaires, interviews and focus groups provided both the over-arching patterns in the data through the quantitative data and the personal depth of the topic areas through one-to-one interviews and focus groups. Ultimately, mixed methods were used to explore an under researched section of the British education system (Stoten, 2014c) and provide a modern understanding of how SF students perceive the stress and challenges that they may face.

This research consists of two broad areas which were undertaken over a period of two years: Sources of SF (Study 1 & 2) stress and the effects of COVID-19 on SF students (Study 3 & 4). Schools were approached in October/November 2019 and once information was provided and consent and ethical approval was gained, the researcher advertised the study via an assembly at the respective schools. All students were recruited via volunteer sampling and all studies were undertaken within the confines of their respective schools and school hours. The first quantitative survey (Appendix A) was undertaken online and gathered at one data collection point in February 2020 and collected data on student perceptions of what sources of stress that students may encounter, their academic self-efficacy and their coping behaviours (Carver, 1997; Chemers et al., 2001; Cohen et al., 1994; Zimmerman et al., 1992). Further data collection points were planned over the coming months but unfortunately, this study was cut short by the events of COVID-19. Study 2 was conducted in 2023 as a set of focus groups that were conducted to attempt to understand SF students’ thoughts and feelings on SF and their stresses/challenges in a more in-depth way. Further exploring the general sources of stress in SF students was undertaken using focus groups (Appendix B) in February 2023 as a post-COVID following up of Study 1 and aimed to gain further insight into students’ thoughts and feelings on undertaking their studies and the sources of stress/challenge that they faced.

The events of COVID-19 may have cut the original study short, however, it was decided that it would be a good opportunity to research a unique event that SF students were contending with during their

studies. Moreover, COVID-19 was so wide reaching in its effects that it would affect any research that came after it. To address studies 3 & 4 were undertaken to still gain an insight into SF sources of stress, but also how COVID-19 had affected pupils' ability to undertake their studies and what effects it may have had on their ability to achieve in their subjects before, during and after the events of COVID-19.

Studies 3 & 4 took place between December 2020 and February 2022 and consisted of an online survey and one qualitative one-to-one semi-structured interview study and were more focussed on the effects of COVID-19 on SF students and how they engaged with their subjects and what sources of stress/challenge they encountered. After consent and ethical approval for the study was gained, a survey link was emailed to the directors of the Sixth form and the directors distributed the survey to the students via internal email (Appendix C). The data collection points for the quantitative survey were spaced out two to three months apart with examination periods being avoided as to avoid interfering with student exam periods and so the study was not unduly influenced by the heightened assessment period stress. Following this in March 2022 a set of semi-structured interviews were undertaken at two SF institutions. The interviews were roughly 15-20 minutes in length and were conducted with intention of exploring SF students views on studying over COVID-19, the potential effects on the student's ability to undertake their studies and students' thoughts on stress over this time. The interview transcripts can be found in Appendix D and are discussed in more detail in chapter 4 and 6. Further detail into the studies can be found in their respective chapters along with background and analysis.

Correlational design.

Correlational research is where variables and their relationships are observed by the researcher without any manipulation of the variables (American Psychological Association, 2023). Correlational research was seen as most appropriate as little literature exists in respect of SF, so there has been little to no creation of solid theory or hypothesis that could be adequately tested as an experimental/interventionist approach would not have captured. Correlational research was also

deemed appropriate in this area as the relationships between the variables are unknown (Curtis et al., 2016) allowing for a unintrusive observation of the data and the prediction of the variables that naturally occur, making correlational studies very appropriate for exploratory research (Omair, 2015; Reio Jr, 2016). Studies 1 & 3 employed quantitative methods and used correlational methods, followed by regression analysis to investigate relationships within the data. Regression was used to expand on the correlational relationships in the data and the effects of certain variables on perceived stress, such as academic self-confidence, academic self-efficacy and coping behaviours.

An experimental design was also deemed to be ill fitting as the manipulation of variables would affect the eventual outcome of the data (Creswell & Creswell, 2018). The correlational and regression relationships would be observed with little to no intervention by the researcher. Other methods were also considered for this study such as experimental designs, quasi-experimental designs and qualitative interviews; however, correlational designs were used instead to predict relationships and relationships within the variables.

Due to the researchers' background in qualitative methods, a purely qualitative research project and set of studies was considered, however, a mixed methods approach was ultimately chosen to explore the breadth and the depth of the data. Conversely, the same reasoning could be used against the research project being purely quantitative; the use of qualitative interviews provided a deeper insight into the general narratives and trends in the data while the statistical data was used to prove or measure the relationships. Dures *et al,* (2011) argues that mixed methods benefit from the exploration of underlying issues and the "what" and "how" of the research from qualitative methods and in turn benefits from the "how many" and "how strong" predictors and measures of quantitative research.

Participants

Participants were chosen from three SF institutions and were all aged 16-19 years of age. Study 1 consisted of only Lower sixth students (L6) who were students in their first year of study at SF. Originally this study planned to be a longitudinal study that followed L6 students through their two years of SF study. However, due to the events of COVID-19 and the enforced lockdowns, this study

was terminated early. The other studies in this programme incorporated both L6 and Upper sixth students (U6). There was no targeting involved with the participants; the only criteria were that students needed to be studying for their A-levels in one of the chosen SF institutions. As a result, students who took part in this study were from A-levels with both examination and coursework assessments. Furthermore, pupils who were undertaking technical courses (BTEC) may have also been included in the populace. Furthermore, the students who took part in the studies were of different ages and stages across the A-level curriculum, encompassing high achieving students as well as moderate and low achieving students. These factors allowed the research to encompass a wide range of viewpoints and experiences from the students and allowed the construction of themes and narratives around SF sources of stress and stress management.

Sampling techniques

Volunteer sampling is a derivative of convenience sampling and involves the researcher seeking volunteers that are already willing to participate in studies. Volunteer sampling is neither systematic nor random but is governed by chance or ready availability (American Psychological Association, 2023). Volunteer sampling was chosen due to its ease of access to utilise in a school setting. It would be unwise to try and force or coerce any students into taking part as this would detract from the natural responses that the participant may give (Sharma, 2017). Furthermore, the researcher would not want to risk pressuring students who were already struggling into undertaking questionnaire and interviews as it would only exacerbate their pressures. Similarly with schools the researcher would not want to sour relations with the school, potentially leading to the school requesting to no longer partake in studies/withdrawing all data from the study.

Volunteer sampling serves two main purposes in this study: to reduce the amount of time taken for recruitment (Sharma, 2017), as the researcher is a PhD student and is bound by deadlines and time constraints. A less arduous method of recruitment allowed the researcher to collect willing participants while maintaining good ties with the schools. Secondly, due to volunteer sampling being low pressure

on the participants, the ones who do volunteer for the study are generally more forthcoming with their responses as there is already a willingness to participate (Sharma, 2017).

Qualitative approaches

Due to the critical realist approach being taken and the studies being exploratory in nature, it allowed the researcher to freely analyse the data and draw out the natural themes and narratives in the data. This would have incorporated the students' experiences, emotions and worldview into the analysis. In turn this would provide a rich and deep "soul" to the data which qualitative analysis seeks to uncover (Husserl, 1970), as well seeking out any themes in the data and the relationships that those themes have with one another (American Psychological Association, 2023).

This may stand in contrast to the "positivist" ideals as the qualitative techniques are difficult to generalise and may be deemed, by positivists, to have too little scientific rigour, however, Smith (2004) argues that "one cannot do good qualitative research by following a cookbook." Essentially the greatest criticism of qualitative techniques may become its greatest advantage as qualitative techniques seek to arrive at an understanding of a phenomenon via the perspective of those experiencing it (Vaismoradi et al., 2013). Saying this, there are benefits to the scientific methodology of trying to prove a phenomena through rigorous scientific testing which adheres to strict rules and theories, however, when it comes to analysing people, speech and experience these things may benefit from being analysed flexibly through the generation of codes, themes and ideas (Clarke & Braun, 2017), rather than simply being analysed through a statistical technique.

Thematic analysis of the qualitative data

Thematic analysis (TA) aims to generate codes and themes from qualitative data, in an effort to seek understanding of a topic in a flexible way while trying to capture interesting features of the data to answer a specific research question, or to build up blocks of meaning (Braun & Clarke, 2006; 2017; 2016; 2013). The steps used for TA can be found in table 3 below. Furthermore, TA was chosen due to its flexibility and its ability to be utilised as a two-step analytic technique and review process,

allowing the themes to be compared against both the coded data and the rest of the dataset (Braun & Clarke, 2006). TA does differ from its other qualitative counterparts as it is not bound by strong epistemological bindings such as Grounded theory, which seeks to create a plausible theory from the dataset (McLeod, 2001), or interpretive phenomenological analysis, which seeks to understand the experiences of reality in great detail in order to understand the phenomena in question (McLeod, 2001). TA, alternatively, can be flexible enough to fit into either the realist/critical relalist or positivist camp, whereby it would seek to support a scientific theory by analysing the experience of others. On the other hand, it could be used by interpretivists to interpret the experiences of the participants with each researcher interpreting the data in different ways. Thus, leading to an understanding of the topic from many different perspectives all bound by common themes.

Qualitative analysis is not bound by rigid and unbending rules (Braun & Clarke, 2006) but rather can be flexible enough to deeply explore the phenomena of a topic area by utilising the viewpoints and worldviews of those who experience it, creating not a weak analytic technique, but a strong one that can complement the findings of quantitative statistical findings by analysing the various experiences and the general trends that arise from those involved in that phenomena.

It was for these reasons that Thematic analysis, as set out by Braun and Clarke (2006; 2016), was chosen to analyse the qualitative studies to allow the researcher to interpret the data in a flexible way and allow TA to not only to reflect reality but also unpick the nuance of what that reality comprises of for the participants.

Regarding the data collected in the interviews and focus groups for this thesis, the steps of Braun and Clarkes TA were followed. Initially the researcher listened to the audio files several times without taking notes to get an initial understanding of the data and what the general feeling of the students was on the subjects in the focus groups and interviews. After this the transcriptions were created from the audio files and the initial codes could be generated in earnest. The transcripts were read through several times, and the researcher would highlight points/phrases or words of interest and note down loose words or phrases that eventually would be refined into initial codes. After reading through and noting down as many phrases or words as possible a list was collated of all of the codes on a large

standing dry-wipe board. The codes were sorted then into loose groups/categories relating to a loose theme, in this stag several codes would be renamed and/or merged into one code if they were similar enough. Codes were then sorted into similar categories, for example codes such as “exams” and “coursework” would be grouped under an “assessment” category. These categories were then further refined, merged and renamed into proto themes. Following this the proto themes were refined or renamed and themes that were similar were merged. In this stage there may be proto themes that included interesting points but were not strong enough to be theme on their own, these became sub-themes which were related to a larger theme. Quotes and phrases from the transcripts were then added to the themes along the refining process. In this time some themes were again merged or removed and the codes placed into other themes. Eventually fully-fledged themes arose which were used in analysis.

Table 3:
Stages of thematic analysis

Steps	Explanation / Examples
Familiarisation	Transcription of the data followed by immersion in the data to get a good understanding of the data. Initial notes are made, and points of interest are highlighted. General rough patterns may occur in this.
Generating initial codes	Phrases, words, points of interest, reoccurring words. Examples in this dataset include: “COVID disruption”, “Stress”, “Negative mindset”, “Positive mindset” etc. Themes may be revisited several times and codes refined.
Searching for themes	Codes are refined and filtered into groups. Some codes may appear more than once and overlap into other themes or groups. For example: “COVID disruption” may fall into a “Examination stress” and “Support” themes as the code will relate/effect more than one aspect.
Reviewing themes	Codes are further refined and merged until the main themes are left. Codes and themes may be revisited through the lens of a research aim. The emergence of a thematic map may occur in this section to visually present how the codes and themes.
Defining and naming themes	More refining may occur in this section with the overall narrative being presented.
Producing the report	Production of a vivid narrative and support for said narrative. The researcher needs to present a cohesive and compelling set of themes here and use extracts and potentially literature to support the narrative.

<u>Critique of TA</u>

Thematic analysis is very widely used in the field of psychological research and even in other subjects. Despite its widespread usage, it is poorly demarcated and has very little academic kudos outside of its descriptive ability (Braun & Clarke, 2006). It is argued that TA robs speech and language of its deeper meaning by focussing on the descriptive points of the data rather than the in-depth nuance of the speech (Gibson, 2006; Javadi & Zarea, 2016). In other analytical techniques such as Interpretive phenomenological analysis (IPA), aims to draw out deeper meaning of a situation by focussing of participants "lived experience" and the personal meaning and interpretation of a situation (Smith & Fieldsend, 2021). IPA is a heavily personal analytic technique and focuses on participants "lived experience" and how an individual interprets a situation, this can lead to the examination of experimental interpretation of situations and concepts that have not been seen in psychological discourse. IPA can provide a deeper understanding of the speakers' point of view, personality, and experience of the world. TA on the other hand focusses on the descriptive interpretation of the speakers views and lacks the ability to delve into the deeper meaning of the speech when compared to other qualitative analysis such as IPA (Braun & Clarke, 2006).

The ever-present criticism of TA is that it is unprofessional and overly simplistic in nature (Javadi & Zarea, 2016). In turn this can sometimes destroy the usefulness of TA by making the results become desired by there being no checks on the researchers' biases, otherwise known as confirmation bias. In essence, it may be possible to claim that the validity of some TA may be destroyed by the researcher and may not be reflective of what the speaker(s) say (Braun & Clarke, 2006; Javadi & Zarea, 2016). In relation to this, issues may arise when the researcher weakly defines a theme, or a theme is too weak to be a theme, but the researcher deems it a theme anyway. This leads to a weakness in the analysis or potentially a weak analysis altogether, thereby undermining the ability for TA to be useful as an analytic technique in that circumstance (Braun & Clarke, 2006). Furthermore, these issues may severely limit the generalisability of TA to other populations or groups as: A. the analysis is subject to the researchers' own biases and B. If the data is subject to interpretation by other researchers, how can it be generalised to populations outside of this one case of analysis from one researcher?

Despite these criticisms, TA is still seen as a widely useful technique. Its main strength being the great utility in which it brings to the table and its ability to fit into many epistemological and ontological approaches and ideas (Braun & Clarke, 2006). For this reason, Braun and Clarke (2006) argue that TA should be foundational to qualitative analysis as it allows researchers to learn the fundamentals of qualitative analysis and then progress onto deeper theories such as IPA or grounded theory. Also, TA is not without merits of its own as an independent analytic theory the accessibility of TA is unmatched by its IPA and grounded theory counterparts. As previously mentioned, the flexibility and accessibility allow TA to be utilised by those outside of the psychology discipline, its tangible nature of creating the themes around the subject and its accessibility to the public (Braun & Clarke, 2006). Regarding this thesis and the research contained within, TA provided an excellent tool to explore an under researched area and allowing students thoughts and feelings about stress management and sources of stress at SF to be expressed in a natural way. Moreover, the natural flexibility allowed the researcher to truly explore the data in a semi-structured way without the rigid structure of the other analytic techniques. Subsequently, TA was chosen due to its accessibility to the public and from there more understanding can be gained into the subject from those who are outside the discipline of Psychology.

Trustworthiness

As states previously, qualitative TA is becoming more widely used in many disciplines and subjects, especially in psychology (Braun & Clarke, 2006). As it grows, the need for it to be a trustworthy and reliable analytic technique is also growing. Trustworthiness is a term that is seldom used by qualitative researchers due to the type of data collected and the heavy interpretation of the analysis. In order to be considered trustworthy, researchers must demonstrate that the techniques that they have used are consistent, transparent, exhaustive and precise (Nowell et al., 2017).

Regarding TA; Nowell, Norris and Moules (2017) argue that the steps set out by Braun and Clarke (2006) to conduct thematic analysis is not just a step-by-step guide but rather a deeply reflective and iterative process whereby the data is under constant scrutiny and is regularly revisited by the researcher to create the most refined themes and codes possible. This involves repeated visiting and

revisiting of the data along with constant moving backwards and forwards between each of the phases. This is why Braun and Clarke highlight the importance of revisiting codes and themes and transcripts through the lens of your research aims, in turn allowing a layered insight into the data and experience of the speaker(s).

Quantitative methodology

Quantitative analysis is formed by the gathering of statistical data which aims to measure certain variables and reporting on those relationships (American Psychological Association, 2023). Though qualitative methods are increasing in respect and usage (Braun & Clarke, 2006), quantitative analysis and the examination of statistical relationships still are the cornerstone of psychological research, with correlational and surveys being the most popular choices for quantitative data collection (Creswell, 2009; Darabi, 2013).

Explorative research

Exploratory research is defined by the APA as a study that is conducted when little is known about a particular phenomenon and tries to establish links between variables (American Psychological Association, 2023). Swedberg (2020), argues that exploratory research falls into two camps: A: a topic area that has not been researched before is given a first tentative analysis. B: An existing topic is reexplored through a new lens. This may produce new hypothesis and questions, but they may not be able to be verified by exploratory research. Furthermore, Swedberg defines the aim of exploratory research as the attempt to discover something new and interesting by working through the topic area. Linking this back to the Ontological and Epistemological approaches; exploratory studies would fall well within critical realist accounts of data as the exploration of the data would be up to interpretation while also incorporating the sensations and thoughts on events as experienced by the participant. The experiences of the participants (in this case SF students) would form the basis of the understanding into the topic area, in turn allowing experience to build the basic understanding of the topic area.

Critique of exploratory studies

The criticisms that positivists would have to TA may also be applicable for exploratory studies too. A positivist may argue that there is no objective or scientific grounding in the area and that other, established groundings would need to be tested to gain an understanding into an under researched area. A positivist may suggest that the literature surrounding GCSE students or undergraduate students may be used to infer the sources of stress for SF students. In response to this, as much as this is a useful idea and one that will be used to some extent in this research, it would not be wise to try and draw causation from a correlation. AS previously discussed, SF institutions have come about via a unique set of circumstances and do not exist as a recognised institution in many other countries. It has also been discussed that SF students are held to the highest standards but also have been left behind by research (Stoten, 2014c), it would be wise to draw some similarities from the existing GCSE and undergraduate literature, but this, ironically, would go against the positivist viewpoint of proving scientific facts as SF has been a unique creation with a unique culture and will not have the same nuances and levels of pressures for the students.

Another critique of exploratory research is that the loose nature and "hands off" approach to the way in which the data may be interpreted or explored may lead to serendipitous results (Devezer et al., 2021). Despite this critique, Devezer acknowledges that exploratory research is not synonymous with serendipity but can be used as a technique to deliberately and systematically attempt to understand an area that we may have little or no knowledge of (Devezer et al., 2021; Stebbins, 2001).

Despite being exploratory in nature, this research needed to generate some sort of statistical data to explore the potential sources of stress for SF students and the relationships within the data. Correlational design was ultimately chosen as the method in which to collect the data as the study was originally envisioned to be longitudinal and would have benefited from the comparison of correlations at different points in the students' academic journey through SF. Correlational methods involve a large level of observation where the researcher may simply observe the experiment or data without

manipulating any variable at a single point in time (Field & Miles, 2010), this is also known as cross sectional data (American Psychological Association, 2023).

Woodworth (1938) and Cronbach (1957) emphasised the importance of correlational research, not only as a research method in and of itself, but as a research method that is as important as experimental research. Woodworth (1938) argued that both experimental and correlational were equal in standing and that correlational research must be placed on the same level of standing as experimental methods rather than being placed above or below (Curtis et al., 2016; Woodworth, 1938). Cronbach (1957) similarly emphasised the importance of both methods as a support for one another but felt that correlational methods were seen as second rate or held in contempt in the scientific psychological community. Ultimately, correlational research has its place not as a superior or inferior research method to its counterparts, but rather a method which can be used to support and deepen the understandings of a topic area alongside experimental methods. These feelings are summed up by Cronbach (1957) when he writes: “It is not enough for each discipline to borrow from the other. Correlational studies only variance among organisms; experimental psychology studies variance among treatments.” (Cronbach, 1957; Curtis et al., 2016)

Despite the criticisms by Cronbach, there are situations where a correlational design is better fitting than an experimental design. A correlational design is used when the researcher does not need or is unable to manipulate variables (Curtis et al., 2016). A correlational design was chosen for the research in this PhD programme as the researcher had no reason to manipulate variables and the natural thoughts and feelings of students was observed in the studies. Moreover, using an experimental design in this instance would imply that the researcher would need to induce stress in students to obtain results, which would be unethical and cause undue mental strain on the students, thus a correlational design was chosen. Regarding this, Husserl (1970) argues that the “soul” of an individual is a nexus unto itself but also must be seen as part of a community of interrelated souls that are bound by intersubjective experiences. This speaks directly to the idea of epistemology which, as previously discussed, would view the world or truth as built up, layer by layer, from individual experiences. It was decided by the researcher, due to the lack of research into the area that a correlational approach

would be taken and no variables would be manipulated for the purposes of the studies in this research program. This was done to preserve the natural order or "Soul" of the data. The researcher also chose not to manipulate any variables as exploratory studies are concerned with simply observing the natural experience of the SF student and allowing free interpretation of the data.

Quantitative data collection

The participants for the qualitative studies in this thesis were collected from three SF institutions in South Yorkshire. Two of the schools had an attached SF and one school had an independent affiliated SF. All participants were collected via a volunteer sample via advertisements at the schools and an online survey was used to capture the data. The surveys were constructed using the Qualtrics (2023) online survey tool maker and were distributed to schools via email through a unique Qualtrics link.

Quantitative data analysis techniques

The purpose of the quantitative, explorative, and correlational research of this research project was to initially explore the sources of stress for SF students and address a literary deficit. Due to the events of COVID-19, additional studies were undertaken to explore the impact of COVID-19 on students' ability to undertake academic tasks. Though no variables were manipulated, there was a particular focus on several areas: To explore the sources of SF students stress and explore the relationships within that data. Despite COVID-19 being a major disruptor of students learning, the overall aim of the research (both qualitative and quantitative) was to explore the sources of SF stress, coincided with a unique and challenging event. Correlational analysis was used to initially explore the potential relationships within the data collected. Once again, allowing a naturalistic observation of the data without manipulating any variables.

Multivariate analysis of variance tests (MANOVA) was utilised to explore the effect of grouping variables on multiple independent variables namely to expand on Dobson's findings where males and females were found to have different tasks that contributed to their stress. Gender differences

regarding the perception of stress, academic self-confidence, self-regulated learning and COVID related anxiety will be analysed to further understand gender differences in the stress of SF students.

Following these hierarchical regressions were used to predict the relationships of several variables and their relation to one another. This allows a prediction beyond just the data collected and the ability to predict potential relationships and the effect of factors such as gender, happiness of subject, subject difficulty, COVID anxiety academic self-confidence, self-regulated learning, perceived stress on the stress of SF students and how potentially those variables affect and contribute to the sources of stress for SF students.

Ethical considerations of the project

Each study in this research project adhered to the ethics of the British Psychological Societies ethics regulations for human participants and research (British Psychological society, 2021; Research Board, 2014). Despite human participants being involves, all the studies in this research project (both qualitative and quantitative) were all low-risk human participant studies. Furthermore, ethical approval was gained from each school for each study and detailed ethical proposals were also submitted through Sheffield Hallam Universities specialised ethical research conduct program known as Converis. Following ethical review by Hallam's ethical board, approval was gained for each study. A breakdown of the general ethical considerations of this project can be found below in table 4.

Data protection of raw data & ethical considerations

In accordance with both Sheffield Hallam and BPS ethics boards, any identifying data was removed from both the qualitative and quantitative studies; names changed/removed, names of participants not taken and unique right to withdraw codes given to the participants. Ethical approval was obtained for each of the studies in this PhD thesis: Study 1: ER19829436, Study 2: ER42059284, Study 3: ER26552623 and Study 4: ER25530927. Evidence for the ethical approval for each of the chapters can be found in Appendix A1, B1, C1 & D1 respectively. Appendix A1 contains a full table of the ethical approval of the studies. The full table of ethical considerations can be viewed below in table 4.

In addition, a protected drive was set up to store data on the university network. Only the researcher has access to this drive and the drive can only be accessed through the researchers own personal, password protected account on the university campus network.

Consent forms or the qualitative studies are stored in Sheffield Hallam's archives for the duration of the study and up to 10 years after. The online consent for the Qualtrics surveys was anonymous but students could not progress in the survey if they did not agree to all the consent form terms.

Table 4:
Ethical considerations within this project.

Guideline	**Description**	**Application to research**
Right to withdraw	Participant has the right to withdraw from the study at any time for any reason and up to a given number of weeks after the study has taken place. If the participant chooses to do this all data, recordings and information about the participant will be destroyed and the participant removed from the study.	Participants were reminded of their right to withdraw before each study and after in the debrief notes. Additionally, the directors of SF were made aware of the students right to withdraw and were told to contact the researcher with a unique code (for the quantitative studies) or the interview number (for the qualitative studies) of the participant so the participant could be removed.
Data protection	Data collected needs to be accurate, up to date, adequate and relevant. Data should only be collected for lawful purposes. GDPR guidelines should be followed, and participants made aware of how long their data may be kept for.	Participants and school were informed of GDPR and data protection in emails and the information sheets for each study.
Data storage	Safe storage of data and anonymisation are important parts of data processing to avoid data leaks and identifying information being published.	Any identifying information in the studies was removed with the interviews being transcribed with an anonymous identifier instead of names. Furthermore, all interview transcripts and audio files are kept in a secure drive on the university system which only the researcher has access to. Consent forms are kept in a secure locker in an office which needs a key card to enter. Forms will be moved to archives after use.
Consent	An unambiguous, freely given and informed statement that the participant is willing to take part in a study.	The quantitative surveys were implemented with a set of tick boxes regarding different aspects of the study and asking that the participant understood. Finally, a consent box was presented and if the participant

		pressed no on the consent box or chose no for any of the other options the survey would end, and the response would not be recorded. For the qualitative studies, students were asked to fill out a consent form with similar tick boxes and asked to sign and date the consent form. Additionally, the participant was asked for verbal consent.
Emergency procedures		Participants were made aware that the recording or survey could be stopped at any time if the participant became upset or distressed by any topics. The participants data would be removed. If any emergency arose such as illness or a medical emergency, the director of SF would be informed immediately. Additionally, the participant was directed towards the school support and counselling services if they became upset or distressed.

Summary

The studies 1 & 3 aim to gain the overarching narratives of the data from several cross-sectional points. The 2 & 4 in contrast gained insight into the personal experience of the students and compare that to the overarching narratives of the quantitative studies. In essence, a deeper narrative of both general narratives and deeper insights aims to be constructed by this research.

The exploratory and critical realist viewpoints that underpin this research were chosen as they were the most appropriate for a population that has not been researched in detail for several decades. It is expected that the narrative around SF stress can be constructed, and a deeper understanding of the support needs and stresses of SF students can be understood. It is also anticipated that this research may be insightful to the creation of other studies into SF students and their support needs.

Chapter 3 – Study 1 Sources of Sixth Form stress survey.

Introduction

Dobson (1980) suggests that this stress may be multidimensional in nature with "examination pressures" being the biggest concern for SF students in Dobson's study with other academic and personal pressures exacerbating examination pressure. To the researcher's knowledge, Dobson (1980) was the last piece of research specifically tackling SF student stress. This study indicated that SF students stress was multi-faceted, meaning that many other stresses fed together to worsen the main stresses for SF students, which was the pressure of assessments. Stoten (2013, 2014a) notes that SF's have often been marginalised when it comes to academic discourse and policy, while A-levels are being upheld as the "gold standard" for university entry in Britain. The exploratory, survey-based design will aim to understand the sources of stress for this little researched population of British education and build on the findings of Dobson and the researchers own MSc. Other research has been conducted into SF, however, this has usually focussed on the identity, administration and state of SF institutions (Stoten, 2013, 2014a, 2014c, 2015), culture and ethos of SF institutions (Briggs, 2005; Hodkinson & Bloomer, 2000), and the flow and work ethic-personality relationship of SF students (Clarke, Sharon G. & Haworth, 1994). What little exists of the research is either not related to the sources of stress or is relevant but dated.

Study 1 was first conceived as a quantitative progression of the researchers unpublished MSc dissertation: Exploring Sixth former's stress management and support needs and emerged from the researcher noticing a paucity in the research regarding SF students. The research comprised of a single set of 10 qualitative interviews which explored what stresses that SF student may have encountered and what strategies (if any) students used to mitigate stress. The findings of this study were that students did see stress as multidimensional, like Dobson (1980)'s findings and that the heightened emotional state of students created a catalyst affected many aspects of a student's life from academic achievement to social and personal life which in turn created an environment for high intensity competition and stress (Posselt & Lipson, 2016). The first study in this PhD programme of research aimed to build on the initial findings of the MSc research and provide an initial further exploration in

SF sources of stress through quantitative surveys. The MSc research was very limited in scope with only 10 participants for the interviews. In the review of the literature surrounding GCSE and university students, students are faced with various sources of stress and challenge but despite drawing some comparisons between other academic levels of British education, there still is little to no research since Dobson's original study into the sources of stress for SF students and even less into how this specific set of students contends with the challenges presented to them in SF. In order to build upon the initial findings of the MSc research, a quantitative survey was chosen for the first study of this PhD programme to sample as many students as possible from the participating schools to gauge what sources of stress are most prevalent to students studying at SF as the MSc research aimed to explore general sources of stress via qualitative means, this first study aimed to explore sources of stress via broad quantitative means.

This study aims to explore SF students' sources of stress using a quantitative questionnaire as a broad and initial exploration into students who attend SF deal with the challenges that they face. Furthermore, what sources of stress students experience and to update the understanding of how students view stress compared to Dobson's original study and bring an understanding of SF sources of stress into the modern era. Ultimately, this study aim explores SF student sources of stress and challenge and what support may be given to the students to help them succeed in their academic pursuits.

Aims of the study

The main aim of Study 1 was to be a longitudinal study to address the paucity in research regarding SF students and the understanding of the sources of stress that students in SF may encounter. This study aimed to have a wide range of areas that were to be explored in relation to the main research aims (chapter 2):

- To use quantitative surveys to gain a broad statistical understanding of what common stresses and challenges students in SF may encounter across their studies.
- To explore what factors may affect the perception of stress in SF students.

- To update the understanding of the general sources of stress that SF students may encounter and how academic pressures increase across both years of SF study.

Background of schools

Two schools were involved with this study and have a history of serving the local working-class communities in industrial and agrarian areas of South Yorkshire. For the sake of anonymity, the names of the schools will be anonymised to school A and school B. School A is situated in the south of Rotherham Borough and opened in 1970 as a secondary school to serve local coal mining and agricultural areas. The school is notable for its academic prestige and achieving specialist business school status, achieving academy status in 2012.

School B in contrast, has a long history of being an academic institution, being set up in the 14th century as a free grammar school with boarding. The original purpose of the school was to provide education to the local children of the area. School B is in Barnsley and is a secondary school with attached SF which serves the surrounding historical agricultural and light industrial areas on the edge of Barnsley. The school is still known for its academic prestige and notable ex-students (Barraclough, 2023).

Both schools have a student population of between 1,600 to 1,830 of which the Sixth form population numbers between 225-330. Both schools are deemed to be slightly over capacity in terms of both Sixth form and general student capacity, and both have an attached SF institution, it can be assumed that most of the SF population of these schools have been taken from the attached schools and most students will still be from the local area.

Ultimately, both schools serve a similar propose: to provide an education for working class communities in their respective areas. There may be slight differences in the culture and content of the school that also may have a bearing on the sources of stress of the SF students; however, it is anticipated that a pattern will emerge in the data collected from these schools that will allow insight into the sources and nature of the stress that SF students experience.

Rationale for quantitative methods

This study used a quantitative, exploratory and correlational design. The main aim of this study was to explore the sources of stress for SF students and their general thoughts on studying over SF as well as exploring the factors which may affect sources of stress. Using a set of one to one interviews with students at a SF institution in South Yorkshire, the MSc project found that students felt that they would benefit from a specialised SF counsellor/support as students felt that the regular school support did not understand fully the support needs of SF students along with the feeling that academic pressures affected many aspects of a student's life and created a high-pressure environment of competition and stress. Finally, students felt as if they consistently lacked the proper techniques to manage workload and to combat stress.

COVID-19

The events of COVID-19 ended the sources of SF stress study with only one data collection point instead of the proposed three. In turn, these events allowed a reconstruction of the original study to also include SF experiences of undertaking their studies across the pandemic. Using the original study as a pre-COVID-19 data point, the researchers reconstructed the study to better explore the effects of COVID-19 on students A-level courses and their ability to undertake their studies and independent learning over lockdowns.

It was decided that it would be beneficial to use study one as a pre-COVID-19 datapoint and study three (chapter 5) as a post-COVID-19 study. This allowed the researcher to compare perceived stress (Cohen, S. et al., 1983) and academic self-efficacy (Chemers et al., 2001) before and after COVID-19. Subsequently the datasets were analysed in tandem with the results of pre and post COVID-19 being compared to discern any differences or similarities between student stress levels and their ability to undertake work pre and post COVID-19.

Materials

The first study consisted of three scales that aimed to investigate student self-efficacy, perceived stress and how they cope with their academic tasks via an online questionnaire. One time point was collected in this study. Schools were given information about the study and information sheets prior to the study were given to the students along with consent forms and debrief sheets in the online survey itself. Each measure, along with the information sheets, debrief and study information can be found in the appendices.

Academic self-efficacy scale

The first scale presented was the Academic self-efficacy scale (ASE) (Chemers et al., 2001; Zimmerman et al., 1992) and is a two-part scale containing 19 items: part 1 consists of 11 questions and measures academic self-confidence. While part 2 has 8 items and measures self-regulated learning. (Appendix A2 for the full measures). The academic self-confidence scale reported a Cronbach's alpha of α= .77 and the self-regulated learning scale reported α= ,79 respectively. Both scales achieved a good reliability score based on the oft used benchmark of α= .70 (George & Mallery, 2024). Overall, the ASE aims to measure student self-confidence in undertaking and mastering academic subjects and tasks (Chemers et al., 2001).

The first section (academic self-confidence) utilised a five-point Likert scale with 1 being *"no confidence at all"* and 5 being *"complete confidence".* In this section participants were asked questions such as: *"How much confidence do you have that you can successfully: "Finish homework assignments by deadlines?", Take notes of class instruction?"* and *"Motivate yourself to do schoolwork?"* These questions related to how confident students were in undertaking general academic tasks and how confident students were in accomplishing those tasks.

The second section (self-regulated learning) uses a seven-point Likert scale with 1 being "*Very untrue*" to 7 being "*Very true*". This second section aimed to gauge how confident students were in organising how successful they were in accomplishing the academic tasks that they were set. Using

questions such as: *"I know how to schedule my time to accomplish my tasks", "I am a very good student",* and *"I find academic work interesting and absorbing".* For the research within this PhD, the ASE scale will be analysed using the two sections and not as one ASE scale, as the sections measure two different aspects of academic self-efficacy: Academic self-confidence and Self-regulated learning.

Brief Coping scale (BCOPE)

The Brief COPE scale (BCOPE) (Carver, 1997; Carver, Scheier, & Kumari Weintraub, 1989) is a shortened version of the 60-item COPE scale by the same researchers and was used to gauge effective and ineffective ways of coping with the aftermath of stressful life events. The BCOPE consists of 28 items in total. The BCOPE scale has a Cronbach's alpha value of $\alpha = .77$.

The BCOPE was chosen primarily for its broad and general question style that was not directly related to any one stress and can be applied to many different types of stress or stressful events without being too specific, allowing it to be used in this study and to gain a general understanding of the coping behaviours and reactions to stress that SF students may exhibit. The scale used questions such as *"I've been giving up trying to deal with it", "I've been getting help and advice from other people"* and *"I've been criticizing myself".* These questions are designed to ascertain whether the participant is coping with a stressful event in an effective or maladaptive way and are scaled from a 1- *"I have not been doing this at all"* to 4- *"I have been doing this a lot"* with 1 being the lowest score and 4 being the highest.

As previously mentioned, the BCOPE is broad and flexible in its utility, thus allowing it to be applied to many different areas. In relation to this study, the BCOPE was used to gauge how SF students utilised coping mechanisms/behaviour when faced with academic challenges.

Perceived stress scale

The Perceived stress scale (PSS) (Cohen, S. et al., 1983) was used to measure how different situations may affect the perceived stress of an individual over the past month. The item consisted of 10 items with a Cronbach's alpha value of $\alpha = .86$. Questions such as: *"In the last month, how often*

have you been upset because of something that happened unexpectedly?" and "*In the last month, how often have you felt that the difficulties were piling so high that you could not overcome them?"*. These questions were asked in the form of a 5-point Likert scale with 0 being *"Never"* and 4 being *"Very often".*

For the PSS, the questions 4,5,7 & 8 these were reversed scored questions as they asked positively framed questions such as *"In the past month, how often have you felt confident about your ability to handle your personal problems?"* (Q4) *and "In the last month, how confident have you been able to control the irritations in your life?"* (Q7). These questions were also reverse scored for the purpose of analysis.

Procedure

Both schools were approached in October/November of 2019 via email to the head teacher/director of SF at each school asking if the school would be interested in taking part in a study exploring SF students' sources of stress. After initial talks and meetings about information related to the study, permission was granted. Following this all the study information was sent via email to the directors of SF and the directors sent out an advertisement of the study to lower SF students (L6). Following the initial advertisement, the researcher gave a talk to the students to advertise the study in the SF weekly assembly. In the talk, the researcher outlined the purpose of the study, information surrounding the study and what the students would be expected to do in the study if they chose to participate. Afterwards, students and staff had the opportunity to ask any questions about the study.

The directors of SF distributed the survey was via a mass email to the lower SF students with the link to the online survey being included in the email. The survey presented the students with an information sheet that detailed the outline of the study, the purpose of the study, background information on why the study is being conducted and the rights to withdraw (Appendix A: Information, consent & debrief). After this the students were presented with a consent form and would consent via tick boxes and clicking the "submit" button. The study did not require express consent from the parents and as the students were all 16 years of age and over and consent for the study was

given by the headmaster of each school in lieu of parents (Research Board, 2014)The link to the survey was active for between one and two weeks before being closed and students were informed that if they were interested in the study to participate within that time window.

The study aimed to collect several data collection points from L6 students across their first year at SF and then collect data from several points in their U6 year. This study was intended to be a longitudinal study but was abruptly ended by the events of COVID-19.

Table 5:
Timeline of Study 1

		Ethical approval gained January 2020. Ethical Identification: ER39221501
	October/November 2019	Initial contact with several schools in the South Yorkshire area to gauge interest in participating in the study. Two schools respond and are accepted.
	December 2019	After initial contact, phone interview with the director of each SF took place and information about the study was sent and a face-to-face interview was arranged.
	January 2020	Following the in-person interview with the DoS, the researcher was invited to speak about the research to the students in an assembly. Data collection then begins.
	February 2020	Data collection for first data point ends.
	March 2020	Government issues COVID-19 lockdown procedures and all schools and non-essential workplaces close. Study 1 is consequently brought to an end.

Ethics

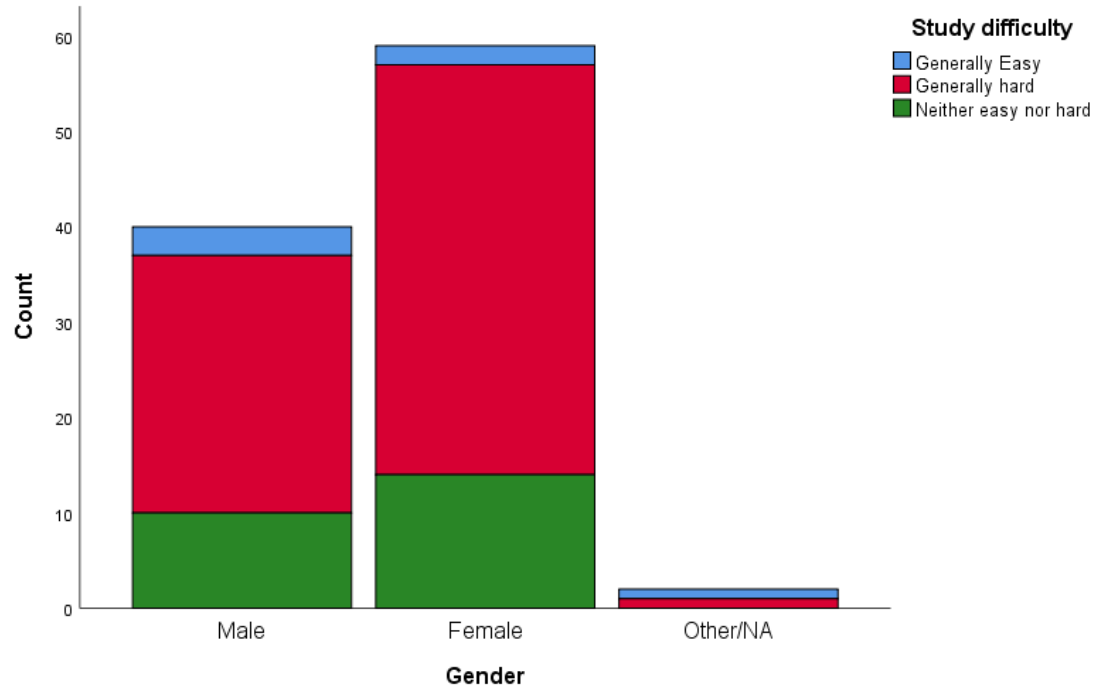
The ethical standards of Sheffield Hallam's ethics board and BPS Ethics board (2014) were adhered to for this study. Additionally, Sheffield Hallam's ethics system, Converis, was utilised to submit information regarding the study, data management, risks, consent and information forms, background information and other information which was sent to the ethical committee and gain ethical approval. Ethical approval was granted in January 2020 with the ethical ID of ER19829436 (See Appendix A1 for ethical approval).

After this, in person meetings were arranged with the directors of Sixth Forms to answer any questions about the study and how the study will be conducted. Following this, information was sent to the school along with the consent forms. Parental consent was not needed for this study as the school deemed the study safe for the students, and the head teacher was used as in loco parentis to gain the school's consent. In addition to this, the questionnaire asked for specific individual consent before the study started, if the respondent pressed "*no*" when asked whether they are consenting to the study, then the study would immediately end, and their response would not be recorded.

Analysis & Results

All analysis were conducted in Jamovi v2.6.17 (2023) and SPSS v26 (IBM Corp, 2021). This study was then treated as cross-sectional design. The first datapoint collected a total of 101 participants (N=101) with females being 58.4% of the respondents, males being 39.6% and participants identifying as "other" being 2%. A breakdown of the demographic data can be seen below in figure 1 & table 6. Age was not collected in this study as all participants were taken from the lower SF year. The majority of students undertook exams as their main mode of assessment (95%) with only a small minority of students having coursework (2%) and "other" (3%) as their main mode of assessment. Furthermore, most students found their SF subjects to be generally difficult (71%), with 24% of students finding their studies neither easy nor hard and 6% of students finding their studies easy. Despite most students in the study finding their studies to be difficult, many students were mostly happy with their subjects (72%) and students who were neither happy nor unhappy or mostly unhappy were in the minority at 20% and 8% respectively.

Figure 1:
Feelings on Study difficulty across gender



Removal of responses

16 responses were removed as they were either incomplete or inappropriate responses, lowering the total number from 117 to 101 useable responses and 16 responses being removed from the study, roughly 13% of the responses were removed. Removal of responses was guided by two criteria:

1. 60% or less of the questionnaire answered (Collier, 2020).
2. The answer was an inappropriate response (such as a joke name, answer, expletives or other non-serious/inappropriate response).

Factor creation & reliability of measures

The PSS needed several items within the measure to be reversed, these were question 4,5,6,7 & 8 as they were positively framed questions where a higher score on the Likert scale would translate to a lower score on the PSS overall. Reversing these questions was imperative for the correct results of the PSS. No other questions in the other scales used required reverse scoring.

The minimum benchmark used for internal reliability is generally $\alpha = .70$ (George & Mallery, 2024). The PSS reported a reliability score of $\alpha = .86$ while the academic self-confidence portion of the ASE scale reported $\alpha = .77$, the self-regulated learning scale $\alpha = .79$, and the BCOPE reported $\alpha = .77$, all of which are within the realms of acceptability for internal reliability.

The total scores were calculated from the measure scores using the "compute variable" function in SPSSS to create a sum variable. A variable was created for the PSS, BCOPE, Academic self-confidence and self-regulated learning, making four scoring variables.

A Shapiro-Wilk test was undertaken for each of the sum variables to ascertain the distribution of the variables and boxplots were created. Each of the sum variables was normally distributed; PSS ($W = .98$, $p = .336$), BCOPE ($W = .98$, $p = .115$), Academic self-confidence ($W = .10$, $p = .086$) and self-regulated learning ($W = .98$, $p = .275$) and showed a normal distribution of the data, though the boxplots did show some outliers (Appendix A3). Although outliers were present in the boxplots, it was decided to keep them as they did not significantly affect the analysis of the data (Frost, 2019a, 2019b), subsequently, this allowed normal parametric analysis and testing to be undertaken (Field & Miles, 2010).

The PSS has a 100% response rate completion rate with every participant answering the scale (N = 101), while the Academic self-confidence section has one missing score (N = 100), self-regulated learning was missing two scores (N = 99) and BCOPE missed seven (N = 94). As there were some missing values in one or more items a Little's (1988) missing completely at random (MCAR) and was found not to be significant χ^2 (403) = 430.12, $p = .169$ meaning that any missing results were likely to have occurred at random and that there were no systematic reasons of why the missing data may have occurred (Little, 1988).

Patterns of inter-relationships across measures within the data

Zero-order correlational analysis was undertaken with the following factors as variables: PSS, BCOPE, ASE scale (Split into Academic self-confidence and self-regulated learning) to ascertain

whether any correlational relationship existed between these factors. The full table of the correlational relationships can be seen in table 7 below.

There was a large, positive significant relationship between the Perceived stress (PSS) and the use of coping behaviours (BCOPE) $r(94) = .52$ $p < .001$. As perceived stress rose, so did instances of coping behaviours, assumedly, to handle the stresses and challenges that SF students were feeling. PSS and academic self-confidence had a moderate negative correlation $r(100) = -.37$ $p < .001$. With Self-regulated learning demonstrating a similar moderate negative correlation with PSS $r(99) = -.31$ $p=.002$. The negative correlations between PSS and academic self-confidence and self-regulated learning indicated that as students perceived more stress their academic confidence and ability to undertake academic tasks decreased.

Table 6:
Correlational relationships between stress, coping and self-efficacy

	Perceived stress	Coping behaviours	Academic self-confidence	Self-regulated learning
Perceived stress	-			
Coping behaviours	.52**	-		
Academic self-confidence	-.37**	-.12	-	
Self-regulated learning	-.31**	-.06	.66**	-

** Correlation is significant at the p= .01 level (2-tailed)

Exploring the relationships of coping behaviours & academic self-efficacy on perceived stress.

A multiple linear regression was used to further explore what factors may influence stress and to better predict what factors may influence perceived stress of SF students over their time at SF. The analysis was undertaken by implementing a standard entry method (IBM Corp, 2021; The Jamovi Project, 2023). Analysis was undertaken to further the findings of Dobson's (1980) as SF sources of stress were explored in his paper but did not explore other factors which may affect academic stress, only what the students felt was a source of stress.

Table 7:
Means and standard deviations for MLR (N=93)

	Mean	Std. Deviation	Mean score	Mean Std. Deviation
Perceived stress	21.37	7.25	2.14	.73
Coping behaviours	61.32	9.52	2.19	.34
Academic self-confidence	35.73	5.99	3.25	.55
Self-regulated learning	38.22	6.65	4.78	.83

The mean scores were also calculated for the measures to gage the general feelings of the students in the surveys in relation to the Likert scorings. The PSS scores were 2.14 and indicated that the students were stressed sometimes while the BCOPE had a score of 2.19 and indicated that students were engaging with coping behaviours a little bit. Academic self-confidence had a score of 3.25 which indicates that students had some confidence in their studies and self-regulated learning indicated that students had an average overall confidence in regulating their learning.

All assumptions for multiple linear regressions were met the assumption of collinearity indicating that multicollinearity was not a concern (BCOPE, Tolerance = .99, VIF = 1.01, Academic self-confidence, Tolerance = .56, VIF = 1.77 and Self-regulated learning, Tolerance = .57, VIF = 1.75). Parametric assumptions were also met, and the data was within acceptable limits according to the Durbin-Watson value of 2.13 and the Shapiro-Wilk test ($W = .99$, $p = .72$). was undertaken and the data was found to be normally distributed. (Appendix A3).

A multiple regression was undertaken to explore how coping behaviours, academic self-confidence and self-regulated learning could predict obtained perceived stress scores in SF students. This resulted in a statistically significant regression (R = .59, $R^2_{adj} = .33$, $F(3,89) = 15.98$, $p = < .001$). It was found that BCOPE scores significantly predicted PSS scores ($B = .37$, $p < .001$) which were consistent with the findings of the zero-order correlations. Both Academic self-confidence ($B = -.24$, $p = .085$) and Self-regulated learning ($B = -.14$, $p = .271$) did not significantly predict PSS scores. Following on from the positive correlational relationship that PSS and BCOPE had, for each point increase in

coping behaviours predicted an increase in perceived stress by .37, indicating that the more student perceived stressful events/obstacles the more they engaged with coping behaviours. While there was no significant relationship with the prediction of PSS scores regarding academic self-confidence and self-regulated learning indicating that perceived stress was not predicted, in this instance, by self-confidence and regulation of learning. Interestingly PSS did have a significant negative association with both academic self-confidence and coping behaviours in the zero-order correlations; this is because in the regression a partial correlation is performed and the variables of academic self-confidence and self-regulated learning are held at a constant, unlike the zero-order analyses, hence why results differ.

Patterns of inter-relationships across measures within the data related to gender.

The MLR indicated that there were relationships between perceived stress scores and coping behaviours while academic self-confidence and self-regulated learning did not significantly predict perceived stress scores. As Dobson noted that SF students found that examination pressures were a source of considerable stress, however, there were some gender differences in what males and females found stressful. Furthermore, Stubbs (2022) found that female SF students came under significant stress regarding the transition to SF, struggling to become independent learners and develop the academic tools needed to succeed.

As can be seen in table 9 there appears to be a consistent pattern of males scoring lower than females on all four measures of perceived stress, coping behaviours, academic self-confidence and self-regulated learning. To determine if these gender differences were significant a one-way MANOVA test was undertaken was conducted to assess if there were gender differences across the factors. The gender group was split between Male and Females; while those who identified as “other” were not included in the analyses due to the sample size (n = 2).

Table 8:
Breakdown of means and std. deviations in one-way MANOVA.

	Gender	Mean	Std. Deviation	N
Perceived stress	Male	19.79	8.06	38
	Female	22.55	6.50	53
	Total	21.40	7.28	91
Coping behaviours	Male	60.26	11.41	38
	Female	61.83	7.98	53
	Total	61.18	9.53	91
Academic self-confidence	Male	33.89	5.99	38
	Female	36.91*	5.73	53
	Total	35.65	5.96	91
Self-regulated learning	Male	37.00	5.96	38
	Female	38.75	6.93	53
	Total	38.02	6.56	91

The Box's M test of 15.68 indicates that homogeneity of variance-covariance matrices (F(10,29830.60) = 1.49, p = .136) linearity and multicollinearity were satisfactory. Overall, the MANOVA indicated that males and females could be significantly separated on PSS, BCOPE, academic self-confidence and self-regulated learning scores (Pillai's trace = .15, F(1,89) = 3.64, p = .009, η = .15). This is further fortified by the large effect size (.15) indicating that there is a large practical significance between the variables and a meaningful relationship with gender.

The follow up univariate ANOVA tests revealed a more fine-grained pattern of gender differences in each separate dependent variable. Academic self-confidence was the only significant variable within these tests reporting that there were gender differences in (F(1,89) = 5.89, p = .017, η^2 = .06) indicating that females generally had a higher confidence in their academic abilities than males. While PSS (F(1,89) = 3.26, p = .074, η= .04) was borderline significant with a near moderate effect size, but this appears to have been underpowered due to the small sample size. BCOPE (F(1,89) = .60, p = .442, η= .01) and self-regulated learning (F(1,89) = 1.59, p = .210, η= .02) indicating that

differences in mean scores likely due to chance fluctuations and not reflective of a genuine gender-based origin.

Discussion

The aim of Study 1 was to provide initial investigation into SF students sources of stress and to address the paucity of literature surrounding SF stress management. Furthermore, the study aimed to explore what factors may affect the perception of stress in SF students and to gain a broader understanding of what sources of stress are common to SF students.

Correlational analysis indicated that coping behaviours for SF students rose as perceived stress rose, students seemed to be engaging in coping behaviours in response or to alleviate perceived academic stresses that they faced. In tandem with this, there were negative correlational relationships with the rising of perceived stress which correlated with the lowering of academic self-confidence and self-regulated learning. Overall, students seem to be not just affected by the rising of perceived stress causing a rise in the use of coping behaviours but also a negative effect on the student's ability/perception to undertake their own academic tasks and engage with academic content.

Correlational analysis suggests that students are experiencing several interactions between factors that are contributing to stress with perceived stress having positive relationships with coping behaviours and negative relationships with academic self-confidence and self-regulated learning. This indicates that students are not just experiencing a single stress that affects their academic life, but rather, a multidimensional relationship between several factors that affects different aspects of their academic ability as Dobson (1980) suggested. Moreover, this suggests that there are several factors which could be affecting the level of stress that students are feeling which is affecting their confidence to undertake their academic tasks. Factors such as mounting academic pressures and the transition from GCSE to SF may be contributing factors to the students multidimensional sources of stress (Putwain, 2008; Roome & Soan, 2019; Stubbs et al., 2022) In addition, the multiple linear regressions refined the associations between coping behaviours and perceived stress such that whilst academic self-confidence and self-regulated learning were initially correlating with stress, they did not once the

effect of other variables were removed. Suggesting that coping behaviour was the main predictor of perceived stress in this instance.

In contrast, the multivariate analysis revealed that there was a significant separation between males and females across the collection of measures. Furthermore, these differences extended to academic self-confidence as a gender difference also existed here. This may be caused by the perception of stress; however, these findings do support Honicke & Broadbent's (2016) findings that academic self-efficacy does indeed have a bearing on potential academic success. Regarding the results of the multivariate analysis, it indicates that there may also be a difference in confidence between males and females regarding academic confidence which in turn could affect a student's ability to achieve success in their studies.

Dobson's findings indicated that there was a difference between males and females when it came to how they experienced stress. Much like Cavanaugh's (2000) challenge-hindrance model, there may be a difference between males and females in how they perceive stress but also how they perceive confidence in their own ability to combat academic tasks with some aspects becoming too much of a challenge and becoming a hindrance to the student instead. Similarly, there may be a difference in how males and females react to long term stress and the effect that it has on them, as Selye's' GAS theory (1951), suggests there may be several varying effects of long-term stress that may become apparent.

Overall, results support Dobson's (1980) findings that SF students are experiencing a complex multidimensional relationship with stress and that there are several factors that are all interlinked that affect a student's level of stress. This may go some ways to explaining why a number of GCSE students experience debilitating levels of stress (Putwain, 2009) which then seems to continue into SF and is exacerbated by the highly pressurised environment of A-levels (Putwain, 2009). Moreover, this may also go some ways to explaining why 37% of students experience depression and anxiety by the time they reach undergraduate level (Okolicsanyi, 2022) students have been in a pressurised environment for an extended period of time and they may have reached the resistance/exhaustion

stage of GAS where adverse psychological and physical effects may begin to show (Selye, 1936, 1946, 1951).

Academic self-confidence became an important factor between genders and indicated that there is a significant difference between males and females when it came to confidence in one's academic ability. Though there were relationships in the correlations, the regressions suggested that only coping behaviours significantly predicted perceived stress levels.

Much like Dobson's (1980) both male and female SF students experienced stress, however, the academic tasks which caused stress differed between males and females, although, the specific aspects which males and females found to be sources of stress were not explored in this PhD in detail. In Dobson's study though males and females differed in some aspects of their sources of stress, Dobson noted that both found examination pressure to be a poignant source of stress. Perhaps there is a difference in the way in which males and female perceive their confidence that is adding to the gender difference such as perceiving an aspect of academic to be such a challenge that it may begin to hinder a student's ability to be confident in their studies such as the stress-challenge model may suggest (Cavanaugh et al., 2000). It may be poignant to explore what specific factors may affect academic confidence in males and females in the future and so this was a point of investigation that was carried over to study 2.

Limitations.

Study 1 was the first attempt to investigate SF student sources of stress since the researchers unpublished MSc. However, this study encountered a major issue in the form of COVID-19 and the subsequent lockdowns. Firstly, the study only collected a fraction of what was intended due to COVID limiting the sample to 101 participants. This also may not have been helped by the study being an online questionnaire as previously mentioned by Cohen *et al* (2011) online surveys are susceptible to low response rates and suspect self-report results. The length of the survey would not have helped these matters and potentially exacerbated drop off rates. Secondly, and perhaps most

significantly, the study was meant to be longitudinal with several datapoints longer but as previously mentioned, was cut short by the COVID related lockdowns, so the study was not as intended.

This initial study aimed to explore the sources of stress for SF students and how they may be coping with the stresses that they face. Unfortunately, this study was not able to fully explore this area due to the events of COVID-19, however, this data point was still used as a rough pre-COVID comparison point for levels of perceived stress and academic self-efficacy that students felt before COVID and with the PSS and ASE being used in the later quantitative study (Study 3) and influenced the construction of questions for Study 2.

In the future it would be pertinent to replicate the original longitudinal design of Study 1 and ensure that a complete dataset is collected. Though it will be impossible to return to conducting the study before COVID-19, it would be useful to conduct a full longitudinal study that follows lower SF students through their A-level courses until graduation and follow the potential changes in perceived stress and academic self-efficacy. Furthermore, the use of a longitudinal study would provide more information about predictions and onset of stress (Farrington, 1991). Furthermore, there may be different aspects, as Dobson found, that males and females may find stressful, in future further exploration of what these aspects may be an avenue of research to further understand differences in what SF students may find to be sources of stress as the results of study 1 found a trend of sex differences across the measures in academic self-confidence. Future studies could also be expanded to include school year, type of subject and other factors that may affect a student's ability to undertake their studies.

This initial investigation into student sources of stress and stress management provided an insight into how students in the modern-day cope with stress and challenge across their academic career in SF and provides some comparison between Dobson's (1980) research and modern times. The current study supported Dobson's previous claims that stress was multidimensional in nature for students. Some more exploration may be required to understand how these factors may affect student stress perception and management as well as exploring other potential factors which may be affecting SF students' ability to undertake their studies. From these results a qualitative set of focus group

interviews were undertaken to explore these factors further and provide a deeper and personal understanding of SF sources of stress.

Chapter 4 – Study 2: Qualitative Focus group interviews.

Introduction

Study 1 aimed to explore the general stressors of SF students in a numeric and broad way while Study 2 aimed to utilise qualitative methods to explore the topic in greater and more personal detail. Following the results of Study 1, Study 2 aimed to further explore the universal or general sources of stress but also include the specific factors that may affect a student's ability to engage with their work or hinder engagement. Subsequently, Study 2 used focus groups (FG's) to explore these factors in a more in-depth way and aimed to gauge what students felt about their studies and what factors affected them most.

Moreover, these FG's aim to extend the existing literature discussed in chapter 1, where Nash *et al,* (2021) noted that students saw studying for A-level examinations as a significant source of stress. The results of Study 1 support Nash's findings and indicate that academic self-confidence and self-regulated learning have a significant bearing on perceived stress, subsequently this will also potentially impact a student's ability to engage with their final examinations and confidence to undertake them. Study 2 will use focus groups as a tool to allow students to speak about their experiences in SF in more depth and allow them to speak for longer periods about issues/challenges/events which have been personal to them and have affected their studies. As SF students have little research regarding their sources of stress and their personal thoughts on the challenges of SF, these FGs will provide an opportunity to explore a hitherto unexplored stage of the academic life of students in Britain and what factors may help or hinder their academic self-efficacy.

Study aims – Study 2

Study 2 aimed to build on the results and findings of Study 1 which found that students were affected by multiple stresses that affected their confidence in undertaking their academic tasks. The focus groups aimed to provide a deeper insight into the sources of stress and challenge for Sixth Form students and what factors are affecting their academic life by using focus groups as a stage for broader discussion. These factors informed the aims of the study:

- Exploration into how students collectively viewed their time at SF and what stresses were universal across their time at SF.
- To identify the main factors and experiences that students encounter that exacerbate or alleviate stress when it comes to their studies.

Methodology

The focus groups were chosen over one-to-one interviews as it was felt that students would have many shared experiences of their challenges and stresses which would be beneficial to discuss in a group setting as many viewpoints as possible, themes and feelings can be gathered all at once in a short amount of time (Jackson, 1998). In addition to this, focus groups have the ability for participants do naturally draw information out of each other by the topic by participants addressing each other's points. This allows a deeper and more naturally flowing discussion with the researcher guiding the direction of the topics via the questions. Ultimately, participants will be given space to naturally discuss the stresses that affect them with the researcher having minimal input in the group and only guiding the group through the questions asked and intentionally leaving the topics open ended. Through this method it will allow the themes of the topics to develop naturally (Jackson, 1998).

Many of the questions in this study were broad in nature to invite open discussion between the students and what they as a group may agree were the more prominent sources of stress that they experienced as SF students. As many students undertake preparations for their final A-level examinations at the end of these two years they may be presented with several challenges that need to be overcome and how students may tackle the personal and academic challenges that they may face. These focus groups were all undertaken after the events of the lockdowns, aimed to work in tandem with the Study 1 in chapter 3 and elaborate on the survey the thoughts and feelings of the SF students and the sources of stress and challenge in a more personal way.

Participants

Students were recruited from a school B, located in South Yorkshire and was the same school that had been used in the previous study. All participants were collected by volunteer sampling via emails including the study information being sent out to the students from the directors of SF. Three focus groups were then gathered with **focus group 1** having six members, **focus group 2** had five members and focus group 3 having seven members. Each focus group session was between 35 minutes and 1 hour long. A maximum of 1 hour was placed on the recording length as not to interfere with student lessons. Though no data was taken on what school year (Y12 or Y13) the SF students were in, all groups were a mix of year 12 and 13's with **group 3** being entirely Y13/Upper Sixth students.

Design

The focus group schedule consisted of 16 questions (appendix B1) which were inspired by the results from Study 1. Due to there being a paucity in the literature regarding SF, the questions were formulated to try and capture student thoughts on their studies and where they felt that their sources of stress came from whilst studying. Study 1 indicated that there were factors that affected perceived stress and academic self-efficacy as well as the student's ability to undertake their work and studies. To try and explore these factors further while exploring the common stresses that SF students may face Study 2's FG questions were split into four main parts:

Introductory questions. This set of questions aimed to explore a broad idea of how students may feel about their studies with questions such as: *"What are your overall feelings on studying at Sixth form and your subjects?"* and *"Could you explain some of the most prominent stresses or challenges that you have experienced over SF?".*

Main body. This section was split into two parts. Following Dobson (1980) that students felt pressured by examination pressures, work expectations and keeping up with academic work, the first section of focus group questions centred on what the students felt was expected of them in SF compared to other years in school. This section utilised questions such as: *"Think back to when you*

were in GCSE and what was expected from you, how do those expectations compare to what is expected of you in SF?"

Main body 2. This section explored how students felt about how they had been supported/not supported over their studies at SF. As SF students had not been represented in research very much, it is largely unknown what support students may feel like they need or are receiving. These questions aimed to explore this concept further by asking questions such as: *"Based on your experience of GCSE and now Sixth Form, how doy uo think that your support needs have changed between the two?"* and *" 'The way in which I deal with challenges and stresses has changed for the better over my time at Sixth Form' What are your thoughts on this statement?"*.

Ending questions. These questions were the final questions presented to the group and were more hypothetical than the preceding questions and aimed to probe the students about what they felt were on the most important issues that they felt they needed help with or what they had learned overall from their time at SF. Questions such as *"If you could go back to the end of GCSE and speak with your past self, what advice would you give to yourself regarding your Sixth Form studies?"* and *"Of all of the things that have been discussed, what do you think are the most important things that need addressing when it comes to your studies?"*.

Procedure

The school was contacted, and the 9th of February 2023 was chosen as the date for data collection. The researcher distributed the consent forms to the students and inform them about their right to withdraw and what will be done with their data. Students then signed the consent forms if they are comfortable with participating in the focus group. The focus groups begin, and students were given an introduction into what the purpose of a focus group was, and that the researcher poses a question to the group and that students would be able to speak freely about their thoughts and feelings on the topic. Students are also encouraged to respond to each other comments or ask other students questions to facilitate a natural flow to the focus group. Students are once again asked whether they consented to having their voice recorded, their right to withdraw and who to contact if they have any issues with the study.

Once the focus group had ended participants are given a debrief sheet and asked if they have any questions about the study (Appendix B1).

Ethics

Ethical approval was gained from the University ethical system with the ethics ID of ER42059284 and followed the code of ethics that are set out by the BPS ethics board (Research Board, 2014). Ethical approval for undertaking the focus groups was gained in January 2023 and the headmaster(s) were used as in loco parentis (Evidence of ethical approval can be found in Appendix B1). No major ethical concerns were involved with the formation or undertaking of this study. Though students were reminded about their right to withdraw, before and after the study with students being reminded that if they had any questions, they could contact the researcher as well as seek support from the school's support services.

Analysis

The focus group recordings were analysed using reflective thematic analysis (TA) as outlined by Braun and Clarke (2016). A sample of the interview transcripts can be found in Appendix B2. The data was transcribed and then read, and meaningful or interesting highlighted using NVIVO software (QSR International Pty Ltd., 2022). Interesting points and highlights were then further developed into codes. After this point the codes were grouped into loose categories with several of the codes appearing in several categories. These categories were revisited to see if the codes were correctly group and over time were further developed into the three prevailing themes in the interview set.

Outline of themes

Four main themes arose from the analysis with three larger themes being present and one minor theme, a visualisation of the thematic map can be seen below in figure 2. **The first theme** was **"Challenges that students face"** arose as an important factor that students readily mentioned, from general difficulties with revision and learning to deeper issues with the learning environment and shock that came with Advanced level of study. Two sub-themes also arose that were linked with the

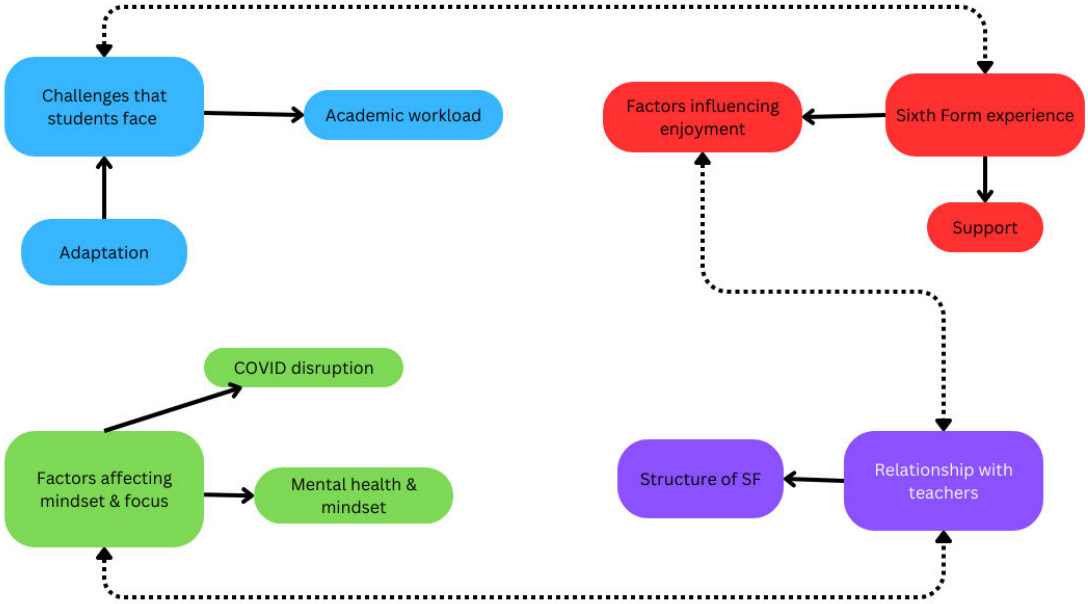
main challenges theme: academics and workload, which related to the greater expectations in the quality and quantity of work and the challenges that these situations created. The second sub-theme was that of **"Adaptation"** where students, managed their stress and adapted to the expectations that were placed on them.

Theme 2 was **"Sixth Form experience"** these were the general experiences of SF students and what had affected their ability to study, support, and the positive and negative situations that affected their engagement with their studies. three sub-themes arose from this theme: The **"Support"** sub-theme related to what support the students had/felt like they needed as well as the effect that support had on them. The second sub-theme was that of "factors influencing enjoyment" this sub-theme relates to what events may have affected students' enjoyment and motivations towards their studies.

Theme 3 was **"Relationships with teachers".** This was a surprising theme to arise from the data as it was unexpected, however, participants spoke about how interactions and relationships with teachers had a large bearing on their stress and interaction with subjects. This theme produced one sub-theme of **"Structure of SF"** which related to the students' thoughts on teaching styles, structure of SF and how teaching style affected interest in subjects.

The smaller, but important, theme to arise from the dataset was that of **"Factors affecting mindset & focus"** a theme that related to the factors that affected the focus and motivation of students. This theme included two sub-themes: **"COVID disruption"** that related to how the fallout from lockdowns and COVID were still affecting students to some degree and student thoughts on how it had affected their ability to work. The second sub-theme was that of **"Mental health and mindset"** where students mentioned the effect of mental health on their ability to undertake their studies and the general mindsets that affected their work.

Figure 2:
Focus group thematic maps and relationships between themes. ***Dotted lines*** *indicate relationship between major themes while* ***solid lines*** *relate to sub-themes that emerge from the main themes/sub-theme that affects the main theme.*



Thematic relationships

The theme of **"Challenges that students face"** was heavily linked with the theme "**SF experiences"**. This provided some overlap between the two themes, and they influenced each other and affected student experience of SF. In the theme "SF experience" the sub-theme "Factors influencing enjoyment" linked with the theme of "Relationships with teachers". There seemed to be some significant overlap between these facets of the data, with the relationship with a teacher being an important factor in enjoyment of SF for students. The same relationship was shared by the themes of **"Relationships with teachers"** and **"Factors affecting mindset and focus"**, where the relationship(s) with teachers did contribute to the students focus and mindset in a subject. Finally, there was an interesting link between the theme **"Factors affecting mindset and focus"** and the sub-theme of "Adaptation" in the **"Challenges that students face"** theme. Interestingly these relationships paint a more detailed picture of the students' experiences of SF and what factors influence motivation, enjoyment and sources of stress and challenge for students, but also how

students tackle those challenges. Despite being inter-related, the themes were felt to be adequately strong enough to stand on their own merits and be factors that furthered the understanding of the sources of stress that SF students encounter and allowed insight into what factors may help or hinder student engagement with their work and their academic self-efficacy.

Theme 1: Challenges that students face

This theme captures the main challenges that students face and what causes them stress with students routinely speaking about the frustrations, stresses, and challenges that they face across their time at SF as well as how the workload and expectations have changed since GCSE and how they adapted to the new requirements of SF. This was a common theme throughout all three focus groups (FG1, FG2, FG3):

"They (teachers) don't really let you know about how difficult- They will give you like a vague...'it's a step up from GCSE' but when you're doing GCSE they said it was a step up from normal school, but it wasn't that bad. But A-level – There is so much more stuff you had to know" - FG1

"They don't tell you how big the step is actually." - FG1

"You know GCSE when you're going to pick what you want to do, they don't really tell you what to do and which ones are good. They don't give you any idea what it's going to be like" - FG1

Students speak quite plainly about the shock they have received from the jump between GCSE and A-level, with the "step up" in expectations making the students feel uneasy. These sentiments were also expressed by students in FG2 and FG3:

"I think that there is just pressure to do well constantly. I think that's what's hard about it, because I think for GCSE you get your grades and you're like 'okay they were good, I've done well', and then you get to A-level and you might not be where you think you are – it's like 'oh gosh, I'm not doing what I should be doing'". FG2

Agreeing with this, another student in FG2 adds:

"Yes, because you are so used to getting top grades, and then you come to A-levels and it's like 'Oh you got a C/D' and it just feels like the end of the world". - FG2

Further to this, a student in GF3 expresses similar feelings about the increase in workload between GCSE and A-level which on top of the increased intensity, provided a significant challenge:

"There is a lot more content to get through in the two years than GCSE as well, so even though you have got less subjects there is still more content to get through in the same amount of time, so it's more of – you never really stop in the two years to have a break". - FG3

A student in FG3 expresses that there is a greater amount of work in A-level but squeezed into the same timeframe as GCSE leading to a greater feeling of pressure, also the student comments that it is a continuous pressure and that one does not get a break in these years. A student in FG2 expresses a similar sentiment when they say *"there is a pressure to do well constantly, I think that's what's hard about it"* both students feel pressured to perform to the highest degree constantly without a break. Furthermore, the second student in FG2 comments that their grades dropped significantly between GCSE and A-level, which was a shock to them and made them feel as if it was *"the end of the world"*.

<u>Academics & workload</u>

Many students specifically spoke about the increased workload of A-level and how it was a challenge that they were attempting to overcome. Workload and academic pressures seemed to be a very large point of contention for students:

"Like for me, for Psychology. I want to know how much the workload is, because I've gone in and there is about 200 studies, I think I need to memorise for like exams and that is a lot of studies just to be thrown into. I need to learn these off by heart, I need to know how to evaluate all of these studies one by one, but before that I didn't know how much there was to focus on." - FG1

"Being able to balance everything. Like if you've got a job as well like with your studies, actually being able to see people, it's not manageable at all. Like finding the right balance between your schoolwork and everything else that you've got going on. It just takes over and then you get to the point where you've not seen your friends outside of school in weeks. It's not healthy" -FG2

"Yeah, there is a lot – you have like nine exams and all of your work from that two years (A-levels) is put on those nine exams. And it is very daunting to think about doing them and also daunting to know that you don't have a chance to like – if you make a mistake, that's it, you don't get a second chance to redo it" -FG3

The workload itself is certainly a challenge for the students, however, there are several other points that contribute to the stress of workload. One student points out that due to the workload, jobs and social life are greatly affected, to the point of not seeing their friends for weeks at a time. Similarly, if academic workload is affecting a student's job it can bring about another stress in the form of monetary or financial worries. A student from FG3 brings up the point of examinations and how now the A-level examinations are not spread out over two years but are now only one set of exams at the end of the students second (final) year. This student conveys worry that *"if you make a mistake, that's it, you don't get a second chance to redo it".* The notion that there is only one chance to get things right would create pressure and add to the stress and challenge of the workload. In addition to this a student in FG2 makes a similar point:

"It's like we are 16,17,18, in these next two years and it's basically your entire future rests on what we're doing and the amount of pressure that gets put on us is ridiculous I think" – FG2

Similarly, to the student in FG3, the student in FG2 comments that there is a *"ridiculous"* amount of pressure that is put on students in the two years that they attend SF. Not only is the pressure of workload felt here, but also the ever-present pressure of prospects such as choosing your university, job choice, career prospects and other important life choices.

Adaptation

Despite students feeling that their entire future hinges on the results that they achieve in their examinations, many students did show a level of adapting to their situations despite the stressful circumstances:

"I feel like it's (SF study) kind of a positive and a negative thing, because positively you kind of have to push yourself to achieve, because most of the teachers are like 'if you don't put the work in then you won't get the outcome that you want' and you've kind of got to have that motivation to do it. On the other hand it's kind of difficult to navigate how to motivate yourself and how to make the progress that you want to make, independently, like without any guidance sometimes"- FG3

The student seems to be keenly aware that there is a positive and negative aspect to SF study and independent learning. The student states that they know that if they do not put the work in the grades

and progress that they want will not be achieved, on the other hand, they voice concerns that it is difficult to muster the motivation to tackle the work required at SF. Furthermore, the student mentions that a lot of independent learning is done without guidance, a student in FG2 mirrors this sentiment:

"I think it's because you are older you have more responsibility." - FG2

In response to this another student in FG2 comments:

"Yes, it seems more like independent study, like the teachers don't teach you anywhere near as much as like they used to, so it's a bit of a jump by having to teach yourself a lot of things." - FG2

Just like the student in FG3, both students in FG2 realise that there is more required of them in SF than in previous school years and it is imperative that they adapt to the changing circumstances around them. Furthermore, the students seem to be aware that learning the skills needed for independent learning and is a necessary skill to adopt but is also a challenge and a source of stress. Students in FG2 and GF3 express when they comment on the difficulty of *"teaching yourself a lot of things"* and *"...its' kind of difficult to navigate how to motivate yourself and how to make progress that you want to make, independently without any guidance sometimes."* For SF students, there seems to be the pressure of expectation and the pressure of important examinations, but these stresses seem to be compounded by the requirement to learn the skills needed for independent study.

Despite the challenges of independent learning and the greater pressure of SF education, there were students who embraced the challenge as a set of obstacles to be overcome and seemed to adapt very well to the situation:

"I enjoy it. I think I like getting to known and familiarise yourself with the subject that you want to study, like you feel more engrossed. When you get homework set, for me it is just like, it makes me want to study more." – FG1

Following this, another student comments:

"Especially with subjects that you actually want to do, like in the future, for uni and all that. It's like you get to focus on the stuff that you enjoy, rather than at GCSE's". – FG1

Both students convey excitement at the prospect of studying subject that they have chosen and subjects that they have a legitimate interest in. The self interest in the subjects seems to be a great motivating factor for these students that has allowed them to adapt in a better way to SF education. When asked the question *"So would you say that one of the most enjoyable bits (of SF) is being able to choose what you want to do?"* the students in FG1 unanimously answered with *"Yeah"*.

In contrast, when students in FG3 were asked about whether SF had been a good experience for most of the students answered with negative responses of *"No", "No"* and *"Awful. I don't know"*. This unanimously negative response was unique to this group as other groups expressed mixed feelings or generally positive sentiments. A student in FG3 expands on this:

> *"It's not all been terrible and horrible. I have enjoyed studying the subjects that I do and like exploring how things work better than they do at GCSE but it has been difficult at the same time because of the stress of life in general."*- FG3

Despite the general negative response about SF, the ability to choose one's own subjects seems to be a mitigating factor to the stress as students can harness their own motivation. Another student in FG3 explains further:

> *"I think the academic side of it is quite intense, but then you have like the social side of college and that has been good"*. -FG3

Alongside the happiness/ability to choose one's own subjects, the student expresses that there are also the mitigating factors in the social aspect of SF/education that can provide support and release from stress that students can benefit from. The social aspect to SF may provide an important tool for stress management that is integrated into the SF course itself, as many students may be experiencing similar stresses to each other and be able to empathise and support each other with the sources of stress.

The academic content of SF seems to be a point of difficulty for students, however, there are factors that students have used to mitigate the stress and adapt to SF education. Undoubtedly this would be a driving factor that helps facilitate growth and adaptation to these new academic challenges, moreover, the personal choices of subjects provide a purpose that drives students to better manage the challenges that they are faced with.

Theme conclusion

Students in SF expressed that they experienced a myriad of challenges when attending SF. The initial jump from GCSE to A-level had been described as difficult by many students and students expressed that this was a shock to them that presented several challenges. Moreover, students quite unanimously felt that one of the main challenges that they faced across SF was that there was an increased amount and intensity of work required of them in the same amount of time (two years) and that in turn had created a pressurised situation where the students were put under a lot of pressure to achieve.

In relation to these pressures, several students also found that SF required the sacrifice of many other aspects of adolescent life. This would especially affect students who rely on the extra income from employment, in turn this creates another pressure that some students at SF may be faced with the choice between employment and education. In relation to mounting pressures, many students felt that the current curriculum caused a great deal of stress for all students in SF as A-level examinations were now undertaken at the end of the second year leaving students with the looming pressure of examinations as well as the new requirements of SF studies. Moreover, students also expressed concern that they only had one chance at important life choices (university choice, etc) due to only having one set of examinations at the end of A-level.

Interestingly, despite students feeling as if they were under a great deal of pressure from several fronts, students did express a general enjoyment of SF despite its challenges. Furthermore, students did seem to be aware that they would have to make sacrifices, but it was for a worthy cause in the long run. This knowledge seemed to provide a king of purpose to students that helped them adapt and manage their stress and challenge despite its intensity. Additionally, another large mitigator of stress or source of purpose for SF students seemed to be that in SF students can choose their own subjects to study, allowing students to study subjects that they enjoy rather than subjects that they are required to do. For many students this added a purpose to their studies and allowed them to cope with stress and challenge.

Ultimately, students experience a myriad of stresses and challenges that all seem to feed and exacerbate academic and examination pressures and expectations. Though there are several factors that mitigate stress, students still experience stress in a multidimensional way with SF presenting itself as an immediately challenging time, however, these challenges are understood by students to have a purpose with many students adapting to the circumstances that surrounds them.

Theme 2: Sixth Form experiences

Factors influencing enjoyment

As previously mentioned, the jump between GCSE and SF is perceived as quite a significant source of stress and challenge by students. There are factors that may mitigate these stresses and difficulties and motivate students to push past challenges. The theme of "Sixth Form Experiences" arose from what students felt most defined their experience and time over SF education and what factors influenced engagement and enjoyment of their studies as well as how support had affected them. Furthermore, there are some experiences, both positive and negative, that most students experienced that affected their overall view of SF. In FG2 a student speaks about events at the beginning of SF:

"I think because right at the beginning, like one of our first assemblies they started talking about like going to uni and applying for stuff like that and we had not even started. That stresses you out a bit" - FG2

Following this, two students in the group commented on this:

"There is just a lot you have to think about".

"Yeah, you haven't got you're A-levels yet and you're already thinking about after that".

The initial experience of SF for these students was that of proximal pressure, seemingly, before the course had even started, they were already presented with university application, which would have been two years in the future. Although this may have been done to motivate the students or present them with a clear goal, however, it seemed to be a point of sudden stress for the students who shared the sentiment that before they had even started their courses, they were already being presented with

stresses about the future. A student further expended on events like this that had affected their mindset and experience of SF:

"I remember an assembly that was given to us right as we came back to Y13, we started, and we were basically told that the year above us has got these fantastic grades and the year below us had got these fantastic grades and we were like down here (doing badly). And that has really stuck with me… I just remember feeling like we've come back to Y13, the first day back, with probably one of the most important years of our lives ahead of us and we've been told that we are rubbish." -FG2

A different stress was experienced for these students was a comparison between the years above and below them who seemed to be achieving higher than the current Y13's. Unfortunately, this assembly seemed to demotivate the student(s). Subsequently the student's confidence in undertaking their work had been affected and this assembly had become somewhat of a defining experience that had coloured the view of their final year of SF. Further to this, two other students' comment:

"It kind of felt like that was all put on us and not on any other factors at all. It was kind of 'your effort is bad, and this is why'. And it wasn't like 'Well what could the teachers do? What extra support could we give?', it was just '...you need to do better and we're (teachers) not going to give you any help on how to do that, you've just got to do better' and that was it." -FG2

"Yes, there was no advice or anything. It was just 'Look, you're doing rubbish, do better". I-FG2

The students in FG3 seem to have been greatly affected by this assembly. There is clear frustration from these students, where they feel that they have been shouldered with blame and pressure to achieve more without being given the support that they needed the effect of this assembly had coloured their view of SF and their own abilities in a negative way. One student in FG3 sums this experience up:

"Well, it just puts you down. It doesn't – I think he (the teacher giving the assembly) wanted to motivate us but it does the complete opposite and makes you think 'Well there's no point in trying.'" - FG3

Other students in FG3 shared this sentiment that this assembly had been a great de-motivating factor for their final year of SF education and had affected their experience in a negative way.

Other students in FG1 and FG2, despite not being in this assembly, had still felt the pressure to achieve and had experienced several events that had coloured their experience of SF. When speaking about examinations and pressures of SF students in FG1 explained:

"I think it's a bit more SF, because they can drop you… if you're not doing what they want you to do." -FG1

Another student in FG1 agrees:

"Yes, it's just try and stick to the way that everyone else sees the school, kind of thing, outsiders. Bring more people in and get them to get good grades, get rid of the people that aren't getting the good grades." -FG1

The realisation that the school may remove a student seems to be a defining factor for these students and was that they felt as if they needed to match or surpass the previous grades of the school, thus upholding the academic reputation of the institution. Students were concerned that early on in their SF studies that they were already being pitted against the previous year's successes and that if they did not surpass the previous year then they were somehow lesser. On top of this the threat of being dropped from the courses or SF may bring feelings of pressure but also feelings of shame and that you have let the school down or tarnished its reputation. The students indicate that they feel as if only grades matter and that students are being cycled in and out on achievement basis alone and those who do not achieve are being removed to keep the grades and air of prestige up. Once again adding to the myriads of potential stresses or challenges that students may face.

Support

Students routinely mentioned the effect that support, whether it from teachers, the school, friends or family, had on their experience of SF. Support that was mentioned included: revision/lesson feedback, school-based support, the students' thoughts on what support they need and where students feel support is lacking throughout the year. Students seemed to realise that support was needed to tackle some of the issues that SF education presented. When asked about what support could be put in place, Students in FG3 felt that overall, support structures in the school were adequate for them, and commented:

"I don't know what we can create (for support) that isn't already created….we've got support teachers….you can go and talk to them and it's like they are not going to know if you are stressed or anything without you telling them. There's lots of after school sessions as well, like for subjects. Like teachers put a lot of effort into helping us and making sure that there are loads of resources for us. So I don't know what else you could create." -FG3

At least for this student the support that the school already offered seemed to be very good, with very little that the student can think of that they need support wise. To this student, their needs seem to be met which would lighten the stress that they feel a little or at the very least allow the student to access support in times of need. In contrast some students did feel as if there was a distinct lack of support for students in SF:

"I was going to say that it's like there's a lot of responsibility. For GCSE there was a lot of resources, there was a lot of help online, a lot of tricks, because everyone went through it in the country. So it feels a little more thought out. For A-levels, especially the niche ones, where there is not many people doing them, it's very hard to find resources online – Student in FG1

"Yeah, sometimes you get homework where they are all on the same day but you don't have any for a while, but then they (teachers) will set it all at the same time. So at some points you're really stressed to get all of your work done, and then you get like a week free instead of just like separating them out" – Student in FG1

"I would say the biggest improvement they (the school) could make, I feel like homework, the homework is so easy to communicate between like a department and spread it out more, like the same amount of homework over the same period of time, just spread it out more" – Student in FG1

Students in FG1 seem to heavily agree that more support needs to be given with the structure and timing of homework and how and when that is set. Although these feelings about lack of support may be unique to this SF institution since the study only took FG's from one school. Nevertheless, sudden spikes of stress and workload seem to be a cause of concern for the students which is made worse by the lack of resources compared to GCSE, especially for niche subjects. The lack of resources would be a problem that causes a snowball effect of issues, as previously mentioned, students struggle with the new independent learning aspect of SF education and despite many adapting to it, it still is a cause of stress for most students. The lack of resources would worsen this but also the sudden jump in stress due to homework being set all on the same day may cause further stress and issues. On top of the lack

of support, a student mentions that there are periods of intense homework followed by a complete lack of homework, which causes instability in one's routine. Additionally, in FG2, students felt that general support was good but that there were some students who felt that the teachers/school needed to set some perspectives about where a student should be to prevent undue stress:

"They have done an assembly on stress and how to deal with it but like they don't really understand the root cause of it is like what they are telling us". – student in FG2

Another student responds to this:

"Like even just one assembly a month about like if it's okay if you are feeling as if you are a bit behind, or like it's normal at this stage but – because it's normal. Like I've spoke to other Y13's about it, and they say no, but in the first few tests you are not going to do that well, but like just the expectation that we should be doing that well and constantly having things pushed on us. – student in FG2

Both students here comment that the staff are missing the root cause of the stresses in these assemblies and in many cases, making the problem worse. The second student further elaborates by commenting that the thoughts of being behind need to be alleviated or some support needs to be given to students feeling this way as this student is finding the expectations a overwhelming. The same student further elaborates:

"Like 'you should be doing this, you should be doing that' like it is just too much. You just need a bit of a break and for someone to say to you that you are doing okay, it's fine. Rather than like, I just got an email, my mum got an email the other day [saying] 'Oh she's putting in loads of effort and she's doing well', well the email is not going to fix anything. Like actually talk to us about it if you know what I mean" – FG2

The student further explains that there is a great deal of pressure arising from feelings of having to contend with so many tasks at once and conflicting information. Subsequently the student is having constant thoughts of pressure and perhaps a perpetual fear of being behind. The student mentions that a break in the pressure would be needed but also for some simple assurance that they are on the right track with their studies. The student then goes on to mention that there is an element of this, but it is in the form of an impersonal email.

In response to this another student comments:

I would say that they should use more realistic ways of coping with stress, because at the end of the day if you're stressed and someone says 'Oh sit down and watch a TV programme' you're not going to enjoy the TV programme because you are going to be thinking about what you should do and I feel that the very superficial textbook ways of dealing with stress – I wouldn't say that they are useful in any sense. Sometimes you need that validation of someone going 'Oh, you're doing alright' but at the end of the day if you have seen evidence that you're not doing alright, then someone telling you that you are doing alright doesn't help." – Student in FG2

The student has strong thoughts about what support is needed and what type of support that needs to be and what issue it needs to tackle. Much like the previous student, this student wants affirmative and truthful support about where they are in their studies and whether they are on the correct path or need correcting. Seemingly there is a need for students to be guided on the right path to alleviate feelings of uncertainty. Throughout the analysis of the FG's, students have commented that there are many new things that they encounter throughout SF that cause pressure or stress these students feel as if a simple affirmation of their position in their work in a direct way may be another way in which the pressures of SF education can be alleviated.

Theme conclusion

Student experience of SF education seems to be highlighted by many different demands being placed on the students all at once, from greater academic demands, requirement to learn how to undertake independent study and the pressure to achieve well and uphold the culture of the SF institution. Students expressed feelings that they were under great pressure to excel academically as well as learning many new skills in a short space of time. Additionally, students felt that the only thing that mattered was the grades and examination results and that if the students were not achieving enough that they would be dropped from the course to keep the grades up.

Despite these burdens placed on the students, the students felt that they were supported quite well through their time at SF which certainly provided a well needed respite for many students. A key point that was expressed was that the support that the teachers gave could be improved by teachers being

more direct and personal with the appraisal of students work, especially in dealing with the root causes of stress rather than just the symptoms. The scheduling of work and assessments was also a key concern for students as the constant changing pressure and workload causes a significant amount of stress and challenge for the students. Students expressed that just like with clearer appraisal, teachers needed to be communicating with the students about scheduling of work but also with other teachers so that work was more evenly spaced rather than all at once. Seemingly, students were feeling overwhelmed and a little lost with all the pressures placed on them, even from the first days of SF when university entry is mentioned. This placed large amounts of pressure and expectation on them from the beginning of their time at SF along with uneven scheduling of work. Furthermore, students expressed that the schools were not dealing with the root cause of the stresses that they were feeling but rather on the symptoms which was not an effective way to help them. Several students had mentioned that the simple support of direct affirmation would benefit them and perhaps alleviate the pressures placed on them. Ultimately, the initial experience of SF, for these students, was that of great and sudden pressure and intense workloads. However, there were also some alleviating factors that helped mitigate student stress from teachers and subject specific after school sessions which students felt were helpful to some degree.

Theme 3: Academic relationships

A major theme that arose in the data was that of the relationship that students had with individual subject teachers. This included how the teacher treated their students, teaching style, support that the teacher gave and interactions that students had with their teachers. Students placed a great deal of weight to this as it directly influenced their enjoyment of subjects, their experience of SF and could provide help or hinder a student's time at A-level. Students across all the groups mentioned the importance of the relationship with teachers and how it had affected their time across A-level:

"I feel that teachers speak to you as if you are equal to them (in SF). Not that you weren't in lower school, but they (teachers) talk to you as if you are a person and I have quite a personal connection with some of my teachers that I wouldn't have in lower school and it's just kind of nice to be- just to

know your teachers as well as them teaching you what you need to know. Just being able to talk to them normally." – Student in FG3

There is a feeling that students are now on a similar level to the teachers and are no longer just pupils in a class but personal students to the teachers who now have a more interpersonal relationship with the teachers. The student in FG3 mentions that the relationship with the teachers has changed since getting to SF and that the relationship is now more personal and "normal" rather than a strict hierarchy allowing more of a mutual understanding between student and teacher. This seems to be special to the student and the ability to talk to the teachers normally in a more casual way would be a positive for the student as it makes the environment more relaxed. In relation to this a student in FG3 says:

"Like I haven't been to college or know exactly what their teaching is like, but all the teachers that we have are all incredible and know exactly what they are talking about, and they know how to help if you need their help. I feel like that isn't something you always get outside of Sixth Form". - Student in FG3

The student places a lot of value in the relationship that they have with the teachers which has created an environment of mutual respect and understanding between the teacher and student that they had not experienced prior to SF. Subsequently the student now felt confident enough to approach teachers for help and direction in their studies. It is evident that students enjoy this newfound relationship with teachers and place a lot of value in the mutual respect that the teachers now have with students that they had not experienced before SF and potentially outside of it. A student in FG2 expands on this further by explaining that not all teacher student relationships are like this, but it occurs on a case-by-case basis:

"Like we have one teacher, he is really good at like explaining and he will always go back over it. If you don't understand but then some are just – I don't know how to describe it. They (certain teachers) will just acknowledge it but then be like 'Oh well, that's your own fault' ". -Student in FG2

The student finds that there are certain teachers that are more welcoming to supporting students and having a more cordial relationship with students that others may not have. The student also finds that this relationship has been great when doubts or confusion over studies arose. In addition, this allows

the student to experience a sense of relief in the fact that there is a teacher, who they have a personal connection with, to explain to explain issues when they need help. In contrast, there seem to be teachers that do not share this level of openness with the students as the student also explains that there are teachers who do not seem to be as welcoming of a more personal connection, leaving students feeling dismissed. This sentiment may negatively affect the student experience, leaving the student feeling as if they are on their own without a personal support from the teachers. In turn this may further exacerbate the challenges that they are already facing.

Another student in FG1 comments on the importance of student-teacher relationships and the importance of familiarity:

"...everything in school is structured around GCSE students, especially timetables and that, so GCSE – they get the same teachers for the two years and we (SF students) might get completely different teachers next year...." -FG1

The student indicates that there is disruption when the teachers that students are used to in GCSE are changed in SF, with the changing of teachers in subjects, familiar relationships that were once had with teachers may be lost and the student may not develop that relationship with the new teacher, leading to a more challenging time at SF, or at least in that certain subject. Furthermore, in GCSE, a sense of rapport and familiarity may be built between the student and teachers due to the time spent together, the student in FG1 comments that this is lost when those teachers are changed in SF, which may provide another point of stress for students that are already facing a multitude of challenges when adapting to SF life.

<u>Structure of teaching and SF</u>

The structure and teaching of SF arose as a sub-theme of "Relationship with teachers", students expressed that different teaching styles affected their ability to engage with the content of A-levels and that the personal relationships that students had with their teachers were important factors that helped or hindered engagement and enjoyment of their studies. Furthermore, students expressed that

the structure of SF and the culture around it also affected student engagement, especially when there were a chain of assessments/homework pieces to do one after another.

"In my other subjects, I will get one big piece of homework every two weeks, and then in History I will get two fairly small pieces a week, but then maths – it's a complete mystery whether you will get two massive worksheets to do for one homework, and then you've got the other which is a big worksheet, and you've got like three maths homework every week and if they think you are struggling they put you into intervention, which is an extra two homework a week. So it's bonkers to keep on top of." -Student in FG1

"No, I think it becomes a bit of a loophole, like as soon as you have finished one piece you just know that there are so many pieces that you need to do before- like the stress is like never gone because there is always so much more that you either need to do or you can do. It's just like never ending." – Student in FG2

Both students comment on the academic structure of SF and the constant pressure to not only perform but also to deal with a constant stream of work and to finish this work off in a tight schedule to avoid "intervention" or the slipping of work. The second student highlights that there is the constant pressure of more work, almost like a conveyer belt, where there is a seemingly never-ending chain of homework pieces that cause constant stress. The students seem to be struggling with the intensity but also the duration of the work being presented to them. In addition to this, the students are certain that more work will be forthcoming in a regular and predictable way in some subjects but are uncertain about the size of the homework pieces in certain subjects. The students are then placed in an uncertain position which requires them to have an ever-changing level of self-efficacy and organisation that may not have been demanded from students before. Students in FG2 comment on this:

"When you're not working you kind of feel guilty for not doing the work."-FG2

Even if you've got nothing to do. Like even if you've got no homework and you've done all of your revision, you constantly feel like 'no why am I wasting my time, I should be doing this (work)". -FG2

The intense academic requirement of SF calls for students to complete work constantly due to the volume of material required for their examinations. Students here comment on how this culture breeds feelings of guilt when the student is not working, even if the work that they have set has been completed. A student in FG3 expresses frustration at this culture:

"because sometimes I feel as if they (teachers) just assume that you are just going to go home and work all evening and work all weekend". -FG3

The same student comments later:

"it's like if you haven't done this piece of homework they (teachers) are like 'Why? What have you been doing?' and especially people with another subject as well. They've got extra workload. But just to be a bit more considerate of people's lives and treat us like people and not like working machines." -FG3

In an agreement with the previous two statements the student in FG3 comments on the expectations placed on students due to how SF is structured around academic work and achievement and how the student feels like they are expected to be constantly working even on the weekends. Relationships with subject teachers seems to play an important role in how much a student enjoys and engages in their studies, as well as how challenging/stressful a student may perceive the subject to be. Frustration at being treated like *"working machines"* would create a more impersonal relationship with the teacher and could exacerbate the student's perception of stress and challenge in a more negative way. Rather than seeing the subject as a challenge to be overcome, students may begin to see the subject (through the treatment by the teacher) as more of a source of stress and chore.

In some instances, this pressurised culture of academic causes a strain in relationships between students and teachers:

"I feel like they (teachers) try and help and like you can get support and stuff but sometimes you would rather not talk to a teacher. Like I don't know, because sometimes like that time you'll just think 'I can't go and spend that time and talk about it because I need to be doing work'". -FG2

Despite needing help with some things and knowing full well that the student can get help from teachers, the student indicates that the relationship between the teacher and themselves is hindered by the culture of intense academics, leading to the student feeling as if they need to be working rather than receiving the help that they need. This mirrors the sentiments of the previous students that the structure of SF is based around achieving academically with little regard for student wellbeing at times.

The academic culture of SF also seems to be a point of contention between students from SF and vocational colleges. Students in FG1 comment on the differences in the cultures between SF and college:

"I have loads of friends who go to [name of college] and that they are finding it really simple there. They're finding it pretty straight forward and I think that is because the subjects there, they're not as hardworking in my opinion. They are not having to invest as much time as we are with our subjects, and I think Sixth Form is really different to college…." -FG1

I'm going to be really blunt. My mate goes into college three days a week and he said that yesterday he watched someone fill in cement all day and he sat there, he grabbed a coffee and went over" -FG1

"The structure is a lot different. Like we are in every day. Not all day for some people, but still every day. Whereas college is more 'come in these days'". -FG1

These students at SF are under the impression that the culture of other forms of education (such as technical colleges alluded to here) is a great deal more relaxed than that of SF, where the workload and expectations placed upon students is a lot lighter than in SF. The expectation to come to school every day is not present in college and there seems to be a perception that students in college have a choice of simpler or more straightforward subjects. In turn this leads to the students feeling that the culture of SF is more severe and demands more of the students when compared to colleges.

<u>Theme conclusion</u>

Students' relationship with teachers seems to be a very important element for the motivation and engagement of SF students with their work and the familiarity and personal connection that a student may have with their teacher provides a source of support for students. Alternatively, strained relationships can cause some students to feel isolated or unsupported.

SF students also see themselves as having greater pressures put upon them by the culture of SF compared to college or vocational students, with some SF students seeing college culture as being simpler and more straightforward than SF.

The relationships between a teacher and student also helps to mitigate the intense academic culture and expectation of SF, making questions about academics a lot easier to deal with if a student has a

teacher that they can speak to about academic issues, in turn this would prevent students falling behind and being placed in intervention.

Theme 4: Factors affecting mindset & focus

Several students spoke about factors which influenced their mindset when it came to work and what factors affected their ability to focus on their work. Furthermore, students spoke about what had influenced their mental health across their studies as well as how the fallout from COVID had affected their studies. One of the main aspects of mindset that students discussed was the mindset towards their work with many students having different views on SF and their state of mind when tackling work:

"...and it's dependent on how well we like comprehend this work and things. It is the be all and end all in whether you get into uni or not isn't it?" -Student in FG3

"Yeah, because like I feel that its seems to be like the be all and end all and obviously you come in to SF not just to go straight into a job. You usually do it because you want to go further, so you either want to go like a degree or an apprenticeship or you want to go down like the route of uni, so both of them you need high exam results, so I would say that's probably a thing that needs to be addressed" - Student in FG2

Students here feel as if the success at A-level is the "be all and end all" of SF with very little room for anything else. Both students feel as if there is a great deal of expectation placed upon them and that the success in A-level will drastically affect their future and that students who fail will have limited options going forward in life. To add to these, two students from FG1 says:

"It is a slippery slope, if you start like getting behind now, there is no going back" -FG1

Another student comments:

"Yeah, it's like three of four spinning disks and you've got to keep them all spinning. If one of those starts to go they all start to go" -FG1

Students here were speaking about multiple academic factors that place a great deal of emphasis on achievement, thus, students have adopted the mindset of only success matters and that they feel as if everything else is of little importance. From all these students there seems to be the mindset that you could fail at any moment and that it could irreparably damage their future. This speaks to the idea that

students feel as if there is there is a potential cascade effect if they fail once. A student in FG1 further comments on this mindset:

"I think expectations play a big role in people not allowing themselves to fail once in a while. Like you can do bad on a test and it's fine, but a lot of people think that it is the end of the world. 'I'm expected to do all of this, I'm supposed to get straight A's and everything' but people don't let themselves have an off day. You can go and do bad on a test and you will be fine. You can get better. You won't stay straight A's your whole life. It's not a set thing." -FG1

The student has noticed that students adopt the mindset of placing success as the key thing rather than growth, where students begin to fear failure as the ultimate threat rather than learning to give themselves a break from the expectations placed on them. This student also, again, comments that when someone fails a test, they think it is the "end of the world", leading to further pressure and demoralisation. It is evident that students are taking their studies seriously and put a lot of weight behind SF and have taken on the mindset that academics are all that matters in SF. Arguably this speaks to the realisation that students know what is required of them and that they are expected to perform to the best of their ability for university entry and to uphold the expectations placed upon them. Conversely, students seem to see failure as a 'world ending' issue to be avoided at all costs where one must keep many disks spinning all the time, lest a domino effect is caused. This fear and by extension avoidance of failure seems to deeply affect students and their mindset, leading some to believe that only academics matters and that *"It is a slippery slope, if you start like getting behind now, there is no going back",* indicating that some students at least, view one failure as the final failure that will ruin their A-levels.

<u>Factors that affect mental health & mindset</u>

With the pressures that students in SF spoke about and the mindset that students adopt, mental health was an issue that was readily spoken about in the focus groups. Students in FG2 briefly speak about their initial experiences of SF:

"Yes, just feeling so stressed so early into it (SF)" -FG2

"Yes, because like we are only a quarter of the way (through SF)" -FG2

Both students comment on how stressful and strenuous SF has been and allude to how challenging it has been and how many sources of stress have occurred despite only being a quarter of the way through the course. Later in FG2, students comment on expectations placed on them and how it has affected their mental health:

"I also feel like the expectations are a lot different. Like my parents have both said to me that they were never expected to go to uni or expected to go in or anything, like they could if they wanted but then we – it's kind of forced upon us, that we are expected to go in to further education whether it's like an apprenticeship or whatever, but relying on your exam grades, if you don't then it is implied that you are going nowhere." -FG2

Once again, the idea of expectations and the pressure it places on students is apparent. This student feels as if compared to their parents' generation that the expectations of achievement and further education is forced upon the current generation. Furthermore, the student infers that they are affected by the idea that if you don't do well in exams that you are *"going nowhere"*.

Mental health seems to be an issue that isolates students as well, especially when they are feeling stressed or struggling, a student in FG3 comments:

"I know that people are very mental health forward now, but I feel like there is still a stigma to be struggling sometimes and it kind of feels like a lot of the time you don't think that other people are going through the same things, that you are kind of like: 'oh, why am I feeling stressed and everyone is coping so well?', but they're not, they are just not showing you that that's how they are feeling…" - FG3

The student here mentions that there seems to be a stigma still attached to admitting that you are struggling or feeling under pressure. Furthermore, the student alludes that this mindset can create a scenario where one feels isolated and that nobody understands their struggles, leading to further isolation and issues with mental health. It is implied that students who are struggling feel as if they are the only one struggling and the development of maladaptive thoughts that everyone around you is doing so well and it is only you that is struggling. These pressures affecting mental health may be further compounded by punishments from the school for missing homework/not achieving on examinations. Students in FG1 speak about this:

"But it almost feels like they (the school) punish you by taking away that independence, so a lot of the time, especially for me the only incentives to really do well in tests is to make sure that I am not being punished by the school." -FG1

A comment is made that pressures are placed on students through threat of punishment by the school and the taking away of independence. The student mentions that this is a great incentive that keeps them performing to avoid this punishment, although, the student does not mention that anything else is a motivating factor, indicating that this student may be aiming for university but not be particularly motivated to do so.

"First, it will be intervention and then they will be like all of your free periods[1] have to be mandatory study periods and then it's like 'after school we want you to be here, now, otherwise we ring your parents'". -FG1

Both students fear the limiting of their independence or free periods, but the second student also mentions the added pressure from the school forcing the free periods to be study periods and the inclusion of mandatory after school sessions. Furthermore, the student feels pressured by the threat of the parents being contacted if the student does not perform in the intervention sessions. Not only can this be perceived as an overt threat, it may also cause the student to feel as if they are in quite a hostile environment, which in turn, can have negative impacts on the student's relationship with the teachers and the subject. In both cases it seems like the student's mental health is being affected by the looming threat of punishment, even if the student is suffering from stress at the time. It is indicated that the student's mental health may also be affected by this as if they are already struggling, that the punishments will only exacerbate the stress levels of the student, leading to a seemingly Sisyphean cycle of stress.

[1] **free periods are sessions with no timetabled lessons, these can be used to revise/study or may be used to relax*

Lockdown and the disruption of online learning

Another facet of mindset and focus that students spoke about was the residual effects of COVID and the effects that it had on the student's ability to work. Students in FG3 spoke about the effects of COVID:

"It's (COVID) had a knock-on effect, hasn't it. Because we didn't do GCSE's or whatever or we didn't sit- we have never set actual exams, basically ever." -FG3

In March of 2020, schools, workplaces and educational facilities were closed due to the worsening COVID-19 pandemic. Due to the cancelling of examinations and the closure of schools in lockdowns students who were studying for their GCSEs at the time were denied their chance to sit formal examinations. Instead, examination grades were given on performance in previous mock examinations or average grades obtained up until that point. A student in FG3 felt that students are expected to put the skills they have learned in A-level to use, but then also suddenly learn skills now in an online environment which is very different to normal face-to-face teaching. This may also add to the pressure and stress that students feel in A-level and contribute to affect the mindset and focus of students as they would be lacking some skills needed to better succeed in A-levels due to the limited support students received online. A student in FG3 also comments on the disruption that COVID brought about regarding SF:

"And also, at the start of Y12 last year, there was still like – and I know there's still COVID now but there was still like a lot of COVID about so often teachers were off ill or there was a lot of students off ill and they kind of tried their best to do like online learning and setting work. But I know that some teachers weren't as good with that as others were, so not personally but generally, people probably did miss out because of that at the start." -FG3

The student comments on the disruption of COVID related illness and the fact that teachers and students would be off ill, creating a period where work was missed by students or lessons were missed by staff. The student comments on that online learning may have been very beneficial, depending on the teacher leading to students missing out on content and skills. Moreover, these disruptions came at

the beginning of Y12, when students had already missed their GCSE examinations due to COVID and the already stressful transition to A-level is being further disrupted by illness and online learning.

Theme conclusion

For students in SF a prevailing factor that affected student's mindset towards A-level and motivation to engage with content and exams was the pressures and expectations placed upon them from the beginning of A-levels. Students had commented that they had adopted a mindset geared towards fearing failure and avoiding it at all costs instead of using failure as a means of growth. Furthermore, students also commented that SF felt as if one was spinning several disks and if they failed at one thing in SF, the rest of their SF career would be gravely affected, to the point where some students felt as if there was no going back once one was on the slippery slope. In relation to the pressure placed on students, some students felt as if they did start to fail that the school would punish them by giving them more work in the form of intervention homework and the taking away of their free periods. Students also felt as if COVID had affected their examination skills as GCSE examinations had been cancelled due to the lockdowns, leading students to feel as if they had missed out on some key skills that they needed for A-level examinations, though some of these skills may have been used in mock examinations prior to the lockdowns, ultimately students were denied the opportunity to employ these skills in formal examinations. Furthermore, the illness and online learning at the beginning of A-level hindered some early progress that students made and disrupted the transition to A-level.

Despite students speaking about mostly negative things when it came to motivation and focus and mindset, no students commented that they felt that A-level was not worth doing or an impossible task to tackle. Interestingly, some students felt that the fear of failure was a motivational factor that pushed them forward rather than held them back. This could be seen as both a positive and a negative as the fear of failure or punishment by the school could push a student into being more resilient and pushing forward with their work but also could contribute to burnout, especially if a student is affected by this stress for long periods of time and their emotional reserves run low.

Summary of findings

In the FG's students felt as if there were several factors that affected their time at SF and what SF students perceived as sources of stress and challenge. The transition to SF was a point of great stress and challenge for students. Especially when students felt that the transition had been disrupted by COVID. Specifically, COVID and the subsequent lockdowns provided a false sense of learning for students that where the effects of the missed face to face teaching and the damage of online learning was only realised when the pupils returned to school. Expectations of SF and its culture were a prevailing issue that ran through each group and theme. Students felt as if there were a great amount of pressure that was placed on then to not only achieve academically but also uphold the culture and image of the school. In some cases, this led students to fear failure more than looking after their own mental health, but in turn provided a motivating factor to achieve as well. Finally, there were several factors that arose in the interviews that helped students mitigate the stress and challenge that they were feeling. Relationships with teachers seemed to play a major role in this where a positive or more cordial relationship with a teacher provided an important pillar of support for students, especially when the student could speak to the teacher freely about what was on their mind. The ability and willingness to adapt to one's circumstances also arose as a way in which students mitigated stress, especially with students who had a genuine interest in their subjects.

Discussion

These interviews were undertaken to address the parity of literature pertaining to SF students and the sources of stress and challenge that they may face. Through these group interviews it was possible to gain insight into what factors were a cause of stress and challenge for SF students, what factors mitigated those challenges and how students felt about the culture and expectations of SF in general. There were four themes that arose out of the analysis of the group interviews these were: "**Challenges that students face", "SF experience, relationships with teachers" and "Factors affecting mindset and focus".**

Students expressed several sentiments towards sources of stress and their experience of SF, with feelings that students are pressured to achieve and looming examinations being sources of stress throughout every theme in some way. It would be safe to say that these two factors are perennial sources of stress for students and influences many aspects of their time across SF. Students also felt as if the "big jump" between GCSE and A-level was significant source of stress and one that provided a shock to the system much like the sentiments that SF students expressed in Stubbs *et al* (2022) and Hernandez-Martinez *et al* (2011) who both found that SF students struggled with the increase in difficulty of examinations between GCSE and A-level. Subsequently, this also contributed to students breaking out of the "normal" thinking of school and helped many realise that a lot more was required of them from SF study which led to both positive and negative effects for many students, indicating that students were potentially building resilience in relation to their studies (Ainscough et al., 2018; Fletcher & Sarkar, 2013).

Dobson's (1980) study found that students did not suffer from a single source of stress but rather there was a multidimensional relationship with stress where students felt that academic stress was a major source of stress but that it was linked with other stresses to do with academics, personal life and mindset which exacerbated each other. This finding was expected to some degree as not only had Dobson commented on this but also Roome & Soan and Brown *et al* (2022) had also commented that students in general may suffer from many sources of stress, especially when it is related to academics. These group interviews seemed to support this idea of a multidimensionality of stress that Dobson proposed for SF students as students in the FG's spoke about many factors which affected their stress and what they perceived as the sources of stress. SF students also voiced that they felt as if the only thing that mattered was their academic achievement, lending credence to previously discussed research which indicates that academic pressure and anxieties are a significant source of stress for students of all ages (Banks & Smyth, 2015). This sentiment coincides with Dobson's finding that students in SF who were preparing for their examinations felt that it caused them a great deal of stress. Similarly, the students in the FG's felt as if academic pressure to achieve in the examinations and work life balance were all significant sources of stress.

Furthermore, students in the FG's consistently commented that the transition from GCSE to A-level was a "big jump" with significant implications to it where the students expressed that the step up was a lot bigger than they first thought and that many skills such as independent learning and time management needed to be learned in a short space of time. There is some evidence to suggest that many students in this time of life experience the transition from GCSE to A-level as a significant jump (Hernandez-Martinez et al., 2011; Stubbs et al., 2022) with the results of the FG study supporting previous findings.

Interestingly, Dobson's study found that a large component of stress for students, aside from examination pressures, was that girls generally said that they struggled with knowing what was required of them when it came to standards of work; whilst boys found that note taking was challenging. Both notions also appeared in the FG interviews, despite no gender data being taken for this study, students in the FG commented several times that a source of tension was not knowing what was required of them and in A-levels, leaving many students feeling unprepared which is a general mix of the findings for both boys and girls in Dobson's study. Perhaps this is further indication that males and females perceive stress differently and are affected by different aspects of academic pressures/stress much like was indicated in Study 1 where males generally perceived less stress than females.

The notion of academic pressure and looming examinations was a significant point that was shared by each group and something that both Upper and Lower SF students commented on several times. This could fit in with the resistance or exhaustion stage of Seyle's (1946) General Adaptation Syndrome, where students are beginning to tire after a prolonged period of academics along with the stresses that the transition to A-level had brought in the previous year. Moreover, the structure of SF mounts all of the examinations at the end of their final year, ensuring constant revision and examination preparation becoming more intense in preparation for their final exams following the initial year of SF, exemplified by stressful events such as the transition to SF and independent learning. This sequence of events would fit in with Seyle's GAS theory as the initial stage of SF was written about as being stressful and would undoubtedly tax the resources of the students, following this is the constant

pressure of expectations and workload that students spoke about which would tax their resources more. Furthermore, cementing the idea that students are under constant examination pressures throughout their time in academia (Connor, 2001; Roome & Soan, 2019). Finally, in their Upper sixth year the examination pressures will increase on the lead up to their final exams and pressure placed on them to attend university and make future life choices will also increase, leading students' emotional and mental resources to be taxed even more. Perhaps these issues contribute somewhat to the increase in the number of cases of depression and anxiety in undergraduate students in the UK. Moreover, students' comments about mounting pressure for examinations fits well with Roome and Soan's comments on "audit culture" and the mounting pressure of expectations and the demand for students to excel more and more at examinations to achieve higher grades compared to the previous year's students, giving credence to the sentiment that only academic achievement mattered and that everything else needed to be put aside in order to obtain higher grades.

The focus groups provided interesting insights into what students in the modern age saw as sources of stress compared to Dobson's study some 45 years earlier. Interestingly students in the FG's mirrored Dobson's findings of stress being multidimensional with examination pressures being at the forefront of those stresses. In contrast to Dobson's study, the Study 2 aimed to explore factors which may mitigate stress as well as the sources of stress that students face. Students in the FG's spoke also about mitigating factors, which allowed a deeper insight into the mindset of students studying in SF and what sources of stress that they have but also what they utilise to mitigate those stresses. Despite the various sources of stress being mentioned by most students and the negative effects that the stress can have, students also mentioned that there were mitigating factors to these stresses that helped them adapt to SF life and education. There was a clear aspect of growth for students that they had adapted to the new academic demands throughout SF despite encountering many challenges indicating that students were perceiving at least some stress as a challenge to be overcome and subsequently the triggering of positive self-evaluations (Cavanaugh et al., 2000).

Overall, despite hardships, SF students seem to show great resilience in overcoming the challenges that SF may present. Though the effects of COVID-19 was not the focal point of Study 2, students

were still affected by lockdowns and its residual effects as these factors were still spoken about in Study 2. Due to the pandemic having such a wide-reaching impact on education, Study 3 and 4 focus on exploring the deeper intricacies and effects of lockdowns and online learning on SF students' ability to undertake their studies and to explore the sources of stress in this time period.

Chapter 5 – Study 3: Sources of stress & challenge over COVID & Lockdown

Introduction

On the 26th of March 2020, the Coronavirus pandemic (COVID) had reached levels where the British Government was prompted to close workplaces, educational institutions, restrict non-essential travel and move lessons online (Department for Education, 2020c). Due to the rapid transition to online delivery, a great deal of disruption was caused by these changes to the delivery and setting of learning materials with many students reporting great levels of anxiety, disappointment and isolation (Catty, 2020). The first study of this PhD thesis was terminated early due to the pandemic which subsequently led to there being almost two years of disruption to the PhD programme as data collection over the lockdown(s) was severely inhibited due to the closure of schools. Despite the early end Study 1 still provided one data collection point and yielded some interesting results into how students perceived stress and what sources of stress were so prevalent for SF students as well as an insight into the factors that caused coping behaviours. Like the previous studies, Study 3 aimed to better understand the sources of stress that SF students encounter with a focus on how COVID-19/lockdowns had affected students' ability to engage with their studies and the potential effects that online learning may have had on student stress.

Literature from this time indicates that in the UK COVID-19 had a profoundly negative impact on student mental health and added to feelings of anxiety and depression (Catling et al., 2022; Catty, 2020) which naturally would add to already present sources of stress. Following the initial announcement of lockdowns, it was announced that all exams would be cancelled in the summer of 2020, leading to the move to online learning and upending of normal routine for students (and most of the general population). It was decided that A-level and GCSE students would be awarded a 'calculated' or 'predicted' grade instead (Department for Education, 2020a, 2020b). Predicted grades also caused a significant amount of upset and stress for A-level and GCSE students alike with only 16% of grades predicted by teachers being reflected in the actual grades achieved (Murphy & Wyness, 2020), leaving a large disparity between the grade that a student could achieve compared to what they

received as a ‘predicted grade’. Furthermore, students who were given predicted grades below what they expected were more likely to apply for less prestigious universities/institutions while those who’s grades were over-predicted applied for more prestigious institutions but then failed to secure their preferred choice of university (Catling et al., 2022). Research indicates that many students from A-level and GCSE were disappointed in the cancelation of exams and felt that the situation had robbed them of their academic goals (Mccarthy, 2024), furthermore, students also felt as if the situation was unfair and that this would label them in a negative light as the ‘COVID generation’ as students with the missing of exams affecting them in the short term and leading to further judgement as not deserving of the grades that they have received, leading to potential disadvantages in the future (Bhopal & Myers, 2020)

The disruption also extended to university students too as university campuses were closed and lectures and seminars moved online. In a study by Evans et al(2021) it was found that university students struggled with the sudden changes to online learning as GCSE and A-level students had done. Results indicated that over half the 254 respondents felt as if their mental health had been impacted their mental health with a significant rise in depressive symptoms being present in the first 1-2 months of lockdown with reports of diminishing wellbeing. The events of COVID were tumultuous and had a considerable effect on students of all ages as these events of lockdowns placed further pressure on students thus adding to the multidimensional set of stresses that SF students encounter. Not only had their academic career been disrupted but also the normal functioning of life leading to instability in academic grades but also uncertainty about the future.

Fundamentally this would have presented another obstacle for the student to overcome, and, at least initially, provided some significant and unique sources of stress that the students would not have encountered before.

As previously mentioned, students view stress through a multidimensional lens (Dobson, 1980) and the pressures placed on students from academic expectations can provide an environment of high intensity competition(Posselt & Lipson, 2016)(Posselt & Lipson, 2016), further to this environment the events of COVID would have added another layer of stress and challenge to the students.

Subsequently it was felt that a Study 3 was initiated with the approach of continuing the main aim of the previous two studies as was to explore an under researched cohort of British education and understand their sources of stress and how SF students tackle these challenges. As Study 1 focussed on exploring the sources of SF stress in a more general way, Study 2 focussed on what main factors may affect these sources of stress via qualitative means and how SF students viewed their time at SF while Study 3 placed more focus on exploring how COVID-19 and lockdowns affected a student's sources of stress and engagement with their course. Though the events of COVID were disruptive they did provide a unique opportunity to explore the effects of COVID and lockdowns on students' ability to engage with their studies and what effects this unique global event may have had on SF sources of stress.

In Study 3 some of the same measures were used as in Study 1 such as the Perceived stress scale (PSS) (Cohen, S. et al., 1983) and ASE (Academic Self-Efficacy scale) (Chemers et al., 2001) as the PSS is utilised to gauge what level of stress a student is feeling at a time point as well as allowing the analysis of perceived stress against other variables which may affect a student's stress level such as gender or happiness with a subject. The ASE scales, which are split into academic self-confidence and self-regulated learning, will be used to discern how confident a student is in undertaking academic tasks and how comfortable students feel in organising their own learning.

Two major changes were also made to the survey in Study 3 as the BCOPE (Brief Cope) inventory (Carver, 1997) was removed due to it making the study too long, adding roughly another 10 minutes to the study. When previously used there was several participants who dropped out due to the length of this item or who did not complete the study, in future it may be better to use the BCOPE as a stand-alone measure. Subsequently the BCOPE was replaced with a questionnaire that was modelled after the ASE scale and surveyed students on their feelings of anxiety on undertaking academic tasks before, during and after lockdowns. This was added to explore how anxious students felt but also to gain an insight into how student anxiety and mindset may have changed over lockdown and to explore more of the lingering effects that lockdown and online learning may have had on students who were returning after lockdown.

Background of schools

Two of the schools that were previously contacted agreed to participate in Study 3, providing that ongoing COVID-19 policies allowed for the study to continue. Several new schools were contacted, and one agreed to partake in Study 3, bringing the total amount of schools in this study to three.

Both previous schools were situated in working class areas and were situated in rural or semi-rural towns/villages which will still be known as school's "A" and "B". The third school will be known as school "C" is on the outskirts of a city centre and is regarded as a highly prestigious public school within the area. Situated in a city that was historically known for mining and steel as well as its working-class populace it has maintained its status as a historic and high achieving school in the area. This school has a population of roughly 1700 students with 600 of those being in SF.

All three schools, despite their differences still provide the same service to the areas that they are in: to provide opportunity for education to a working-class area, and so, this third school was deemed as acceptable to be included in Study 3.

Purpose of the study

Study 3 utilises an online survey, where there was no guarantee that the same students would have answered the questionnaire at each time point, thus the study would class as an elongated online survey with three testing points. The main aim of the study was to further investigate the sources of stress for SF students following on from the results of Studies 1 and 2. For Study 3, particular focus was placed upon on the effects of COVID-19 on the student's ability to undertake academic tasks. In addition, the study aimed to measure anxiety before, during and after lockdowns as well as how students' ability to undertake academic tasks was affected upon returning from online learning. This aims to provide an insight into how the pandemic affected student stress and the ability to undertake academic tasks. Furthermore, exploring where the main sources of stress for students may arise and how student stress may have built upon the results found in Study 1 and 2.

Rationale for quantitative methods

This study used a quantitative, exploratory, and survey-based design. This study aimed to provide an exploration into sources of SF student stress across the events of COVID-19 and its effect on student stress and self-efficacy. This research emerged from two main factors: firstly, the closing of schools and the disruption that the lockdowns caused. And secondly the subsequent early termination of Study 1 due to the lockdowns. It was decided that there was now a unique opportunity for the researcher to explore the effect of COVID-19 and lockdowns on SF student engagement with A-levels and what sources of stress and/or challenge students may encounter while undertaking their studies in the lockdowns. In turn, this allowed the results of Study 1 to become a pre-COVID baseline for Study 3 and 4. It was realised that the effects of COVID were so far reaching that any other study that was undertaken after Study 1 would be affected by COVID in some way. Thus Study 1 became a baseline of sources of student stress without the effects of the pandemic and allowing Study 3 and 4 a comparison point for pre COVID sources of stress.

As mentioned in chapter 3, Stoten (2013, 2014a) noted that SF have often been overlooked in academic discourse and policy despite A-levels being upheld as the academic "gold standard" for British education. Furthermore, SF students are seen as the academic elite for pre-university education. This study was undertaken as it would be pertinent to provide research into a body of students that has been often overlooked in academic discourse, but also, provide exploration into a set of events that had uniquely affected these students.

Much like Study 1, Study 3 will also use a correlational design where the variables and their relationships are observed by the researcher without any manipulation of the variables (American Psychological Association, 2023). Correlational research was also deemed appropriate in this area as the relationships between the variables are unknown (Curtis et al., 2016) allowing for a unintrusive observation of the data and the prediction of the variables that naturally occur, making correlational studies very appropriate for exploratory research (Omair, 2015; Reio Jr, 2016). A between-subjects approach was used to allow PSS to be measured in relation to other variables such as academic self-

efficacy, anxiety, self-regulated learning and the effect that COVID-19 had on the student's ability to undertake academic tasks and to be compared to the previous baseline in Study 1. It is anticipated that using these approaches in tandem will allow a more thorough understanding of the relationships within the data.

Furthermore, due to COVID-19 and the subsequent lockdowns being a new and sudden phenomenon, there was little to no literature into how students were dealing with these changes. Initial studies such as Catty (2020) indicated that students across the board were struggling with feelings of depression, anxiety and isolation, however, there had been no literature at this time which focussed on how SF students had been affected and what their sources of stress were and what anxieties they may be feeling and when these anxieties arose. This study aimed to address these points and provide a longitudinal insight into how SF students anxiety levels were affected and what their sources have stress may have been at different timepoints across lockdown and their return to face-to-face studies.

Aims of the study

Overall, this study sought to explore the effects of a global phenomenon (COVID & lockdowns) on the ability for students in SF to undertake their studies. Furthermore, general sources of stress were explored that students may have encountered over this period with a focus on what sources of stress may occur due to the events of COVID. Moreover, this study explored SF student's self-efficacy and how confident they felt undertaking their studies before, during and after lockdowns. Subsequently the main research questions for this study are as follows:

- Exploration of the sources of stress that students may have encountered over lockdowns and how it may have affected their ability to study.
- To explore the effect of lockdown on self-efficacy and capacity for students to undertake their work
- To investigate student anxiety before, during and after lockdown.

Participants & recruitment

Study 3 was also entirely volunteer based with the survey being sent to students at each data point by SF directors to see if the students would be interested in participating in the study.

Though there were three sperate data collection points, the data was analysed together, and the data collection was one elongated collection, the timeline of the study can be seen in table 10 below. The first collection point was in December 2020 and gained 139 responses with 93 female, 41 male respondents and 5 identifying as other. The next data point was February 2021 with 84 responses being collected, 25 male, 58 female and 1 identifying as other. The final collection point was in April/May 2021, with 40 responses being collected, 13 male, 27 female and 0 other.

Late 2020 and early 2021 saw the implementation of several new lockdowns in the UK based on the Governments "restriction tier system". The country went into lockdown again from November 5th to December 2nd, 2020, and a further lockdown on 5th January 2021 to 22nd February 2021 with schools reopening on 8th March 2021. Because of the restrictions and the datapoints coinciding with SF exam periods, the last two planned data collection points were curtailed and collected less data than initially planned, however, in order not to interfere with student exam periods and to avoid adding extra stress, students were not pressured further to undertake the survey. The study gained 263 responses in total analysis was conducted on the combined datasets.

Table 9:
Timeline of Study 3

Ethical approval gained: October 2020. Ethical identification: ER26552623		
	March 2020	Reestablishment of contact with schools. New school: "C" is also contacted.
	October 2020	Ethical approval is gained from Sheffield Hallam's Converis system. Data collection begins.
	December 2020	Data collection point.
	February 2021	Data collection point.
	April/May 2021	End of data collection for COVID-19 study.
	May 2021	

Removal of participants

This study had the same removal criteria as the previous study in chapter 3 using pairwise deletion method (IBM Corporation, 2020): The removal of gag/non-serious responses and the removal of responses and responses with most of the response completed along with responses below 60% completion (Collier, 2020). This allowed for some cases to be removed while leaving some incomplete responses intact that has enough data to be analysed. There were removals of responses in all three data collection points: The December 2020 datapoint had 4 participants removed, February 2021 had 26 removals and April/May 2021's data collection had 18 responses removed. A total of 263 responses were analysed for Study 3 which was roughly about 15% of the total responses collected were removed.

Materials

Study 3 used both the PSS (Cohen, S. et al., 1983) and the academic self-efficacy scale (Chemers et al., 2001) as study 1 did, the details of these previous measures can be seen in **chapter 3**. However, study 3 had the additional measures of two COVID-related scales; one measuring COVID related

anxiety (based on the academic self-confidence scale which is the first part of the ASE) and a measure which investigated self-efficacy across COVID (based on the second part of the ASE scale)

The COVID anxiety related scale (Appendix C1) utilised three 5-point Likert scales numbering from 1 (Hesitant) to 5 (confident) with 15 items in total. The Cronbach's alpha value for this scale was α= .85. The scale asked students to retrospectively how confident that they felt undertaking academic tasks before (5 items) and during lockdown (5 items) and upon the return to face-to-face teaching (5 items). This section asked questions such as: *"How did you feel undertaking your studies at these different time points?"* regarding different academic tasks such as examinations, revision and seeking support for your work. A minor one item, second part to this scale also exists, asking the students to explain in brief terms how they felt COVID had affected their studies.

The COVID self-efficacy scale (Appendix C1) consisted of 9 items and sought to explore what situations may cause anxiety upon returning to face-to-face teaching after the lockdowns. For the second scale the Cronbach's alpha value was α= .85. The scale was set out similarly to the first COVID scale with scales between 1 (no anxiety) to 5 (major anxiety). The scale asked questions such as: *"Which of the following scenarios, may cause you anxiety when returning to Sixth form after lockdown?"* regarding several scenarios such as *"Returning to Sixth Form"* and *"Others respecting social distancing".*

Procedure

Due to the continuing lockdown measures the researcher was not permitted to visit the school to advertise the study, however, the directors of SF volunteered to advertise the study in the school bulletin and any assemblies that they may have with the SF students to garner potential candidates for the survey. All three of the schools were contacted via email as face-to-face contact was prohibited at this time due to governmental lockdown regulations. First contact was made in March 2020 when the initial lockdowns were introduced. This initial contact was used to seek interest and approval for the studies to continue at a later point despite the circumstances. After this ethical approval was gained in October 2020 and the first data collection point was undertaken in December 2020 with two other

data collection points in February 2021 and April/May 2021. Each datapoint was collected entirely online without any physical meetings or school visits.

The second survey was distributed in a similar manner to the Study 1; an email link was sent out to the students, this time to both years of SF, and a reminder email about the online survey a week later. The link was active for two weeks. The information in the link presented the students with all the necessary information required to make an informed decision on whether they wanted to participate in the study or not. Most responses occurred within the first week of the survey being live. The study link was open for 2 weeks and participants were given as much time as needed to finish the questionnaire, although, completion should not have taken more than 15 minutes.

Ethics

A similar route was followed to that of Study 2, ethical framework was taken from the BPS board of ethics (2014) and ethical approval was gained in October 2020 through Sheffield Hallam's ethical approval board with the ethical ID: ER26552623 (evidence of ethical approval can be found in Appendix C1).

In addition to the ethical approval, COVID-19 restrictions were still in place for data collection. The researcher did not attend any assemblies or meetings with the directors of SF and communicated with them through email. When school restrictions were eased, Students were emailed the link to the study. Any face-to-face contact was eliminated to reduce the spread of COVID-19. Similarly to the previous studies, the head teacher(s) of the school were used as in loco parentis instead of parental consent.

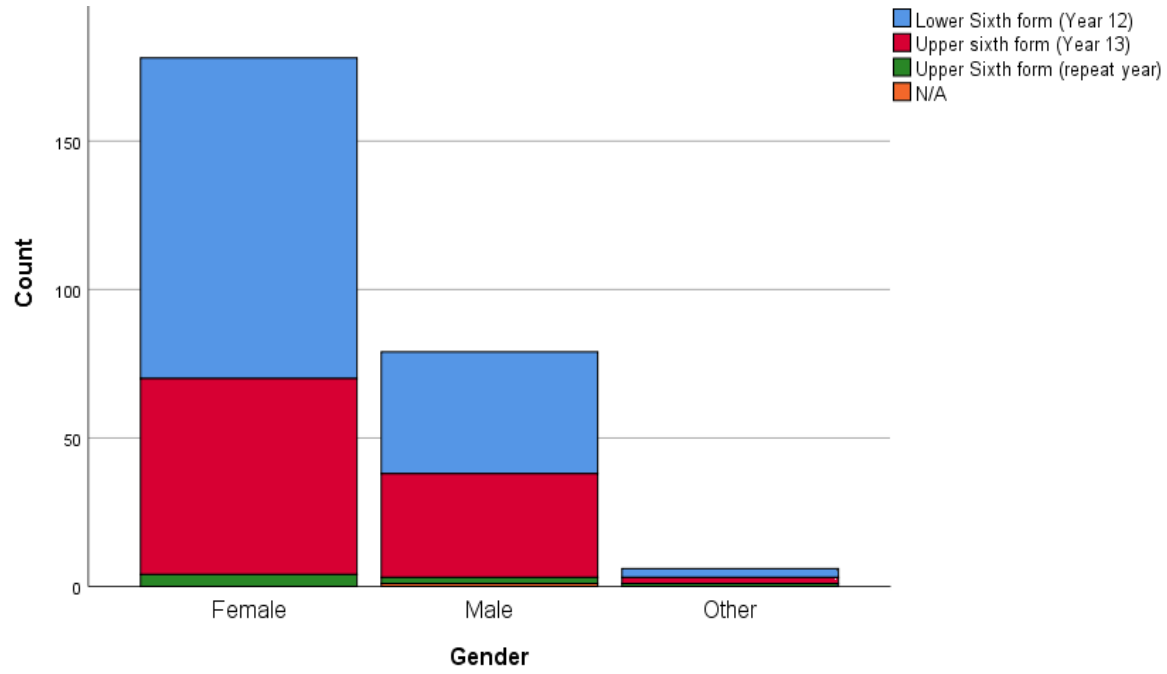
Analysis & Results

The quantitative survey collected data from December 2020 to May 2021 and was treated as one elongated data collection points with three individual data collection points. The survey aimed to explore the sources of stress for SF students with a focus on the effects of COVID-19 lockdowns and how these events may have affected student stress and how it may have affected students' ability to perform academic tasks. The December survey gathered 139 participants, the February survey

collected 84 responses and the third and final survey in April/May collected 40 responses after data cleaning. The total number of responses collected for this study was 263 with lower SF students being the bulk of the data (n = 152), followed by Upper SF students (n = 103) than students who repeated a year (n = 7) and one participant not answering this question. Overall, females (n = 178) participated far more than males (n = 79) and a six answering "other".

This study was an elongated cross-sectional design with no guarantee that the same students would have answered the questionnaire at each data point. All analysis was undertaken using the SPSS version 26 (IBM Corp, 2021) and Jamovi data analysis software version 2.3.28 (The Jamovi Project, 2023).

Figure 3:
Breakdown of gender & school year for Study 3



Creating the factor scores & reliability of the measures.

Items that needed to be reversed scored were questions 4,5,6 & 8 in the PSS as they asked positively framed questions where having a higher score on the Likert scale meant a lower overall score for perceived stress on that question.

Internal reliability was measured for the measures used in this study with α= .70 being the minimum benchmark score for reliability (George & Mallery, 2019; Nunnally, J. C. et al., 1967) . The COVID self-efficacy scale which measured confidence in undertaking academic tasks before, during and after lockdown had a Cronbach's alpha value of α= .86, showing good internal reliability.

The COVID anxiety measure reported a Cronbach's alpha value of α = .83, again, showing a good internal reliability. A high result was to be expected as both COVID scales are based on the ASE scales that reported α= .77 (academic self-confidence) and α= .79 (self-regulated learning) respectively. The perceived stress scale PSS was also used in this study and reported a Cronbach's alpha of α= .86.

The total scores used in the analysis were calculated by creating separate total variables using the "compute variable" option in SPSS to create a sum variable. Missing scores within the data were labelled as "999" missing values in SPSS and so were treated as missing values in the data and not included in the analyses. Histograms were produced and a Shapiro-Wilk test was undertaken on the total score variables and only the PSS was deemed to be normally distributed ($W = .99$, $p = .139$) while academic self-confidence ($W = .98$, $p = .010$), Self-regulated learning ($W = .98$, p = .019) and COVID anxiety ($W = .98$, $p = .004$) were not normally distributed. Histograms and box plots were created, and some histograms were visible in the box plots. Visual inspection of the histograms was roughly passable for distribution of data, while the box plots were also deemed to be acceptable and the outliers kept in as they did not significantly interfere with the data (Frost, 2019a, 2019b) (Appendix C2). Although three out of the four variables were not normally distributed, the effects of non-normal distribution will be offset by the large sample size of the study being 263 in total the

commonalities between the variables becomes less pronounced and the effect of non-normal distribution is lessened (Field & Miles, 2010; MacCallum et al., 1999).

Overall, the PSS was the measure that was answered most by participants (N=248) while the COVID post confidence section was the least completed section of the questionnaire (N=184). This indicates that there were some missing values or questions within the data, thus they were not included in the final totals when calculated. Or that there was a drop off in responses due to drop out effects of the students not completing the survey fully. In either case, the PSS was the most answered section and had a 94.2% of respondents answering. From the previous descriptive statistics, it can also be assumed that most respondents were female due to the higher overall response rate of females in the study (67.7%). As these variables were missing values in one or more items a Little's (1988) test of Missing Completely At Random (MCAR) was undertaken and was found to be significant χ^2 (1247) = 1547.34, $p < .001$. which suggests that the hypothesis that the data is not MCAR. Upon inspection of the data, it was found that there were a number of responses missing towards the end as students stopped answering/dropped out. Furthermore, the previously mentioned 60% rule (Collier, 2020) may have contributed to the data not being MCAR as participants may have dropped out/stopped answering soon after the 60% mark.

Pattern of inter-relationships across measures within the data.

To uncover the patterns of association across the variables the parametric assumptions were examined, and it was found that the parametric assumptions were met for this analysis with all variables being involved being ordinal variables with no problematic outliers (Appendix C2). Zero order correlational analysis was undertaken with the following factors as variables: PSS, Academic self-confidence and academic self-efficacy and the COVID-19 anxiety scale. Parametric assumptions were met for all the variables involved. The descriptive statistics and correlational relationships can be viewed below in tables 10 and 11.

Table 10:
Means and std. Deviations for the correlational relationships of Study 3

	Mean	Std. Deviation	Mean score	Mean Std. Deviation
PSS	23.57	7.18	2.36	.72
Academic self-confidence	37.39	8.65	3.40	.80
Self-regulated learning	37.73	8.75	4.72	1.09
COVID anxiety	21.71	7.79	2.41	.87
Confidence pre	17.39	4.60	3.48	.92
Confidence during	13.33	5.60	2.67	1.12
Confidence post	15.17	5.50	3.03	1.1

Table 11:
Correlations for Academic confidence, self-regulated learning, COVID anxiety and confidence pre, during and post COVID.

		Perceived stress score	Academic self-confidence	Self-regulated learning	COVID anxiety	Confidence pre	Confidence during	Confidence post
Perceived stress score	Pearson Correlation	-						
Academic self-confidence		-.11	-					
Self-regulated learning		-.49**	.52**	-				
COVID Anxiety		.44**	-.06	-.60	-			
Confidence pre		-.32**	-.25**	.47**	-18	-		
Confidence during		-.33**	..47**	.36**	-.27**	.38**	-	.
Confidence post		-61**	.69**	.57**	-.29**	.24**	.50**	-

**Correlation is significant at the 0.01 level (2-tailed)

A moderate negative relationship was found between current levels PSS and how confident students felt pre-COVID r = (221) -.32, p<.001 and confidence during pandemic r = (209) -.33, p <.001. There was a strong negative relationship between Perceived stress (PSS) and student confidence post-COVID r = (177) -.61, p = <.001. These correlations indicate that before and during lockdown, students felt that as their perceived stress rose, their academic confidence lowered.

This could be seen as a natural phenomenon in education, especially the slightly more negative correlation in the lockdown. However, upon the return to school, the negative relationship between perceived stress and academic confidence almost doubled. Students perceived a higher amount of stress upon the return to school after lockdowns and subsequently their academic confidence was more severely affected when returning to face-to-face teaching.

A strong negative relationship was found between PSS and Academic self-regulated learning (ASE_SRL) r(232) = -.49, p <.001 interestingly, this relationship was also found previously and to a stronger degree than in study 1. and a weak non-significant negative relationship between PSS and Academic self-confidence r(238) = -.10, p = .102. Conversely this relationship was also found in study 1 and is weaker in study 2 indicating less variation in the confidence scores. As perceived stress rose students' ability to self-regulate their studies and undertake academic tasks was also affected, however, academic self-confidence was not affected at this point by perceived stress. In contrast to the return to school after lockdown, perceived stress did not seem to affect academic self-confidence as greatly. Perhaps due to the additional challenges that lockdown presented and being out of face-to-face teaching for over a year due to lockdowns.

The only positive relationship to occur was between PSS and Covid anxiety r(193) = .43, p <.001. Although this was the only positive relationship it is to be expected that as perceived stress rises so does the COVID related anxiety. Despite academic confidence not being affected by PSS as much when the students undertook the study, COVID anxiety rose in tandem with PSS scores indicating that COVID anxiety may have become an extension of perceived stress for the students.

The mean scores were also calculated for the scores in each of the measures to gage what the general feeling was of students in reference to the scales of the measures. For the PSS a score of 2.36 indicated that students were on average sometimes stressed. While academic self-confidence and self-regulated learning scored 3.40 and 4.72 meaning that they had some confidence in their studies and an average confidence in regulating their learning. The COVID anxiety scale also indicated that there was some anxiety experienced regarding COVID and the pre, during and post scaled indicated that there was a drop in confidence during lockdown compared to pre lockdown but students confidence had not recovered fully post lockdown when compared to pre lockdown.

Multivariate analysis investigating the effect of gender on academic factors.

A one-way MANOVA test was conducted to assess if the two gender could be differentiated across scores from PSS, academic self-confidence, self-regulated learning and COVID related anxiety. The gender group was split between Females and Males. Females made up the majority of the respondents and Males the minority, those who answered "other" for gender were removed from the analysis for having a very small sample size (n = 6),

Table 12:
Gender breakdown of Study 3 respondents.

	Gender	Mean	Std. Deviation	N
PSS	Female	24.04	6.42	130
	Male	19.56	7.31	55
	Total	22.71	6.98	185
Academic self-confidence	Female	36.65	7.60	130
	Male	36.18	8.87	55
	Total	36.51	7.98	185
Self-regulated learning	Female	37.68	8.37	130
	Male	40.15	8.65	55

	Total	38.42	8.51	185
COVID Anxiety	Female	22.73	7.65	130
	Male	18.98	6.32	55
	Total	21.62	7.47	185

To test the multivariate effects of the independent variable on the dependant variables, Pillai's trace test was chosen as the test statistic as it is deemed to be robust against violations of the assumptions of equal covariance matrices (Tabachnick et al., 2019). Box's M indicates that the assumption of homogeneity of variance-covariance matrices was not met (M = 26.06, $F(10,52138.34) = 2.53$, $p = .005$). However, this test is regarded as overly sensitive and significance for this test is determined at $p = .001$ (Tabachnick et al., 2019). Hence the values for these variables were within acceptable standards.

Overall, the MANOVA indicated that males and females could be significantly separated on the collection of DV's, this is further reinforced by the medium effect size ($\eta^{2=}$ .14) meaning that there is a large practical significance between the variables and a meaningful relationship.

The follow up univariate ANOVA tests further revealed a more fine-grained detail of gender differences on individual measures. Males (M =19.56) reported moderately and significantly lower perceived stress scores than females (M = 24.04) (F (1,185) = 17.27, $p < .001$, $\eta^{2=}$ .09) as well as COVID related anxiety (Males M = 18.93, Females M = 22.73) ($F(1,185) = 10.23$, $p = .002$, $\eta^2 = .053$). No significant effect was found with Academic self-confidence ($F(1,185) = .135$, $p = .714$, $\eta^2 < .01$) or Self-regulated learning (F (1,185) = 3.28, $p = .072$, $\eta^2 = .05$), like study 1. These results indicate that males and females have a similar level of academic confidence and were able to regulate their learning to similar levels, although self-regulated learning was approaching significance and a moderate effect size, which indicates that if explored further there may be a significant difference between males and females regarding self-regulated learning. These findings highlight the influential role on the perception of stress between males and females and the effect of COVID on returning to school after the lockdowns.

Exploring the predictors of perceived stress: academic self-efficacy, self-regulated learning, COVID anxiety & confidence.

A hierarchical regression was then conducted to explore the strength of the relationships of the variables to perceived stress scores and to be able to better predict how the independent variables could predict perceived stress of SF students over their A-level studies. The regression consisted of two models with the second building on the results of the first. The results of the MANOVA tests highlighted that there were gender differences in perceived stress and academic self-confidence and self-regulated learning in SF students. A deeper exploration into any potential differences in gender should be conducted as well as looking at two other factors that may affect sources of stress for SF students: How difficult students found their subjects as well as how happy students were with their subjects.

A two-tiered model of variables was entered into a hierarchical regression to assess its ability to predict scores on the Perceived Stress Scale PSS that can be explained by the addition of new variables (Field & Miles, 2010). Using the enter method, two blocks were created: The first model contained the predictors of gender, study happiness and study difficulty. According to the MANOVA results, Gender had previously shown some significance, and further exploration was undertaken to find whether there were other factors such as the happiness of one's subject choice and the difficulty of one's subject and whether there were any significant effects between genders.

The second model contained the same variables with the addition of Academic self-confidence, self-regulated learning and COVID related anxiety. These factors were added to further explore the effect of subject difficulty and happiness on gender while also including how academic self-confidence, self-regulated learning and COVID anxiety may affect males and females. Parametric assumptions for the data were met and was distributed evenly according to the Durbin-Watson which displayed a value of 1.70, showing that the data was within the acceptable limits, therefore meeting parametric assumptions.

Table 13:Means & std deviations of MLR for study 3

	Mean	Std. Deviation	N
Perceived stress scores	22.71	6.98	185
Subject Difficulty	2.23	.54	185
Subject Happiness	1.39	.67	185
Academic self-confidence	36.51	7.98	185
Self-regulated learning	38.42	8.51	185
COVID Anxiety	21.62	7.47	185

Overall, the first model explained that there was a weak to moderate relationship between the factors and PSS scores, indicating that 19% of the variance in the data can be explained by the combination of these factors (R = .44, $R_{ajd}^{\ 2}$ = .18, F (3,181) =14.44, p <.001). in this model, both gender (B = -4.54, p< .001) and subject happiness (B =3.19 , p <.001) were significant predictors of perceived stress in SF students while subject difficulty was not (B = -1.25, p = .149).

The gender-based differences are consistent with that similarly reported in the univariate analysis stemming from the MANOVA, though other variables have been controlled for. In this case, the difference between males and females was (β= -,30 p= .000) indicating that there was a -.30 difference between the stress scores of females to males.

Subject happiness is an important factor in a student's ability to undertake their work and a potential mitigator for academic stress (β= .30, p= .000) indicating that for every point increase in subject happiness there was a .30 increase in perceived stress. The first model explained that there was a weak to moderate relationship between the factors and PSS scores. In the first model, both gender and subject happiness were significant predictors of perceived stress in SF students while subject difficulty did not significantly predict perceived stress scores. This is an indicator that subject

happiness is an important factor in a student's ability to undertake their work and a potential mitigator of academic stresses.

The second model in the hierarchical regression built upon the first and showed the following relationship: (R = .65, R^2 = .42 F (3,178) = 21.25, p< .001). The second model showed improvement from the first model (ΔF(3,178)=22.84, p<.001, ΔR^2 =.224). The second model included the same variables with the addition of academic self-confidence, self-regulated learning and COVID anxiety increased and accounted for 42% of the variance. This increase represents a large effect size (based on Cohen's guidelines ($f^2 \geq .35$). This means that the additional predictor(s) explain a substantial amount of variance relative to the unexplained variance in PSS scores.

Consistent with the previous results of the univariate ANOVA. The second model indicated that gender had a significant negative relationship with perceived stress (β= -2.53, p= .007). On average for every point increase in perceived stress scoring there is a there is a decrease of -2.53 points in stress from females to males. Male students experienced a lower rate of stress than female students when gender was explored as a predictor of perceived stress meaning that there was a significant difference in gender effects between males and females when it came to feelings of perceived stress.

Subject happiness (β= 1.68, p= .012), and COVID anxiety (β= .32, p< .001) have a significant positive relationship with perceived stress scores. With each point if increase in perceived stress subject happiness rose by 1.68 points and an increase of .32 in COVID anxiety. This effect can be attributed to the idea that despite students perceiving more stress, the happiness with their subject may be a mitigating factor to stress, as the previous regression in chapter 3 indicated. As feelings of perceived stress rose, as did feelings of COVID anxiety, perhaps in this instance COVID anxiety had become another branch of perceived stress now that the students had returned from lockdown.

Academic self-confidence (β = .03, p = .689), and subject difficulty (β = -.04, p= .522), were not significantly associated with the prediction of perceived stress. Subject difficulty was shown not to be significant in both models, indicating that subject difficulty is not a predicting factor of perceived stress scores. Additionally, subject difficulty may be being mitigated by other factors as the

significance in the second model decreases, whereas subject happiness was significant in both models, indicating that SF students perceived stress or potential challenges from the difficulty of the subject are being mitigated by factors such as how happy one is with their subject choice.

Table 14:
MLR regression model Study 3

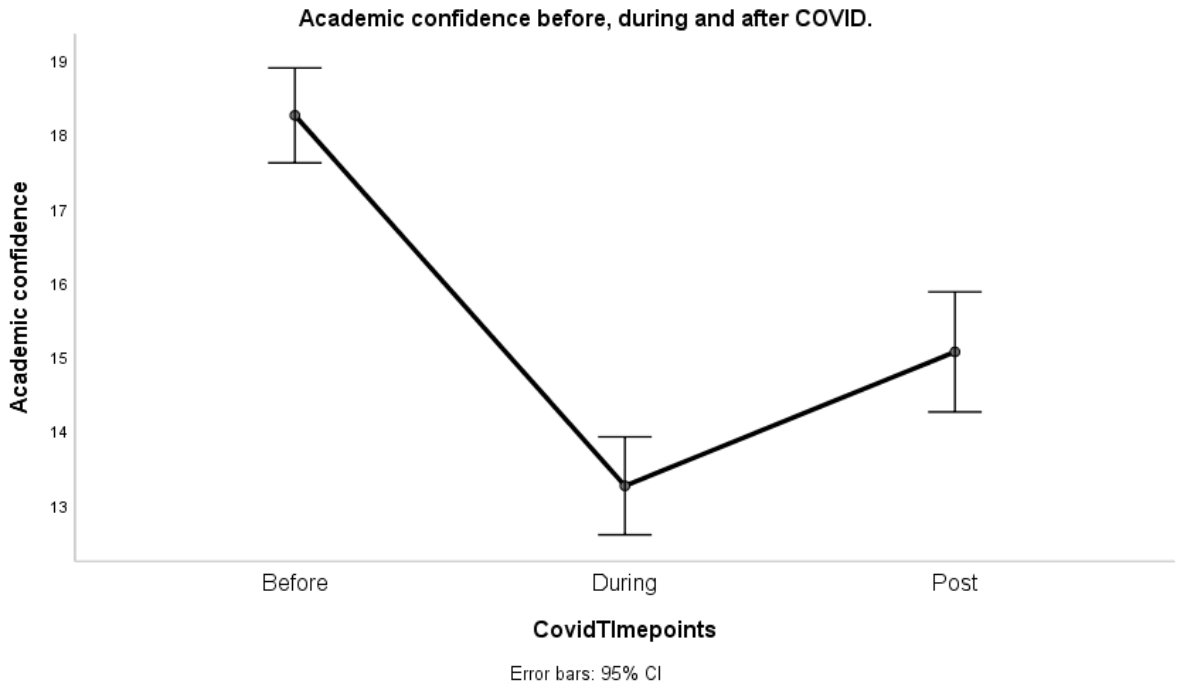
Model	R	R^2	Adj. R^2	R^2 change	F Change	Df1	Df2	Sig. F change	Durbin-Watson
1	.44	.19	.18	.19	14.44	3	181	.000	
2	.65	.42	.40	.22	22.84	3	178	.000	1.70

Exploring the effects of self-efficacy at different timepoints

Students were asked to recollect their confidence in undertaking academic tasks before, during and after lockdowns and from this repeated measures ANOVA was conducted.

Prior to the repeated measures being conducted, the assumptions for sphericity were found to have been violated ($X^2(2)= 15.03$, $p= .001$). Subsequently, the degrees of freedom needed correcting, and the Greenhouse-Geisser correction was used to make the test more conservative(Field & Miles, 2010)After the corrections were made, results demonstrated that there was a significant effect of self-rated levels of the COVID period on the self-rated levels of confidence (F (1.85, 331.19) = 79.06, $p < .001$, η_p^2=.31). Student confidence had been bolstered by the return to school, but the repeated measures ANOVA indicates that there are differences between the self-confidence ratings, with a non-linear pattern across the three time points. Analysis reported that self-confidence lowered during lockdown but rose upon the return to their studies but did not return to the pre-lockdown levels (A visual representation of confidence levels can be seen in figure 4).

Figure 4:
Self-reported academic confidence over different timepoints



Students reported that they felt that academic confidence was higher prior to lockdown and was negatively affected while they were studying in lockdown. Post lockdown academic confidence rose when students returned to school, however, confidence did not return to pre-lockdown levels. This was indicated by the post-hoc tests Bonferroni correction to minimise the instance of type I error rates and revealed that pupil's academic self-efficacy during the lockdown dropped -4.99 points compared to before the lockdown ($p_{bonferroni}$<.001), recognising that students struggled to engage with academic tasks during the lockdown and their confidence in undertaking academic tasks had diminished compared to before lockdown. However, academic self-efficacy rose 1.81 points upon the return to school, indicating that the return to school had a positive impact on a student's ability to undertake academic tasks. Despite this, academic self-efficacy post-lockdown was still significantly poorer compared to scores before to the lockdown (-3.19, $p_{bonferroni}$<.001). The results indicate that self-reported confidence was affected by COVID and subsequent lockdowns and the student's confidence/ability to undertake academic tasks was greatly diminished. However, upon the return to school, student's self-efficacy increased, although not back to pre-lockdown levels indicating that

students were more confident inside the classroom when compared to being away from the classroom in lockdown.

Discussion

Overall, the analysis indicated that the strongest predictors of perceived stress for SF students in this study were COVID related anxieties towards returning to their studies after lockdown and students' confidence in their academic self-efficacy being affected after returning to their studies. Gender and subject happiness also being important factors that affected SF students perceived stress. Males seemed to perceive less stress than females and subject happiness was indicated to be an important mitigator of stress. A difference in the way males and females perceive stress supports Dobson's (1980) original findings as Dobson noted that males and females were indeed both experiencing stress, but males and females experienced stress towards different academic tasks. Interestingly, this differs slightly from the findings of the analysis in chapter 3, where a gender difference was found in academic self-confidence, perhaps some factor (such as COVID) had a bearing on this between the original study and this one. Tangentially this contrasts Dobson's (1980) findings that found that there were no significant differences between males and females when it came to stress, only what certain aspects of education that they found stressful and that the perception of stress and effect of COVID played a larger role in this than first expected.

The findings in this study support one of the main aims of the PhD research. The sources of stress of SF students have been more deeply explored and results indicate that there was a deeper interaction between gender and perceived stress as males experienced less perceived stress than females which highlights that there are differences in how sources of stress in SF are experienced by gender.

Study 1 found that there were gender differences in academic confidence with females being generally more confident in their academic abilities than males. However, Study 4 demonstrates that females perceived more stress than males indicating that females have a higher propensity towards the effects of stress but are generally more confident in their academic abilities. This effect may go some ways to explain why post-lockdown confidence scores had not recovered to pre-lockdown levels. Males may

have been affected by the lowering of confidence in academic abilities across lockdown and struggled to recover, while females suffered more anxiety.

As the effect of COVID and lockdowns were examined on the student's ability to engage with their studies, results indicated that students were impacted by COVID related anxiety when returning to their studies but that their confidence in their academic abilities was significantly affected. This increase in anxiety towards returning to school stands in contrast with studies such as Catling et al (2022) and Catty (2020) that report student anxiety rose significantly in lockdown, instead the results of this analysis indicate that anxiety decreased in lockdowns when compared to both before and after lockdowns. Though, the results from both Catty and Catling *et al* focussed on initial reactions to the lockdowns and effects of COVID 19 and not student perceptions over time.

Students in this period are experiencing a "big jump" between GCSE to A-levels (and presumably lower Sixth to Upper sixth) where an intense period of change and academic demand is placed on the student (Hernandez-Martinez et al., 2011; Stubbs et al., 2022). Interestingly, academic confidence and perceived stress did not seem to be as affected during the lockdown but only became an issue when SF students had returned to their face-to-face studies. Indicating that the effect of COVID and lockdowns on their education and confidence did not become apparent until the return to their studies and the environmental pressures that are usually apparent in a school/educational setting (Posselt & Lipson, 2016)are not felt as strongly when learning from home. Much like the results of Study 1, academic self-confidence proved to be an important factor in SF students' ability to engage with academic tasks.

The effects of the pandemic and online learning became a source of stress for SF students as they began to view the disruption that they had encountered through the lens of how it may affect their examinations and assessments. Consistent with the findings from Study 1 and Dobson's (1980) idea of multidimensional view of stress for SF students, the events of the pandemic and the move to online learning had caused disruption to the normal work life of the student, however, this effect was delayed. Similarly, as Nash et al (2021), indicated, SF is a culmination of many stressors that affect a student's mindset and feelings of pressure, the events of the pandemic and the ensuing disruption

caused a pressurised situation where more pressures were added to the student. Moreover, the compounding effect of mounting requirements and academic pressures via audit culture and top-down curriculum pressure from universities (Putwain, 2009; Reid, 1972; Roome & Soan, 2019; Shore & Wright, 1999) would already be present and exacerbated by the effects of missed content over lockdown. Upon the returning to school students may have begun to realise that the smaller disruptions had a compounding effect on stress and that it now provided a potential threat to one's academic success, thus the feelings of anxiety harkening back to the idea that SF students view sources of stress through a strictly academic lens where pressures are weighed as to how it may affect academic success for the student.

Results indicated that the change in events due to COVID cause considerable stress, especially the return to face-to-face teaching. The reaction to these changing events supports the idea that students felt stress because their life experiences and events disrupted the environmental demands (return to school, revision, realisation that content needed to be caught up on) and an individual's resources (Núñez-Regueiro & Núñez-Regueiro, 2021). Furthermore, the return to school and COVID anxiety indicates that students were presented with a stressor that exceeded students' current ability to cope, supporting the idea that students may be in one of the stages of Selye's GAS theory (1946). Moreover, the results of this study support Dobson's (1980) claims about stress being multidimensional in nature with stresses and challenges exasperating the main challenge of assessment and examination concerns. Despite the unique circumstances of COVID, ultimately the challenges and stresses that were presented by COVID affected students' ability to undertake their studies which in turn exacerbated their ability to feel adequately prepared to undertake their examinations. Moreover, a number of SF students felt that online learning had a detrimental effect on their academic confidence, perceived stress and ability to undertake their studies. Although, these negative effects did not become apparent until the return to face-to-face teaching where students became acutely aware of what they had missed and the effects on their confidence. This may not have been so pronounced if it were not for the already existing pressures of SF education along with the transition from GCSE to SF or through the years of SF itself.

Despite there being gender-differences in the results and males being generally less stressed than females, results did not indicate that neither gender was stressed at all. Both genders displayed levels of stress and were affected by the normal sources of stress present in SF and the events of COVID and that COVID had been a profound factor in the experience of SF students studying at this time that added to the already multi-faceted experience of stress that SF students experience across their studies.

Finally, despite the effects of COVID and the return to school being mostly a source of stress for students, it may have also become a motivating factor as well as the repeated measures ANOVA reported that academic self-efficacy of students rose upon the return to school when compared to during the lockdowns and the hierarchical regression reported that subject happiness was a mitigating factor for perceived stress. The results indicate that students perceived stress can be mitigated by their happiness with the subject or increased motivation upon returning to school is very much in line with the idea of challenge-hindrance as proposed by Cavanaugh et al (2000) indicating that students who have a higher happiness in a subject will be able to weather increasing perceived stress due to their enjoyment of the subject acting as a mitigator. Although it did not return to pre-lockdown levels, it is still an indicator that there are potential motivating factors such as that encourage students despite the other apparent pressures.

Limitations

The studies within this PhD thesis found several enlightening aspects of how SF students view and perceive sources of stress throughout their time at SF and what factors may exacerbated or mitigate stress. However, is it also important to note that there were several issues with these studies that must be acknowledged for the sake of future research.

The events of COVID-19 were so tumultuous and disturbing to the school system and student that subsequent studies were also affected by the lingering effects of the pandemic such as missed content, COVID anxiety and issues with online learning. Ultimately, most of the data in this PhD thesis was affected by the persisting effects of COVID and lockdowns, meaning that even if the study was not

directly exploring the effects of COVID on students' perception of stress, COVID would most likely have had an impact on the student and subsequently the data.

Finally, even though an effect with gender was found, the specific factors that caused males to experience lower stress levels than females was not explored. Dobson's (1980) research found that, much like the research in this PhD, females experienced more stress than males. Furthermore, Dobson found that there were specific tasks that males found more stressful than females, such as: "monotony of work", while females found that "little knowledge of the standards of work required by the teacher" was more of a source of stress. For both Dobson's research and the research in this PhD study, the specific factors and differences of what males and females found to be a source of stress was not explored further. Future research could expand into exploring these gender differences and the specific aspects of what males and females find to be sources of stress and any further factors that may affect this.

Chapter 6: Study 4: One-to-one interviews

Introduction

The advent of COVID-19 and subsequent series of isolation and imposed lockdowns affected the structure and teaching style of many in education, including SF students and their A-level studies (Mccarthy, 2024). The lockdowns disrupted the normal flow of learning and examinations and provided several challenges to SF students on top of those that already present themselves throughout SF. Study 3 indicated that there had been some profound effects on student confidence in undertaking their work upon the return to face to face teaching after the lockdowns and that there were various other sources of stress that the return to face to face teaching had brought to the surface such as the lowering of academic self-efficacy and COVID related anxieties. Previously, Study 3 utilised online surveys to gain a general and broad understanding of the effects of COVID-19 and lockdowns on SF students. Study 4 was designed to explore the student perspective in studying over the COVID-19 pandemic period. One-to-one interviews would allow students to be able to freely speak about their experiences of studying over COVID-19 and how it has affected them without feeling pressured to speak by a group (Opdenakker, 2006). The one-to-one interviews would also provide an opportunity for students to engage in a post-reflective overview of the entire academic period over COVID-19 and how it had affected the students. The interviews were used to follow threads from Study 3, it was also designed to examine the reasons why students felt more anxious in tackling studies when returning to school after the lockdowns. In essence, Study 3 aimed to provide a broad understanding of what students may be feeling but Study 4 aimed to provide a deeper and more personal insight into what students felt had affected them the most academically across the pandemic and lockdowns.

Though there may be some overlap between the sources of stress felt under normal circumstances of studying at A-level, COVID provided a unique opportunity to explore students' retrospective overview of their time studying over COVID-19 and any stresses or challenges that may have affected them. Additionally, as mentioned in chapter 4, the study aims to contribute to the exploration of SF student journey across SF and address a lack of research regarding SF students (Stoten, 2013, 2014a). Furthermore, the events of COVID provided an opportunity to examine the effect of lockdowns on

students' engagement with their studies and how it may have affected their journey across A-level along with an exploration into what students see as their perceived sources of stress going forward in their studies.

Research questions

The disruption that COVID caused globally was something that affected SF students as well as schools and colleges were closed. Though this was an unexpected and tumultuous period, it did provide a pretext to study the effect of lockdowns and online learning that COVID caused and the outcomes on SF students stress and ability to undertake their studies.

The research aims of this study centred around exploration into student perceptions of online learning and engagement with their studies while also exploring how this may have affected the sources of stress that students encountered. The research aims of this study were as follows:

- To explore student perceptions of lockdowns and the effect that lockdowns had on their ability to engage with their subjects.
- Investigation into what students felt retroactively had helped or hindered their ability to engage with their studies over COVID-19.

Participants & recruitment

Participants were collected via volunteer sampling from two public schools in South Yorkshire. Two of the three previous schools agreed to take part in the study with school A and School B agreeing to take part. As previously mentioned, both schools serve historically industrial and agrarian communities. All participants were between the ages of 16-19 and were from both Lower Sixth form and Upper Sixth form and were studying a mixture of subjects and disciplines.

Students were informed about this study via the researcher contacting the Director of Sixth form in each school and providing the information documents via e-mail. Information about the study was sent out to the students via their school e-mail and the students were asked to register interest.

Initially, 10 students per school registered their interest but the final outcomes were seven interviews at School A and 12 for the for-school B.

Table 15:
Timeline of Study 4.

Ethical approval gained: March 2022 Ethical ID: ER25530927		
	February 2022	Schools contacted about interviews. Two schools agree to participate. After several emails, one school does not respond and so it is assumed that they no longer want to participate.
	March 2022	School A's data collection point on 20th March.
	April 2022	School B's data collection point April 1st.

Design

The interview utilised semi-structured one to one interview that focused on the effect of COVID-19 on the Sixth form students' ability to study, their confidence in undertaking academic tasks before, during and after COVID-19, the questions were based on study 3's COVID-19 anxiety and and retrospective scales. Study 4 also aimed to explore the management of academic challenges/stresses and how COVID-19 has affected the students' academic prospects for the future.

Due to restrictions put in place by school A, the interviews were limited to roughly 20 minutes in length for school A's interview sessions. The interview schedule consisted of 10 main questions and 8 follow up or prompt questions (Appendix D1). The interview schedule began with questions that explored the general feelings of studying at SF, utilising questions such as: *"Could you tell me whether you faced any challenges over your time at Sixth Form?"* and *"What are your thoughts and feelings about studying at Sixth Form?"* These opening questions aimed to gauge how students felt generally about their SF courses and whether there were any significant challenges or stresses that may have arisen in this time. Following the opening section, the main body of the interview was reached, with questions pertaining to the students' feelings on how COVID-19 had affected their studies and confidence to undertake academic tasks. Questions such as: *"How do you feel that the events of COVID and lockdown have affected your journey through SF?", "How has the events of*

COVID affected the way in which you approach work/revision?" and *"Over the time at SF (especially COVID) has the way in which you approach and manage your stress changed? If so, how?"*. With the following area focusing on the topic of support and prospects, with questions such as: *"Over COVID, do you feel as if you were supported through your studies?"* and *"How have the events of COVID affected your plans for future education and prospects?"*

Prompt and follow up questions were used to tease some more information out of the students or were used to supplement/present a different perspective on a question that had been asked. Generally, these follow up or prompts were attached to one of the main questions, such as:

"Question: Do you feel as if your confidence in undertaking academic tasks (such as essays, or exams) has been affected by the events of COVID-19? If so, how?" and *"Prompt: Think back to how you felt undertaking your studies over the lockdowns, how does your confidence compare?"*

Other materials in this study included a voice recorder and the Sheffield Hallam secure folder (StudentSharedDrive (Q):) behind a password protected account which only the researcher could access. Physical copies of the consent forms are stored in a locker are stored in a secure office in a locker which required a key to access and have been moved to archival storage for the duration of the research project.

Procedure

The researcher arranged one day to visit each school and collect data. School B was visited, and data collected on 30th March 2022. The researcher was given the full school day to collect data. School A was visited on 1st April 2022, in this instance the researcher was only given until 12 o'clock noon to collect the data with a strict 15-minute limit per interview and so the interviews collected from school A are shorter on average than those at school B. Despite this the researcher was able to complete the data collection within these days.

Students had been informed and allowed to register interest with the study through the Director of the respective Sixth Forms with the director(s) acting as in loco parentis for consent on behalf of the

parents. When the day came a private room was booked where students could be called in to undertake the interviews. Students had already been made aware about the right to withdraw through the information that was sent to the schools but were also reminded about the right to withdraw verbally and through the information/consent form, which can be viewed in Appendix D1. Consent for the study was given by the headmaster of each school with parents not being required to give express consent for students to partake in the study (Research Board, 2014) Students were asked to fill in paper consent form where they were reminded about their right to withdraw. After the participant had signed the consent form on the day of the interview prior to the interview being conducted, they were again reminded of their right to withdraw and were verbally asked if they had any questions. After this, the interview began and was voice recorded using a Dictaphone. After the interviews the student would be reminded of their right to withdraw and given a debrief sheet and given the opportunity to ask any questions about the interview.

Ethics

The BPS code of ethics (Research Board, 2014) was still followed. In addition to this, adherence to Sheffield Hallam Universities own ethical approval system Converis was used to gain ethical approval for this study and was granted in March 2022 with the ethical ID: ER25530927 (evidence for ethical approval can be found in Appendix D1).

Participants were informed of their right to withdraw several times before, in the information sheet and after the study. The Directors of SF were also informed that students could withdraw from the study too and that if they wished to do so they could without reason. As an additional precaution, students were informed about the location/contact of support staff in case the student became distressed in the study or needed additional support afterwards.

In the analysis and transcription of the interviews, any identifying information was removed along with participant names. The participants were given an anonymous identifier instead, for example: the first participant at School A would be called “A1”. This was done to reduce the likelihood of students being identified through the transcripts. A sample of these transcripts are available in Appendix D4.

Analysis

The interviews were analysed using Braun and Clarkes reflexive thematic analysis (TA) (2006). Firstly, the data was read to increase familiarity with the data and begin to identify relevant and interesting points and potential codes in the data. TA was chosen due to its flexibility and its ability to be used as both a analytic review technique and review process that draws out the over-arching themes and narrative of the data (Braun & Clarke, 2006). Furthermore, TA was chosen to analyse these interviews over other analytical techniques such as Grounded theory or Interpretive Phenological analysis as TA is not bound by strict epistemological bindings which allows it to fit into both positivist and realist camps when needed. Ultimately TA was flexible enough to allow a natural analysis of the data along with fitting the exploratory needs of this PhD which required a broad analysis of the experience of others.

Following the steps as set out in Braun & Clarke (2006)after transcription, the data was read through several times before codes were generated, this helped develop familiarity with the data and allowed the researcher to begin to see potential connections and over-arching patterns within the data. Following this, highlighting of potentially interesting points was undertaken along with the noting of initial codes within the data. The initial codes were highlighted within the date using the NVIVO qualitative data analysis software (QSR International Pty Ltd., 2022), most of the analysis was done using the traditional pen and paper method. Following this the codes were arranged into loose category groups. Once the loose category groups had been formed, similar groups would be combined to form initial themes, this process would continue to refine and strengthen the emerging themes found in the data until the researcher had felt that the themes were strong enough to stand be commented on thoroughly in the analysis.

Outline of the themes

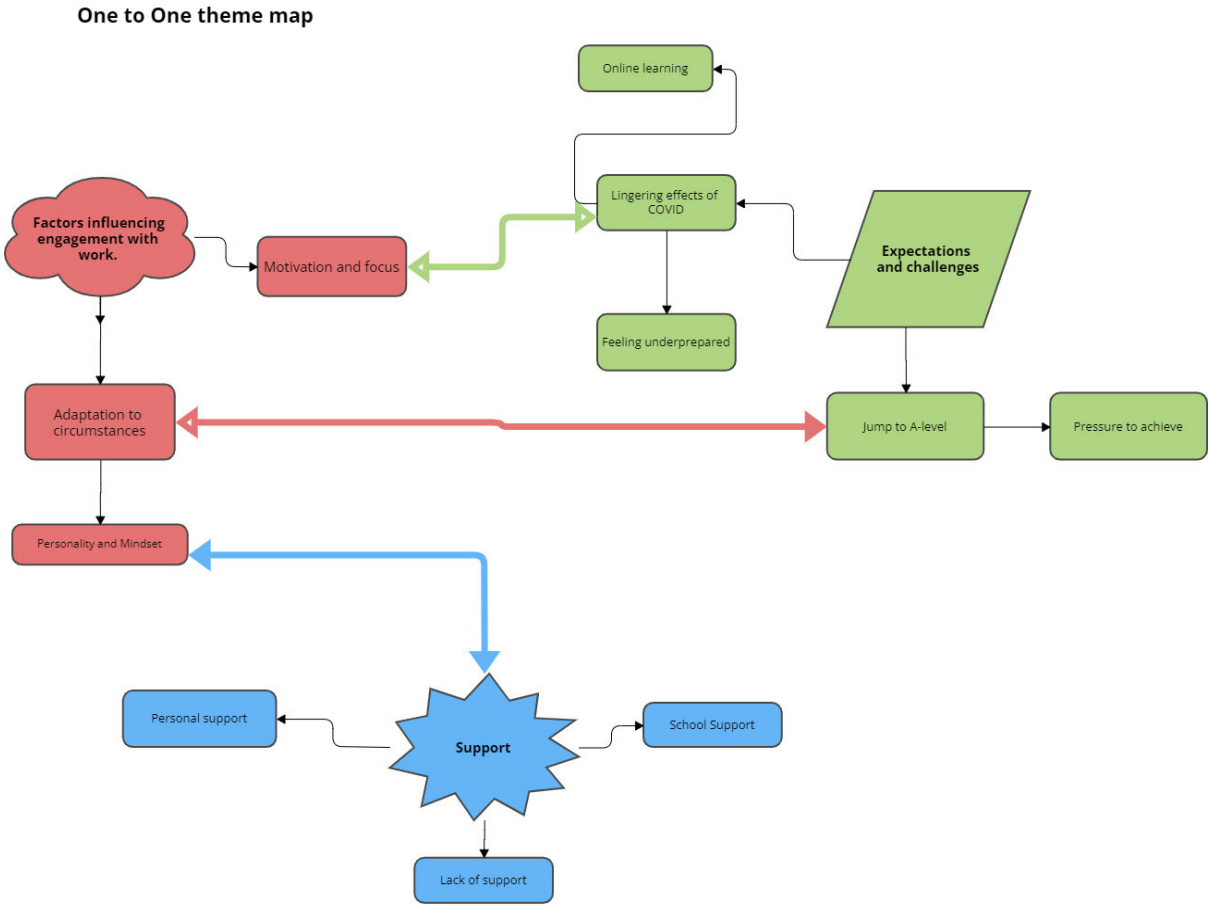
Three main themes arose from this data, namely: **“Expectations and challenges”** with this theme being possibly the first modern insight into what challenges, sources of stress and pressures that SF students faced. Several sub-themes were also linked to this theme with **“**lingering effects of COVID”

and the return to face-to-face teaching being linked to “feelings of under preparedness”, “pressure to achieve” and “issues with online learning”. The second theme was that of **“Student feelings on support”,** minor sub-themes of differing types of support were extracted from this theme with **“**Personal support”, “Lack of support” and “School support” being key factors in this theme. The third theme was **“Factors influencing engagement with work”** with the sub-themes of “Adaptation to circumstances” and “Motivation and focus”. A table of the key comments from the students regarding the analysis can be found in appendix D5 - Interview comments table.

Thematic relationships

The three themes were distinct enough to be separate but also shared some relationships and influenced one another, a full map of the themes and their relationship can be seen below in figure 5. The aim of these themes would be to depict the narratives and themes running through the interviews and provide a modern-day insight into what the effects of COVID and lockdowns were on student’s ability to undertake their studies and what the main sources of stress and challenge were. There were several relationships between themes and sub-themes with “Factors influencing engagement with work” and its sub-theme of “motivation and focus” was strongly linked with “Lingering effects of COVID”. The “Adaptation to circumstances” sub-theme was linked with the “Jump to A-level” sub theme and the Support theme was linked strongly with the “Personality & mindset” sub-theme and the “Factors affecting engagement with work” theme. The extent of these thematic relationships will be discussed further in the results section below and a visual representation can be seen below in figure 5.

Figure 5:
Map of the thematic relationships in Study 4.



Thematic analysis & results

Theme 1: Expectations & Challenges

This theme captures the various challenges and sources of stress that the students faced over COVID-19, lockdown, and with A-levels in general. Stress and challenges were accentuated by the effects of COVID, lockdowns and online learning. Many students felt a great deal of frustration and irritation with online learning; this sentiment was expressed aptly by Participant B12 who was an upper Sixth Form student:

"Online learning just doesn't work; do you know what I mean? It just doesn't work."-B12

The student then further explains their feelings about online lessons:

"it's just embarrassing to ask for help or anything, it's just hard. And then the teacher goes too fast or the Wi-fi breaks down. Just a lot of stuff gets in the way and I feel as if it is not as efficient" B12

There is a clear sense of frustration when it came to the move to online learning over lockdowns, this could be due to many factors; the sudden change in educational format, the increased onus placed upon the students to independently study, stress induced by the events of lockdown. Though the materials were available and there was time for independent learning at the students end, it seems that the students struggled to engage with the material when learning online. Seemingly this lack of face-to-face communication was a significant obstacle for student engagement and understanding of their subjects and had interrupted their learning at a critical time. Further to this B12 voiced some subject specific practical issues regarding online learning and its effect on her ability to study:

"I think that lockdowns have made it significantly harder as well, for study, because I do A-level Spanish and a big element of that is speaking it, so we haven't been able to have speaking practice as much as we used to…" – B3

The student speaks about missing a large element of their course due to online learning. Though the format changed, the effect on subjects and learning for both years had been quite profound with subjects that require a practical element being particularly affected, this was especially problematic with subjects that had a practical element as a major component, leading to B3 feeling as if they have

not had the essential practice needed to properly understand the Spanish course. Participant B10, who takes a computer design and technology course, shares the sentiments with B3 when saying:

"I feel like we missed out a lot of practical skills in that subject (design subject), so when it came to doing an actual project, we were sort of clueless on where to go and what to do." -B10

The student then further explains:

"We had to do most of it online, on CAD (computer design software) and doing concepts instead of actually getting in with the physical skills". -B10

The effect on these subjects cannot be understated with many students feeling that their education, especially those who took subjects with practical elements, had been greatly affected and that the initial disruption had provided a challenge but also upon returning to school that there were still issues stemming from lockdown that the students faced. Students then seemed to be presented with missed opportunities and practical skills in their course and on the return to school, some students disclosed that they faced with the realisation that they needed to revisit the content that they learned over lockdown as they did not understand it as much as they should have done. On this issue, participant B1 expressed:

"When you're at home, or I have been at home for like a term when I've isolated before…it doesn't seem to come across the same over ZOOM for me personally, so I found that quite difficult to adapt to….I had 20 weeks off where I've really not done anything now being thrown back into A-levels, that is quite stressful, jumping straight back into it." -B1

P1 expresses a twofold problem here: the issues surrounding missed content because of isolation and COVID related disruption, along with the jump back into A-levels. Students B1, B3 and B10 all express sentiments that their studies had been affected by online learning, along with the stress of then having to return to A-levels with some major parts of their education missing.

Another major issue with online learning and lockdowns was the effect it had on formal examinations. Students expressed trepidation when explaining that they skipped their GCSE exams due to COVID and now were expected to engage with A-level examinations without prior experience of formal exams.

"…I didn't do my GCSE's and then straight into A-levels and it was quite a big jump without even sitting and exam in Y11." - B5.

"I was definitely less prepared for my A-levels, knowing I have never done an exam before" A6.

A particular challenge that seems to be weighing on students is that of the disruption to formal examinations. Examinations are the end point of the GCSE and A-level courses and many students' admission into A-level courses and potential entry into the university course of their choice hinged on the results that they achieve in their examinations. Disruption to the examinations or preparations for examinations will present considerable challenges for any student as it could jeopardize the student's future. On this subject, participant A6 further explains:

"…I came into my A-levels without really taking a proper formal exam, besides my SATS from year 6 (10-11 years of age), which is quite a long time ago (6-7 years ago)"-A6

Several participants from both upper and lower years of SF all expressed sentiments of feeling under prepared for their A-level courses along with frustration and concern at not undertaking formal examinations that they felt would have prepared them for A-level examinations. All these sentiments seemed to link in with the disruption caused by COVID and lockdowns as well as online learning and missed materials. Many students felt the sting of examination disruption and that it weighed heavily on their ability to work and the confidence in the upcoming examinations. Ultimately, students in SF saw the disruption to their examinations through online learning and the effects of COVID-19 as a great challenge that significantly affected their ability to undertake work and undermined their confidence.

<u>Jump to A-level</u>

Students also saw the natural jump from GCSE to A-level as a significant challenge. Naturally, climbing the academic ladder can be challenging, especially when students may not have experienced anything like A-level courses before. B1, an upper SF student explains:

"It's (A-Level) been quite novel and not really kind of undertaken before". B1

The student uses the word "novel" here, expressing just how new A-levels are to the student and how it is something completely foreign to them. This exact sentiment was shared by B3 and A1 who commented that:

"I think what I found most challenging is that jump, I think especially in English, that jump between A-level and GCSE because I didn't realise how different it would be". B3

(SF after lockdowns) *"it has been a really painful learning experience, especially online, because it's that lack of motivation and wanting to do anything and that lack of interactions with humans in person."* A1

The sentiment of both upper and lower SF students seems to be that A-levels are very new and provide a new set of challenges that the students may not have faced before. Furthermore, the jump between GCSE and A-level provides an initial shock but also a slow realisation into how difficult A-levels is and how much more is expected of the students when compared to GCSE's, especially because of the effects of COVID-19 forcing students to learn online, this factor alone seems to have damaged the some student's confidence in their abilities and motivation to engage with their studies. Additionally, B3 had already expressed in the previous theme how their language course had been negatively affected by online learning and missed practical skills. The students seem to indicate that there are some shared stresses despite the events of COVID but also some additional frustrations caused by the lockdowns which have also exacerbated existing sources of stress. Additionally, this would have added extra stress to the jump between GCSE and A-level. Many students found this jump difficult, B2 and A6 who were both upper SF students expressed this sentiment clearly when speaking about their initial experience of A-level:

"Horrible, to sum it up". B2

"…it was definitely a big jump because we had an eight-month break (lockdown) between ending my GCSE's and doing my A-levels so I found the jump quite a big jump, especially after not studying for eight months". A6

B2 then goes on to explain how they felt about the jump between GCSE and A-level itself:

"It was bad, because for GCSE it was very like, not to sound big-headed but it was easy…" B2

Both students seemed to have been humbled by the experience of A-level and the transition from GCSE to lockdown then to A-level and what was suddenly expected of them, and it has affected their experience quite deeply. This seemed to be especially hard for students that had fallen out of usual academic rhythms such as A6. The sentiment that runs through all these quotes is that each student is shocked at the jump in expectations and academic intensity between GCSE and A-level, leaving many students feeling under prepared. Furthermore, some students felt that the disruption caused by COVID had also compounded the challenges of the jump from GCSE to A-level, student B5, expresses their frustration and the difficulties that they met due to missing their GCSE examinations:

"I think that maybe it would have been a slightly better experience without COVID, maybe, because obviously, I didn't do my GCSE's and the straight into A-levels and it was quite a big jump without even sitting an exam in Y11". B5

B5 explains that the transition to A-level may have been a better experience if they had not suffered the cancelling of examinations. Students already seemed to struggle with the jump between what is expected at GCSE and what is then expected in A-level. The events of COVID caused students to miss out on their GCSE examinations which may have provided further preparation for A-level or at least helped with the transition to A-level. At the very least, some students had fallen out of rhythm of what was academically expected of them and the natural challenges presented by the transition to A-levels had been compounded by the disruption caused by lockdowns and COVID with students losing their motivation for academia or falling out of step with their academic progress.

Theme conclusion

Ultimately, for SF students there are many factors that have caused challenges for them and have affected their A-level courses. Significantly the cancelling of GCSE/A-level examinations had a profound effect and consequently the effect it had on the student's confidence to undertake their A-level examinations. The issues were further compounded by the natural jump from general to advanced level education which brought about its own challenges and stresses. Students expressed frustrations and difficulties in adapting to A-levels after the events of COVID but remained somewhat optimistic with some students feeling that the experience was "novel" or "challenging" there was no

mention of students feeling despondent or despairing over their A-levels nor was there any mention of things feeling overwhelming or impossible.

Theme 2: Student feelings on Support

Throughout COVID and their A-levels students received varying amounts of support, these seemed to arise from three main areas: Personal which was support from friends, family and shared experiences between students that alleviated concerns. School support, where students received support in lessons, from teachers or senior leadership teams (SLT's), especially in COVID. Finally, many students also mentioned areas where support was lacking or where there was no support that was received and subsequently led to problems in their studies.

Personal support

Across the lockdown, students faced isolation from their friends and peers, but some students were able to still retain connections to their friends via online and social distanced activities, when possible, in turn providing an outlet and source of support for students who were struggling with the current circumstances. Some students expressed sentiments that this has been a great source of support for them while content had moved online, student B7 explains:

"I like to think that I have developed a couple of slightly healthier coping mechanisms for the stress, and I've managed to get support systems in place with friends." B7

Harkening back to study 1 and the use of coping mechanisms, the student seems to have adapted well to the differing circumstances of the lockdown and has taken steps to put in place coping mechanisms and support mechanisms that would be beneficial for the student and the students' friends. Even indicating that it may have been beneficial as B7 had developed "slightly better coping mechanisms". Similarly, another student, A5, explains that their friendship group understood that they needed to support each other:

"I knew how I felt (in lockdown) so I made an effort to kind of reach out, but they (friends) did as well, we all felt it, so we all knew what to do to help each other's wellbeing". A5

Again, there seems to be indication of positivity as A5 and the friends around A5 realised that they needed to support each other and reached out to each other, leading to a healthier situation and outlet for any struggles that they may have been going through. It was understood that they were all in a difficult situation and reacted accordingly. Student A6 expressed that their way in dealing stress or circumstances had improved across lockdowns:

"I remember me and my friends all went to [Name of country park] we just socially distanced and we were all having a nice time and I found that it was probably the best way for me to kind of make sure I have people I could go and see and I need to stay in contact with everyone because personally I am quite bad at staying in contact with people…" A6

Participant A7 also echoes this viewpoint:

"Yeah I think that I can verbalise and talk to people….stress and explain that better now and I know how to deal with it myself better now. If I was stressed before I think I would probably sit and wallow in my stress whereas now I tend to take a more active approach towards it." -A7

Both students, over lockdown, have realised that they needed an active approach towards support and reached out to their friends to seek out that support and ultimately benefitted from it and helping them deal with a difficult time that had interrupted the normal flow of their education. There seems to be an active element at play in these students, where they understood that they needed support and acted accordingly, reaching out to friends and adapting to their circumstances. Actively reaching out to friends seemed to have provides an outlet for growth in some students and benefitted their stress management in the long run. The disruption caused by lockdown and COVID seems to have reinforced the notion that students (or at least some) need to be mindful of their mental health and the impact that poor mental health can have on their studies and a way to mitigate needless stress is to reach out for support in an active way.

<u>School support</u>

Some students also seemed to receive support from the school itself, with teachers and staff members setting up support sessions, extra classes and online meetups to support their students. Furthermore,

some students felt that they had been academically well looked after despite the circumstances of lockdown and COVID:

"Yeah, I mean the teachers and the SF team have done everything that they could do for helping us in lockdown. Like as difficult as it has been I feel like they have done the best that they could."- A6

Following this A6 further explains:

"In online lessons they did multiple different lessons of teaching, and they did break out rooms where you just talked to smaller (groups) and stuff like that. So, I think that the teachers and everyone did their best and they did a good job." -A6

The student quite clearly states that there has been a great amount of support from the school and teachers. Inevitably this would have been a great support for the student across a disruptive time. Ultimately, this student seemed to be more content due to the support that they had received. Other students also felt as if their A-levels had been adequately supported and had taken advantage of the sessions that were available. On this student B9 states that:

"...It's quite good in A-levels because they do so much, so many revision sessions that we can go to and because we have 'frees' now, in GCSE we had a full timetable, but now we have gaps in the day where we can sit down on the computers and revise or go and see some teachers and ask them for help". -B9

The support from COVID seems to have given the student the knowledge that when returning to face to face learning that they can take advantage of the extra support and revision sessions. Similarly, to A6, B9 feels as if the support given was helpful and that the school was doing as much as they could to support the students in their studies.

<u>Lack of support</u>

Unfortunately, there were students who felt that the school(s) had not supported students adequately, or even at all. Subsequently, leaving several students from both of the schools involved to feel as if they had been forgotten about or left to their own devices without any means of support. This sentiment was not only confined to one school but was voiced by students from each institution. This was especially felt across lockdowns by some students, a sentiment directly stated by student B2:

"The teachers just weren't there to help really…they just left us to our own devices, like I had no contact with them apart from when they sent the leavers video". -B2

Specifically, the student here is speaking about the end of their GCSE courses at the previous school that they attended and not the school that they were attending at SF. Nevertheless, this student was obviously affected by the lack of support and felt as if they had been forgotten about and had received little support from an institution that was supposed to be supporting them. Though, there were students at the current school(s) that felt as even after lockdown that they were not supported properly either. Several students share this sentiment, including B2 who stated:

"…in Y12 they did not give us as much support as I personally think that they should have, so they basically left us to our own devices and over half the year left in my SF". -B2

B2 mentions that the lack of support may have caused the leaving of many students in the year in Y12. Despite this only being an event that occurred at this school, this speaks of a deep lack of support and a catastrophic effect on the student's confidence in their teachers, school and ability to work on their A-levels. With the student even mentioning that over half the year dropped out of the school due to this lack of support. This is certainly felt by other students, especially student A1 who had very intense feelings towards the school and their lack of support in lockdown, but also issues surrounding the return to face-to-face teaching:

"They (school) don't know how to fix the issues that are there, and I think it is really undermining as a student, because you don't know what you are supposed to do at all". -A1

The student comments later in the interview:

"I think since that we have just not had much of it (support) and I think that it had really lowered peoples morale, people's confidence and a direction that we so clearly had before COVID actually came along"- A1

Both A1 and B2, despite being at different schools feel as if the schools have failed them when it comes to support during lockdown or upon the return to school. Both students were frustrated at the lack of support but also the lack of action or knowledge of what to do by the staff and teachers that were supposed to be in charge and supporting the students. In turn this caused their confidence and self-efficacy towards work to be diminished leading to a lessened enjoyment of SF and a greater deal

of challenge and stress that the students were facing across this time. Perhaps these issues stem from a lack of communication between the senior leadership team (SLT) and the students themselves as mentioned by B4:

"I feel like a couple of the teachers are quite supportive as well. I don't think the SLT…I don't think that they're that supportive, to be honest- I think that they think they are, but they are not really". -B4

In slight contrast to A1 and B4's sentiments, B4 feels that support was on an individual basis when it came to the teachers rather than a wholesale denunciation of the teaching staff/school but rather a failure of communication on the SLT's part to realise that they are not as helpful as they think they are when it comes to student support. In either case the sub theme of "lack of support" is quite evidently felt with a number of students feeling "left to their own devices" which presents another challenge to be overcome in an already challenging part of the student's life.

Theme conclusion

The theme of "expectations and challenges" is rooted in the challenges that SF students faced not only across lockdown and COVID, but also upon the return to school and the perceived effects that these events had on the student's ability to undertake their studies. Several students felt adequately supported while unfortunately other students felt as if they had been left by the wayside when it came to support and were struggling to recover their confidence. Alternatively, the students who did feel supported took advantage of several support forms with friends and family playing a key role in support as well as academic support from the school and seemed better equipped to tackle the issues of lockdown but also were better prepared upon returning to school. Once again despite there being several negative points that were brought up by the students, there was no mention of morale or self-efficacy being destroyed, but rather, a sense that things were improving and had tackled the challenges before them, despite being initially tumultuous. Perhaps the students had seen these events as a challenge to be overcome rather than a source of stress. Despite there being stresses along the way it seems that some students had used this an opportunity for growth instead of letting these events hinder them.

Theme 3: Factors influencing engagement with work

This theme is heavily related to the motivations, drives, mindsets, experience, and adaptation to circumstances that students exhibit in relation to COVID, lockdown and studying. The two prevailing sub themes were "Adaptation to circumstances" which was heavily linked with personality and mindset of the student and their effect that those aspects had on the ability for a student to adapt/not adapt to the situation they were presented with. The second sub-theme was "Motivation and focus", which was linked with what factors had added or detracted from student motivation with subjects, engagement with work and how student managed their stress and workload.

Adaptation to circumstances

Students showed varying levels of adaptation to their circumstances both in lockdown and upon returning to school but also with general adaptation to their A-level work and what was required of them. In an existential way, some students were very aware of the changes that they had gone through and that they had adapted to the circumstances in a better way than they had done before, this was especially true for the lockdowns:

"Because I do kind of look back at it (lockdown) and think 'If I can get through that, then I can get through most of what's coming my way'". - B1

"But it's just inspiration and it's kicking me to do even better at the next ones (exams) and I have improved, and things have gone up every single exam that I have done" – A2

"I suppose it's had a positive impact in a way that before lockdown it was very easy to stress about certain things like exams, like GCSE's and stuff , whereas then during lockdown you kind of get used to it being more stressful, so you often get used to it in a way….so I suppose that has helped coming up to exams now, whereas obviously before I would really stressed out, but now I have seen that it's not stressful." – A4

All three of these students showed some level of adaptation to the circumstances and reflection on how far they had come, specifically B1 starting that "*If I can get through that I can get through most of what's coming my way"* is a clear indicator that the student feels that the stress felt over lockdown was a refining factor for the way in which they tackle their work and has become more resilient as a

result of the challenges. In a similar vein A4 states that there is a clear progression and adaptation of the stress that they experienced over lockdown. Additionally, A4 explains that the outcome of this adaptation to stress was that exams are no longer as stressful for them when they state, *"before I would be really stressed out but now I have seen that it's not stressful".* This indicates that a clear change has taken place in this student's mindset. A2 similarly describes less of a progression of mindset but rather a motivational, driving factor that has spurred them on throughout the circumstances that they have faced. Specifically mentioning inspiration and how that had led them to improve on every mock exam and exam that they have done. Though all three students differ slightly in their mindset and what motivates them, these students have benefitted and progressed from these positive adaptations and have found ways of engaging with their work in a more meaningful way.

Other students experienced an adaptation to workload and course content due to necessity:

"I feel like I am engaging more now, because I need to understand it" – A3

Though not as profound as the previous students' experiences, this student understands the necessity of engaging with their work, fundamentally this student understood that they needed to understand the work to achieve, leading them to increase their engagement and self-efficacy in order to obtain the results that they need. Similarly, student A6 explains:

"We have just hammered on and kept going and I have found it a lot easier" -A6.

Similarly, to A3, A6 shows perseverance and determination to get through these circumstances. Even though it is not a changing of mindset per se, but rather a show of brute determination and perseverance to the cause that has gotten them through the situation. Both A3 and A6 show that another useful adaptation to get engage with work is to simply tackle the situation and persevere through it.

In contrast, there were some students who struggled to adapt to their circumstances or that their confidence to undertake academic tasks has been shaken. Participant B2 explains this aptly:

"I was proper cocky and confident, and I came here and I don't know if it was because I was around smarter people than before. I don't know, but I just fell behind so quickly, and I didn't realise that had happened for A-levels, but it did…"- B2

P2 then further explains:

"(My) Confidence has gone very downhill".-B2

And

"It's like I have forgotten all the work ethic I've had has just gone downhill, yes."- B2

B2 describes their experiences as being damaging to their confidence with it affecting the rest of their course. B2's mindset seems to have encountered a shock when coming into A-level, an experience which is still affecting their ability to undertake work to the point where their work ethic has also been affected. Ultimately, this student has experienced a humbling set of situations that has greatly affected their mindset. Later in the interview B2 explains:

I'm not good with stress management, at all. So, I just kind of avoid doing it, then I get even more stressed." -B2

The student had taken on a maladaptive mindset of avoiding dealing with stress due to their experiences and damage to their work ethic. Despite this, they have realised that what they are doing is an issue that needs to be addressed and furthermore, B2 does realise that they lack proper techniques to manage stress properly perhaps this also relates to a motivation to change and the building of resilience through hardship. Subsequently, this may develop into the seeking of adequate stress management techniques.

While some students experienced a decisive move towards a positive mindsets and adaptation to circumstances and others a more negative direction, some expressed a continual journey of ups and downs when it came to undertaking their studies:

"I think like during lockdown I think that my confidence did grow like towards the end and then in SF, at the start I was a lot less confident than how I feel now. I feel like I have grown a lot, like drastically since then"- B12

Though not a continuous growth, as previous students had mentioned, B12 indicates that there were several ups and downs when it came to tackling their wok and the mindset that they had towards, it, feeling first an outgrowth of confidence at the start of lockdown and then a dip on starting A-levels with a "drastic" rise in confidence since. This may have been the experience for most students; having several ups and downs before finally gaining more confidence or successfully adapting to what is required of them in A-level. In strong support of B12, A2 explains:

"I was struggling at the beginning of Y13, with all my different essays and things to do…but you just have to learn about time management and just have to learn what to prioritise and in this instance, it was my workload that I just had to make sure that I had my mind on". -A2

Despite difficult situations being encountered by B12 and A2, they adapted to their circumstances well and ultimately came out a lot more confident in their ability to undertake work than they had done before. The realisation that workload needed to be focussed on and managed in order to alleviate stress allowed both students to gain confidence in their academic abilities and tackle the challenges of A-level in a more constructive way.

It seems to be a very important factor for A-level students to be able to adapt to their academic surroundings to increase their confidence and academic ability. Students who were able to do this seemed to show a greater awareness of their needs and greater ability to manage their stress. Leading to these students enjoying A-levels and finding the courses easier when compared to the students who did not adapt accordingly or had a negative mindset towards the factors that influenced their work.

<u>Motivation & focus</u>

Though linked heavily to mindset, the sub theme of "motivation and focus" became its own sub theme due to many students speaking about factors that detracted or added to their overall motivation or desire to engage with their subjects. There was quite a strong link with the "lingering effects of COVID" from the "Support" theme where some students felt that they had been supported throughout COVID, conversely, some students felt as if they had not been supported at all, or very little. In turn, student motivation to engage with their subjects had been affected, for better or for worse. COVID

and lockdowns had a lingering effect on student motivation and focus on their studies. When student P10 was asked about whether the lockdowns and COVID had affected the way in which their studies, P10 responded with:

"I would only say because of lack of motivation. Because of COVID, which added to that a bit, but I wouldn't say much in terms of how I revise" -B10

Though the way in which P10 revised had not been affected, the student admitted that the motivation towards revision and their work had been affected. Later in the interview B10 admits:

"Erm, I would say that it's (COVID) reduced confidence a fair bit throughout all subjects". -B10

Though the physical way in which the student revises had not been affected, the self-efficacy of the student, motivation, and confidence in undertaking their subjects. Participant B5 explains this sentiment well:

"I was really keen on applying to top universities and things like that, but I suppose during COVID, I don't know if I got less motivated or whatever I feel quite directionless with it because I don't really know what career I want to do and it's very much a 'take it or leave it' situation'. -B5

B5 mentioned that before ethe advent of COVID, applying to the top universities was a strong goal for them and something that they were confidently working towards, however, since COVID, B5's confidence has been damaged, and they are now feeling "directionless". This mirrors the sentiments of P10 where both students are feeling less motivated to engage with their subjects then before. B5 adds to this when they explain:

"My friends and I, most of us feel the same way. We are not ambitionless, I suppose that's the wrong word, but it's kind of like 'Oh well, if I got into uni but if I didn't, I wouldn't really mind' sort of thing. Like no one has really got drive or something they really want to do anymore. It's kind of like we are floating through sort of thing". -B5

Here B5 explains that it is not lack of ambition but lack of direction and motivation that is affecting the students. Again, this mirrors the previous comments by B10 and indicates that there are a number of students that feel as if they have been robbed of their confidence and motivation when it comes to their studies and future prospects. Another student whose motivation had been damaged was B3:

"…lots of courses offer a year abroad and I was like there's no point in looking for one that's going to offer that because I'm not going to be able to do that, and like I could have gone and done a semester abroad in Spain because I do Spanish and I could have taught over there and that would have been really good, probably for my job, but it's probably not going to happen so I just didn't bother looking for it"- B3

In the same vein as P10 and P5, P3 speaks of an overall lack of motivation and desire stemming from COVID. Unfortunately, this damage to motivation seems to have deeply affected B3 as the student no longer sees the point of pursuing a semester in Spain while at university due to a lack of motivation. Especially the end sentence *"but It's not going to happen, so I just didn't bother looking for it"* this sentence indicates that the student has (mostly) given up on trying to look for a semester abroad and has resigned themselves to the fact that it just is not going to happen. These feelings also extended to future career opportunities as B3 further explains:

I'm hoping to do my teacher training and become a teacher and I also was like 'is there any point?' Am I just going to be behind a computer screen teaching a class and never actually go into a school and be a proper teacher, what I know as a teacher, is that ever going to be the same again? And it didn't put me off doing that job for quite a while, but then I thought 'no, I have always wanted to do it, so I will just go with it and hope for the best'". -B3

B3 perfectly encapsulates the feelings of the sub-theme of "Motivation and focus" in these quotes, giving an account of how the student feels completely despondent with their prospects and unmotivated to pursue what should be exciting opportunities. These attitudes were especially shared by B5 when the student describes that they are not ambitionless but rather feel like they are floating and directionless where they are not driven to attain the goals that they are supposed to achieve.

Though many negative aspects are on display here, none of the students' express feelings of completely giving up, but rather a detraction from their confidence and motivation. This is a good indicator that the students do have a mindset to achieve but there have been factors that have affected the way in which they view prospects.

Theme conclusion

This theme yielded a mix of thoughts and feelings from the students with some student expressing a personality and mindset that was well adapted, despite the circumstances and challenges, to tackle the challenges across SF. Other students expressed that their mindset, motivation and views towards education had been damaged somewhat. Personality and the willingness to adapt to the circumstances seemed to have a large bearing on the enjoyment of A-level studies and a large influence in the motivation and focus that student had and how well they engaged with their courses.

Summary of findings

Ultimately there is a myriad of circumstances that can cause a source of stress or challenge for students in SF institutions. The jump from GCSE to A-level and the expectations that were placed on the students. presented a considerable challenge to them, along with the increase in workload and intensity of work. These stresses were further compounded by the events of COVID, and the subsequent lockdowns which presented significant challenges within itself. For some students these events provided an opportunity to grow and adapt to their circumstances, leading to a growth in confidence and in their ability to face challenges. Some students, however, had their confidence marred by these events and struggled to recover with some students feeling as if they had missed out on important content of their courses, or did not understand the course content well enough, leading to a decrease in confidence towards their exams.

It was found that a great mitigating factor for this stress and challenge was the availability of support or the willingness to reach out for it. Some students received support from their friends, family and school and did feel adequately supported throughout lockdown and upon returning to schools. Other students felt as if they had been failed by their school and left to their own devices, which had harmed their enjoyment of SF and perhaps had caused many students to leave the school in one instance. Clearly the support, or lack thereof, is a significant contributing factor to a student's ability to deal with stress and challenge in A-level and has a significant bearing on the student's enjoyment of the course.

Throughout the interviews, COVID and the lockdowns were found to be an inescapable set of factors that had affected students in some way shape or form. Some students were profoundly affected by these events in a negative way, and it had provided a source of significant stress and challenge for them, with some students still feeling those effects even upon returning to school. Other students found it to be a source of personal growth and adapted well to the situations that they faced, with some students commenting that lockdowns had given them the tools to deal with stress in the future.

Discussion of thematic analysis

Three main themes were identified from this Thematic Analysis that pertained to SF students' experiences of studying under lockdowns and COVID: *Expectations and challenges, Factors influencing engagement with work and Support.* Students were asked to share their experiences over this period of their lives and how it affected them. By exploring this topic, it was possible to gain the insights into a largely under researched body of students about a unique circumstance that affected their ability to engage in their studies. The main findings for this study will be discussed in relation to literature and the potential implications for students will be highlighted.

Stress and challenges are an ever-present part of a student's academic journey with many students feeling that academic and exam stresses are extremely important to this time of life (Dobson, 1980). Along with this, students are reporting a significantly higher level of stress than the average population (Macaskill, 2012). Within these interviews, there was a continuous mention of stress and challenges that the students had faced and the effect that it had on the student's engagement with work, ability to undertake revision and the support that they felt they had received. These stresses are commonly thought to be adding to the increase in stress related illnesses by the time students in the UK reach university (Okolicsanyi, 2022). Despite this, there was very little purely negative talk about A-levels within the interviews, nor did the students express any feelings of wanting to give up on academia. There were certainly instances where students had dropped out and assumedly moved schools due to lack of support, or where students had lost motivation for their future but overall, there was still the sense that students knew that they needed to push through and complete their A-levels to

achieve an education. Interestingly this fits with Colemans (2011) thoughts on stress, where adolescents, despite the pressures placed on them do not come out of education as badly as first thought. Rather, at least in the case of these interviews, a great deal of personal resilience and adaptation was shown, even from those students who had more negative experiences of SF.

One of the main findings of Dobson (1980) was that students experienced stress in a multidimensional way with a number of stresses feeding into each other which fed into the ever-present exam or assessment stress. In relation to this, students in the current study expressed that they were aware of the expectations that were placed on them and were aware that their A-level examinations were vital to their academic progress. In addition, many of Dobson's participants felt as if A-level studies provided a significant source of stress and challenge for them, this sentiment is echoed by students in the current study who expressed that A-levels, especially the jump from GCSE to A-level, was a source of considerable stress. Furthermore, students in this study supported the findings of Nash et al (2021) who found that on the one hand SF students were expected to achieve and were aware of the expectations placed on them but on the other hard found A-levels incredibly challenging compared to GCSE. In the Study 4 of this PhD thesis, students routinely mentioned the "Jump from GCSE to A-Level" and how much of a shock and challenge that the students found it.

It was also regularly mentioned in the interviews that support had been a great mitigating factor for stress and challenge in SF students' journey across SF and their ability to identify and manage their stress, including the mitigation of stresses like "Lingering effects of COVID" and "Adaptation to circumstances". For the students of this study, the concept of support was one that factored heavily into one's engagement with A-level work and the ability to adapt to the circumstances around them to properly work on their courses.

Very much in line with the concept of perceived stress (Cohen, S. et al., 1983; Lazarus & Folkman, 1984), students who took part in this study expressed that support (or lack thereof) had been an important factor in their journey through SF and had impacted it. In relation to perceived stress there seemed to be some students who, despite the situations they were in, reached out for support from friends, family, and school systems to help them through lockdown and support their learning.

Indicating that at least some students may have been building resilience via seeking support (Fletcher & Sarkar, 2013; Li & Yang, 2016; Masten, 2011). or beginning to see the stresses that they had faced as a challenge to be overcome rather than a debilitating stress (Cavanaugh et al., 2000)Some students also expressed that this made them more confident in seeking out support after they had returned to face-to-face teaching and that student had benefited from the support that was available across these times. In relation to the concept of Perceived stress, the student's personality, and ability to perceive stress in a different way allowed them to seek support in several areas, subsequently allowing them to better tackle the challenges of lockdown and A-levels in general.

In contrast, there were some students who did not receive support or reach out for it as much as other students did. Thereafter, these students seemed to struggle with their A-levels a lot more as well as struggling more over lockdown and COVID which relates to the findings of Catty and Catlin (2022; 2020) and that there had been a profound negative impact on mental health. The results of Study 4 indicate that there had been many lingering effects of COVID and lockdown that had affected a student's transition to SF, engagement with their studies and their perceived stress. It could be argued that these students both supported and contradicted the idea of perceived stress as the students may have lacked the personality and resilience needed to perceive the events of lockdown and A-levels as anything but stressful and cumbersome. On the other hand, some students spoke of reasons outside of the student's control about why support was not received; one student mentioned that their previous school did not contact them over lockdown as they were at the end of year 11 and only contacted the students to send the leavers video. Students' attitudes towards the schools may have been damaged somewhat by the lack of support but also the general loss of their long-term goals as Mccarthy (2024) suggested, feeling abandoned by the school system that was supposed to support them. In addition, one student mentioned that the school had been so bad at giving support over lockdown that it had caused many in the year to leave and attend other schools. In some cases, it may not have been the student's personality or perception of the event that caused them to feel as if they lacked support but rather forces outside of their control. Moreover, it is worth mentioning that these students were still attempting A-levels and carrying on regardless of the support that they received, indicating that the

student's resilience may be stronger than first imagined and the perception of stressors may be that of a stressful but something that needs to be persevered until success is achieved.

In relation to both Selye's GAS theory (1946) whether the students had received support or not, many students expressed feelings of stress and its effect that it had on them. No student ever commented that A-level or lockdown or online learning was easy, indicating that some level of stress and challenge was present that was depleting the students mental, physical, or emotional batteries. This risks a student becoming overwhelmed or lacking the resources to manage the stresses that they face thus becoming ill or exhausted, especially when the stress is related to academics (Brown et al., 2022; Roome & Soan, 2019; Skinner & Pitzer, 2012; Yorke & Longden, 2008). Some students may have had the effects of the exhaustion stage of GAS mitigated via the support they had received from the school. In contrast, the students who had not received support may be beginning to suffer the resistance or exhaustion stages of GAS where the mental and emotional reserves are being taxed.

For both students, whether support had been received or not, there was a deeply ingrained notion that A-levels were important and worth it in the long run, despite the circumstances surrounding COVID and the disruption caused. Perhaps, rather than support being an indicator of personality or success, is rather a way to mitigate stress for students who received it in a population who are all aware that they need to see A-levels through whether they receive support or not. It would also be interesting to explore the same factors but in the context of what increases and decreases motivation and whether there is a "breaking point" or a "fixing point" where students may lose motivation and give up or be able to regain motivation. This may heavily factor into the perception of stress and the mindset of the student.

Chapter 7 Discussion and Conclusion

Introduction

The aim of the research within this PhD thesis was to gain a better understanding of SF sources of stress and how SF students manage the stress and challenges that they face across their time at SF. A unique opportunity also arose to explore these issues further with the events of COVID and lockdowns and how students managed the challenges of online learning and disruption to their studies across lockdowns and upon the return to face-to-face teaching. To achieve this a critical realist approach was used as this allowed the researcher to which allowed individual experiences of an event to be explored in relation to reality and allow personal experience to be applied to the understanding of SF students journey across their A-level courses. Due to this framework, more emphasis was placed on exploration of student thoughts and feeling on the subject as well as personal experience, perceived stress, mental health, adaptation, coping and individual differences when it came to managing stress and challenge.

Selye's GAS model (1951) was used to provide a framework for the effects of stress, especially long-term stress, on SF students. The GAS model was chosen for its flexibility of application and its ability to tolerate individual differences in personality, resilience and mitigating factors of stress (McCarty & Pacak, 2000). Though the GAS model allows for broad individual differences in the perception of stress, it does not account for how individuals manage their stress which is why the challenge-hinderance model (Cavanaugh et al., 2000) was used in tandem with the GAS to allow the exploration into how SF students view and manage their stress on an individual level.

Four studies were undertaken in this PhD programme comprising of two quantitative questionnaires, one set of qualitative interviews and one focus group study. The overall aims of the studies were to explore SF students' sources of stress and how they manage stress and challenge throughout their journey across their A-level studies. The first quantitative survey (Study 1) and the focus groups (Study 2) measured the general sources of stress that students outside of COVID both sets of studies shared the aim of exploring SF student stress management and how students coped with the

challenges that they faced. While the second quantitative survey (Study 3) and the one-to-one interviews (Study 4) explored the effects of COVID and online learning and lockdown on SF students' perceived stress. Furthermore, Studies 3 and 4 explored what factors may have helped mitigate the academic stress/pressures that SF student may be facing such as subject difficulty, subject happiness and gender.

The quantitative surveys were used to gain a broad understanding of the thoughts and feelings of SF students and to gain a quantitative insight into what students perceived stress, coping, academic self-confidence, self-regulated learning, COVID anxiety, how students managed stress and academic confidence before during and after lockdowns were. The first pair of studies (1 & 2) focussed on general SF student sources of stress and the factors that affected and mitigated stress while the last pair of studies focussed on COVID-19 and what sources of stress may have presented themselves to students across lockdowns and what effect those stresses/challenges may have had on engagement with work. Each quantitative survey was followed by a qualitative study. The qualitative studies were used to gain a more personal insight through interviews and focus groups (FGs) into student thoughts and feelings on SF, learning over COVID and the sources of stress that they encountered. Moreover, both the interviews and FGs provided an opportunity to explore how SF students managed the stress/challenges that they had faced across their time at SF.

Summary of findings

The research programme found that there were several sources of stress that students experienced that exacerbated the major stressor that students felt which was examination pressure, giving credence to Dobson's (1980) idea of a multi-dimensional view of stress for SF students with examination pressure being the most significant stressor for both girls and boys. However, exploration of the results of this PhD programme indicated that students had begun to view stress through the lens of how it may affect their assessment results where outside stressors became a threat to the student's ability to revise for their exams or perform their academic duties. This was especially apparent in the qualitative interview

and focus group studies where in both cases students expressed frustration in the pressures that were placed upon them from the very beginning of their studies.

In some cases, students also expressed that they felt as if the fear of failure was so great that failure was deemed unacceptable, this sentiment was especially apparent in the qualitative studies within this research report. The thought pattern of failure being unacceptable seemed to arise out of the culture of SF being that of academic excellence and mounting pressure regarding academic achievement. SF students seemed to realise that more was now being expected of them due to the students now being in SF and considered the academic elite of the British education system, pre-university. Results from the focus groups indicated that students felt that there were intense academic pressures placed on them from the beginning of their SF journey, thus furthering the view of SF purely through a lens of achievement and academic success. These sentiments support the idea of a rise in audit culture in the UK as proposed by Roome and Soan (2019) where increasing pressure is placed upon student from GCSE level and above to achieve increasingly high grades as a measure of a student's success. These pressures seemed to contribute to the academic pressures that the students feel, especially if they were not happy with the subjects that they had chosen. On top of the mounting academic pressures and expectations, students also expressed that the transition from GCSE to SF caused significant stress, with subjects being more trying than in previous years of education.

Studies 3 and 4 were related to students' ability to undertake their studies throughout COVID-19 and lockdown, the quantitative survey into general SF sources of stress indicated that, students perceived more stress upon returning to their studies after lockdown. These results indicated that there may have been some challenges that students had not been exposed to throughout lockdown and became apparent only when face to face teaching was resumed. In both Study 1 and Study 3, gender played a significant role in predicting stress and in both cases, the findings indicate that there is a gender difference in the perception of stress from SF students and that males on the whole perceive less stress than females. Further indicating that being male provided a difference in perspective when it came to academic stress which subsequently was an insulating factor against the negative effects of stress. This is congruent with existing literature which indicates that the effect of academic stress had a

stronger negative effect on females than on males (Ye et al., 2018). Similarly, both studies indicated that subject happiness was also an insulating factor against the perception of stress. Students seemed to be more willing to tackle the difficulties and challenges in their subjects if they were happy within the subject(s) that they had chosen and seeing the sources of stress within the subject as more of a challenge than a hindrance as the challenge-hindrance model suggests (Cavanaugh et al., 2000).

The ensuing qualitative COVID-19 related interviews, students expressed that they had similar concerns as the first interviews, where transition to SF and assessment stress were major sources of stress, however, many students felt that they were now underprepared for undertaking their SF courses and assessments due to the amount of content missed and the disruption of learning which caused another source of stress to be experienced on top of the other naturally occurring stresses that are perennial to SF education. Analysis of the interviews seemed to indicate that students felt that the effects of online learning and the disruption were not entirely felt until students returned to their face-to-face studies, only then did the amount of content missed and what they had missed out on became apparent. Results indicated that SF stress levels did not increase much between pre-COVID and during COVID, but upon the returning to face-to-face learning, stress levels doubled. Online learning seems to have a significant impact on SF students at this time, as discussed previously, students felt that content had been missed and that they were underprepared for their examinations. In summary, the transition from online learning and lockdowns back to face-to-face teaching posed a great threat to the students' academic success and thus became a significant source of stress and challenge. Interestingly, there were some students who, despite the hardships, felt as if the events of lockdown had provided them with then tools to tackle further hardships in their studies and had provided them with the tools to tackle future challenges, even though the challenges may be a source of stress.

An unforeseen result to arise out of the qualitative interviews and focus groups was around student perception of sources of stress with some students perceiving stressors as challenges to be overcome while others saw the stresses as a burden. The way in which students personally perceive stress and the individual effects that it has on them is congruent with Cohen *et al's* (1983) theory of perceived stress is congruent with the idea and that it was a SF students' perception of a stress/pressure or

challenge that dictated how much of an effect that the event may have had on a student. Furthermore, it was found that there were aspects of SF education that had a great motivating or hindrance factor which is consistent with the ideas of the challenge-hinderance model proposed by Cavanaugh (2000). Despite students being placed under pressure, the results of the PhD research indicated that certain factors acted as exasperators or mitigators of stress sources which caused a potential source of stress to be viewed as a challenge instead of an insurmountable stress or burden.

The multi-dimensional view of stress seemed to be most fitting for students in SF as the results indicated that students heavily viewed their life through an academic lens in this period and began to develop an aversion to mistakes or failure, thinking that it would have catastrophic negative effects on the rest of their lives. Furthermore, over COVID the academic pressures seemed to be dampened somewhat with the introduction of online learning, which gave rise to its own issues which only became apparent when student returned to face to face teaching. Upon the return students were faced with how much content had been missed and how much disruption had occurred to their learning and realised the factors from lockdown coupled with the natural stresses of SF (such as transition to SF and academic pressures) created a credible threat to their academic success and subsequently caused anxiety. Despite these factors creating a sizable level of anxiety and source of stress for SF students, there were also some mitigating factors which allowed students to perceive the sources of stress in a different manner, and as challenges rather than hindrances and provided an important factor for SF students personal and academic growth.

General discussion

Overall, the results of the studies within this PhD programme were similar to the findings of Dobson (1980), which inspired the research into this topic area. The findings of this study programme not only coincided with Dobsons specific findings about general sources of stress but also bore resemblance to Chamberlain, Daly and Spalding's (2011) findings which indicated that some test-anxiety was beneficial to students' performance but if anxiety reached a high enough level, it was detrimental to exam performance. Students in both Dobson's and this PhD research felt that there was a network of

stresses that affected their ability to undertake their academic tasks and that academic pressures were a major source of stress, giving credence to the idea that SF students experience stress in a multidimensional way. Furthermore, results of the studies within this PhD indicate that despite a multidimensional view of stress being experienced by the students, the students view stress through the lens of academic achievement, meaning that any stresses that they encounter is viewed regarding whether it is a threat to their academic success or not.

The research indicated that students did perceive various situations which were deemed to be stressful, but there were several factors which helped mitigate stress such as relationships with teachers and subject happiness, gender and perception of the stress. Relationships with teachers and perception of the event as mitigators were especially apparent along with how happy a student was with their subject. In both the qualitative and quantitative studies these factors proved to be important mitigators of stress. Though there were factors to mitigate stress analysis indicated that there were some differences in gender with males being generally less stressed than females but females being more confident in undertaking academic tasks. This supports Ye *et al's* (2018) findings that academic stress was negatively related to academic self-efficacy and that this relationship was stronger in female students compared to male students Tangentially this also supports Dobson (1980) where it was found that on some academic tasks females reported being more stressed than males. Although in Dobsons study there was no significant difference between males and females in general stress, it did seem that there were certain aspects of academia that differed between males and females which mirrors the findings of the analysis in this PhD.

SF students seem to view each challenge through the lens of how that challenge will affect their ability to be successful in their academic achievements. If the situation is deemed to be a threat to a SF students' ability to revise or undertake their academic tasks, then it is seen as a source of stress. The hierarchical regressions undertaken in Study 1 and 3 both indicated that subject happiness was a significant in predicting whether a student may perceive their course/studies as stressful. Both happiness and difficulty could be a source of stress and challenge themselves or alternatively a source of stress release/contentment. If a student was happier with the subjects that they chose, it may change

their perception of their course from one of a stress dragging them down to a challenge to be overcome this was highlighted in both hierarchical regressions where subject happiness seemed to be a significant predictor of stress whereas subject difficulty was not.

Mindset and perception of stress became an important factor too as some students began to see academic stresses as challenges to be overcome rather than sources of debilitating stress. Furthermore, study 4 indicated that some students were reaching out for support more despite having both the normal stresses of SF but also the challenges of COVID-19. These findings indicate that some students were becoming more resilient to the stresses that they encountered (Fletcher & Sarkar, 2013; Liu & Lu, 2012). This links with achievement goal theory where some research has indicated that students who employed a "mastery mindset" (aiming to master the challenge) fared better than those who did not employ such a mindset (Elliot & McGregor, 2001). Indicating that the perception of the students towards the challenge had a bearing on how stressful an event was to the individual.

It may be pertinent to expand on Daly and Spalding's findings and the findings of this PhD research as exploring what causes the differences in perceptions of sources of stress that students faced. Similarly, Hodkinson and Bloomer's (2000) research suggested that the institutional culture of SF creates a continual pressure to achieve that can be crushing but, it also provided a great deal of incentive to take control of their own learning, highlighting the importance of fostering positive mindsets and personality traits towards academic issues. The findings from the PhD lends credence to Cavanaugh's ideas of motivating challenges that cause the individual to view a stress as a potential for self-improvement rather than a hinderance (Cavanaugh et al., 2000).

Moreover, links to Chamberlain, Daly and Spalding's results where students exhibited differences in the perception of a challenge that they faced, where in some cases, students became more motivated to tackle that challenge. This was especially highlighted with the hierarchical regression results; when students were split by subject difficulty it did not seem to predict perceived stress in a significant way, while happiness with their subject did seem to be a significant predictor of stress.

In relation to individual perceptions of stress and challenge, personality factors and their relationship with stress using models such as the Big 5 personality model (McCrae & Costa, 1987) to gauge which personality traits are more beneficial to SF students in mitigating stress. In future this may be used to formulate a personality-based support method to help promote more healthy views of academic achievement rather than negative ones. Though the BCOPE scale was a significant predictor of stress in Study 1, it was removed due to the measure causing the survey to be overly long. In future there is potential to further explore how SF students manage their stress through their coping mechanisms and to use the BCOPE scale alongside the Big-5 personality scale and PSS to see which traits facilitate a mindset of resistance, persistence and stress management in relation to PSS scores.

Similarly, and perhaps more relevantly, the notion of resilience in a student's personality could be explored as a potential mitigator and bulwark against the negative effects of stress. In the field of education resilience is concerned with a student's ability to utilise strategies to overcome challenging circumstances (Shengyao et al., 2024; Vance et al., 2015). Students with a more challenge-based mindset may be able to formulate strategies to overcome sources of stress and challenge in a more efficient way than students who do not. In the context of SF, there were students who expressed that there were mitigating factors that helped them overcome challenges throughout their SF education. The research within this PhD thesis did not explore resilience as a factor, however, resilience would be a avenue of research to further expand on how students may mitigate the stress from the challenges that they face. Much in the same way that Cohen *et al* (1983) and Lazarus and Folkman (1984) theorised that stress was uniquely perceived by individuals, resilience could be explored by further examining how academic self-efficacy, self-regulated learning and academic self-confidence can build resilience regarding student academic challenge. Students mentioned several factors which caused stress from the transition to university, expectations placed upon them by teachers and the viewing of self-worth through an academic lens. The aforementioned factors are pressures placed upon students from the outside with little input from the students themselves, exploring resilience may be a way in which students can then formulate more effective strategies to cope with these pressures as well as

how they could form stronger positive relationships with teachers or how to increase subject happiness.

Comparison of findings with GCSE literature and stress

In recent years GCSE students in the UK have been subject to increasing pressures to achieve academically and have been subjected to increasing auditing from schools (Roome & Soan, 2019). It has been suggested that the increase in audit culture is negatively affecting the wellbeing of students emotionally due to examination pressures (Putwain, 2009; 2007b). Previous research indicates that examination and assessment pressures can have a detrimental effect on students' self-esteem and wellbeing (Brown & Woods, 2022), with students expressing that they had relatively high self-esteem and wellbeing at 11 years old and markedly lower scores in both by age 14 (Katsantonis et al., 2022). SF students seemed to display similar sentiments to these findings with students in the Study 1 expressing that higher coping behaviours were undertaken when higher levels of stress were perceived. In addition, the follow up qualitative interviews indicated that students would forego looking after themselves due to a fear of failing academically leading to a downturn in wellbeing to achieve academically. Unfortunately, this coincides with a natural and tumultuous period where an adolescent's self-esteem is generally negatively affected which overlaps with GCSE programmes (Brown & Woods, 2022). As the academic requirements increase and SF students are presented with not only the stress of transitioning to SF (Stubbs et al., 2022) but also the negative effects of stress on sleep quality (Carskadon, 2002; Yan et al., 2018). These factors coupled with mounting pressures from examinations and fearing failure could create the circumstances that both SF students and GCSE students feel that failure is something to be feared rather than learnt from. The aftereffects of this lowering of self-esteem and increasing pressure to achieve are reflected in the findings of this PhD research where SF students' academic self-confidence was negatively affected by various perceived sources of stress. As students enter SF, they will have had an unbroken four-year period of increasing academic intensity until the end of their A-level examinations, leading to students viewing their stressors through the lens of whether it will affect their end examination results Due to long term stress and the effects that stress has on aspects such as sleep quality, mental health and physical health

(Carskadon, 2002; McCarty, 2016a; Yan et al., 2018). Which may in time lead to situations where students may become disillusioned with the school system if the stress continues for a long enough period (Katsantonis et al., 2022).

The downturn in wellbeing and self-esteem also coincides with a particularly intense time in one's development, namely puberty where many cognitive and physical changes occur (Yan et al., 2018). SF students are still generally undergoing these changes and leading to another potential source of stress. Although this PhD research did not explore the effects of puberty on stress, it is still a factor which is at play in students aged 16-18. Furthermore, these stresses run in tandem with the introduction of formal examination pressures, by the time a student begins their SF studies, they have already been exposed to a two year long set of formal examinations in GCSE along with the effects and challenges of puberty. Further research is needed into the greater effects of puberty on SF students' ability to manage examination stress. It cannot be ruled out that cognitive and personality changes at this time did not have a bearing on the results of the research undertaken in this PhD.

From the age of 11 to the completion of their GCSE studies, students expressed that they had experienced a lowering of wellbeing and self-esteem due to the pressures placed on them in the education system (Brown & Woods, 2022; Katsantonis et al., 2022). Sixth form students experiencing a continuation of this throughout the transition to A-level from GCSE together with the mounting academic pressures and requirements that are associated with SF study. SF students did express that they, especially across COVID, experienced several stresses and obstacles to their studies with the general transition to SF and return to face-to-face teaching after lockdowns. SF students expressed that there had been a few factors which affected their confidence and perceived stress. The qualitative interviews also highlighted how student's perception of stress perceived sources of stress had a bearing on how well students could cope with the challenges that they faced Cohen et al (1983). This may explain why some students perceived the difficulties that were faced from lockdowns as a building factor with some students expressing that it put things into perspective and made them feel as if they had been better equipped to face academic challenges. As previously discussed in chapter two, GCSE students who were proactive in their approach towards stress and tackled the tasks at hand with

a “mastery” mindset seemed to fare better against the negative effects of stress compared to students who did not take on such a mindset (Roome & Soan, 2019). In a similar way to the challenge hindrance model (Cavanaugh et al., 2000), students in SF expressed that they are affected by their perception of the stress, and how much it may affect their achievement of grades but also what mitigating factors are present to balance the stress/provide a reason to endure or build resilience.

Comparison with University literature

A reoccurring issue that students in SF mentioned in this PhD programme of study was that the transition to SF was a challenge for many students much like Stubbs (2022) had found in previous research. Research by Macaskill and Denovan (2013) researched students’ feelings upon transitioning to university and found that students in general had various anxieties and challenges such as expectations of university, academic focusses and many changes occurring at once. SF students echoed these sentiments throughout their A-level studies and expressed that there was a myriad of stresses that they experienced at each point of their studies, with COVID presenting a number of shared sources of stress for most students in A-level. Although, their perception of the stress and willingness to tackle the stress varied from student to student.

Similarly, Macaskill (2018) studied second year undergraduate students and found that students in first and second year of universities shared several stresses, however, assessment pressures, institutional pressures of university and changes to course were both present in both first- and second-year undergraduates. Additionally, Posselt and Lipson (2016) noted that undergraduate courses generally brought institutional pressures and a culture of competitiveness which is a tangible source of stress for many students which is another branch to then audit culture that SF students would have experienced previously. Similarly, the SF students in the research programme expressed that assessment pressures were a source of stress that was present across each year of SF as well as the institutional pressures and expectations of the SF institution.

The Sixth form students in this research programme expressed feeling as if only academic achievement mattered and that they need to be constantly achieving academically. Jones (2011) found

that the structure of A-level courses hindered students' literacy and numeracy skills in university due to the culture of academic achievement over all else, in turn, this caused students to need to work harder at university to achieve the grades that they needed. The missing of key skills and/or important content can have a domino effect in the students' academic progress later on. This is indicated by the students becoming less confident and more anxious upon the return to their studies after lockdowns as it only then became apparent what the true effects of online learning was on their studies and the content that they had missed became apparent and subsequently a source of considerable stress and concern for the student. In turn, students were re-entering face to face learning in their A-levels after considerable disruption but also had to contend with the structure of A-level courses which, as Jones (2011) indicated, already hindered the key skills of literacy and numeracy.

There are a shared set of stresses or sources of stress in SF and university, with academic pressures and institutional pressures being perennial pressures that many, if not all students felt to some degree. However, in university undergraduate students seem to perceive the culture as more competitive towards the job market and their future careers as well as the changes brought about by living away from home. Sixth Form students on the other hand seemed to be affected more by academic pressures by viewing all pressures through the lens of academic achievement brought about by increased pressures to achieve higher grades than the previous year's students.

Implications of the research and contributions for SF students

There has been a paucity of research when it comes to SF sources of stress and stress management, but also in relation to SF students in general (Stoten, 2013, 2014a). This research has highlighted the need for an understanding of the sources of stress and challenge that SF students may face but also the importance of fostering management techniques for students to effectively tackle the challenges that their A-level courses present. However, this research has highlighted that there are some ways in which a student can present the source of stress, either as a challenge or a stress, which can determine how the student is affected as well as several factors which can aid in the mitigation of the

stress/challenge. This finding is especially important as it indicates that there are aspects of personality such as resilience and perception that may affect how SF students are affected by stress and what factors can be explored and fostered to provide students with the mental tools to tackle stress throughout their studies. Moreover, the research has highlighted that a number of SF students view any stresses or challenges through the lens of academic and grade achievement and whether the source of stress will ultimately affect their ability to achieve the grades that are required of them, if so the student may become fearful of failure. Ultimately this adds another dimension of stress where instead of hoping to learn from failure, whether potential or actual failure, SF students begin to fear the concept of failure and deem failure to be unacceptable due to the nature of academic pressures and expectations placed upon them.

It would be pertinent to provide students with tools to not only help them identify sources of stress but also how to foster a more of a challenge related mindset towards stresses and impress the idea that challenges and mistakes can be learnt from rather than feared and build a healthy mindset to provide SF students with the ability to deal with the stress that they encounter.

Furthermore, the research has highlighted the detrimental effects that any disruption to the normal flow of the courses can cause to SF students, this was especially striking regarding the effects of online learning and lockdowns. SF students became more anxious and perceiving more stress upon returning to face-to-face learning compared to before and during lockdowns. Students strongly expressed that upon the return to face-to-face teaching that they felt underprepared for their examinations. Stubbs et al (2022) noted that female SF student's felt that the transition from GCSE to SF was a significant source of stress and pressure and the changing requirements between the two periods of study was oftentimes an "overwhelming experience" and that students may not have developed sufficient challenge solving skills. Further to the findings of Stubbs, the research within this PhD thesis indicates that SF students struggle with the changing expectations, but also that the transition from GCSE to SF or from lower to upper SF was also exacerbated by the additional pressures of COVID, lost time, missed content and feelings of under preparedness. To help mitigate these effects, SF students may benefit from extra support regarding preparation to tackle challenges

but also how to contend with unexpected circumstances or sources of stress that may occur to avoid or dampen potential negative effects to mental health in an already intense academic period of their lives.

Implications and suggestions for teachers & researchers

This research has provided a modern-day insight into the stress and challenges that SF students face across their A-level courses. It is anticipated that this research will provide a basis for future research to further explore the nuances of SF education and the effect that it has on the students. Personality measures, stress management, individual perceptions, mental health and developmental research could be undertaken to research this under researched cohort of students in British education and in future help to provide further support for these students.

For teachers it is anticipated that this research highlights how many challenges that SF students face and that there needs to be extra support in these times, especially to learn to manage their workload and stresses across their SF courses. In addition, in the general understanding of SF challenges it is anticipated that through this research, teachers can gain a better understanding of what factors may affect students' ability to tackle the issues that they are presented with and what factors are a hinderance to a student and what factors are a challenge. In turn leading to teachers and students alike being able to foster more positive mindsets towards stressful events in SF. Teachers understanding may be helped by fostering more positive and challenge focussed relationships with students whereas students may benefit from learning to employ stress management strategies or change their mindset towards sources of stress and hopefully perceive them as challenges to be overcome rather than hindrances.

With the lack of research into SF students and their sources of stress, it may be difficult to truly understand the difficulties of SF students and how they manage their stress or how they tackle challenge. Especially from a teaching perspective, many often forget what the pressurised environment of school is like once they are older. It is anticipated that this research will allow teachers to better understand the mindset of SF students and how best to help them but also to be able to aid SF students in building skills and resilience towards the stresses that they encounter. Moreover, it is

expected that SF students will begin to feel as if their concerns are being heard by not only the academic community but also their teachers after several decades of neglect in research (Stoten, 2014a). The research in this PhD Thesis indicated that a mitigating factor for perceived stress was the relationship that they had with their teacher as several students mentioned this as a key facilitator in understanding their subjects and thus, less stress. This seemed to be a very important factor when it came to students feeling that they enjoyed their subject or felt as if the subject was a source of stress or a challenge to be overcome.

Limitations & Recommendations for future research

Despite COVID-19 having an impact on the amount of data that was collected from studies, there are additional issues with surveys and questionnaires which would have affected studies one and three as these were survey based. This was especially noticeable in both studies were there was a noticeable drop off in responses due to the BCOPE (Carver, 1997) in study one and in datapoints two and three in study three. In both cases the response rates decreased over the duration of the study, responses were further reduced as responses below 60% were removed from the study as to reduce the negative effects on the analysis (Collier, 2020).

Specifically, the BCOPE, despite their being some significant relationships found within the data, there was a noticeable drop off rate in the BCOPE scale, which may raise questions of how useful the BCOPE is when used in tandem with other measures when surveying SF students. Consequently, there BCOPE was not analysed past the point of study one and was removed from further studies and student coping behaviours were not adequately explored and so a proper understanding of how students employ coping strategies and stress management across SF was not fully explored at least within this programme of research. Moreover, results of Study 1 also found that the BCOPE scale (Carver, 1997) was a significant predictor of perceived stress but was removed from future quantitative studies due to the BCOPE causing the surveys to be overly long. It may be pertinent to run the study again with only PSS and BCOPE to gauge how SF students utilise coping behaviours

when they are presented with situations that they perceive to be stressful and what coping behaviours are utilised the most by SF students.

Furthermore, self-report bias can be a significant and perennial issue for surveys, and it can lead to a skewed, socially desirable, or sub-par response (Cohen, L. et al., 2011). Though precautions such as making the question within the survey to be direct with little area of misinterpretation (eg: strongly disagree to strongly agree Likert scales), removal of careless responses (Collier, 2020; Ward & Meade, 2023). Similarly, student experiences throughout COVID and the proximity of the later three studies to the events of COVID may have played a part in students potential over negative reporting of COVID anxieties due to the changes in learning that COVID brought about.

Moreover, the challenges caused by returning to face-to-face studies could have been exacerbated by how close lockdowns and school disruption had been to the continuation of the studies, both qualitative and quantitative as the events of COVID had a noticeable negative effect on the mental health and stress levels of the general populace (16 and older) in the UK (Pierce et al., 2020). The self-report bias may have been more pronounced due to the sensitivity of the events surrounding COVID and the lockdowns as participants may feel social pressure or a bias towards events which influences their answering of the survey questions, which is a prevalent issue in survey-based research (Nunnally, &. B., 1994; Song et al., 2015). Though measures were undertaken to alleviate issues of self-report bias, there will still be a level of bias that exists naturally when participants undertake surveys.

Regarding scope and the sample size of the research in this PhD, with only three SF institutions being used and all were situated in South Yorkshire, it would be possible to claim that these results are representative of SF students in South Yorkshire, but perhaps not the rest of the UK SF student population, as cultures and requirements of different SF institutions may change across the UK. Demographically, the studies in this PhD took place in a similar area, namely northern England with all three schools being relatively close to each other and being within the bounds of South Yorkshire. Culturally these areas are very similar in regional identity and see themselves as culturally "Yorkshire" and "Northern", which distances itself from the rest of the UK including Southern or

Westminster politics, identity and furthermore, playing into the historic perception of the economic North-South divide (Giovannini, 2016; Jopling, 2019).

Similarly, other demographic factors could be considered to garner a more rounded view of SF students' perception and sources of stress, such as gender, ethnicity, school year, subjects' choice, to discern what factors may be predictors of stress, cause a rise in coping behaviours or could be mitigators of stress. In any case, the lack of demographic and other factors in this PhD research could provide a wealth of information into SF students and help to provide new avenues for research for future researchers.

Regarding the interpretation of the interviews and thematic analysis, as previously discussed it can suffer from a lack of depth and interpretation leading to a largely descriptive view of the data with little outside of this (Braun & Clarke, 2006; Gibson, 2006; Javadi & Zarea, 2016). The researcher could indeed be questioned on the point of the research being critical realism and subjective in nature and therefore be accused of a lack of control and scientific rigour of the research. However, an critical realist would argue that experience and reactions to the world around an individual cannot be removed or controlled as peoples experiences differ for the same reality. If the researcher attempted to control these factors the research would not reflect the legitimate worldview of the participant or their thoughts. Regarding the findings within this PhD thesis, indeed there is not a great deal of deep interpretation of the interview data as it was not the aim to do so but rather provide a more up to date understanding of a student base that had seldom been studied since 1980. Due to the flexibility and ability to draw out natural expressions and themes from participants (Braun & Clarke, 2006), TA was a useful tool in understanding the sources of stress that SF students experienced. Moreover, the main aim of this study, as stated in chapter two was to provide a basis for future studies into SF sources of perceived stress and stress management.

Despite the positive aspects of both the qualitative and quantitative analysis and the results that were yielded, the results and analysis is limited due to this disruption, thus only limited comments and exploration of the relationships could be undertaken. However, the exploration into SF sources of stress was the first in several decades with results providing important and fresh insight into how

students in SF perceive stress, what some of the sources of stress may be, what factors may exacerbate stress and what factors might mitigate stress. Furthermore, the events of COVID-19, despite being disruptive, provided a unique opportunity to explore an under researched area of British education while it was amid a global event and investigate SF students' perspective on undertaking their studies throughout this period.

As previously discussed, there has been a paucity of research into SF students in general (Stoten, 2014c) the research in this PhD thesis has been pioneering in nature as there is very little research related to SF to draw upon. Though this research has highlighted some significant relationships and insights into the sources of stress for SF students and the factors that affect stress, there were still several areas which were not explored, or under explored due to the relationship being unexpected or due to the time/methodological restraints of the PhD programme. Subsequently there are a few recommendations for research that could be addressed in future studies into the SF population.

Although Sixth form institutions were used as the main area of study in this thesis, there are other institutions where A-level courses can also be undertaken such as technical colleges or independent colleges. This thesis focused solely on SF institutions and did not collect data from other sources of A-level education. It could be argued that these other institutions could be an important point of comparison between what the main sources of stress SF students experience and whether they align with other A-level students from other institutions. In future it would be important to expand the scope of the research in this thesis to incorporate these other institutions to gain insight into whether there are sources of stress unique to SF where there is overlap in the sources of stress between SF and other colleges. Additional research could also be conducted to ascertain whether some students in SF want to be attending SF or would rather be undertaking other activities such as work but cannot do so due to the raising of the age of compulsory education. Subsequently research into these areas would allow for a comparison between SF students and students from other institutions. Furthermore, research into the effect of changes to compulsory education age would expand the knowledge of what factors may influence engagement with SF education and the academic self-efficacy of students in SF.

Because of the differences between the north and south in England, whether perceived, economical or cultural, there may be differences that have been missed in the mindset, perception of stress and factors which may affect SF students' sources of stress in other areas of the country. Future researchers may be wise to investigate what cultural divides there may or may not be between the north and the south. The incorporation of other SF schools from different areas of the country would allow researchers to see any differences but also what unites SF students to give a clearer view of what SF students in general from all walks of life may experience and what factors may affect and mitigate their perception and sources of stress. Furthermore, another factor that would be pertinent to explore is the difference between students studying for A-level courses and those studying BteC/vocational courses as there may be differences between how the course structure between the two qualifications may affect student stress. Giving a further view of all SF students and not assuming that all SF students are simply studying strictly A-level qualifications.

A significant issue that was faced throughout the research in this PhD but most significantly Study 1 was that of COVID-19 and the subsequent lockdowns. Though one datapoint was gathered, the lockdowns cut the study short, and no more data was gathered from Study 1, leaving it incomplete and with the analysis examining only part of what it was planned. In future, it would be beneficial to undertake the study again with the PSS, BCOPE and ACE measures in a longitudinal way to try and obtain data on perceived stress, academic self-efficacy and coping behaviours over a two-year period following students from beginning SF in lower SF until graduating from SF. Ultimately, there has been no longitudinal studies into SF sources of stress and completing study one would allow future research to gain the first longitudinal insight into the potentially changing nature of SF sources of stress over a two year period. The studies within this thesis were mostly cross-sectional and so only provided a momentary glimpse into what the students were feeling on the day that they took part in the surveys or interview/focus group. A longitudinal study would provide a better long-term understanding of the challenges that students in SF face and the sources of stress that they will encounter.

One aspect which was neglected in this PhD was that of personality, analysis of the studies within this thesis indicated that there were factors which could exacerbate stress but also mitigate it and factors which could affect the perception of stress in SF students. The qualitative interviews especially highlighted the effect of factors such as "relationships with teachers" and "factors which influenced engagement with work" which indicated that there was a great deal of mindset and personal perception of a stressor/challenge that affected the student's ability to engage with their work. To explore this future research may benefit from utilising a model such as the Big 5 personality model (McCrae & Costa, 1987) in conjunction with the challenge-hinderance model (Cavanaugh et al., 2000) which would allow further exploration into the results of this PhD and further inspect what personality traits are mitigators or stress and which ones are exasperators of stress. This would allow future research to focus more on the support needs of the SF students and begin to work on a potential way to change negative student mindsets and perceptions of the stresses that they may face across A-levels. Furthermore, results indicate that there may be a link between personality and stress management/perception and how students tackle the challenges that they face. There may be opportunity for measuring how these personality traits change over the course of their SF studies and the potential for a study to be conducted into the effect of students "self-talk" and further exploration into individual perception of stress when it comes to tackling challenges, allowing students to build up the tools to combat sources of stress or challenge when they arise and how the challenge-hindrance model could be further utilised in this area of education (Cavanaugh et al., 2000).

The GAS model (Selye, 1946) and PSS (Cohen, S. et al., 1983; Lazarus & Folkman, 1984) were chosen for the research in this PhD thesis for their flexibility and broad scope when addressing how individuals perceive and experience stress. However, this broad and general approach does lack some of the complexity needed to understand stress in a more detailed way. Perhaps in future, and to link more heavily with the challenge-hinderance model (Cavanaugh et al., 2000); exploration into what aspects of SF education students find to be a stressor and what aspects are a challenge could be undertaken to obtain a more fine-grained understanding of what aspects of SF students find to be a source of stress and which they see as a challenge to be overcome.

One of the major criticisms of Selye's GAS theory was that the GAS theory focuses on endocrine and adrenal cortex's while modern research indicates that there is a more complex interaction between several neurological systems that affect one's ability to mediate stress and the effect it has on an individual (Mason, J. W., 1972; McCarty & Pacak, 2000). It would be a natural progression from the research within this thesis to begin exploring the neurological systems that are at play in stress or to begin using more focussed and specific models of stress to investigate the sources of stress for SF students. Furthermore, it may be pertinent to explore other models using the GAS and PSS models such as sleep quality, home environment, mental health issues (such as depression or anxiety) and other existing medical conditions (Carskadon, 2002; Fink, 2016; Martin & Marsh, 2009; Núñez-Regueiro & Núñez-Regueiro, 2021) as these are all factors that were neglected in this PhD programme of research but could provide key insights into how SF students perceive stress and challenge in future research.

Finally, educational progress and transition to different stages of academia is known to be a source of stress or at the very least a period of uncertainty for students (Denovan & Macaskill, 2016; Stubbs et al., 2022). Further research into what effects the transition from GCSE to SF and from lower SF to upper SF to gauge the progress and potential sources of stress from GCSE to the end of SF. This will provide an overview of what sources of stress SF students may encounter throughout their studies and give a clearer picture of the journey that students in the UK may experience.

Conclusion & recommendations for practice

This research programme has been one of the first pieces of research into Sixth Form students' sources of stress and stress management since Dobson's (1980) study which inspired this research in this thesis together with the researcher's own MSc dissertation. The research in this PhD programme explored SF students' sources of stress, stress management, perceived stress, academic self-efficacy and a unique opportunity to study the effect of COVID-19 on students' ability to undertake their studies. Ultimately, the research within this PhD research programme aimed to build on the initial

research by Dobson and provide a basis for future research into SF students, and their sources of stress and how they tackle the challenges that they face across Further Education in the current era.

Results revealed that the stress that students encountered was multi-dimensional in nature and not just tied to one source of stress specifically but rather a network of stresses that all affected the student's ability to undertake their work. Additionally, it was found that there were several factors of personality that could exacerbate or mitigate the stresses that students encountered and that the perception of stress as a challenge or hindrance played a factor in several students ability to tackle stress. Furthermore, it was found that relationships with teachers, availability of support, willingness to engage in support and mindset were all important factors in how students dealt with the challenges that they faced across their A-level studies.

Due to the events of COVID-19, there was opportunity to conduct research into what sources of stress SF students encountered over the lockdown and the challenges that arose with online learning. The events of COVID allowed an exploration into a unique societal event and how SF students dealt with those events and the return to face-to-face learning after the lockdowns. Results from the COVID related studies revealed that students perceived more stressed upon returning to face-to-face studies after lockdowns had ended and that they faced new sources of stress such as catching up with missed content and anxiety over COVID.

Overall, it was found that students were affected by academic pressures and the expectations of SF on a constant basis and that other stresses or pressures would affect a student's ability to engage with their studies. Much like the findings in Dobson (1980), stress was perceived by students as multidimensional with everything affecting the student potential academic achievement. If a student encountered a source of stress or a challenge it would not just affect the student in isolation but was viewed by the student through the lens of what effect, it would have on their final examinations and the work that they needed to do to achieve academically. Despite this, there were several factors in student personality and individual experience that allowed students to mitigate the effect of stress and challenge on their academic achievement such as relationships with teachers and enjoyment of subject. Furthermore, some students seemed to see the challenges and sources of stress to be obstacles

to be overcome rather than burdens that drag them down. which begs the question: how the school system or researchers would tap into this to find out what causes a student to adopt this more challenge focussed mindset. Finally, implementing such measures could help students mitigate the already stressful period of further education and SF as well as allowing them to adopt a more "challenge" focussed mindset rather than a mindset that sees obstacles as sources negative of stress.

Though there were a number of limitations to the research within this thesis, the research in this PhD programme has provided the first exploration(s) into an under researched cohort of students in Britain (Stoten, 2014c) and has provided an insight into what SF students see as sources of stress and how they manage stressful events. The main findings of this thesis found that SF students did indeed encounter stress in a multidimensional manner which contributed to students seeing stresses or challenges as things which may affect their academic achievement. Leading toa potential fear of failure and struggles with the pressures placed upon them from the beginning of SF. Moreover, students found that the transition from GCSE to SF was very difficult and produced a number of challenges to the student. In turn many students were also burdened with the events of COVID and lockdowns, which caused major disruption to the students normal academic functioning. Subsequently analysis revealed that student academic confidence and their self-regulated learning had been negatively affected upon the return to face-to-face teaching. Interestingly, analysis indicated that there were gender differences in the way that males and females perceived stress, with males generally experiencing lower levels of stress than females.

Though there were factors which exacerbated stress, research in this thesis also revealed that there were important mitigating factors of stress too which SF students drew upon, such as a positive relationship with teachers, willingness to reach out for support and happiness with their subjects. Some students, despite the stresses faced, seemed to have a more challenge-oriented mind set and perceived stress as a challenge to be overcome rather than an insurmountable burden. This gave valuable insight in to the mindset of SF students and the personal perceptions of stress was gained. It is anticipated that the results of the research in this thesis will aid the understanding of the mindset of

students in SF and a better comprehension of how to support these students in an intense period of academic pressure.

Finally, this thesis will conclude with some recommendations for practice for both students and teachers:

1. The transition from GCSE to SF was a point of great stress for students with many students struggling to adapt to the new academic pressures and expectations. Many students understood that A-level study would be different but seemed to struggle greatly with what was expected of them and how to independently study. A suggestion for students struggling with the transition to A-level would be to adopt a challenge base mindset and see the intense circumstances around the transition to A-level as a potential for growth rather than a hindrance. This would also help mitigate any disruption to the student's course, such as was experienced in CCOVID-19. The viewing of events as a challenge rather than a immovable obstacle will encourage students to weather these challenges and provide them with the tools to tackle later challenges too.
2. SF students encounter a multitude of stresses throughout their SF journey. Though numerous stresses are present throughout all educational journeys, the stresses in SF are often more pronounced as there are great expectations placed upon the students as well as A-level qualifications being imperative for university entry. Despite the presence of many stresses, students indicated that there were also several factors which mitigated these pressures. Both subject happiness and a positive relationship with teachers were key mitigators of stress that students thought highly of. A suggestion for teachers would be that there is an opportunity to greatly reduce the stress that students feel not only with the transition to A-level but the myriads of stresses that students encounter. Teachers have the opportunity to build rapport with students and a more "grown up" relationship where mutual respect and casual humour is encouraged. This way students find a more relaxed learning environment and are encouraged to enjoy the subject more along with gaining a teacher who they feel is "on their side" and who they can rely on.

3. As previously stated, students often encounter numerous stresses and pressures at once. One large pressure is that of academic expectations and independent study. Students are often confused or unsure exactly what is expected of them in A-level compared to GCSE and may become disillusioned or stressed. A suggestion for teachers would be to explain clearly to students that a major difference between GCSE and A-level is that of independent learning and study and that students can now begin to engage with the course content by bringing in their own perspectives if they can adequately reference the points that they are speaking about. In sum, encourage students to formulate their own perspectives on a matter in essays and coursework and encourage them to study independently around a subject. Coupling this with the positive teacher relationship and enjoyment of a subject that they have now chosen will create a more positive experience for students and lower confusion and stress.
4. Finally, a suggestion for students to detach themselves from the idea that only academic achievement is important. Certainly A-levels are an important academic qualification for university choice, but it is not the most important moment in your life. Learning from mistakes and use it to engage further with your studies. Failure is an opportunity to learn and change in the face of adversity and stress. Instead of fearing failure or mistakes, embrace them and use them to your advantage.

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Appendices

Appendix A - Study 1: Quantitative sources of stress survey

A1- Information & Debrief & Ethical approval

Information

What is expected of me?

- You will be expected to answer a questionnaire at five time points across the next two years.

- These data collection points will be used to gain an understanding of the academic life cycle and challenges that students may encounter across the two years and how Sixth form students manage these challenges.

Do I have to take part?

- The choice to take part in this study is entirely up to you, if you decide to take part you will be asked to fill in a consent form.

- You also have the right to withdraw at any time if you so wish without reason for up to 7 days after the study, by doing so any information will be disposed of and your entry will be deleted.

Unique identifier

- For the purpose of this study I would like to ask you to create a way to unique identifier to use in this survey and future surveys. If at any time you should want to withdraw from the study please email me and quote your unique identifier.

Confidentiality & Data protection

-Any information collected will be kept on a secure drive on the University system and will only be accessed by the named researchers and will not be taken off of campus.

-Data collected will be managed in line with GDPR regulations and all identifying information will be anonymised.

https://www.shu.ac.uk/about-this-website/privacy-policy/data-subject-rights

If you have any questions about this study, the researchers email is provided at the end of this survey.

By clicking the box below, you are agreeing to participate in the study.

☐I consent

☐I do not consent

Please create a unique identifier and remember it for future studies. An example would be your Initials and your favourite holiday destination, or your Favourite subject at school and your day and month of birth. Please remember this for future surveys or if you wish to withdraw from the study.

For example: LC Iceland or History 2504

Unique identifier

Debrief

Thank you so much for completing my survey! Its been greatly enjoyable to create this survey and study this area! I hope to be able to get some brilliant results from this survey.

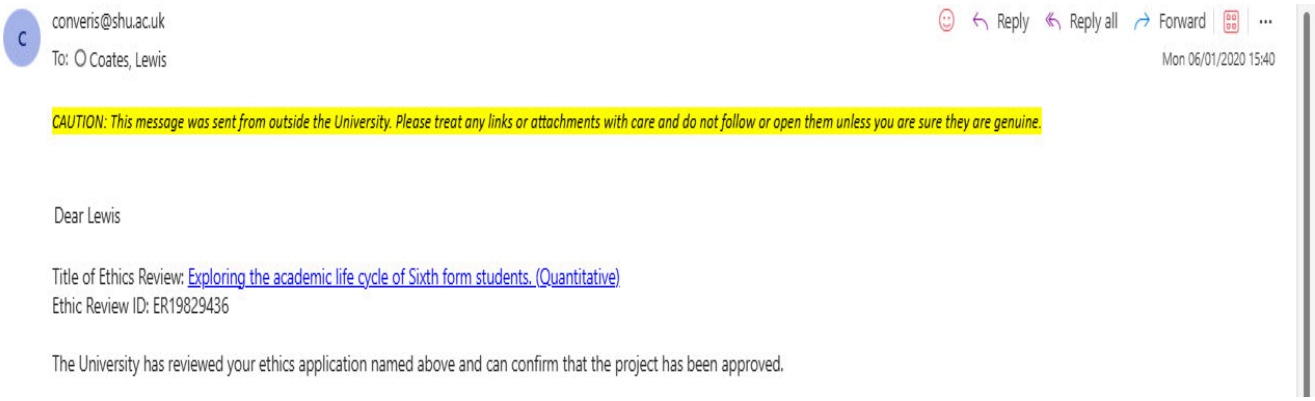
Please remember that if you would like to withdraw from the survey at any time that is perfectly fine and all you need to do is email the researchers with your unique identifier and ask to be removed. Also if you have any questions which you would like to discuss, please feel free to email the researchers:

Lewis Coates [redacted]

Charlotte Coleman (supervisor) [redacted]

Ethical approval (includes approval table for all studies)

Thesis Chapter(s)	Research study	Ethics review reference	Approval date
Chapter 3	Study 1 – Online survey	ER19829436	January 2020
Chapter 4	Study 2 – Focus Groups	ER42059284	January 2023
Chapter 5	Study 3 -Online survey	ER26552623	October 2020
Chapter 6	Study 4 – One-to-one interviews	ER25530927	March 2022



converis@shu.ac.uk
To: O Coates, Lewis

Reply Reply all Forward ...
Mon 06/01/2020 15:40

CAUTION: This message was sent from outside the University. Please treat any links or attachments with care and do not follow or open them unless you are sure they are genuine.

Dear Lewis

Title of Ethics Review: Exploring the academic life cycle of Sixth form students. (Quantitative)
Ethic Review ID: ER19829436

The University has reviewed your ethics application named above and can confirm that the project has been approved.

A2 - Measures (BCOPE, PSS & ASE)

Brief COPE

	I haven't been doing this at all	I've been doing this a little bit	I've been doing a medium amount	I've been doing this a lot
1. I've been turning to work or other activities to take my mind off things	☐	☐	☐	☐
2. I've been concentrating my efforts on doing something about the situation I'm in	☐	☐	☐	☐
3. I've been saying to myself "this isn't real".	☐	☐	☐	☐
4. I've been using alcohol or other drugs to myself feel better.	☐	☐	☐	☐

5. I've been getting emotional support from others.	□	□	□	□
6. I've been giving up trying to deal with it.	□	□	□	□
7. I've been taking action to try to make the situation better.	□	□	□	□
8. I've been refusing to believe that it has happened.	□	□	□	□
9. I've been saying things to let my unpleasant feeling escape.	□	□	□	□
10. I've been getting help and advice from other people.	□	□	□	□
11. I've been using alcohol or other drugs to help me get through it	□	□	□	□
12. I've been trying to see it in a different light, to make it seem more positive.	□	□	□	□
13. I've been criticizing myself.	□	□	□	□

14. I've been trying to come up with a strategy about what to do.	□	□	□	□
15. I've been getting comfort and understanding from someone.	□	□	□	□
16. I've been giving up the attempt to cope.	□	□	□	□
17. I've been looking for something good in what is happening.	□	□	□	□
18. I've been making jokes about it.	□	□	□	□
19. I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.	□	□	□	□
20. I've been accepting the reality of the fact that it has happened.	□	□	□	□
21. I've been expressing my negative feelings.	□	□	□	□
22. I've been trying to find comfort in my religion or spiritual beliefs.	□	□	□	□

23. I've been trying to get advice or help from other people about what to do.	□	□	□	□
24. I've been learning to live with it.	□	□	□	□
25. I've been thinking hard about what steps to take.	□	□	□	□
26. I've been blaming myself for things that happened.	□	□	□	□
27. I've been praying or meditating.	□	□	□	□
28. I've been making fun of the situation.	□	□	□	□

PSS

For each question choose from the following alternatives:

0 - never 1 - almost never 2 - sometimes 3 - fairly often 4 - very often

_____ l. In the last month, how often have you been upset because of something that happened unexpectedly?

_____ 2. In the last month, how often have you felt that you were unable to control the important things in your life?

_____ 3. In the last month, how often have you felt nervous and stressed?

_____ 4. In the last month, how often have you felt confident about your ability to handle your personal problems?

_____ 5. In the last month, how often have you felt that things were going your way?

_____ 6. In the last month, how often have you found that you could not cope with

all the things that you had to do?

_____ 7. In the last month, how often have you been able to control irritations in your life?

_____ 8. In the last month, how often have you felt that you were on top of things?

_____ 9. In the last month, how often have you been angered because of things that happened that were outside of your control?

_____ 10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

Figuring Your PSS Score

You can determine your PSS score by following these directions:

First, reverse your scores for questions 4, 5, 7, and 8. On these 4 questions, change the scores like this:

0 = 4, 1 = 3, 2 = 2, 3 = 1, 4 = 0.

Now add up your scores for each item to get a total. •**My total score is _____.**

Individual scores on the PSS can range from 0 to 40 with higher scores indicating higher perceived stress.

►Scores ranging from 0-13 would be considered low stress.

►Scores ranging from 14-26 would be considered moderate stress.

►Scores ranging from 27-40 would be considered high perceived stress.

ASE scale

No Confidence at all	**Very little confidence**	**Some Confidence**	**Much Confidence**	**Complete Confidence**
1	**2**	**3**	**4**	**5**

How much confidence do you have that you can successfully:

1	**Finish homework assignments by deadlines?**	**1**	**2**	**3**	**4**	**5**
2	**Study when there are**	**1**	**2**	**3**	**4**	**5**

	other interesting things to do?					
3	**Concentrate on school subjects?**	**1**	**2**	**3**	**4**	**5**
4	**Take class notes of class instruction?**	**1**	**2**	**3**	**4**	**5**
5	**Use the library to get information for class assignments?**	**1**	**2**	**3**	**4**	**5**
6	**Plan your schoolwork?**	**1**	**2**	**3**	**4**	**5**
7	**Organize your schoolwork?**	**1**	**2**	**3**	**4**	**5**
8	**Remember information presented in class and textbooks?**	**1**	**2**	**3**	**4**	**5**
9	**Arrange a place to study without distractions?**	**1**	**2**	**3**	**4**	**5**
10	**Motivate yourself to do schoolwork?**	**1**	**2**	**3**	**4**	**5**

11	**Participate in class discussions ?**	**1**	**2**	**3**	**4**	**5**

Directions: Please use the scale below to respond to the following 8 items. **Very Untrue** **Very True**

1	**2**	**3**	**4**	**5**	**6**	**7**

__	**12**	**I know how to schedule my time to accomplish my tasks.**
__	**13**	**I know how to take notes.**
__	**14**	**I know how to study to perform well on tests.**
__	**15**	**I am good at research and writing papers.**
__	**16**	**I am a very good student.**
__	**17**	**I usually do very well in school and at academic tasks.**
__	**18**	**I find my academic work interesting and absorbing.**
__	**19**	**I am very capable of succeeding at this college. ***

*This question was changed to “college/Sixth form” for the purpose of this study

A3 – Correlations, Boxplots, Multiple linear regression & One-way MANOVA.

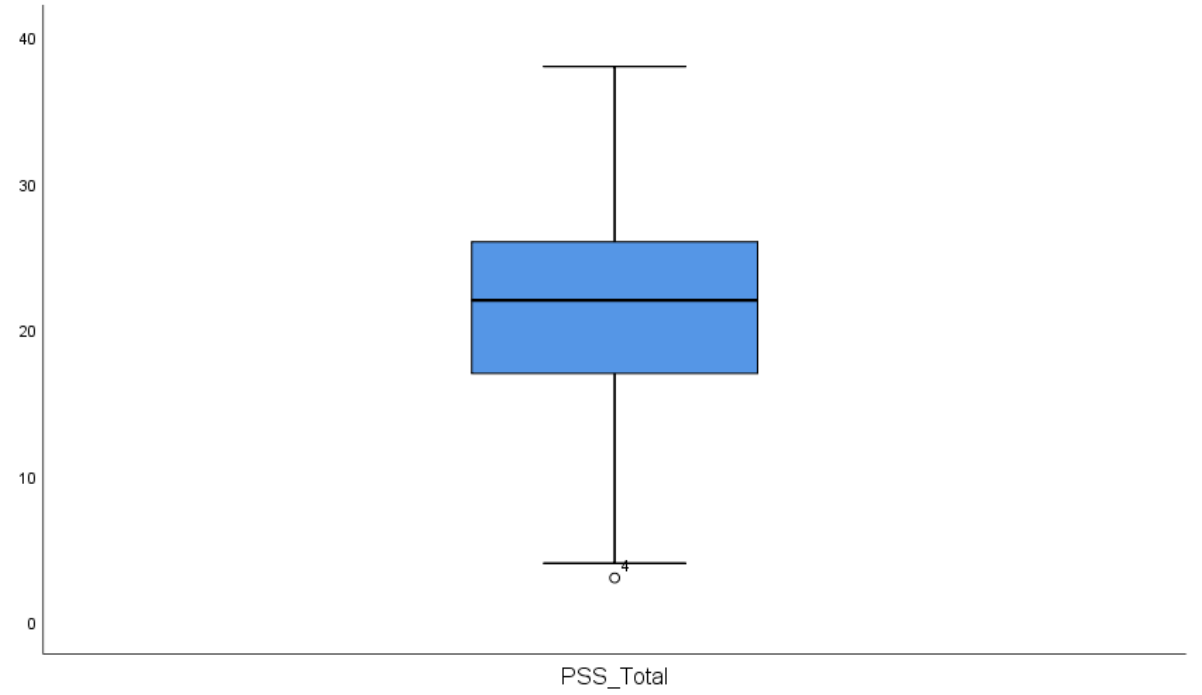
Correlations

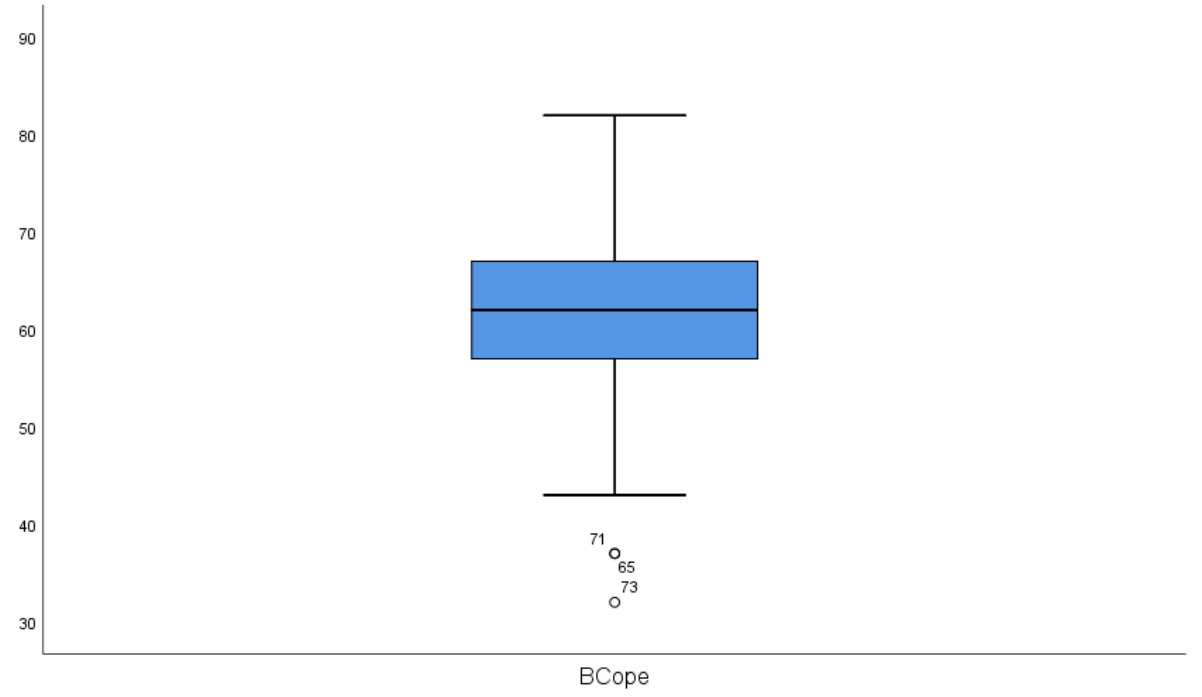
	Mean	Std. Deviation	N
PSS_Total	20.96	7.343	101
BCope	61.27	9.488	94
ASE_Confidence	35.85	5.916	100
ASE_SRL	38.16	6.543	99

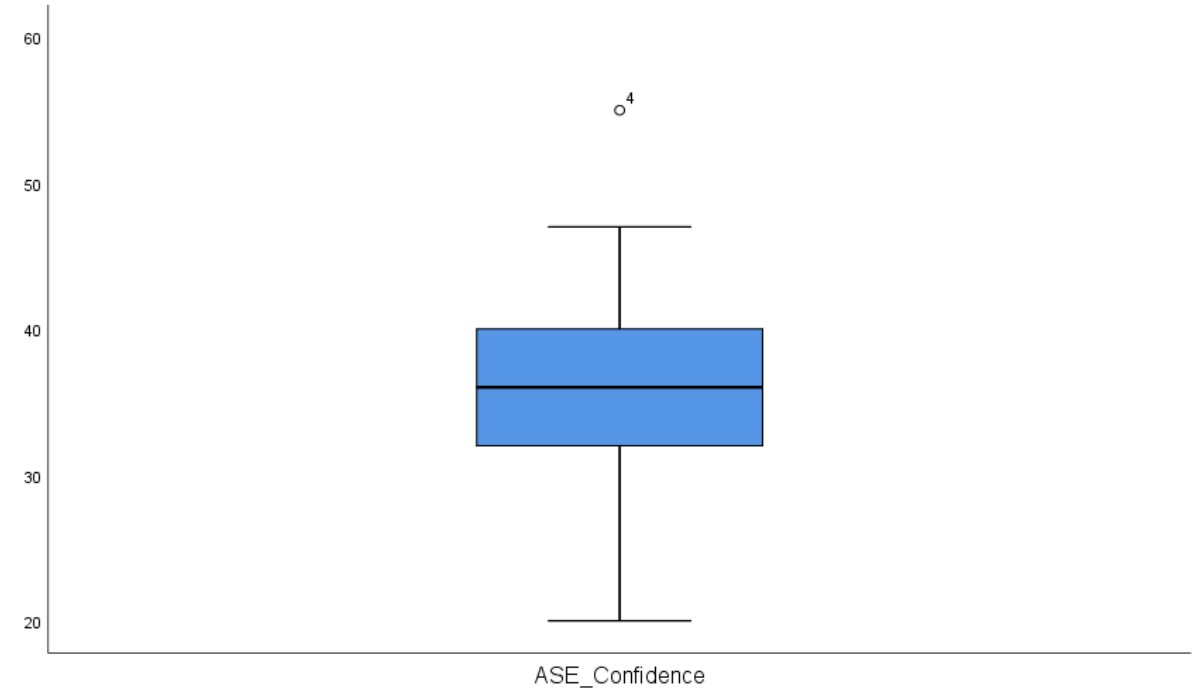
		PSS_Total	BCope	ASE_Confidence	ASE_SRL
PSS_Total	Pearson Correlation	1	.515**	-.367**	-.305**
	Sig. (2-tailed)		.000	.000	.002
	N	101	94	100	99
BCope	Pearson Correlation	.515**	1	-.117	-.057
	Sig. (2-tailed)	.000		.260	.584
	N	94	94	94	93
ASE_Confidence	Pearson Correlation	-.367**	-.117	1	.657**
	Sig. (2-tailed)	.000	.260		.000
	N	100	94	100	99
ASE_SRL	Pearson Correlation	-.305**	-.057	.657**	1
	Sig. (2-tailed)	.002	.584	.000	
	N	99	93	99	99

**. Correlation is significant at the 0.01 level (2-tailed).

Boxplots






60
50
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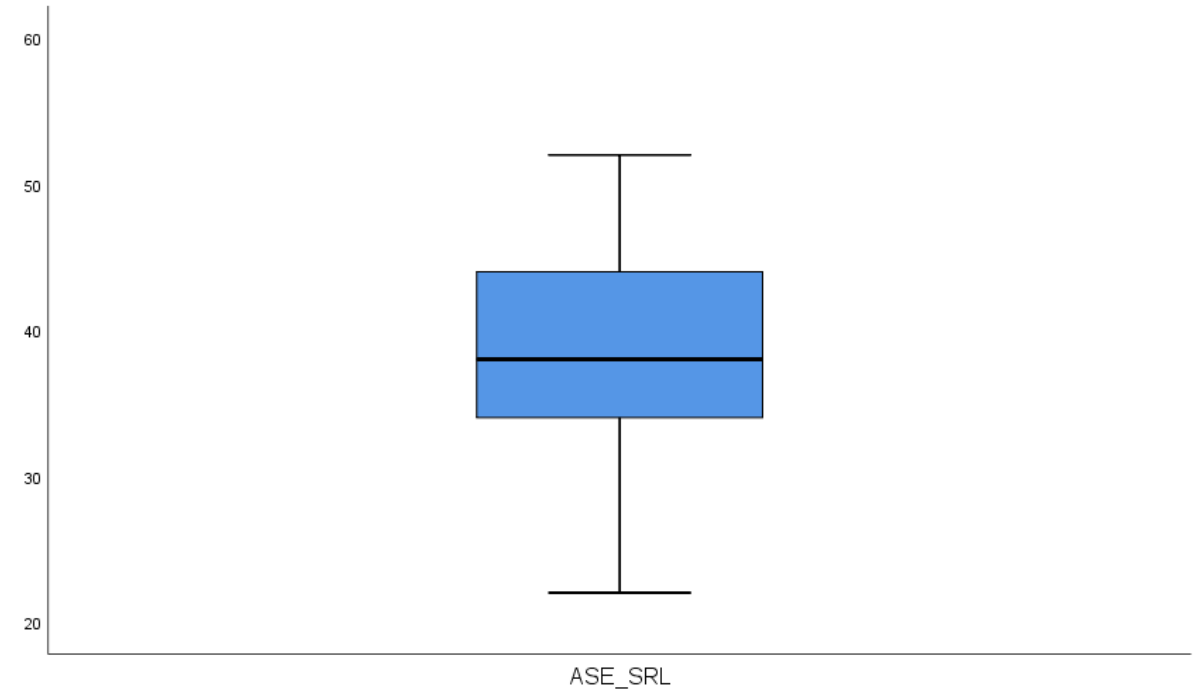
30
20
4
ASE_Confidence


60
50
40
30
20
ASE_SRL

Multiple linear regression

Descriptive Statistics

	Mean	Std. Deviation	N
PSS_Total	21.37	7.254	93
BCope	61.32	9.524	93
ASE_Confidence	35.73	5.993	93
ASE_SRL	38.22	6.646	93

Correlations

		PSS_Total	BCope	ASE_Confidence	ASE_SRL
Pearson Correlation	PSS_Total	1.000	.513	-.338	-.283
	BCope	.513	1.000	-.118	-.057
	ASE_Confidence	-.338	-.118	1.000	.655
	ASE_SRL	-.283	-.057	.655	1.000
Sig. (1-tailed)	PSS_Total	.	.000	.000	.003
	BCope	.000	.	.129	.292
	ASE_Confidence	.000	.129	.	.000
	ASE_SRL	.003	.292	.000	.
N	PSS_Total	93	93	93	93
	BCope	93	93	93	93
	ASE_Confidence	93	93	93	93
	ASE_SRL	93	93	93	93

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.592[a]	.350	.328	5.946	2.133

a. Predictors: (Constant), ASE_SRL, BCope, ASE_Confidence

b. Dependent Variable: PSS_Total

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1694.825	3	564.942	15.978	.000[b]
	Residual	3146.745	89	35.357		

	Total	4841.570	92

a. Dependent Variable: PSS_Total

b. Predictors: (Constant), ASE_SRL, BCope, ASE_Confidence

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			T
		B	Std. Error	Beta	t	Sig.	
1	(Constant)	12.651	5.990		2.112	.037	
	BCope	.367	.066	.482	5.603	.000	
	ASE_Confidence	-.240	.138	-.198	-1.744	.085	
	ASE_SRL	-.137	.124	-.125	-1.109	.271	

a. Dependent Variable: PSS_Total

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	9.59	31.47	21.37	4.292	93
Residual	-14.959	17.933	.000	5.848	93
Std. Predicted Value	-2.745	2.354	.000	1.000	93
Std. Residual	-2.516	3.016	.000	.984	93

a. Dependent Variable: PSS_Total#

One-way MANOVA exploring gender-based differences

Between-Subjects Factors

		Value Label	N
Gender (Please specify)	1	Male	38
	2	Female	53

Box's Test of Equality of Covariance Matrices[a]

Box's M	15.679
F	1.489
df1	10
df2	29830.597
Sig.	.136

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

a. Design: Intercept + Gender

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.990	2221.991[b]	4.000	86.000	.000	.990
	Wilks' Lambda	.010	2221.991[b]	4.000	86.000	.000	.990
	Hotelling's Trace	103.348	2221.991[b]	4.000	86.000	.000	.990
	Roy's Largest Root	103.348	2221.991[b]	4.000	86.000	.000	.990
Gender	Pillai's Trace	.145	3.643[b]	4.000	86.000	.009	.145
	Wilks' Lambda	.855	3.643[b]	4.000	86.000	.009	.145
	Hotelling's Trace	.169	3.643[b]	4.000	86.000	.009	.145
	Roy's Largest Root	.169	3.643[b]	4.000	86.000	.009	.145

a. Design: Intercept + Gender

b. Exact statistic

Levene's Test of Equality of Error Variances[a]

		Levene Statistic	df1	df2	Sig.
PSS_Total	Based on Mean	2.248	1	89	.137
	Based on Median	2.255	1	89	.137
	Based on Median and with adjusted df	2.255	1	87.203	.137
	Based on trimmed mean	2.323	1	89	.131
BCope	Based on Mean	4.346	1	89	.040

	Based on Median	3.427	1	89	.067
	Based on Median and with adjusted df	3.427	1	72.630	.068
	Based on trimmed mean	3.979	1	89	.049
ASE_Confidence	Based on Mean	.064	1	89	.801
	Based on Median	.126	1	89	.723
	Based on Median and with adjusted df	.126	1	88.994	.723
	Based on trimmed mean	.069	1	89	.793
ASE_SRL	Based on Mean	.227	1	89	.635
	Based on Median	.205	1	89	.652
	Based on Median and with adjusted df	.205	1	82.523	.652
	Based on trimmed mean	.221	1	89	.639

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Gender

Source	Dependent Variable	Type III Sum of Squares	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	PSS_Total	168.310[a]	168.310	3.258	.074	.035
	BCope	54.347[b]	54.347	.595	.442	.007
	ASE_Confidence	200.640[c]	200.640	5.885	.017	.062
	ASE_SRL	68.145[d]	68.145	1.594	.210	.018
Intercept	PSS_Total	39668.970	39668.970	767.934	.000	.896
	BCope	329915.006	329915.006	3613.020	.000	.976
	ASE_Confidence	110940.332	110940.332	3254.232	.000	.973
	ASE_SRL	127009.859	127009.859	2970.162	.000	.971
Gender	PSS_Total	168.310	168.310	3.258	.074	.035
	BCope	54.347	54.347	.595	.442	.007
	ASE_Confidence	200.640	200.640	5.885	.017	.062
	ASE_SRL	68.145	68.145	1.594	.210	.018
Error	PSS_Total	4597.448	51.657			

	BCope	8126.840	91.313
	ASE_Confidence	3034.107	34.091
	ASE_SRL	3805.811	42.762
Total	PSS_Total	46423.000	
	BCope	348747.000	
	ASE_Confidence	118878.000	
	ASE_SRL	135430.000	
Corrected Total	PSS_Total	4765.758	
	BCope	8181.187	
	ASE_Confidence	3234.747	
	ASE_SRL	3873.956	

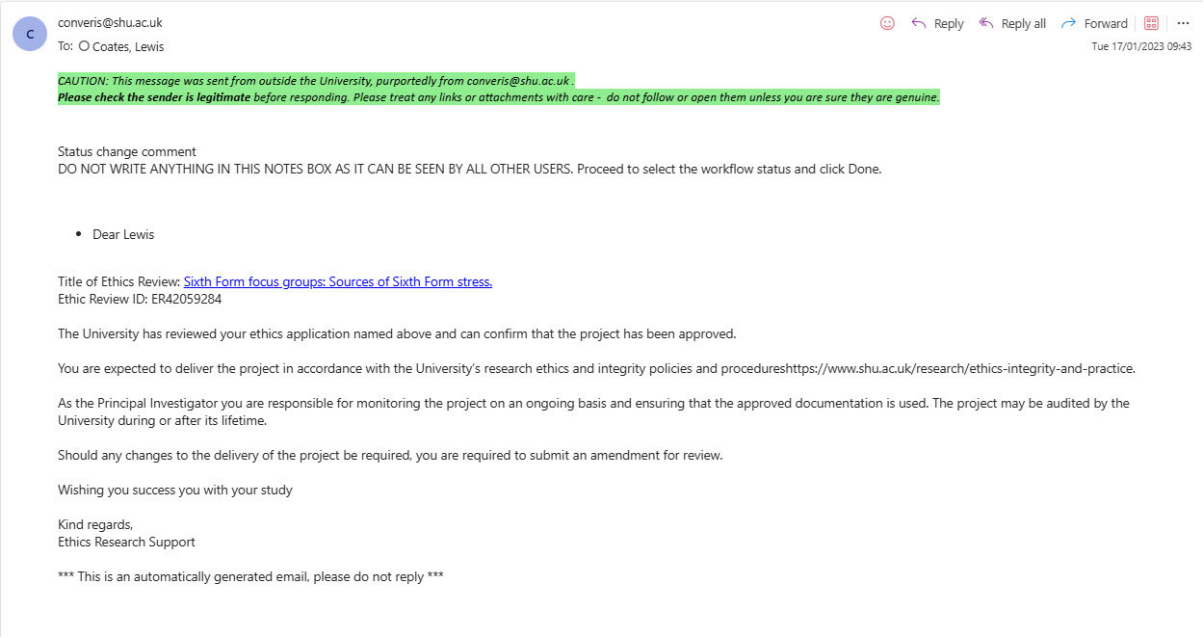
Gender (Please specify)

				95% Confidence Interval	
Dependent Variable	Gender (Please specify)	Mean	Std. Error	Lower Bound	Upper Bound
PSS_Total	Male	19.789	1.166	17.473	22.106
	Female	22.547	.987	20.586	24.509
BCope	Male	60.263	1.550	57.183	63.343
	Female	61.830	1.313	59.222	64.438
ASE_Confidence	Male	33.895	.947	32.013	35.777
	Female	36.906	.802	35.312	38.499
ASE_SRL	Male	37.000	1.061	34.892	39.108
	Female	38.755	.898	36.970	40.539

Appendix B - Study 2: Focus groups on sources of stress

B1 - Focus group Ethical approval, Schedule, Information, consent & debrief

Ethical Approval



converis@shu.ac.uk
To: Coates, Lewis

Reply | Reply all | Forward
Tue 17/01/2023 09:43

CAUTION: This message was sent from outside the University, purportedly from converis@shu.ac.uk .
***Please check the sender is legitimate** before responding. Please treat any links or attachments with care - do not follow or open them unless you are sure they are genuine.*

Status change comment
DO NOT WRITE ANYTHING IN THIS NOTES BOX AS IT CAN BE SEEN BY ALL OTHER USERS. Proceed to select the workflow status and click Done.

- Dear Lewis

Title of Ethics Review: Sixth Form focus groups: Sources of Sixth Form stress.
Ethic Review ID: ER42059284

The University has reviewed your ethics application named above and can confirm that the project has been approved.

You are expected to deliver the project in accordance with the University's research ethics and integrity policies and proceduresthttps://www.shu.ac.uk/research/ethics-integrity-and-practice.

As the Principal Investigator you are responsible for monitoring the project on an ongoing basis and ensuring that the approved documentation is used. The project may be audited by the University during or after its lifetime.

Should any changes to the delivery of the project be required, you are required to submit an amendment for review.

Wishing you success you with your study

Kind regards,
Ethics Research Support

*** This is an automatically generated email, please do not reply ***

Purpose of the study

The purpose of these interviews is to gather data for a PhD project which is exploring the experiences of Sixth Form students. There has not been a great deal of research into the experiences and stress of Sixth Form students with only a handful of studies being undertaken into Sixth Form students stress since 1980 (Dobson, 1980; Hodkinson & Bloomer, 2000). With the advent of COVID, this research aims to explore student experiences of undertaking their studies across Sixth Form and how COVID may have affected the student's confidence in undertaking academic tasks and how they may have coped with the challenges that they faced.

Ultimately this research aims to explore your experiences of Sixth Form, examining the factors that have contributed to any stress that you may have encountered and how you have managed that stress.

Do I have to take part?

No, you do not have to take part if you do not wish to do so. This study is entirely voluntary.

Right to withdraw

Additionally, you have a right to withdraw from the study up to 1 week after the completion of the interview if you wish to do so without any reason given. Simply email the researcher with your interview code and the researcher will remove your interview from the research.

Procedure (if you choose to take part)

If you agree to take part, you will be asked to fill in a consent form (below) and will be asked to undertake a focus group interview that will explore how you felt undertaking your Sixth Form studies across. Additionally, exploration into other potential challenges you may have faced over your studies. The interviews will take between 20 and 30 minutes and can be undertaken face to face or online depending on current restrictions.

Possible risks

Although there are no major risks involved with this survey, if you have any questions regarding the survey or have been upset, distressed, or affected in any way by this survey please do not hesitate to email the researchers or supervisor.

GDPR and data

The only people in Sheffield Hallam University who will have access to information that identifies you will be people who need to contact you to take part in the study or give you feedback that you requested. When the data is transcribed, any identifying data will be removed or changed.

Sheffield Hallam University will keep identifiable information about you from this study for 10 years after the study has finished.

Legal Basis for Research

The University undertakes research as part of its function for the community under its legal status. Data protection allows us to use personal data for research with appropriate safeguards in place under the legal basis of public tasks that are in the public interest. A full statement of your rights can be found at https://www.shu.ac.uk/about-this-website/privacy-policy/privacy-notices/privacy-notice-for-research

However, all University research is reviewed to ensure that participants are treated appropriately, and their rights respected. This study was approved by UREC with Converis number ER25530927. Further information at: www.shu.ac.uk/research/excellence/ethics-and-integrity

Contact information & Complaints.

Please remember if you have any questions or would like to withdraw from the study at any time please do not hesitate in emailing the researcher or supervisor of this study.

Lewis Coates (researcher)- [redacted]

Charlotte Coleman (Supervisor)- [redacted]

Focus group interview Questions

- What are your feelings on studying over Sixth Form?
- Prompt: Thoughts about your options, academics, social changes etc?

- What have been the greatest sources of stress across your time at SF?

- What factors other factors do you feel contribute to these stresses?

- What have been the greatest sources of support across your time at SF?

- Has there been any specific ways in which you have been supported with these stresses?

- How have you been tackling these stresses?

- Are there stresses in SF that you don't feel supported with?

- What challenges have you faced over your time at SF? (Academic, social etc)
- Follow up: How do these challenges compare to GCSE?

- What have been the greatest frustrations when undertaking your courses?

- Who do you feel that you can talk to about these stresses/challenges? (eg: Family, friends, within school?)

- What do you feel are the most significant challenges that you have faced?
- Prompt: Academics, exams, studying etc?
- Have you encountered any non-academic related stressors? How have these affected you?

- Compared to before the lockdowns, how do you feel that your confidence holds up post-lockdown, when it comes to academic work?
- Prompt: Has there been any change in the way you seek help when tackling academic challenges?

- Do you tend to have a positive attitude when it comes to academic work? Do you feel like SF has challenged that? If not/so how?

- What is your understanding of the difference in what is expected from you in Sixth form compared to GCSE?

- What has been a challenge that you have overcome? How did you do this?
- To what extent do you feel under pressure to perform in your Sixth Form studies?
- Minor stressors?
- How far have the challenges of SF changed the way in which you approach your work/revision?

Group interviews debrief sheet

Thank you for participating in my study concerning sources of Sixth form stress and its sources and how students cope with these stresses/challenges. Sixth Forms a seen as elite institutions in Britain but have been largely overlooked in research, with only a handful of studies existing into Sixth Form students experiences This lack of research surrounding Sixth Form is largely due to there being no international counterpart for Sixth Form institutions. Despite this lack of research Sixth form students are still expected to be the "academic gold standard for British education" (Stoten, 2014).
We aim to explore the experience of an under researched cohort of student within the British education system. Furthermore, we aim to explore what factors are contributing to any potential or perceived stress that students at Sixth Form may face. Ultimately we aim to to better understand the challenges that they face and how students may manage the stress of those challenges and whether there can be any support created for Sixth Form students in future.

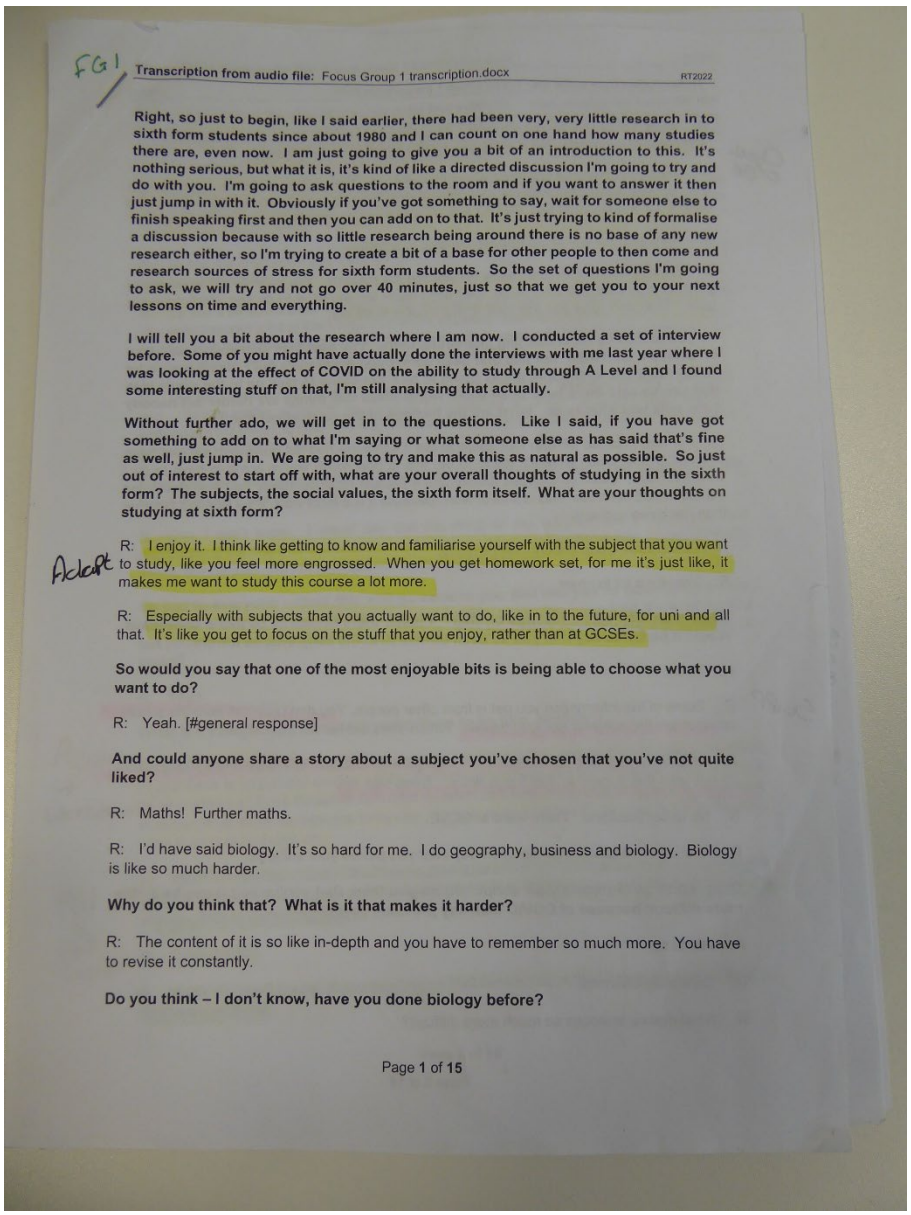
Data treatment
All of the responses recorded in this interview will be analysed as part of a larger dataset for the purpose of this PhD project. All responses and identifying information will be anonymised and any other identifying information will be removed. Findings will be used as a part of the PhD thesis and may be presented at academic conferences. Your responses will not be used for any other purpose other than stated on this debrief sheet.

Right to withdraw and contact information
If you wish to withdraw from this study at any point for up to 10 days after participating, or if you have any questions about the nature of the study or what you have experienced in this study, you may contact the researcher at any point with the details below.
A full statement of your rights can be found here:
https://www.shu.ac.uk/about-this-website/privacy-policy/privacy-notices/privacy-notice-for-research

If you have any questions about this project, please feel free to get in touch with the researcher: **Lewis Coates -** [redacted]

You can also write to the researcher write at: **Sheffield Hallam University, Howard Street, Sheffield, S1 1WBT.**

B2 – Focus group interview transcript samples



FG1

Transcription from audio file: Focus Group 1 transcription.docx RT2022

Right, so just to begin, like I said earlier, there had been very, very little research in to sixth form students since about 1980 and I can count on one hand how many studies there are, even now. I am just going to give you a bit of an introduction to this. It's nothing serious, but what it is, it's kind of like a directed discussion I'm going to try and do with you. I'm going to ask questions to the room and if you want to answer it then just jump in with it. Obviously if you've got something to say, wait for someone else to finish speaking first and then you can add on to that. It's just trying to kind of formalise a discussion because with so little research being around there is no base of any new research either, so I'm trying to create a bit of a base for other people to then come and research sources of stress for sixth form students. So the set of questions I'm going to ask, we will try and not go over 40 minutes, just so that we get you to your next lessons on time and everything.

I will tell you a bit about the research where I am now. I conducted a set of interview before. Some of you might have actually done the interviews with me last year where I was looking at the effect of COVID on the ability to study through A Level and I found some interesting stuff on that, I'm still analysing that actually.

Without further ado, we will get in to the questions. Like I said, if you have got something to add on to what I'm saying or what someone else as has said that's fine as well, just jump in. We are going to try and make this as natural as possible. So just out of interest to start off with, what are your overall thoughts of studying in the sixth form? The subjects, the social values, the sixth form itself. What are your thoughts on studying at sixth form?

Adapt

R: I enjoy it. I think like getting to know and familiarise yourself with the subject that you want to study, like you feel more engrossed. When you get homework set, for me it's just like, it makes me want to study this course a lot more.

R: Especially with subjects that you actually want to do, like in to the future, for uni and all that. It's like you get to focus on the stuff that you enjoy, rather than at GCSEs.

So would you say that one of the most enjoyable bits is being able to choose what you want to do?

R: Yeah. [#general response]

And could anyone share a story about a subject you've chosen that you've not quite liked?

R: Maths! Further maths.

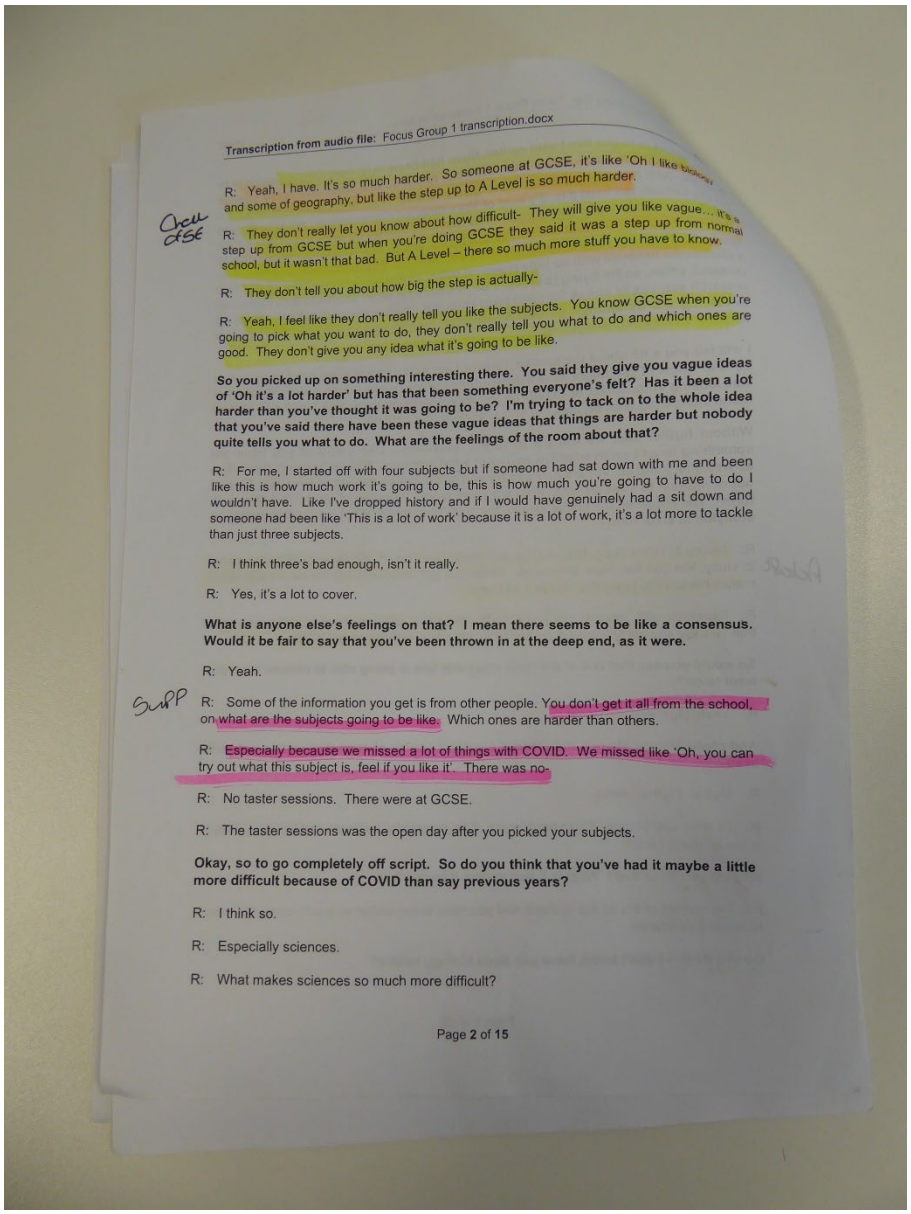
R: I'd have said biology. It's so hard for me. I do geography, business and biology. Biology is like so much harder.

Why do you think that? What is it that makes it harder?

R: The content of it is so like in-depth and you have to remember so much more. You have to revise it constantly.

Do you think – I don't know, have you done biology before?

Page 1 of 15



Transcription from audio file: Focus Group 1 transcription.docx

R: Yeah, I have. It's so much harder. So someone at GCSE, it's like 'Oh I like [illegible] and some of geography, but like the step up to A Level is so much harder.

R: They don't really let you know about how difficult- They will give you like vague... it's a step up from GCSE but when you're doing GCSE they said it was a step up from normal school, but it wasn't that bad. But A Level – there so much more stuff you have to know.

R: They don't tell you about how big the step is actually-

R: Yeah, I feel like they don't really tell you like the subjects. You know GCSE when you're going to pick what you want to do, they don't really tell you what to do and which ones are good. They don't give you any idea what it's going to be like.

So you picked up on something interesting there. You said they give you vague ideas of 'Oh it's a lot harder' but has that been something everyone's felt? Has it been a lot harder than you've thought it was going to be? I'm trying to tack on to the whole idea that you've said there have been these vague ideas that things are harder but nobody quite tells you what to do. What are the feelings of the room about that?

R: For me, I started off with four subjects but if someone had sat down with me and been like this is how much work it's going to be, this is how much you're going to have to do I wouldn't have. Like I've dropped history and if I would have genuinely had a sit down and someone had been like 'This is a lot of work' because it is a lot of work, it's a lot more to tackle than just three subjects.

R: I think three's bad enough, isn't it really.

R: Yes, it's a lot to cover.

What is anyone else's feelings on that? I mean there seems to be like a consensus. Would it be fair to say that you've been thrown in at the deep end, as it were.

R: Yeah.

R: Some of the information you get is from other people. You don't get it all from the school, on what are the subjects going to be like. Which ones are harder than others.

R: Especially because we missed a lot of things with COVID. We missed like 'Oh, you can try out what this subject is, feel if you like it'. There was no-

R: No taster sessions. There were at GCSE.

R: The taster sessions was the open day after you picked your subjects.

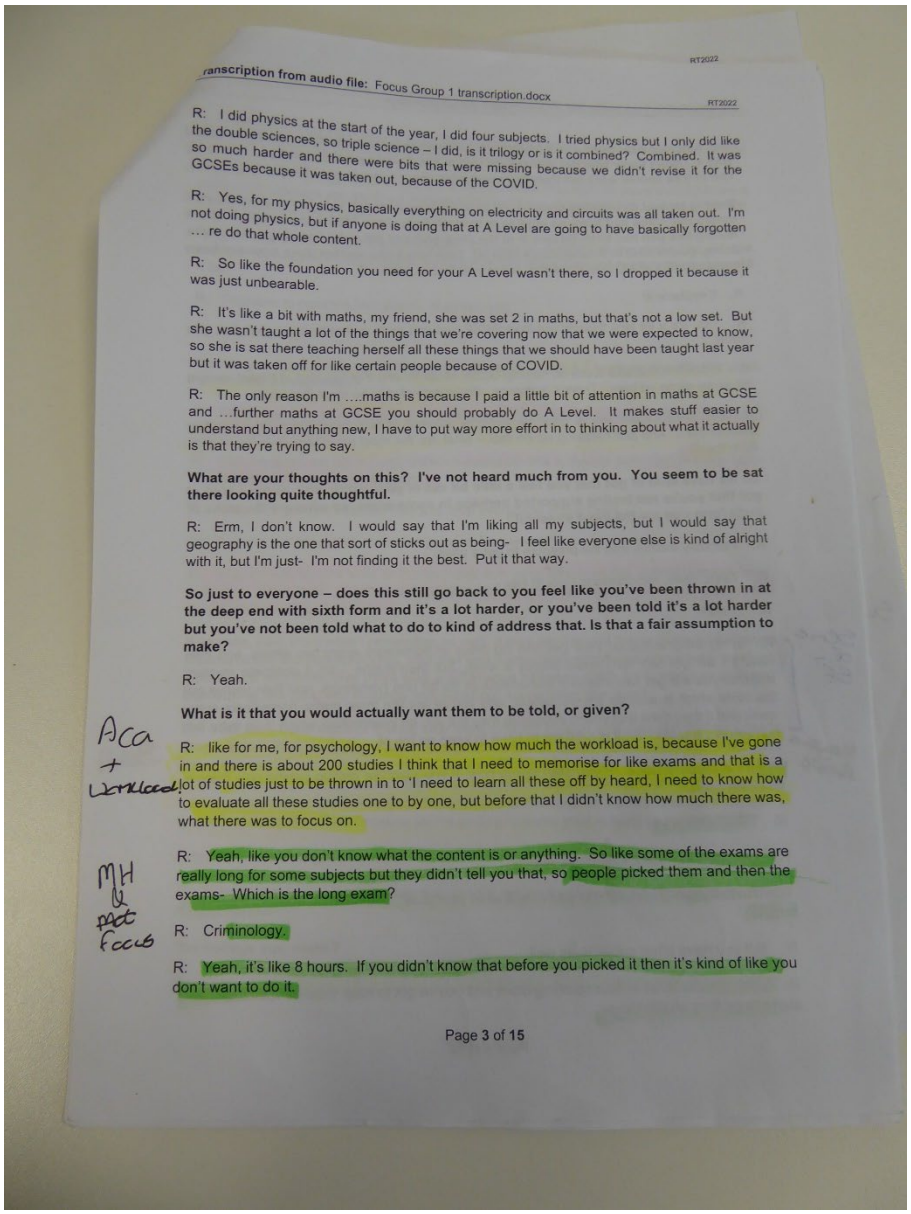
Okay, so to go completely off script. So do you think that you've had it maybe a little more difficult because of COVID than say previous years?

R: I think so.

R: Especially sciences.

R: What makes sciences so much more difficult?

Page **2** of **15**



R: I did physics at the start of the year, I did four subjects. I tried physics but I only did like the double sciences, so triple science – I did, is it trilogy or is it combined? Combined. It was so much harder and there were bits that were missing because we didn't revise it for the GCSEs because it was taken out, because of the COVID.

R: Yes, for my physics, basically everything on electricity and circuits was all taken out. I'm not doing physics, but if anyone is doing that at A Level are going to have basically forgotten … re do that whole content.

R: So like the foundation you need for your A Level wasn't there, so I dropped it because it was just unbearable.

R: It's like a bit with maths, my friend, she was set 2 in maths, but that's not a low set. But she wasn't taught a lot of the things that we're covering now that we were expected to know, so she is sat there teaching herself all these things that we should have been taught last year but it was taken off for like certain people because of COVID.

R: The only reason I'm ….maths is because I paid a little bit of attention in maths at GCSE and …further maths at GCSE you should probably do A Level. It makes stuff easier to understand but anything new, I have to put way more effort in to thinking about what it actually is that they're trying to say.

What are your thoughts on this? I've not heard much from you. You seem to be sat there looking quite thoughtful.

R: Erm, I don't know. I would say that I'm liking all my subjects, but I would say that geography is the one that sort of sticks out as being- I feel like everyone else is kind of alright with it, but I'm just- I'm not finding it the best. Put it that way.

So just to everyone – does this still go back to you feel like you've been thrown in at the deep end with sixth form and it's a lot harder, or you've been told it's a lot harder but you've not been told what to do to kind of address that. Is that a fair assumption to make?

R: Yeah.

What is it that you would actually want them to be told, or given?

ACa + workload

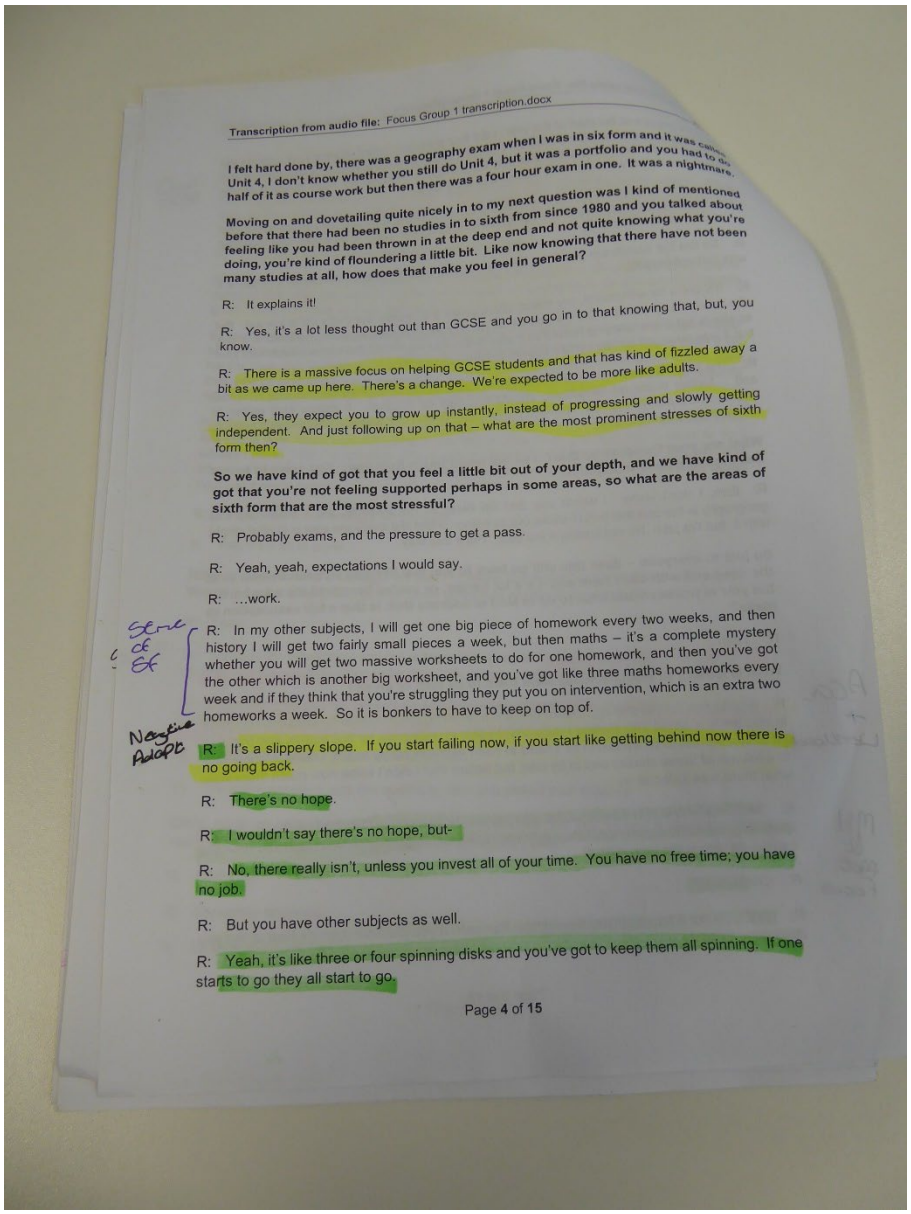
R: like for me, for psychology, I want to know how much the workload is, because I've gone in and there is about 200 studies I think that I need to memorise for like exams and that is a lot of studies just to be thrown in to 'I need to learn all these off by heard, I need to know how to evaluate all these studies one to by one, but before that I didn't know how much there was, what there was to focus on.

MH & ~~pact~~ focus

R: Yeah, like you don't know what the content is or anything. So like some of the exams are really long for some subjects but they didn't tell you that, so people picked them and then the exams- Which is the long exam?

R: Criminology.

R: Yeah, it's like 8 hours. If you didn't know that before you picked it then it's kind of like you don't want to do it.



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I felt hard done by, there was a geography exam when I was in six form and it was coursework, Unit 4, I don't know whether you still do Unit 4, but it was a portfolio and you had to do half of it as course work but then there was a four hour exam in one. It was a nightmare.

Moving on and dovetailing quite nicely in to my next question was I kind of mentioned before that there had been no studies in to sixth from since 1980 and you talked about feeling like you had been thrown in at the deep end and not quite knowing what you're doing, you're kind of floundering a little bit. Like now knowing that there have not been many studies at all, how does that make you feel in general?

R: It explains it!

R: Yes, it's a lot less thought out than GCSE and you go in to that knowing that, but, you know.

R: There is a massive focus on helping GCSE students and that has kind of fizzled away a bit as we came up here. There's a change. We're expected to be more like adults.

R: Yes, they expect you to grow up instantly, instead of progressing and slowly getting independent. And just following up on that – what are the most prominent stresses of sixth form then?

So we have kind of got that you feel a little bit out of your depth, and we have kind of got that you're not feeling supported perhaps in some areas, so what are the areas of sixth form that are the most stressful?

R: Probably exams, and the pressure to get a pass.

R: Yeah, yeah, expectations I would say.

R: …work.

R: In my other subjects, I will get one big piece of homework every two weeks, and then history I will get two fairly small pieces a week, but then maths – it's a complete mystery whether you will get two massive worksheets to do for one homework, and then you've got the other which is another big worksheet, and you've got like three maths homeworks every week and if they think that you're struggling they put you on intervention, which is an extra two homeworks a week. So it is bonkers to have to keep on top of.

R: It's a slippery slope. If you start failing now, if you start like getting behind now there is no going back.

R: There's no hope.

R: I wouldn't say there's no hope, but-

R: No, there really isn't, unless you invest all of your time. You have no free time; you have no job.

R: But you have other subjects as well.

R: Yeah, it's like three or four spinning disks and you've got to keep them all spinning. If one starts to go they all start to go.

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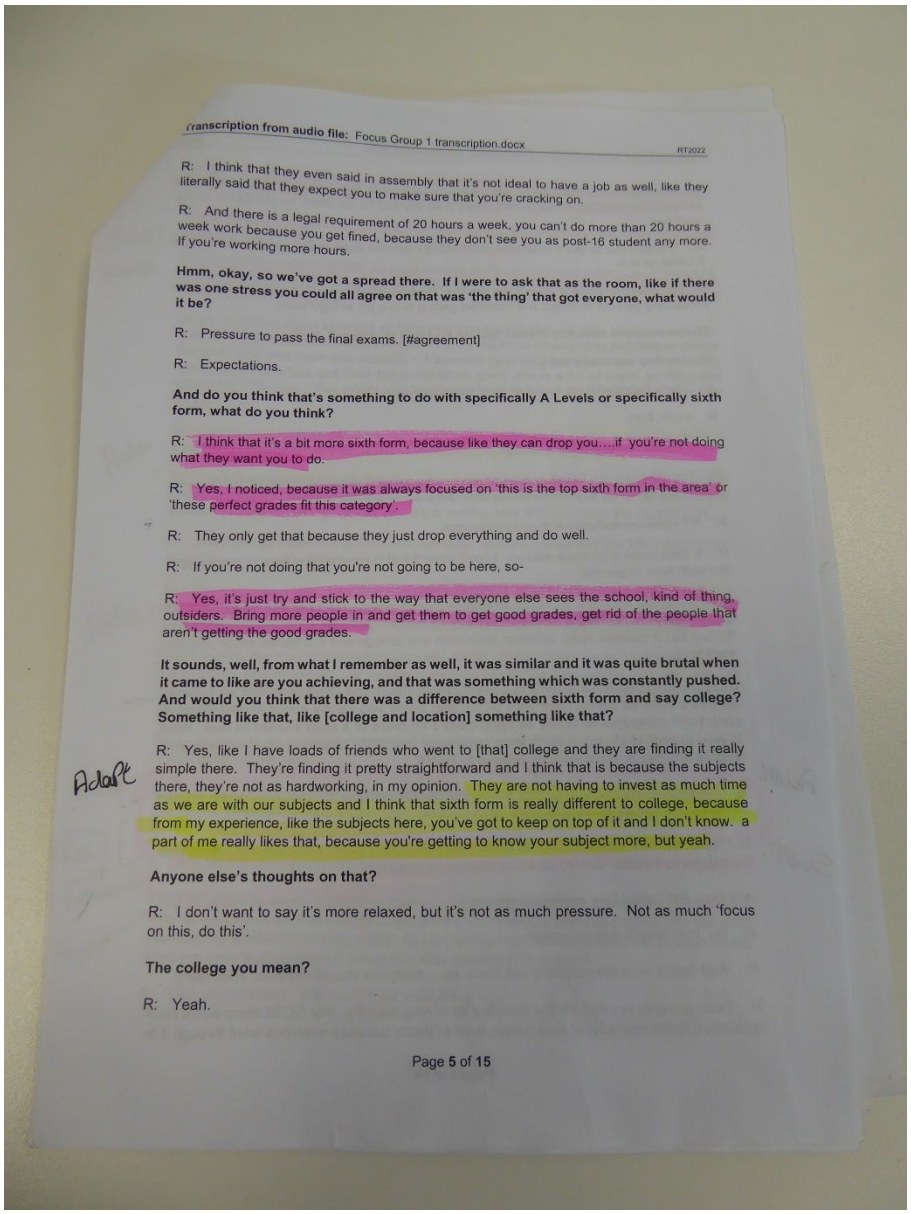


R: I think that they even said in assembly that it's not ideal to have a job as well, like they literally said that they expect you to make sure that you're cracking on.

R: And there is a legal requirement of 20 hours a week, you can't do more than 20 hours a week work because you get fined, because they don't see you as post-16 student any more. If you're working more hours.

Hmm, okay, so we've got a spread there. If I were to ask that as the room, like if there was one stress you could all agree on that was 'the thing' that got everyone, what would it be?

R: Pressure to pass the final exams. [#agreement]

R: Expectations.

And do you think that's something to do with specifically A Levels or specifically sixth form, what do you think?

R: I think that it's a bit more sixth form, because like they can drop you….if you're not doing what they want you to do.

R: Yes, I noticed, because it was always focused on 'this is the top sixth form in the area' or 'these perfect grades fit this category'.

R: They only get that because they just drop everything and do well.

R: If you're not doing that you're not going to be here, so-

R: Yes, it's just try and stick to the way that everyone else sees the school, kind of thing, outsiders. Bring more people in and get them to get good grades, get rid of the people that aren't getting the good grades.

It sounds, well, from what I remember as well, it was similar and it was quite brutal when it came to like are you achieving, and that was something which was constantly pushed. And would you think that there was a difference between sixth form and say college? Something like that, like [college and location] something like that?

Adapt

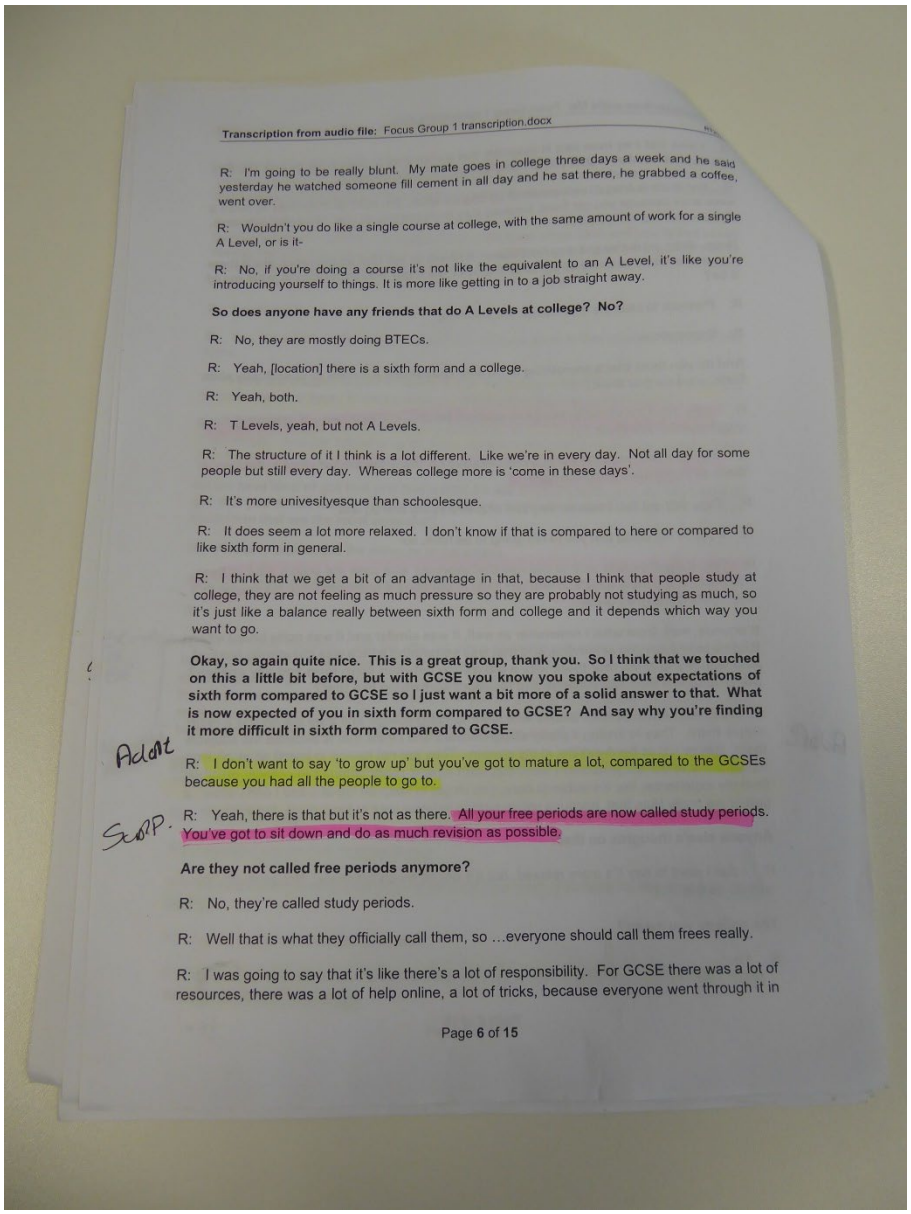
R: Yes, like I have loads of friends who went to [that] college and they are finding it really simple there. They're finding it pretty straightforward and I think that is because the subjects there, they're not as hardworking, in my opinion. They are not having to invest as much time as we are with our subjects and I think that sixth form is really different to college, because from my experience, like the subjects here, you've got to keep on top of it and I don't know. a part of me really likes that, because you're getting to know your subject more, but yeah.

Anyone else's thoughts on that?

R: I don't want to say it's more relaxed, but it's not as much pressure. Not as much 'focus on this, do this'.

The college you mean?

R: Yeah.



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R: I'm going to be really blunt. My mate goes in college three days a week and he said yesterday he watched someone fill cement in all day and he sat there, he grabbed a coffee, went over.

R: Wouldn't you do like a single course at college, with the same amount of work for a single A Level, or is it-

R: No, if you're doing a course it's not like the equivalent to an A Level, it's like you're introducing yourself to things. It is more like getting in to a job straight away.

So does anyone have any friends that do A Levels at college? No?

R: No, they are mostly doing BTECs.

R: Yeah, [location] there is a sixth form and a college.

R: Yeah, both.

R: T Levels, yeah, but not A Levels.

R: The structure of it I think is a lot different. Like we're in every day. Not all day for some people but still every day. Whereas college more is 'come in these days'.

R: It's more univesityesque than schoolesque.

R: It does seem a lot more relaxed. I don't know if that is compared to here or compared to like sixth form in general.

R: I think that we get a bit of an advantage in that, because I think that people study at college, they are not feeling as much pressure so they are probably not studying as much, so it's just like a balance really between sixth form and college and it depends which way you want to go.

Okay, so again quite nice. This is a great group, thank you. So I think that we touched on this a little bit before, but with GCSE you know you spoke about expectations of sixth form compared to GCSE so I just want a bit more of a solid answer to that. What is now expected of you in sixth form compared to GCSE? And say why you're finding it more difficult in sixth form compared to GCSE.

Adult

R: I don't want to say 'to grow up' but you've got to mature a lot, compared to the GCSEs because you had all the people to go to.

SOAP.

R: Yeah, there is that but it's not as there. All your free periods are now called study periods. You've got to sit down and do as much revision as possible.

Are they not called free periods anymore?

R: No, they're called study periods.

R: Well that is what they officially call them, so …everyone should call them frees really.

R: I was going to say that it's like there's a lot of responsibility. For GCSE there was a lot of resources, there was a lot of help online, a lot of tricks, because everyone went through it in

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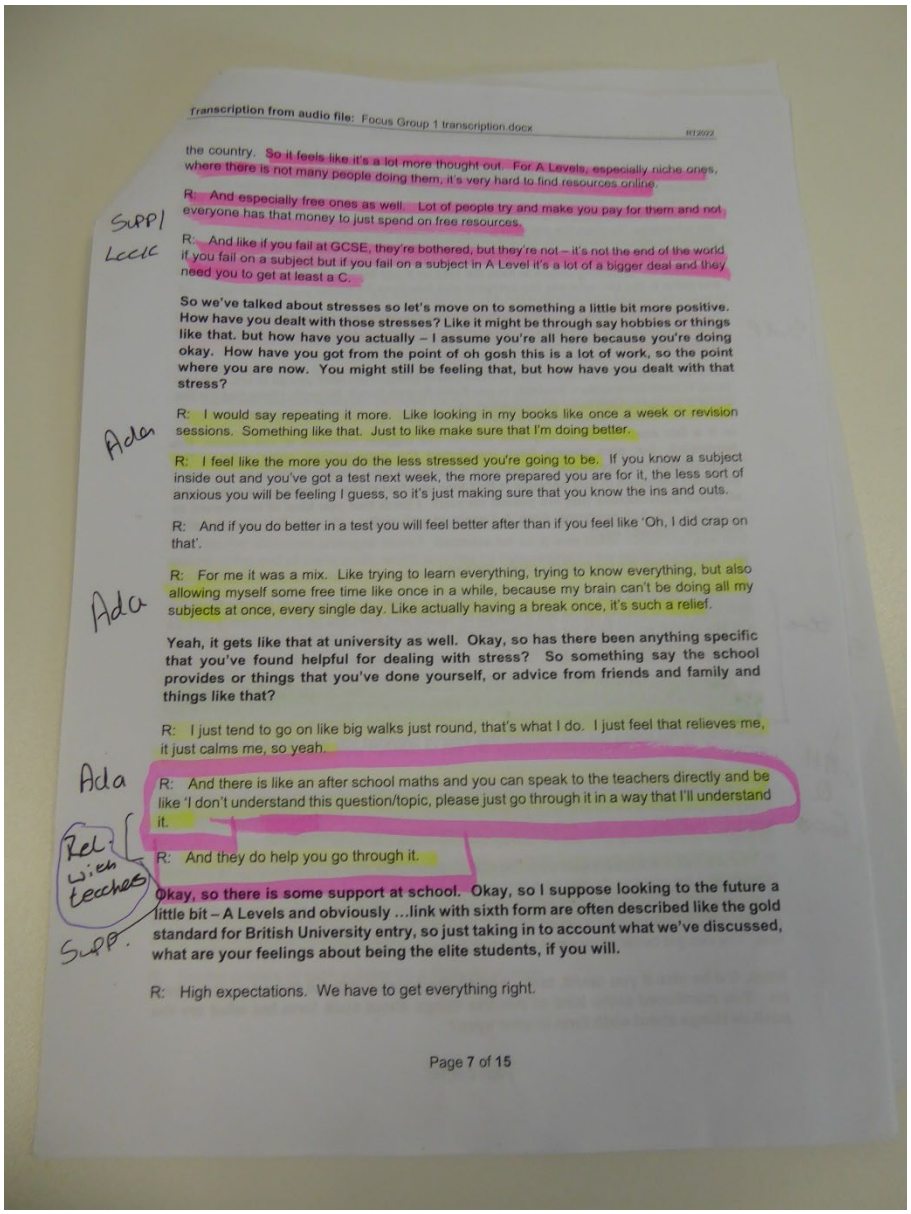


the country. So it feels like it's a lot more thought out. For A Levels, especially niche ones, where there is not many people doing them, it's very hard to find resources online.

R: And especially free ones as well. Lot of people try and make you pay for them and not everyone has that money to just spend on free resources.

R: And like if you fail at GCSE, they're bothered, but they're not – it's not the end of the world if you fail on a subject but if you fail on a subject in A Level it's a lot of a bigger deal and they need you to get at least a C.

So we've talked about stresses so let's move on to something a little bit more positive. How have you dealt with those stresses? Like it might be through say hobbies or things like that. but how have you actually – I assume you're all here because you're doing okay. How have you got from the point of oh gosh this is a lot of work, so the point where you are now. You might still be feeling that, but how have you dealt with that stress?

R: I would say repeating it more. Like looking in my books like once a week or revision sessions. Something like that. Just to like make sure that I'm doing better.

R: I feel like the more you do the less stressed you're going to be. If you know a subject inside out and you've got a test next week, the more prepared you are for it, the less sort of anxious you will be feeling I guess, so it's just making sure that you know the ins and outs.

R: And if you do better in a test you will feel better after than if you feel like 'Oh, I did crap on that'.

R: For me it was a mix. Like trying to learn everything, trying to know everything, but also allowing myself some free time like once in a while, because my brain can't be doing all my subjects at once, every single day. Like actually having a break once, it's such a relief.

Yeah, it gets like that at university as well. Okay, so has there been anything specific that you've found helpful for dealing with stress? So something say the school provides or things that you've done yourself, or advice from friends and family and things like that?

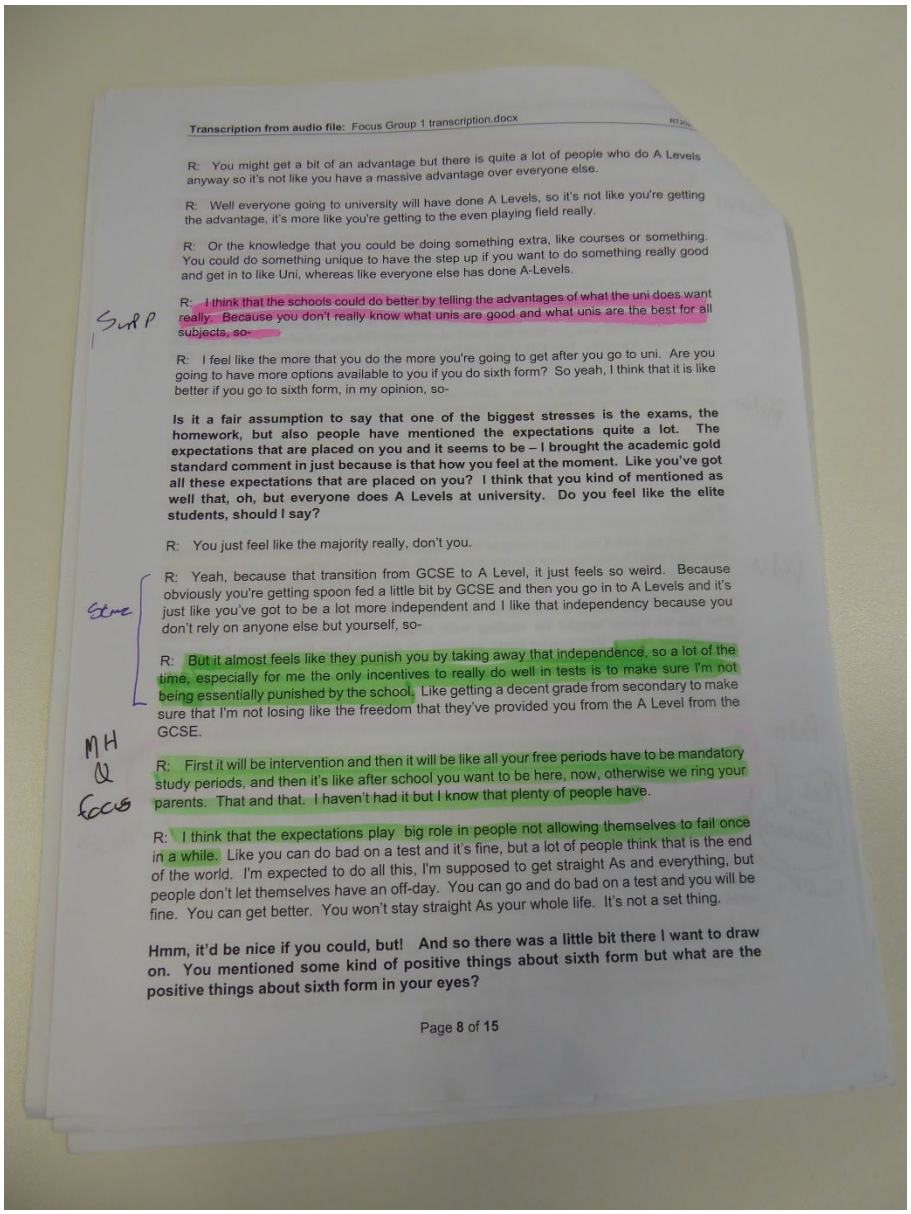
R: I just tend to go on like big walks just round, that's what I do. I just feel that relieves me, it just calms me, so yeah.

R: And there is like an after school maths and you can speak to the teachers directly and be like 'I don't understand this question/topic, please just go through it in a way that I'll understand it.

R: And they do help you go through it.

Okay, so there is some support at school. Okay, so I suppose looking to the future a little bit – A Levels and obviously …link with sixth form are often described like the gold standard for British University entry, so just taking in to account what we've discussed, what are your feelings about being the elite students, if you will.

R: High expectations. We have to get everything right.



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R: You might get a bit of an advantage but there is quite a lot of people who do A Levels anyway so it's not like you have a massive advantage over everyone else.

R: Well everyone going to university will have done A Levels, so it's not like you're getting the advantage, it's more like you're getting to the even playing field really.

R: Or the knowledge that you could be doing something extra, like courses or something. You could do something unique to have the step up if you want to do something really good and get in to like Uni, whereas like everyone else has done A-Levels.

SuRP

R: I think that the schools could do better by telling the advantages of what the uni does want really. Because you don't really know what unis are good and what unis are the best for all subjects, so-

R: I feel like the more that you do the more you're going to get after you go to uni. Are you going to have more options available to you if you do sixth form? So yeah, I think that it is like better if you go to sixth form, in my opinion, so-

Is it a fair assumption to say that one of the biggest stresses is the exams, the homework, but also people have mentioned the expectations quite a lot. The expectations that are placed on you and it seems to be – I brought the academic gold standard comment in just because is that how you feel at the moment. Like you've got all these expectations that are placed on you? I think that you kind of mentioned as well that, oh, but everyone does A Levels at university. Do you feel like the elite students, should I say?

R: You just feel like the majority really, don't you.

Stress

R: Yeah, because that transition from GCSE to A Level, it just feels so weird. Because obviously you're getting spoon fed a little bit by GCSE and then you go in to A Levels and it's just like you've got to be a lot more independent and I like that independency because you don't rely on anyone else but yourself, so-

R: But it almost feels like they punish you by taking away that independence, so a lot of the time, especially for me the only incentives to really do well in tests is to make sure I'm not being essentially punished by the school. Like getting a decent grade from secondary to make sure that I'm not losing like the freedom that they've provided you from the A Level from the GCSE.

MH
&
focus

R: First it will be intervention and then it will be like all your free periods have to be mandatory study periods, and then it's like after school you want to be here, now, otherwise we ring your parents. That and that. I haven't had it but I know that plenty of people have.

R: I think that the expectations play big role in people not allowing themselves to fail once in a while. Like you can do bad on a test and it's fine, but a lot of people think that is the end of the world. I'm expected to do all this, I'm supposed to get straight As and everything, but people don't let themselves have an off-day. You can go and do bad on a test and you will be fine. You can get better. You won't stay straight As your whole life. It's not a set thing.

Hmm, it'd be nice if you could, but! And so there was a little bit there I want to draw on. You mentioned some kind of positive things about sixth form but what are the positive things about sixth form in your eyes?

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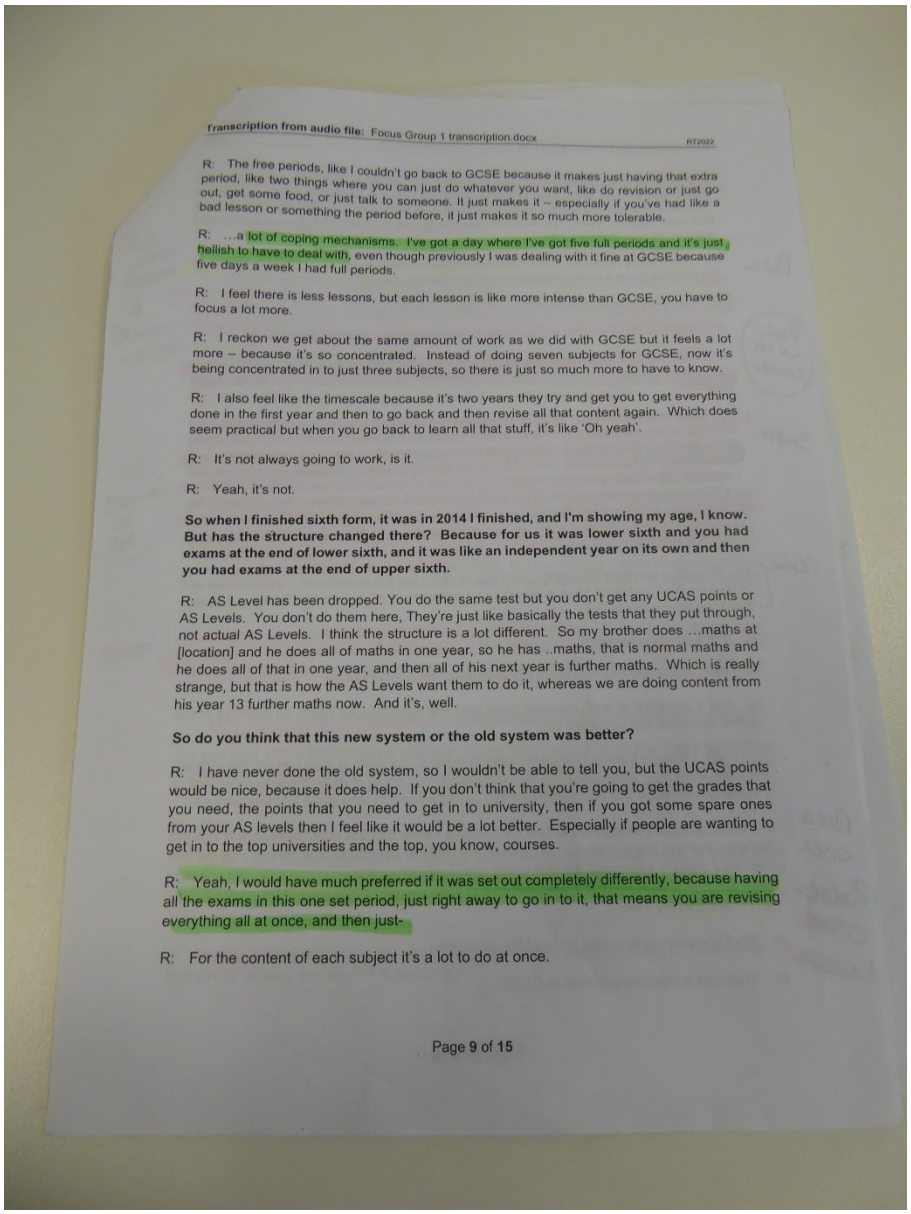


R: The free periods, like I couldn't go back to GCSE because it makes just having that extra period, like two things where you can just do whatever you want, like do revision or just go out, get some food, or just talk to someone. It just makes it – especially if you've had like a bad lesson or something the period before, it just makes it so much more tolerable.

R: …a lot of coping mechanisms. I've got a day where I've got five full periods and it's just hellish to have to deal with, even though previously I was dealing with it fine at GCSE because five days a week I had full periods.

R: I feel there is less lessons, but each lesson is like more intense than GCSE, you have to focus a lot more.

R: I reckon we get about the same amount of work as we did with GCSE but it feels a lot more – because it's so concentrated. Instead of doing seven subjects for GCSE, now it's being concentrated in to just three subjects, so there is just so much more to have to know.

R: I also feel like the timescale because it's two years they try and get you to get everything done in the first year and then to go back and then revise all that content again. Which does seem practical but when you go back to learn all that stuff, it's like 'Oh yeah'.

R: It's not always going to work, is it.

R: Yeah, it's not.

So when I finished sixth form, it was in 2014 I finished, and I'm showing my age, I know. But has the structure changed there? Because for us it was lower sixth and you had exams at the end of lower sixth, and it was like an independent year on its own and then you had exams at the end of upper sixth.

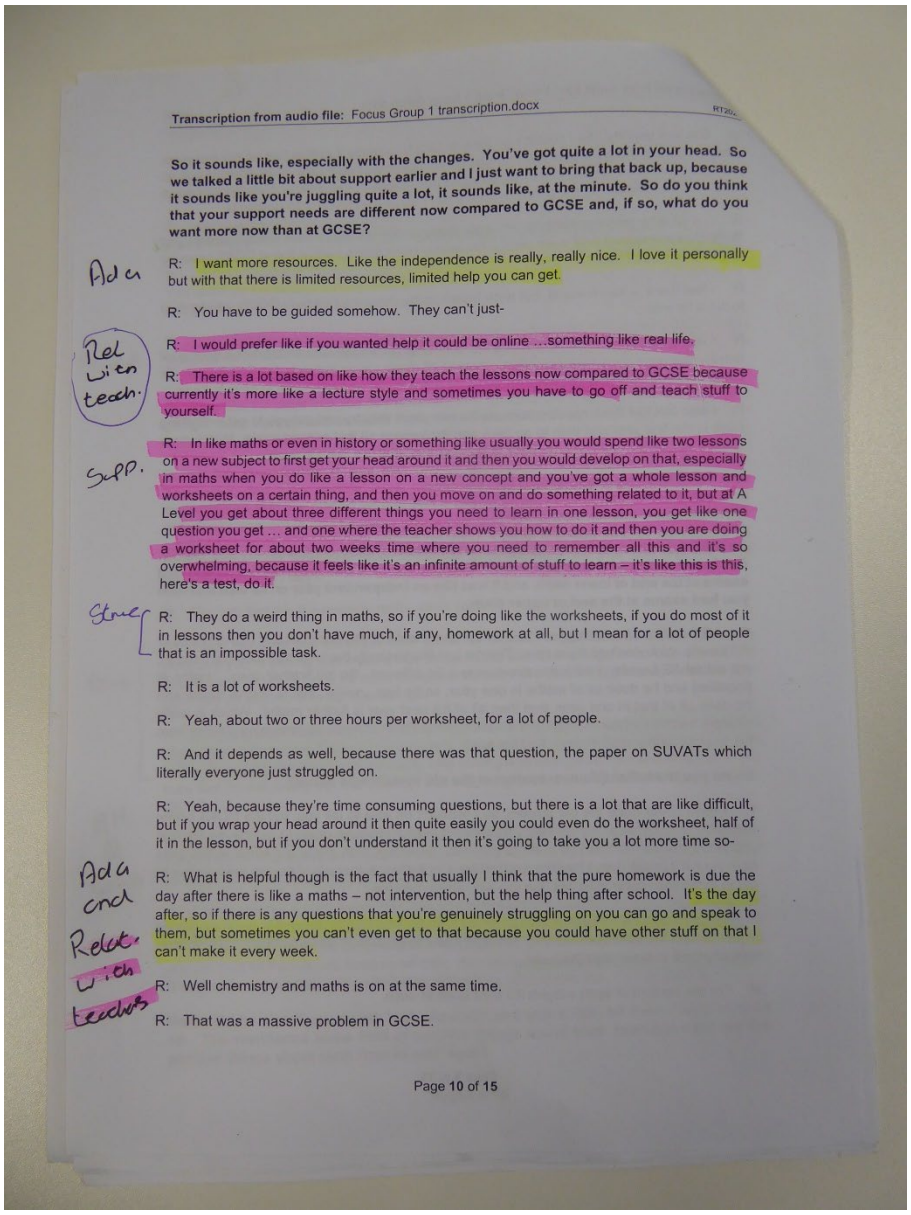
R: AS Level has been dropped. You do the same test but you don't get any UCAS points or AS Levels. You don't do them here, They're just like basically the tests that they put through, not actual AS Levels. I think the structure is a lot different. So my brother does …maths at [location] and he does all of maths in one year, so he has ..maths, that is normal maths and he does all of that in one year, and then all of his next year is further maths. Which is really strange, but that is how the AS Levels want them to do it, whereas we are doing content from his year 13 further maths now. And it's, well.

So do you think that this new system or the old system was better?

R: I have never done the old system, so I wouldn't be able to tell you, but the UCAS points would be nice, because it does help. If you don't think that you're going to get the grades that you need, the points that you need to get in to university, then if you got some spare ones from your AS levels then I feel like it would be a lot better. Especially if people are wanting to get in to the top universities and the top, you know, courses.

R: Yeah, I would have much preferred if it was set out completely differently, because having all the exams in this one set period, just right away to go in to it, that means you are revising everything all at once, and then just-

R: For the content of each subject it's a lot to do at once.



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So it sounds like, especially with the changes. You've got quite a lot in your head. So we talked a little bit about support earlier and I just want to bring that back up, because it sounds like you're juggling quite a lot, it sounds like, at the minute. So do you think that your support needs are different now compared to GCSE and, if so, what do you want more now than at GCSE?

R: I want more resources. Like the independence is really, really nice. I love it personally but with that there is limited resources, limited help you can get.

R: You have to be guided somehow. They can't just-

R: I would prefer like if you wanted help it could be online …something like real life.

R: There is a lot based on like how they teach the lessons now compared to GCSE because currently it's more like a lecture style and sometimes you have to go off and teach stuff to yourself.

R: In like maths or even in history or something like usually you would spend like two lessons on a new subject to first get your head around it and then you would develop on that, especially in maths when you do like a lesson on a new concept and you've got a whole lesson and worksheets on a certain thing, and then you move on and do something related to it, but at A Level you get about three different things you need to learn in one lesson, you get like one question you get … and one where the teacher shows you how to do it and then you are doing a worksheet for about two weeks time where you need to remember all this and it's so overwhelming, because it feels like it's an infinite amount of stuff to learn – it's like this is this, here's a test, do it.

R: They do a weird thing in maths, so if you're doing like the worksheets, if you do most of it in lessons then you don't have much, if any, homework at all, but I mean for a lot of people that is an impossible task.

R: It is a lot of worksheets.

R: Yeah, about two or three hours per worksheet, for a lot of people.

R: And it depends as well, because there was that question, the paper on SUVATs which literally everyone just struggled on.

R: Yeah, because they're time consuming questions, but there is a lot that are like difficult, but if you wrap your head around it then quite easily you could even do the worksheet, half of it in the lesson, but if you don't understand it then it's going to take you a lot more time so-

R: What is helpful though is the fact that usually I think that the pure homework is due the day after there is like a maths – not intervention, but the help thing after school. It's the day after, so if there is any questions that you're genuinely struggling on you can go and speak to them, but sometimes you can't even get to that because you could have other stuff on that I can't make it every week.

R: Well chemistry and maths is on at the same time.

R: That was a massive problem in GCSE.

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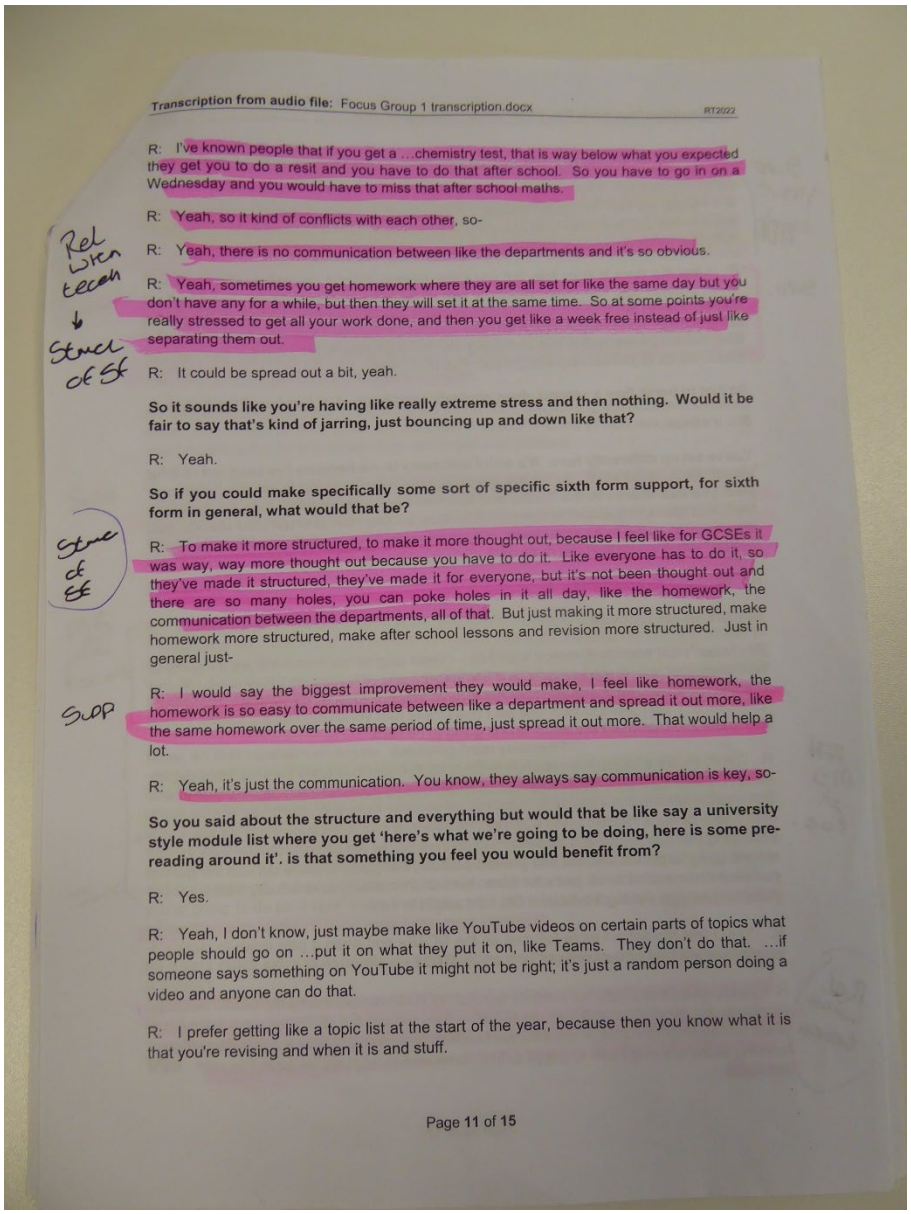


R: I've known people that if you get a …chemistry test, that is way below what you expected they get you to do a resit and you have to do that after school. So you have to go in on a Wednesday and you would have to miss that after school maths.

R: Yeah, so it kind of conflicts with each other, so-

R: Yeah, there is no communication between like the departments and it's so obvious.

R: Yeah, sometimes you get homework where they are all set for like the same day but you don't have any for a while, but then they will set it at the same time. So at some points you're really stressed to get all your work done, and then you get like a week free instead of just like separating them out.

R: It could be spread out a bit, yeah.

So it sounds like you're having like really extreme stress and then nothing. Would it be fair to say that's kind of jarring, just bouncing up and down like that?

R: Yeah.

So if you could make specifically some sort of specific sixth form support, for sixth form in general, what would that be?

R: To make it more structured, to make it more thought out, because I feel like for GCSEs it was way, way more thought out because you have to do it. Like everyone has to do it, so they've made it structured, they've made it for everyone, but it's not been thought out and there are so many holes, you can poke holes in it all day, like the homework, the communication between the departments, all of that. But just making it more structured, make homework more structured, make after school lessons and revision more structured. Just in general just-

R: I would say the biggest improvement they would make, I feel like homework, the homework is so easy to communicate between like a department and spread it out more, like the same homework over the same period of time, just spread it out more. That would help a lot.

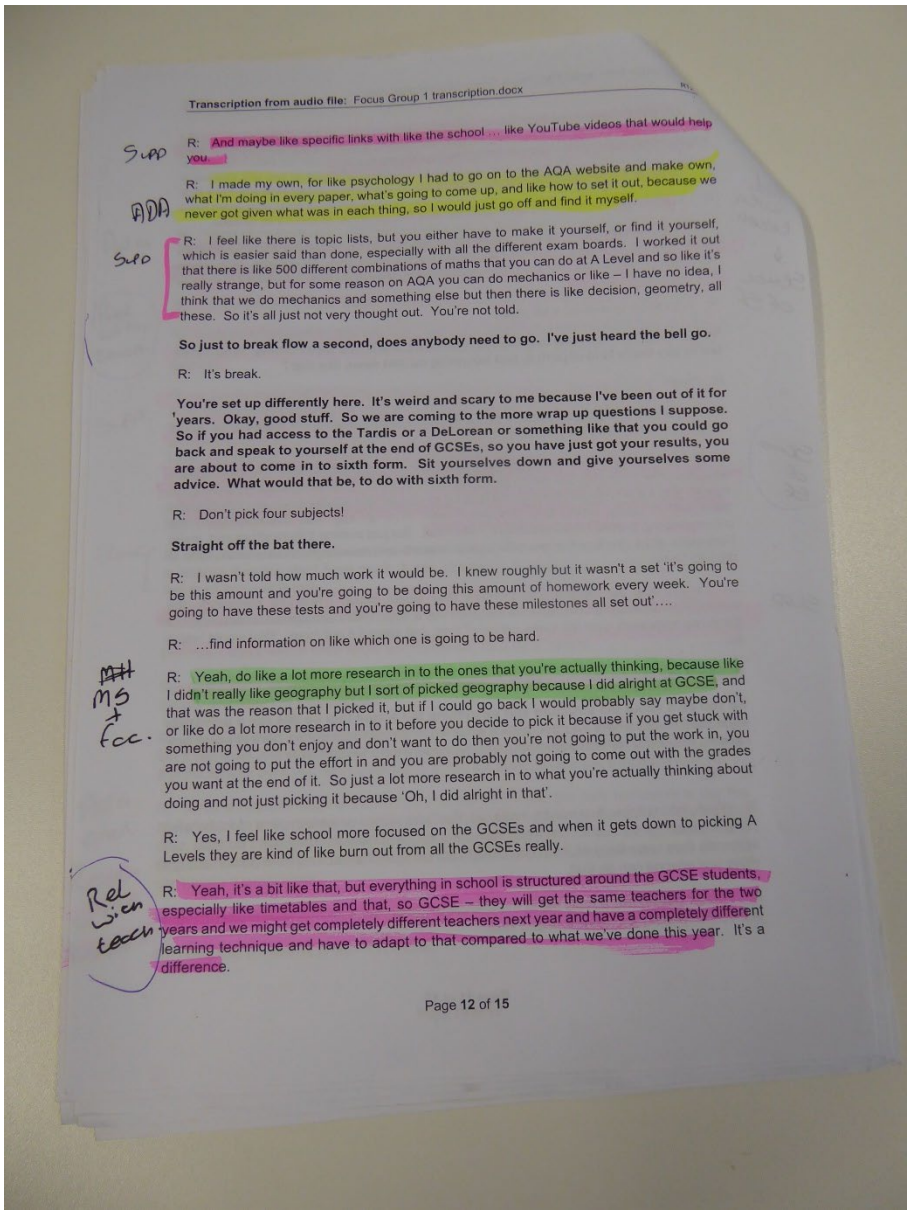
R: Yeah, it's just the communication. You know, they always say communication is key, so-

So you said about the structure and everything but would that be like say a university style module list where you get 'here's what we're going to be doing, here is some pre-reading around it'. is that something you feel you would benefit from?

R: Yes.

R: Yeah, I don't know, just maybe make like YouTube videos on certain parts of topics what people should go on …put it on what they put it on, like Teams. They don't do that. …if someone says something on YouTube it might not be right; it's just a random person doing a video and anyone can do that.

R: I prefer getting like a topic list at the start of the year, because then you know what it is that you're revising and when it is and stuff.



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R: And maybe like specific links with like the school ... like YouTube videos that would help you.

ADA

R: I made my own, for like psychology I had to go on to the AQA website and make own, what I'm doing in every paper, what's going to come up, and like how to set it out, because we never got given what was in each thing, so I would just go off and find it myself.

Supp

R: I feel like there is topic lists, but you either have to make it yourself, or find it yourself, which is easier said than done, especially with all the different exam boards. I worked it out that there is like 500 different combinations of maths that you can do at A Level and so like it's really strange, but for some reason on AQA you can do mechanics or like – I have no idea, I think that we do mechanics and something else but then there is like decision, geometry, all these. So it's all just not very thought out. You're not told.

So just to break flow a second, does anybody need to go. I've just heard the bell go.

R: It's break.

You're set up differently here. It's weird and scary to me because I've been out of it for 'years. Okay, good stuff. So we are coming to the more wrap up questions I suppose. So if you had access to the Tardis or a DeLorean or something like that you could go back and speak to yourself at the end of GCSEs, so you have just got your results, you are about to come in to sixth form. Sit yourselves down and give yourselves some advice. What would that be, to do with sixth form.

R: Don't pick four subjects!

Straight off the bat there.

R: I wasn't told how much work it would be. I knew roughly but it wasn't a set 'it's going to be this amount and you're going to be doing this amount of homework every week. You're going to have these tests and you're going to have these milestones all set out'....

R: ...find information on like which one is going to be hard.

~~MH~~ MS + fcc.

R: Yeah, do like a lot more research in to the ones that you're actually thinking, because like I didn't really like geography but I sort of picked geography because I did alright at GCSE, and that was the reason that I picked it, but if I could go back I would probably say maybe don't, or like do a lot more research in to it before you decide to pick it because if you get stuck with something you don't enjoy and don't want to do then you're not going to put the work in, you are not going to put the effort in and you are probably not going to come out with the grades you want at the end of it. So just a lot more research in to what you're actually thinking about doing and not just picking it because 'Oh, I did alright in that'.

R: Yes, I feel like school more focused on the GCSEs and when it gets down to picking A Levels they are kind of like burn out from all the GCSEs really.

Rel with teach

R: Yeah, it's a bit like that, but everything in school is structured around the GCSE students, especially like timetables and that, so GCSE – they will get the same teachers for the two years and we might get completely different teachers next year and have a completely different learning technique and have to adapt to that compared to what we've done this year. It's a difference.

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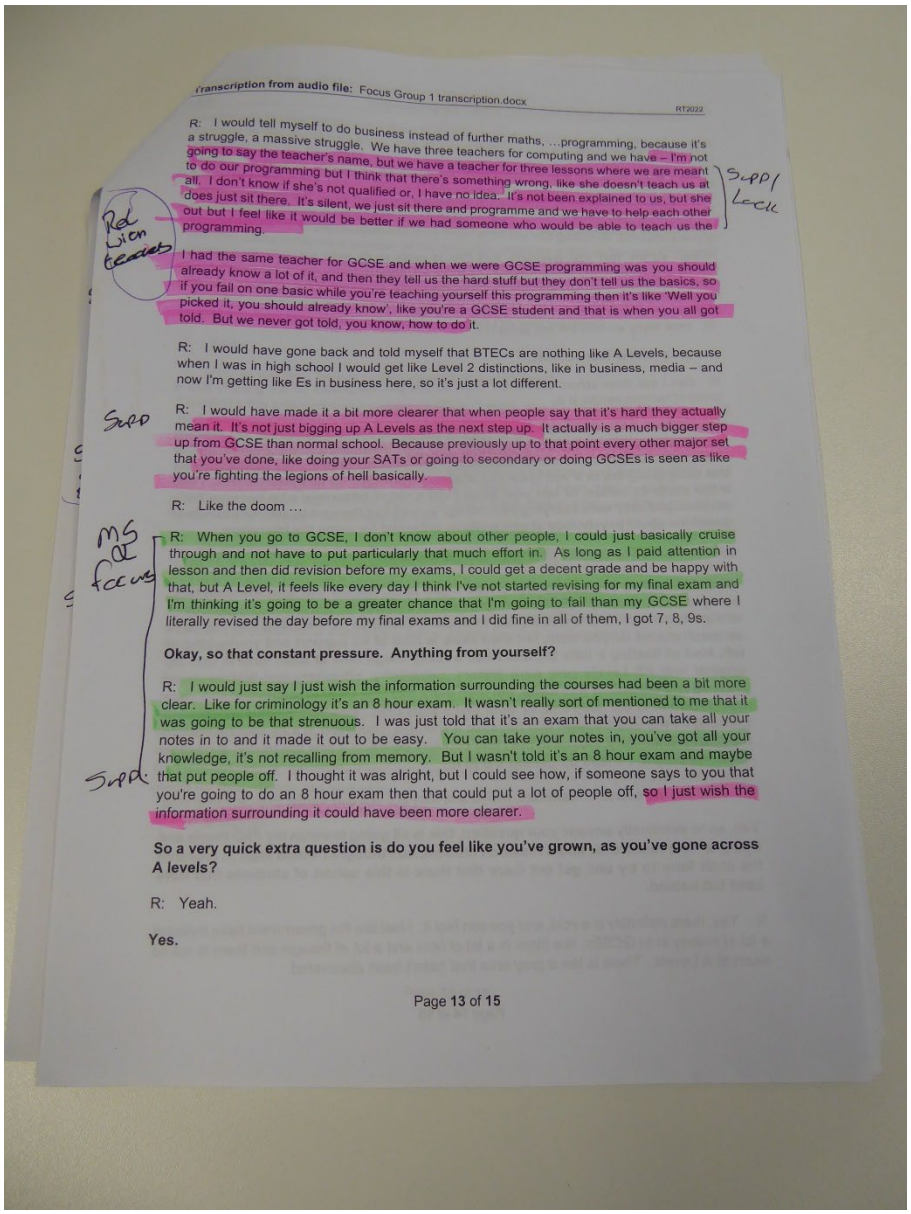

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R: I would tell myself to do business instead of further maths, ...programming, because it's a struggle, a massive struggle. We have three teachers for computing and we have – I'm not going to say the teacher's name, but we have a teacher for three lessons where we are meant to do our programming but I think that there's something wrong, like she doesn't teach us at all. I don't know if she's not qualified or, I have no idea. It's not been explained to us, but she does just sit there. It's silent, we just sit there and programme and we have to help each other out but I feel like it would be better if we had someone who would be able to teach us the programming.

I had the same teacher for GCSE and when we were GCSE programming was you should already know a lot of it, and then they tell us the hard stuff but they don't tell us the basics, so if you fail on one basic while you're teaching yourself this programming then it's like 'Well you picked it, you should already know', like you're a GCSE student and that is when you all got told. But we never got told, you know, how to do it.

R: I would have gone back and told myself that BTECs are nothing like A Levels, because when I was in high school I would get like Level 2 distinctions, like in business, media – and now I'm getting like Es in business here, so it's just a lot different.

R: I would have made it a bit more clearer that when people say that it's hard they actually mean it. It's not just bigging up A Levels as the next step up. It actually is a much bigger step up from GCSE than normal school. Because previously up to that point every other major set that you've done, like doing your SATs or going to secondary or doing GCSEs is seen as like you're fighting the legions of hell basically.

R: Like the doom ...

R: When you go to GCSE, I don't know about other people, I could just basically cruise through and not have to put particularly that much effort in. As long as I paid attention in lesson and then did revision before my exams, I could get a decent grade and be happy with that, but A Level, it feels like every day I think I've not started revising for my final exam and I'm thinking it's going to be a greater chance that I'm going to fail than my GCSE where I literally revised the day before my final exams and I did fine in all of them, I got 7, 8, 9s.

Okay, so that constant pressure. Anything from yourself?

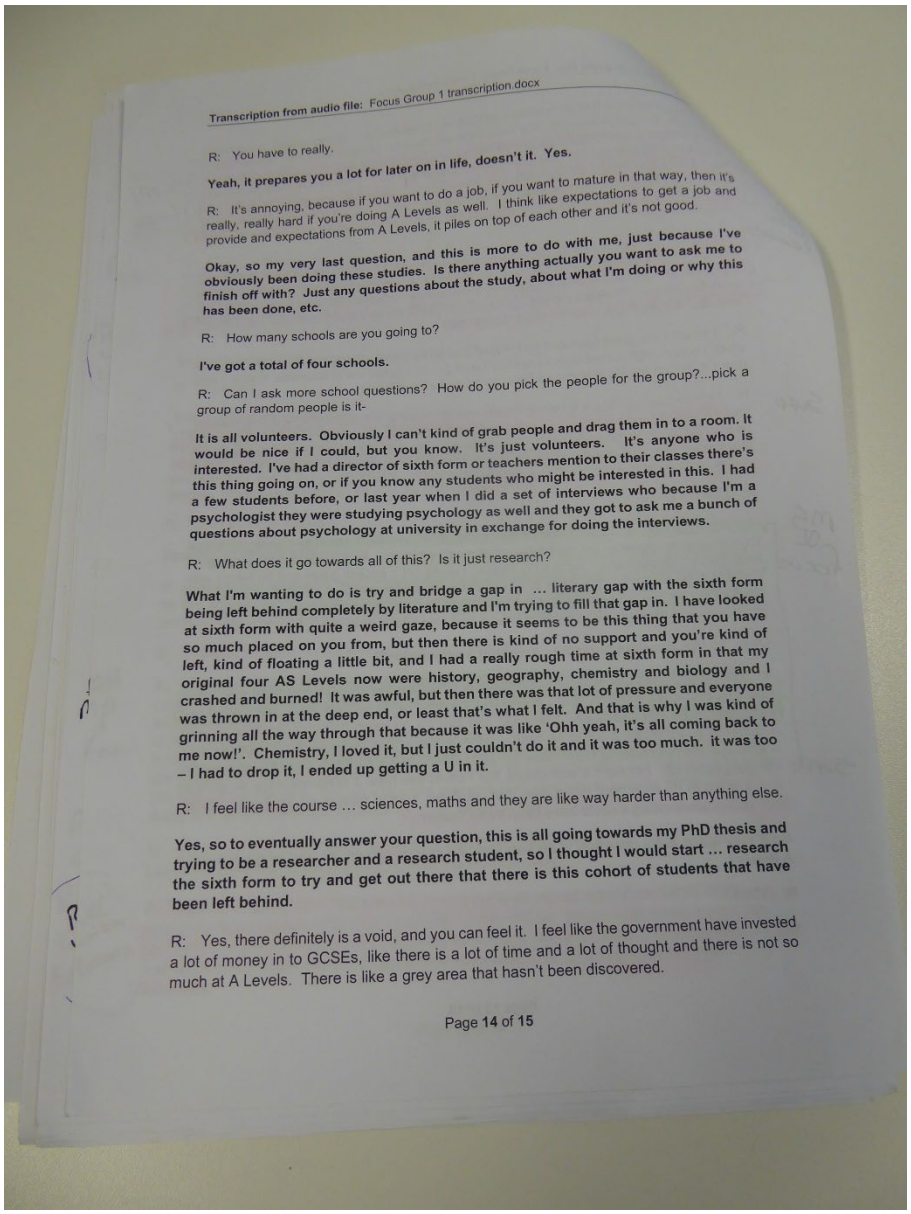
R: I would just say I just wish the information surrounding the courses had been a bit more clear. Like for criminology it's an 8 hour exam. It wasn't really sort of mentioned to me that it was going to be that strenuous. I was just told that it's an exam that you can take all your notes in to and it made it out to be easy. You can take your notes in, you've got all your knowledge, it's not recalling from memory. But I wasn't told it's an 8 hour exam and maybe that put people off. I thought it was alright, but I could see how, if someone says to you that you're going to do an 8 hour exam then that could put a lot of people off, so I just wish the information surrounding it could have been more clearer.

So a very quick extra question is do you feel like you've grown, as you've gone across A levels?

R: Yeah.

Yes.

Page 13 of 15



R: You have to really.

Yeah, it prepares you a lot for later on in life, doesn't it. Yes.

R: It's annoying, because if you want to do a job, if you want to mature in that way, then it's really, really hard if you're doing A Levels as well. I think like expectations to get a job and provide and expectations from A Levels, it piles on top of each other and it's not good.

Okay, so my very last question, and this is more to do with me, just because I've obviously been doing these studies. Is there anything actually you want to ask me to finish off with? Just any questions about the study, about what I'm doing or why this has been done, etc.

R: How many schools are you going to?

I've got a total of four schools.

R: Can I ask more school questions? How do you pick the people for the group?...pick a group of random people is it-

It is all volunteers. Obviously I can't kind of grab people and drag them in to a room. It would be nice if I could, but you know. It's just volunteers. It's anyone who is interested. I've had a director of sixth form or teachers mention to their classes there's this thing going on, or if you know any students who might be interested in this. I had a few students before, or last year when I did a set of interviews who because I'm a psychologist they were studying psychology as well and they got to ask me a bunch of questions about psychology at university in exchange for doing the interviews.

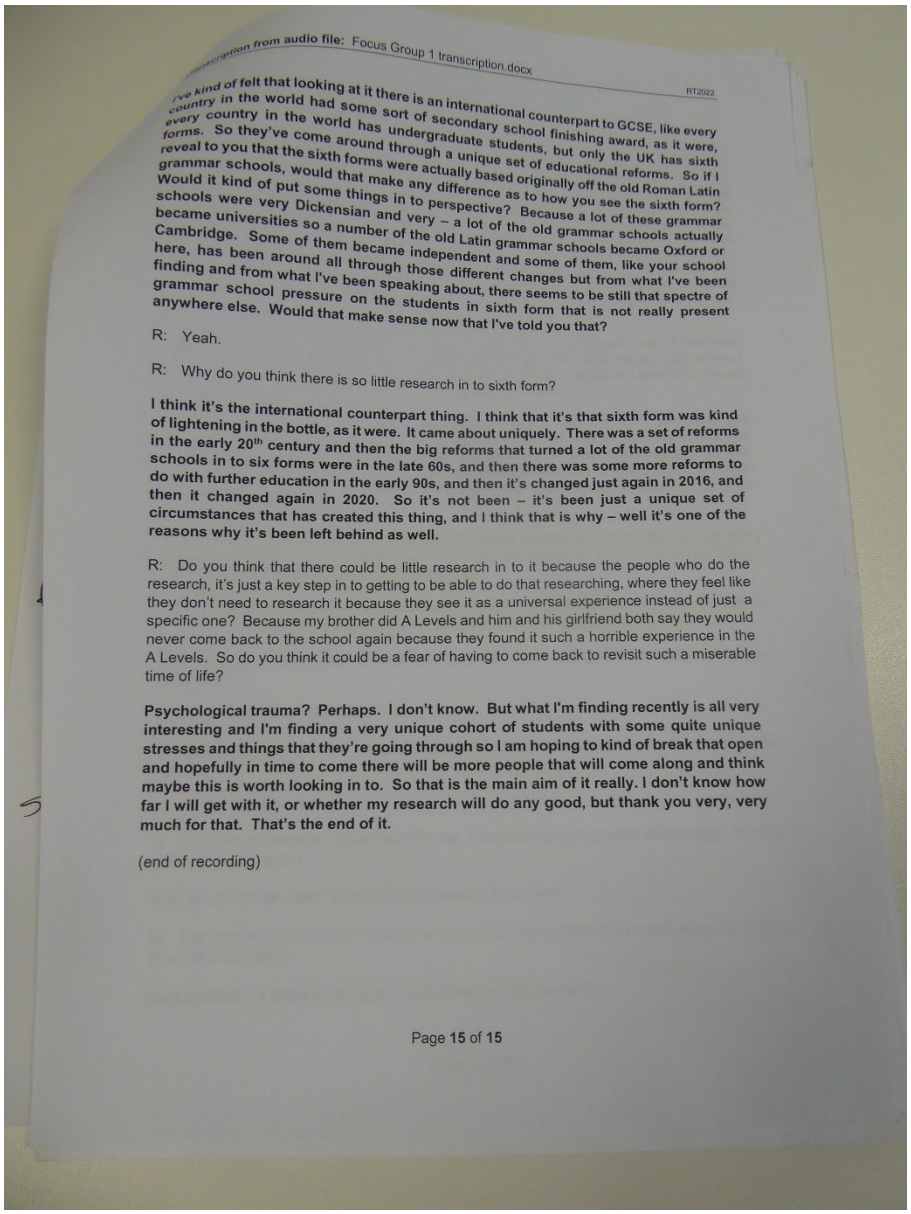
R: What does it go towards all of this? Is it just research?

What I'm wanting to do is try and bridge a gap in … literary gap with the sixth form being left behind completely by literature and I'm trying to fill that gap in. I have looked at sixth form with quite a weird gaze, because it seems to be this thing that you have so much placed on you from, but then there is kind of no support and you're kind of left, kind of floating a little bit, and I had a really rough time at sixth form in that my original four AS Levels now were history, geography, chemistry and biology and I crashed and burned! It was awful, but then there was that lot of pressure and everyone was thrown in at the deep end, or least that's what I felt. And that is why I was kind of grinning all the way through that because it was like 'Ohh yeah, it's all coming back to me now!'. Chemistry, I loved it, but I just couldn't do it and it was too much. it was too – I had to drop it, I ended up getting a U in it.

R: I feel like the course … sciences, maths and they are like way harder than anything else.

Yes, so to eventually answer your question, this is all going towards my PhD thesis and trying to be a researcher and a research student, so I thought I would start … research the sixth form to try and get out there that there is this cohort of students that have been left behind.

R: Yes, there definitely is a void, and you can feel it. I feel like the government have invested a lot of money in to GCSEs, like there is a lot of time and a lot of thought and there is not so much at A Levels. There is like a grey area that hasn't been discovered.



I've kind of felt that looking at it there is an international counterpart to GCSE, like every country in the world had some sort of secondary school finishing award, as it were, every country in the world has undergraduate students, but only the UK has sixth forms. So they've come around through a unique set of educational reforms. So if I reveal to you that the sixth forms were actually based originally off the old Roman Latin grammar schools, would that make any difference as to how you see the sixth form? Would it kind of put some things in to perspective? Because a lot of these grammar schools were very Dickensian and very – a lot of the old grammar schools actually became universities so a number of the old Latin grammar schools became Oxford or Cambridge. Some of them became independent and some of them, like your school here, has been around all through those different changes but from what I've been finding and from what I've been speaking about, there seems to be still that spectre of grammar school pressure on the students in sixth form that is not really present anywhere else. Would that make sense now that I've told you that?

R: Yeah.

R: Why do you think there is so little research in to sixth form?

I think it's the international counterpart thing. I think that it's that sixth form was kind of lightening in the bottle, as it were. It came about uniquely. There was a set of reforms in the early 20th century and then the big reforms that turned a lot of the old grammar schools in to six forms were in the late 60s, and then there was some more reforms to do with further education in the early 90s, and then it's changed just again in 2016, and then it changed again in 2020. So it's not been – it's been just a unique set of circumstances that has created this thing, and I think that is why – well it's one of the reasons why it's been left behind as well.

R: Do you think that there could be little research in to it because the people who do the research, it's just a key step in to getting to be able to do that researching, where they feel like they don't need to research it because they see it as a universal experience instead of just a specific one? Because my brother did A Levels and him and his girlfriend both say they would never come back to the school again because they found it such a horrible experience in the A Levels. So do you think it could be a fear of having to come back to revisit such a miserable time of life?

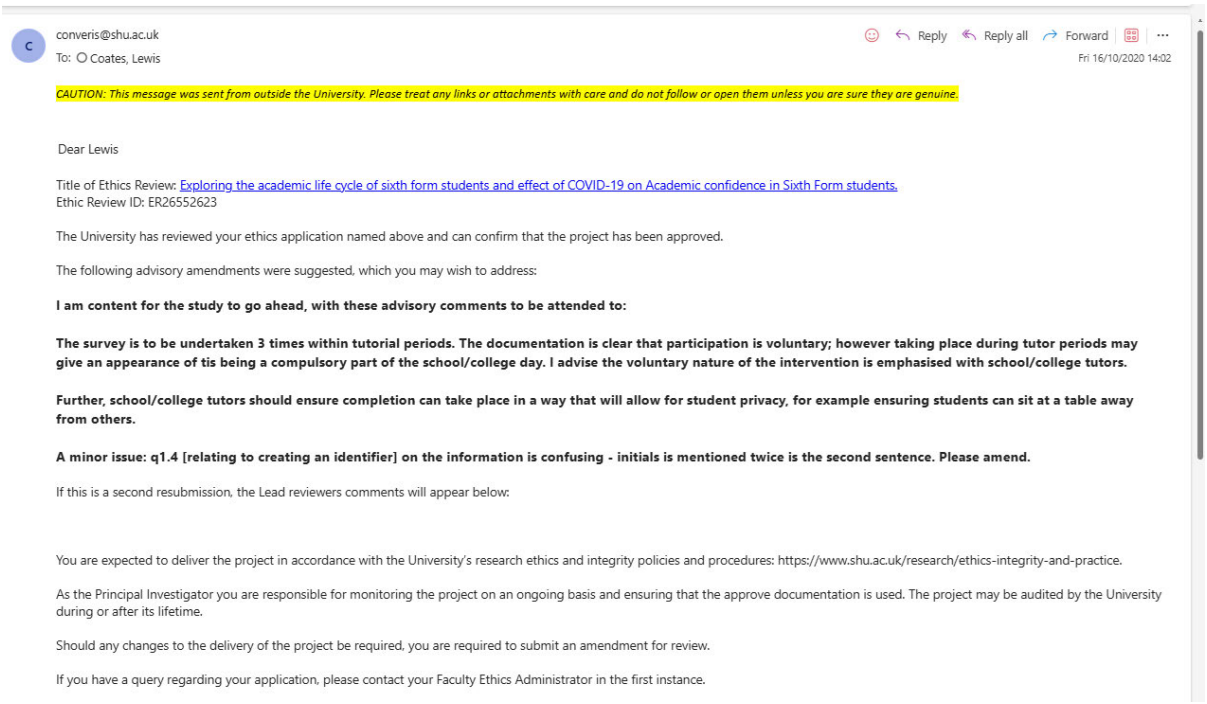
Psychological trauma? Perhaps. I don't know. But what I'm finding recently is all very interesting and I'm finding a very unique cohort of students with some quite unique stresses and things that they're going through so I am hoping to kind of break that open and hopefully in time to come there will be more people that will come along and think maybe this is worth looking in to. So that is the main aim of it really. I don't know how far I will get with it, or whether my research will do any good, but thank you very, very much for that. That's the end of it.

(end of recording)

Appendix C - Study 3: Quantitative survey for COVID & Lockdown

C1 – Ethical approval & COVID measures

Ethical Approval



converis@shu.ac.uk
To: Coates, Lewis

Reply Reply all Forward
Fri 16/10/2020 14:02

CAUTION: This message was sent from outside the University. Please treat any links or attachments with care and do not follow or open them unless you are sure they are genuine.

Dear Lewis

Title of Ethics Review: Exploring the academic life cycle of sixth form students and effect of COVID-19 on Academic confidence in Sixth Form students.
Ethic Review ID: ER26552623

The University has reviewed your ethics application named above and can confirm that the project has been approved.

The following advisory amendments were suggested, which you may wish to address:

I am content for the study to go ahead, with these advisory comments to be attended to:

The survey is to be undertaken 3 times within tutorial periods. The documentation is clear that participation is voluntary; however taking place during tutor periods may give an appearance of tis being a compulsory part of the school/college day. I advise the voluntary nature of the intervention is emphasised with school/college tutors.

Further, school/college tutors should ensure completion can take place in a way that will allow for student privacy, for example ensuring students can sit at a table away from others.

A minor issue: q1.4 [relating to creating an identifier] on the information is confusing - initials is mentioned twice is the second sentence. Please amend.

If this is a second resubmission, the Lead reviewers comments will appear below:

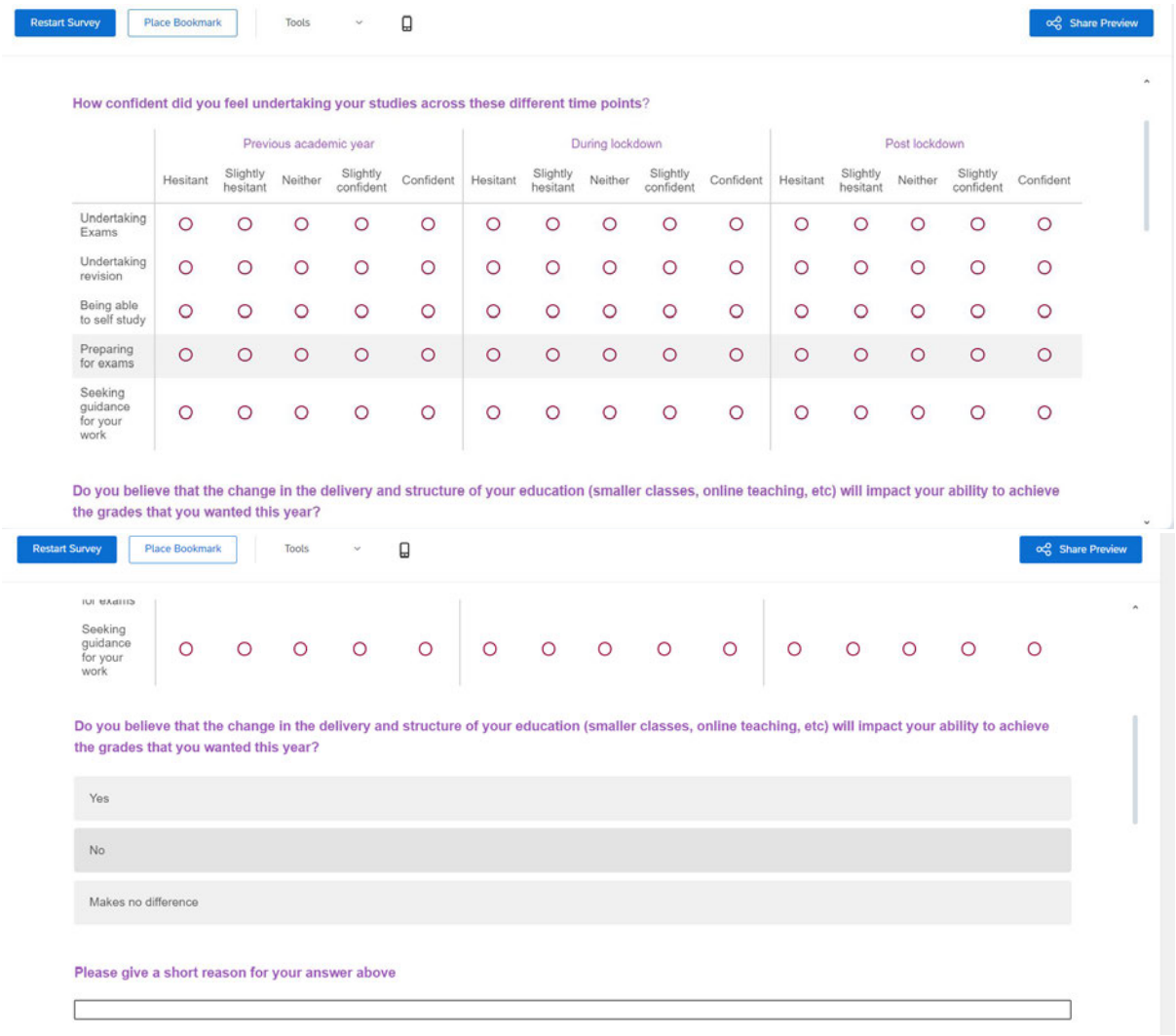
You are expected to deliver the project in accordance with the University's research ethics and integrity policies and procedures: https://www.shu.ac.uk/research/ethics-integrity-and-practice.

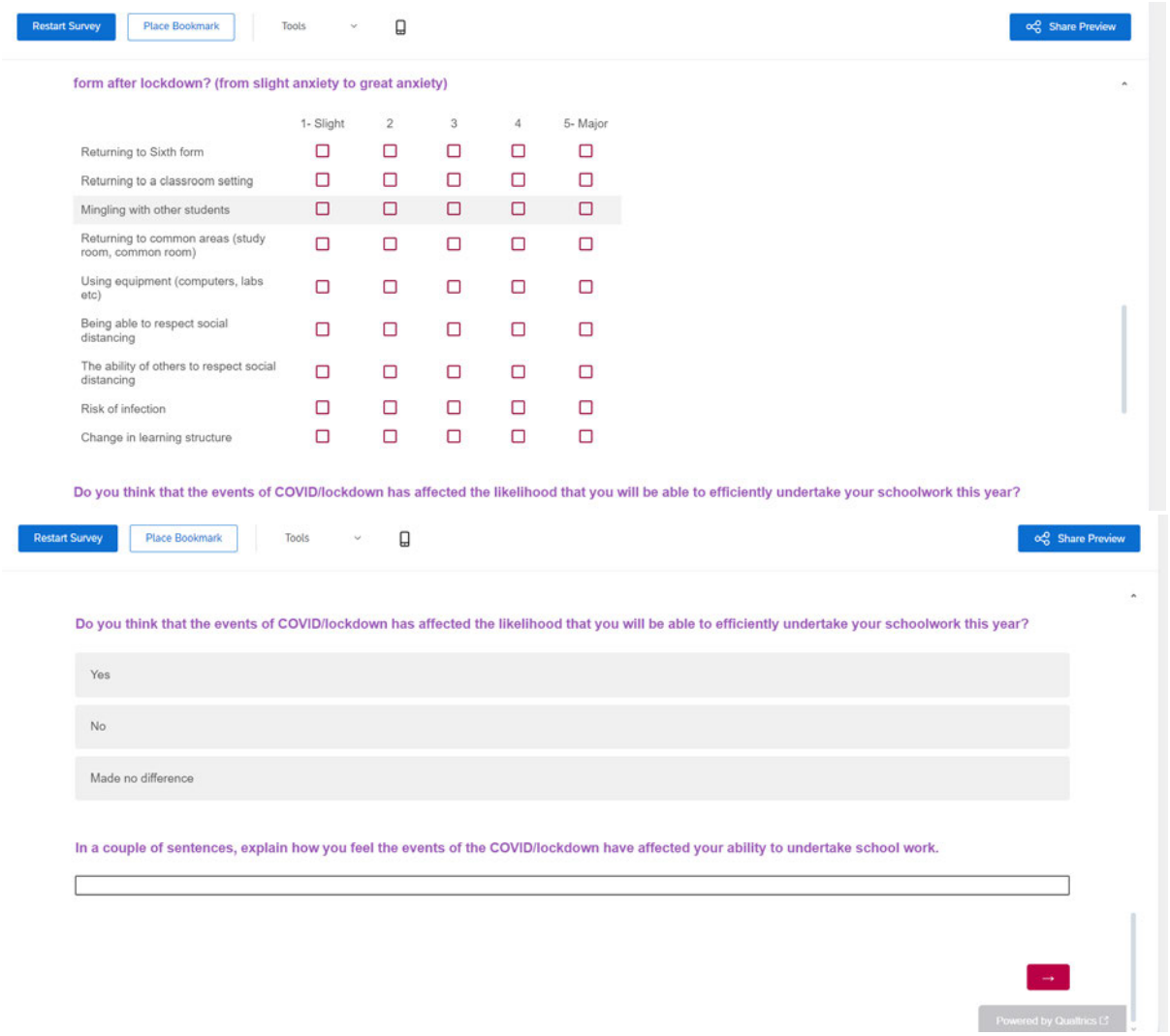
As the Principal Investigator you are responsible for monitoring the project on an ongoing basis and ensuring that the approve documentation is used. The project may be audited by the University during or after its lifetime.

Should any changes to the delivery of the project be required, you are required to submit an amendment for review.

If you have a query regarding your application, please contact your Faculty Ethics Administrator in the first instance.

COVID measures




Restart Survey
Place Bookmark
Tools
Share Preview
form after lockdown? (from slight anxiety to great anxiety)
1- Slight
2
3
4
5- Major
Returning to Sixth form
Returning to a classroom setting
Mingling with other students
Returning to common areas (study room, common room)
Using equipment (computers, labs etc)
Being able to respect social distancing
The ability of others to respect social distancing
Risk of infection
Change in learning structure
Do you think that the events of COVID/lockdown has affected the likelihood that you will be able to efficiently undertake your schoolwork this year?

Restart Survey
Place Bookmark
Tools
Share Preview
Do you think that the events of COVID/lockdown has affected the likelihood that you will be able to efficiently undertake your schoolwork this year?
Yes
No
Made no difference
In a couple of sentences, explain how you feel the events of the COVID/lockdown have affected your ability to undertake school work.
Powered by Qualtrics

C2 – Chi squared, Descriptives, Correlations & Histograms: Study 3

Chi-Square Tests

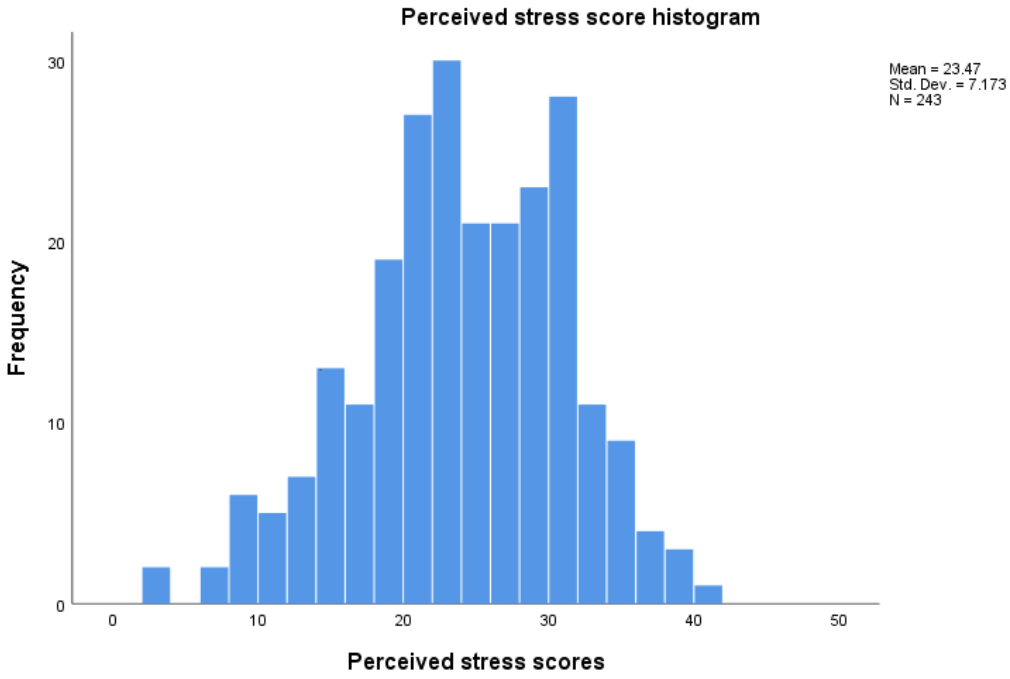
	Value	df
Pearson Chi-Square	3.726[a]	3
Likelihood Ratio	3.831	3
Linear-by-Linear Association	2.305	1
N of Valid Cases	257	

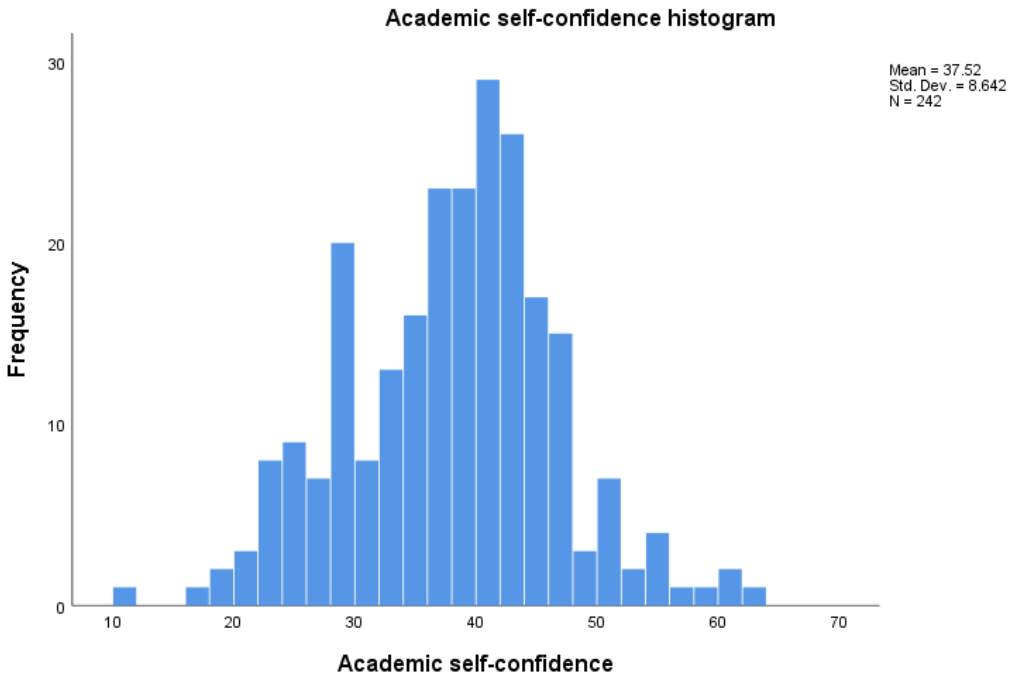
a. 4 cells (50.0%) have expected count less than 5. The minimum expected count is .31.

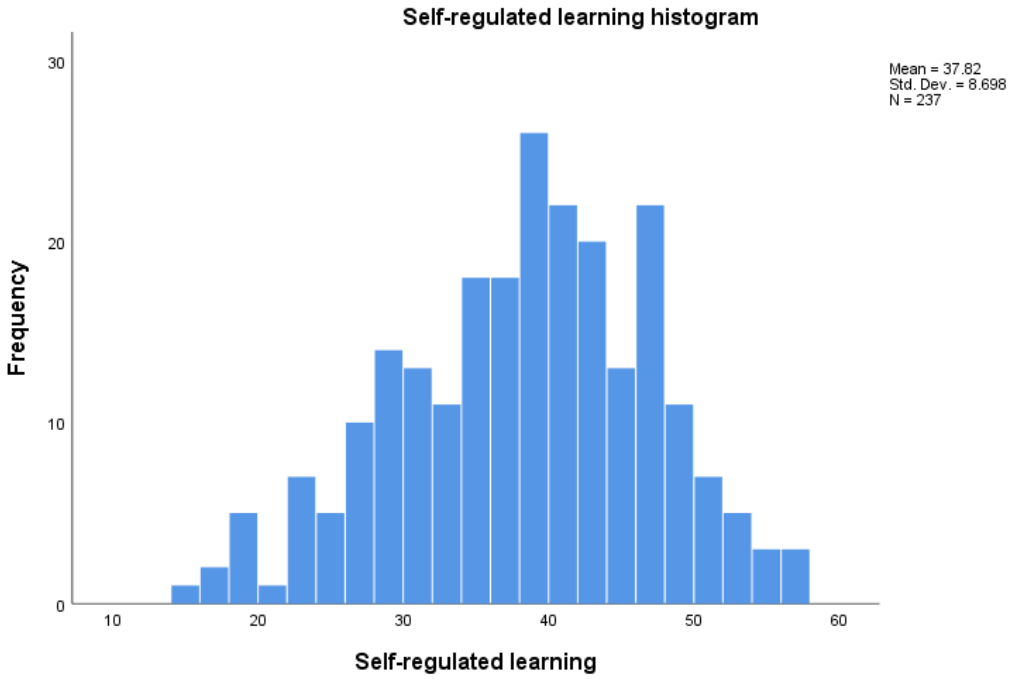
Correlations

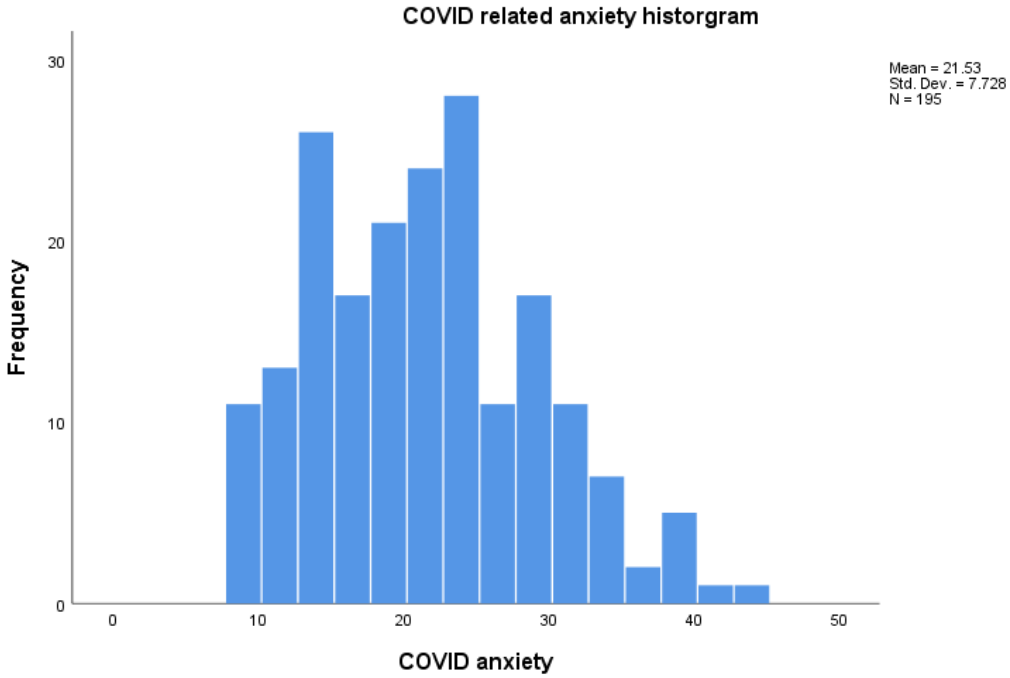
		PSS_total	ASE_CONF_total	ASE_SRL_total	COVID_ANX_total	CONF_PRE	CONF_DURING	CONF_POST
PSS_total	Pearson Correlation	1	-.106	-.492**	.437**	-.323**	-.333**	-.612**
	Sig. (2-tailed)		.102	.000	.000	.000	.000	.000
	N	248	240	234	195	223	211	179
ASE_CONF_total	Pearson Correlation	-.106	1	.515**	-.057	.248**	.470**	.687**
	Sig. (2-tailed)	.102		.000	.422	.000	.000	.000
	N	240	247	238	198	226	214	182
ASE_SRL_total	Pearson Correlation	-.492**	.515**	1	-.060	.472**	.365**	.574**
	Sig. (2-tailed)	.000	.000		.402	.000	.000	.000
	N	234	238	242	197	227	215	181
COVID_ANX_total	Pearson Correlation	.437**	-.057	-.060	1	-.117	-.266**	-.290**
	Sig. (2-tailed)	.000	.422	.402		.102	.000	.000
	N	195	198	197	200	198	186	174
CONF_PRE	Pearson Correlation	-.323**	.248**	.472**	-.117	1	.384**	.243**
	Sig. (2-tailed)	.000	.000	.000	.102		.000	.001
	N	223	226	227	198	230	218	184
CONF_DURING	Pearson Correlation	-.333**	.470**	.365**	-.266**	.384**	1	.496**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	211	214	215	186	218	218	180
CONF_POST	Pearson Correlation	-.612**	.687**	.574**	-.290**	.243**	.496**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.001	.000	
	N	179	182	181	174	184	180	184

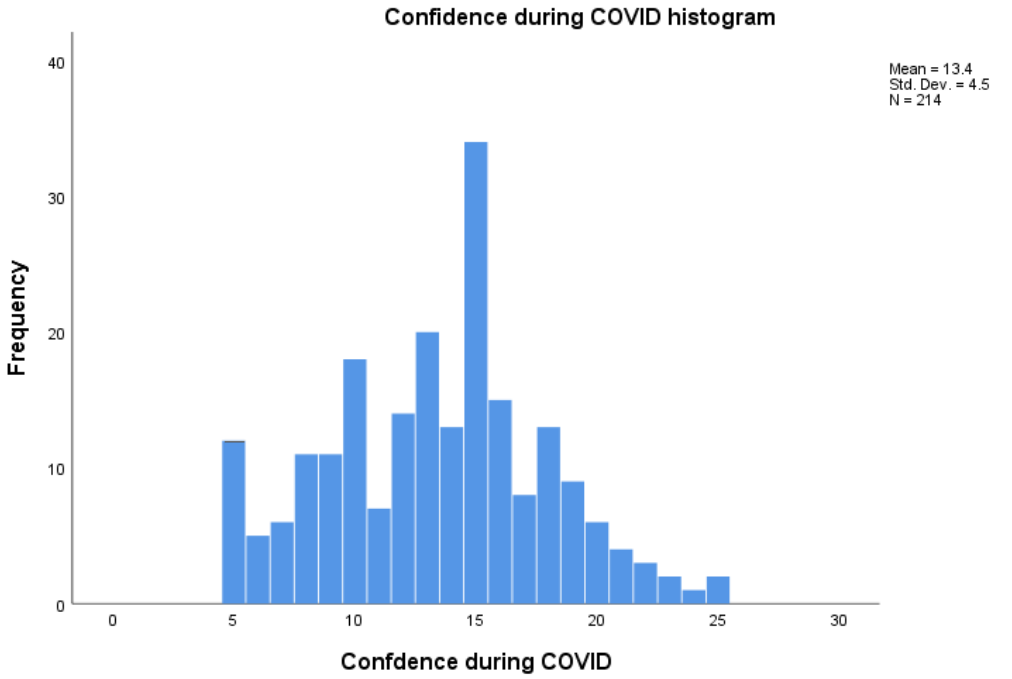
**. Correlation is significant at the 0.01 level (2-tailed).

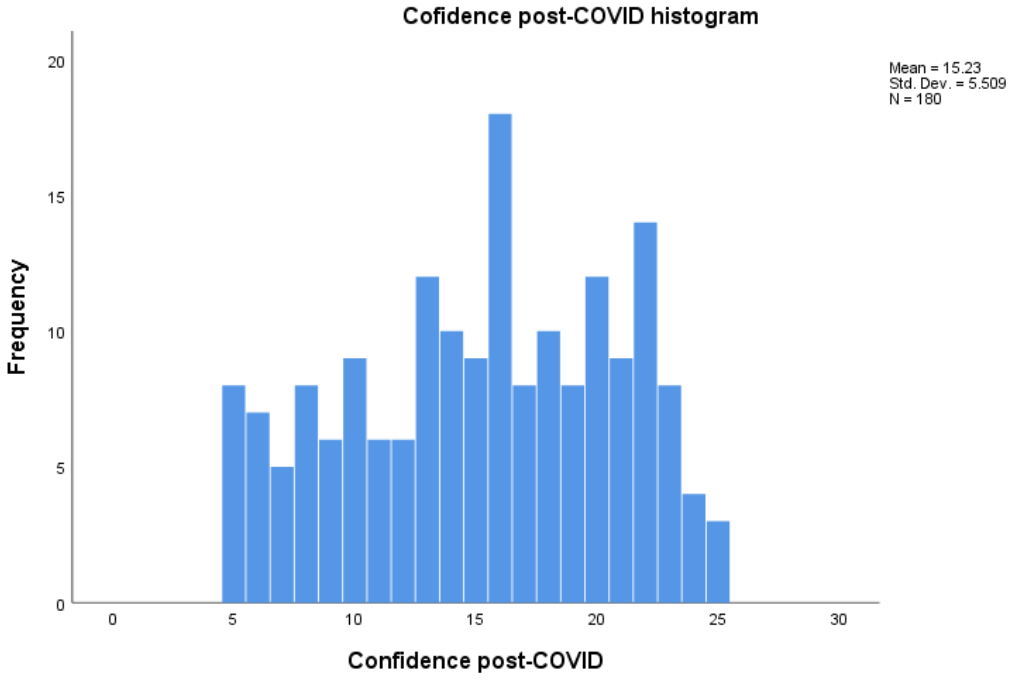

Perceived stress score histogram
Mean = 23.47
Std. Dev. = 7.173
N = 243
Frequency
Perceived stress scores

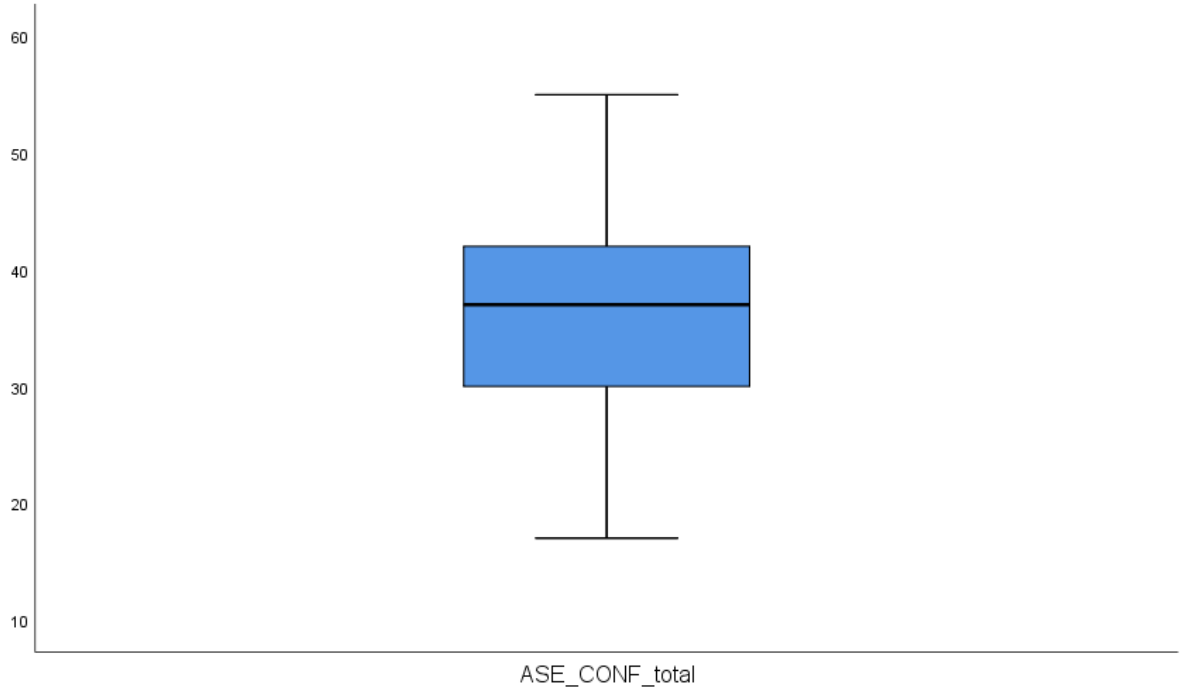

Academic self-confidence histogram
Mean = 37.52
Std. Dev. = 8.642
N = 242
Frequency
Academic self-confidence

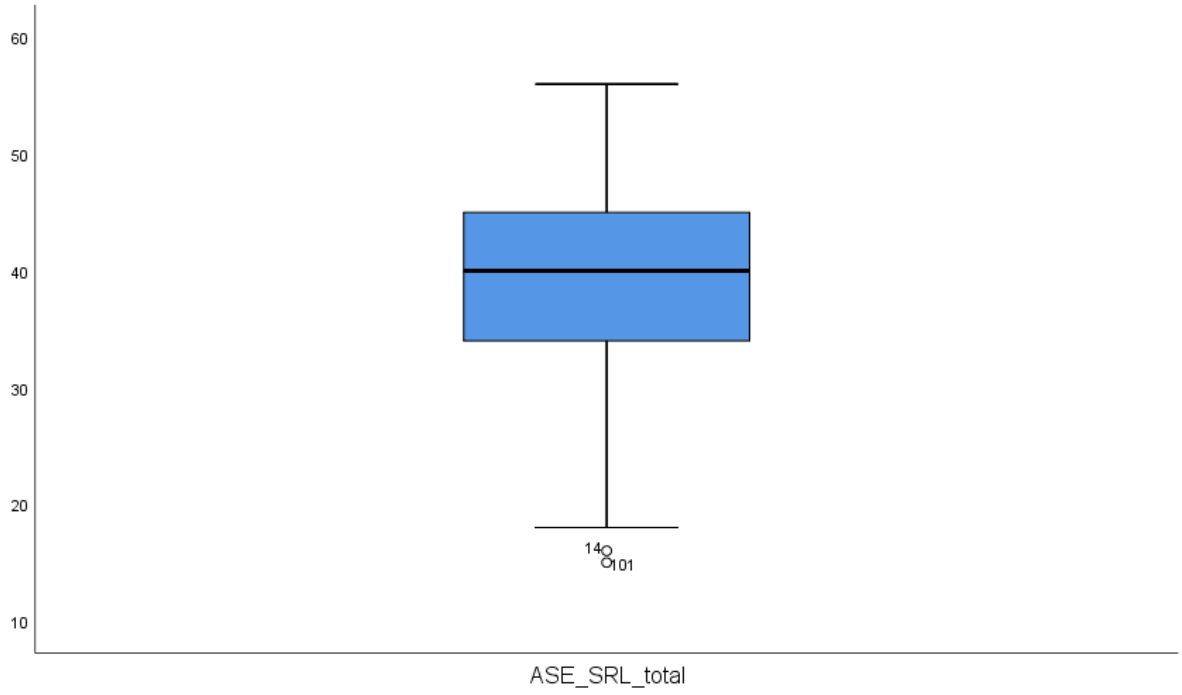

Self-regulated learning histogram
Mean = 37.82
Std. Dev. = 8.698
N = 237
Frequency
Self-regulated learning

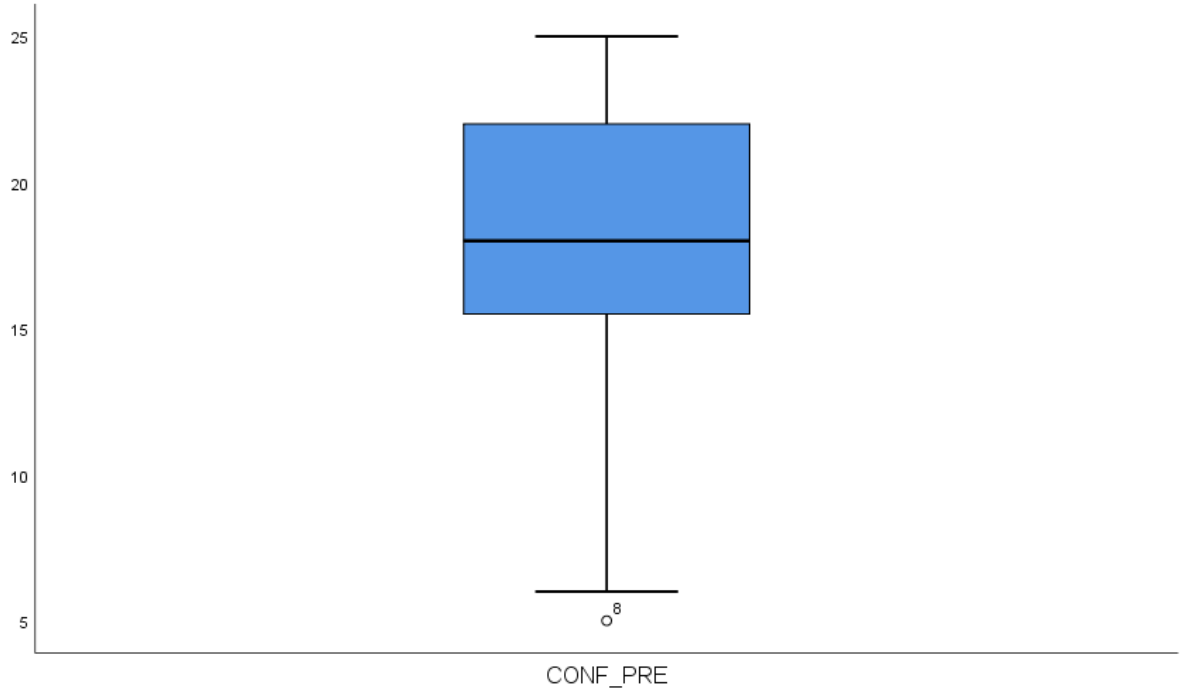

COVID related anxiety historgram
Mean = 21.53
Std. Dev. = 7.728
N = 195
Frequency
COVID anxiety

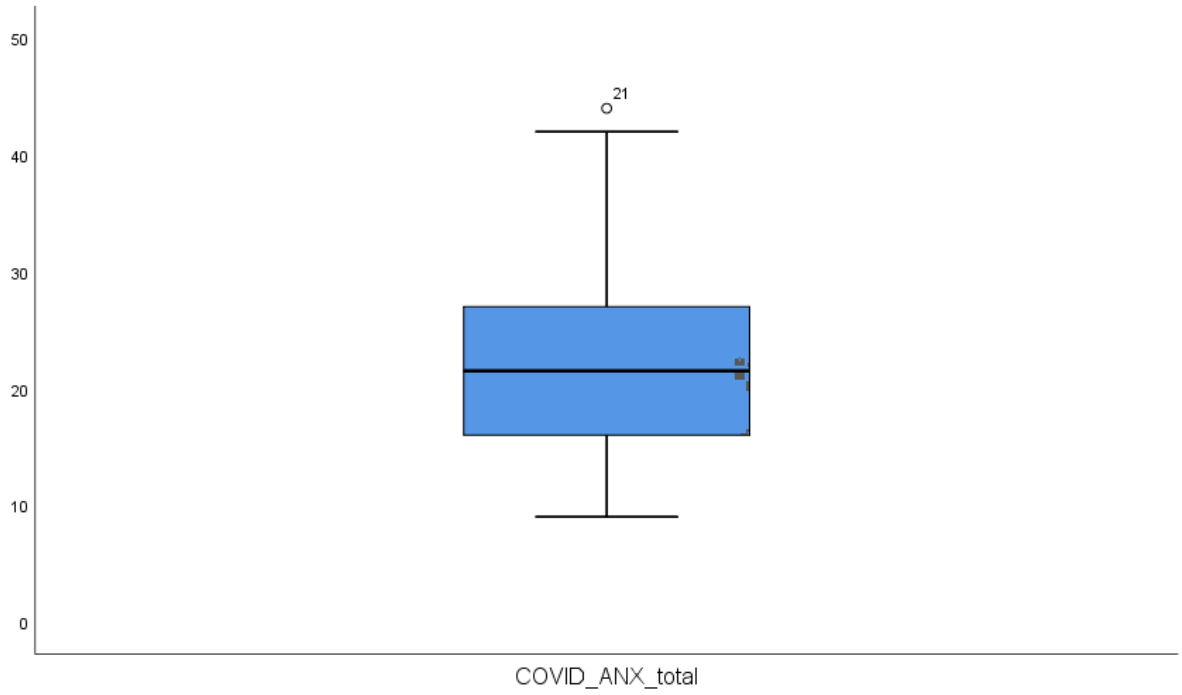

Confidence during COVID histogram
Mean = 13.4
Std. Dev. = 4.5
N = 214
Frequency
Confdence during COVID


Cofidence post-COVID histogram
Mean = 15.23
Std. Dev. = 5.509
N = 180
Frequency
Confidence post-COVID


60
50
40
30
20
10
ASE_CONF_total


60
50
40
30
20
10
14
101
ASE_SRL_total


25
20
15
10
5
8
CONF_PRE


50
40
30
20
10
0
21
COVID_ANX_total

C3 – Multivariate analysis investigating the effect of gender on academic factors. MANOVA Output

Box's Test of Equality of Covariance Matrices[a]

Box's M	26.063
F	2.528
df1	10
df2	52138.338
Sig.	.005

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

a. Design: Intercept + Gender

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.981	2335.890[b]	4.000	180.000	.000
	Wilks' Lambda	.019	2335.890[b]	4.000	180.000	.000
	Hotelling's Trace	51.909	2335.890[b]	4.000	180.000	.000
	Roy's Largest Root	51.909	2335.890[b]	4.000	180.000	.000
Gender	Pillai's Trace	.121	6.197[b]	4.000	180.000	.000
	Wilks' Lambda	.879	6.197[b]	4.000	180.000	.000
	Hotelling's Trace	.138	6.197[b]	4.000	180.000	.000
	Roy's Largest Root	.138	6.197[b]	4.000	180.000	.000

a. Design: Intercept + Gender

b. Exact statistic

Levene's Test of Equality of Error Variances[a]

		Levene Statistic	df1	df2	Sig.
PSS_total	Based on Mean	.856	1	183	.356
	Based on Median	.708	1	183	.401

	Based on Median and with adjusted df	.708	1	174.740	.401
	Based on trimmed mean	.833	1	183	.363
ASE_CONF_total	Based on Mean	.497	1	183	.482
	Based on Median	.619	1	183	.432
	Based on Median and with adjusted df	.619	1	174.886	.432
	Based on trimmed mean	.513	1	183	.475
ASE_SRL_total	Based on Mean	.507	1	183	.477
	Based on Median	.585	1	183	.445
	Based on Median and with adjusted df	.585	1	174.352	.445
	Based on trimmed mean	.525	1	183	.470
COVID_ANX_total	Based on Mean	1.865	1	183	.174
	Based on Median	1.715	1	183	.192
	Based on Median and with adjusted df	1.715	1	172.723	.192
	Based on trimmed mean	1.818	1	183	.179

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Gender

Tests of between-Subjects effects

Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
PSS_total	773.903[a]	1	773.903	17.271	.000
ASE_CONF_total	8.611[b]	1	8.611	.135	.714
ASE_SRL_total	234.046[c]	1	234.046	3.275	.072
COVID_ANX_total	543.193[d]	1	543.193	10.234	.002
PSS_total	73476.606	1	73476.606	1639.716	.000
ASE_CONF_total	205032.395	1	205032.395	3205.381	.000
ASE_SRL_total	234114.954	1	234114.954	3276.237	.000
COVID_ANX_total	67246.328	1	67246.328	1266.962	.000
PSS_total	773.903	1	773.903	17.271	.000
ASE_CONF_total	8.611	1	8.611	.135	.714
ASE_SRL_total	234.046	1	234.046	3.275	.072

COVID_ANX_total	543.193	1	543.193	10.234	.002
PSS_total	8200.335	183	44.811		
ASE_CONF_total	11705.605	183	63.965		
ASE_SRL_total	13076.906	183	71.459		
COVID_ANX_total	9713.059	183	53.077		
PSS_total	104371.000	185			
ASE_CONF_total	258363.000	185			
ASE_SRL_total	286335.000	185			
COVID_ANX_total	96699.500	185			
PSS_total	8974.238	184			
ASE_CONF_total	11714.216	184			
ASE_SRL_total	13310.951	184			
COVID_ANX_total	10256.251	184			

Estimates

				95% Confidence Interval	
Dependent Variable	Gender (Please specify)	Mean	Std. Error	Lower Bound	Upper Bound
PSS_total	Female	24.038	.587	22.880	25.197
	Male	19.564	.903	17.783	21.345
ASE_CONF_total	Female	36.654	.701	35.270	38.038
	Male	36.182	1.078	34.054	38.310
ASE_SRL_total	Female	37.685	.741	36.222	39.147
	Male	40.145	1.140	37.897	42.394
COVID_ANX_total	Female	22.731	.639	21.470	23.991
	Male	18.982	.982	17.044	20.920

Pairwise Comparisons

Dependent Variable	(I) Gender (Please specify)	(J) Gender (Please specify)	Mean Difference (I-J)	Std. Error	Sig.[b]
PSS_total	Female	Male	4.475*	1.077	.000
	Male	Female	-4.475*	1.077	.000
ASE_CONF_total	Female	Male	.472	1.286	.714
	Male	Female	-.472	1.286	.714
ASE_SRL_total	Female	Male	-2.461	1.360	.072
	Male	Female	2.461	1.360	.072
COVID_ANX_total	Female	Male	3.749*	1.172	.002
	Male	Female	-3.749*	1.172	.002

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Bonferroni.

Multivariate Tests

	Value	F	Hypothesis df	Error df	Sig.
Pillai's trace	.121	6.197[a]	4.000	180.000	.000
Wilks' lambda	.879	6.197[a]	4.000	180.000	.000
Hotelling's trace	.138	6.197[a]	4.000	180.000	.000
Roy's largest root	.138	6.197[a]	4.000	180.000	.000

Each F tests the multivariate effect of Gender (Please specify). These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Exact statistic

Univariate Tests

Dependent Variable		Sum of Squares	df	Mean Square	F	Sig.
PSS_total	Contrast	773.903	1	773.903	17.271	.000
	Error	8200.335	183	44.811		
ASE_CONF_total	Contrast	8.611	1	8.611	.135	.714
	Error	11705.605	183	63.965		
ASE_SRL_total	Contrast	234.046	1	234.046	3.275	.072
	Error	13076.906	183	71.459		

COVID_ANX_total	Contrast	543.193	1	543.193	10.234	.002
	Error	9713.059	183	53.077		

The F tests the effect of Gender (Please specify). This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

C4 - Linear regression output with gender differences.

Correlations

	Perceived stress	Gender	Subject difficulty	Subject happiness	Academic self-confidence	Self-regulated learning	Covid Anxiety
	1.000	-.294	-.151	.298	-.287	-.456	.427
	-.294	1.000	.098	.046	-.027	.133	-.230
	-.151	.098	1.000	-.080	.002	.075	-.162
	.298	.046	-.080	1.000	-.385	-.289	.124
	-.287	-.027	.002	-.385	1.000	.635	-.043
	-.456	.133	.075	-.289	.635	1.000	-.050
	.427	-.230	-.162	.124	-.043	-.050	1.000
	.	.000	.020	.000	.000	.000	.000
	.000	.	.091	.267	.357	.036	.001
	.020	.091	.	.140	.490	.156	.014
	.000	.267	.140	.	.000	.000	.046
	.000	.357	.490	.000	.	.000	.283
	.000	.036	.156	.000	.000	.	.248
	.000	.001	.014	.046	.283	.248	.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	26.965	2.508		10.751	.000		
	Gender	-4.542	1.024	-.298	-4.437	.000	.987	1.013
	Subject_Diff_Simplified	-1.252	.864	-.098	-1.449	.149	.983	1.017
	Sub_Hap_Simplified	3.185	.702	.304	4.538	.000	.991	1.009
2	(Constant)	28.974	3.630		7.983	.000		
	Gender	-2.526	.918	-.166	-2.752	.007	.902	1.108
	Subject_Diff_Simplified	-.481	.750	-.037	-.641	.522	.959	1.043
	Sub_Hap_Simplified	1.678	.658	.160	2.551	.012	.828	1.208
	ASE_CONF_total	.027	.068	.031	.400	.689	.541	1.847
	ASE_SRL_total	-.318	.062	-.387	-5.103	.000	.568	1.760
	COVID_ANX_total	.323	.056	.345	5.756	.000	.911	1.097

a. Dependent Variable: PSS_total

Model Summary[c]

Model	R	R Square	Adj R Square	Change Statistics					Durbin-Watson
				R Square Change	F Change	df1	df2	Sig. F Change	
1	.439[a]	.193	.180	.193	14.444	3	181	.000	
2	.646[b]	.417	.398	.224	22.836	3	178	.000	1.702

a. Predictors: (Constant), Sub_Hap_Simplified, Gender (Please specify), Subject_Diff_Simplified

b. Predictors: (Constant), Sub_Hap_Simplified, Gender (Please specify), Subject_Diff_Simplified, COVID_ANX_total, ASE_SRL_total, ASE_CONF_total

c. Dependent Variable: PSS_total

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1733.445	3	577.815	14.444	.000[b]
	Residual	7240.793	181	40.004		
	Total	8974.238	184			
2	Regression	3745.771	6	624.295	21.254	.000[c]
	Residual	5228.467	178	29.373		
	Total	8974.238	184			

a. Dependent Variable: PSS_total

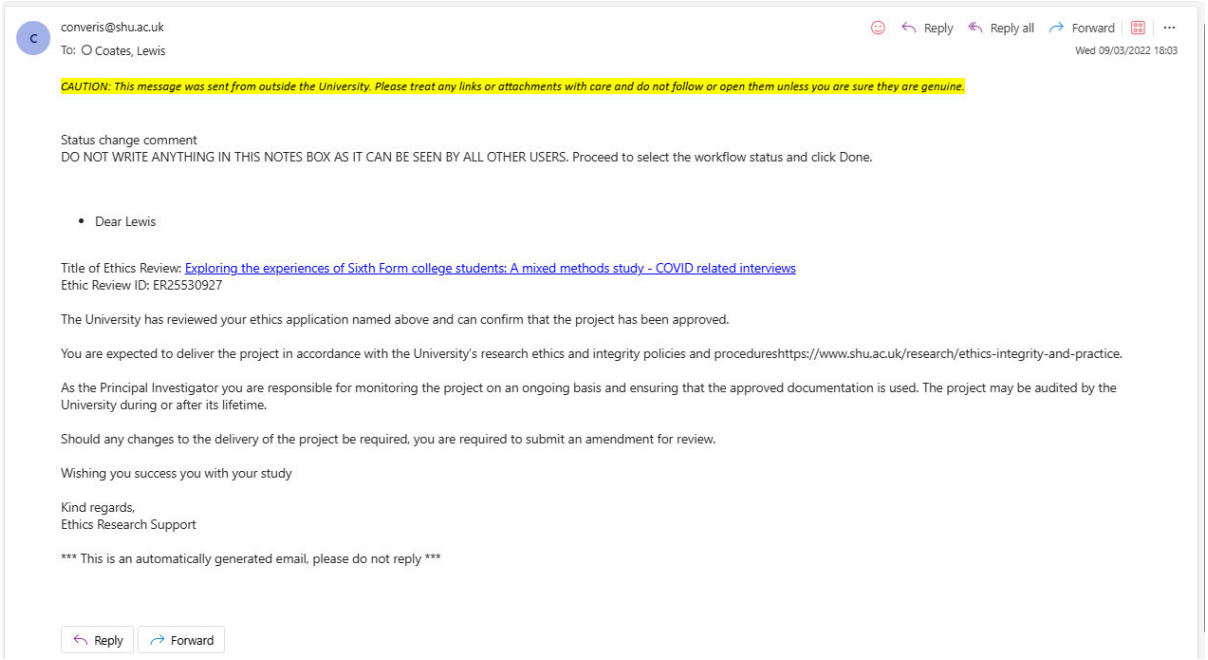
b. Predictors: (Constant), Sub_Hap_Simplified, Gender (Please specify), Subject_Diff_Simplified

c. Predictors: (Constant), Sub_Hap_Simplified, Gender (Please specify), Subject_Diff_Simplified, COVID_ANX_total, ASE_SRL_total, ASE_CONF_total

Appendix D - Study 4: One to one interviews.

D1 – Ethical Approval, Interview schedule, Information, Consent & Debrief

Ethical Approval



converis@shu.ac.uk
To: Coates, Lewis

Reply | Reply all | Forward
Wed 09/03/2022 18:03

CAUTION: This message was sent from outside the University. Please treat any links or attachments with care and do not follow or open them unless you are sure they are genuine.

Status change comment
DO NOT WRITE ANYTHING IN THIS NOTES BOX AS IT CAN BE SEEN BY ALL OTHER USERS. Proceed to select the workflow status and click Done.

- Dear Lewis

Title of Ethics Review: Exploring the experiences of Sixth Form college students: A mixed methods study - COVID related interviews
Ethic Review ID: ER25530927

The University has reviewed your ethics application named above and can confirm that the project has been approved.

You are expected to deliver the project in accordance with the University's research ethics and integrity policies and procedureshttps://www.shu.ac.uk/research/ethics-integrity-and-practice.

As the Principal Investigator you are responsible for monitoring the project on an ongoing basis and ensuring that the approved documentation is used. The project may be audited by the University during or after its lifetime.

Should any changes to the delivery of the project be required, you are required to submit an amendment for review.

Wishing you success you with your study

Kind regards,
Ethics Research Support

*** This is an automatically generated email, please do not reply ***

Reply | Forward

Purpose of the study

The purpose of these interviews is to gather data for a PhD project which is exploring the experiences of Sixth Form students. There has not been a great deal of research into the experiences and stress of Sixth Form students with only a handful of studies being undertaken into Sixth Form students stress since 1980 (Dobson, 1980; Hodkinson & Bloomer, 2000). With the advent of COVID, this research aims to explore student experiences of undertaking their studies across Sixth Form and how COVID may have affected the student's confidence in undertaking academic tasks and how they may have coped with the challenges that they faced.

Ultimately this research aims to explore your experiences of Sixth Form , examining the factors that have contributed to any stress that you may have encountered and how you have managed that stress.

Do I have to take part?

No, you do not have to take part if you do not wish to do so. This study is entirely voluntary.

Right to withdraw

Additionally, you have a right to withdraw from the study up to 1 week after the completion of the interview if you wish to do so without any reason given. Simply email the researcher with your interview code and the researcher will remove your interview from the research.

Procedure (if you choose to take part)

If you agree to take part, you will be asked to fill in a consent form (below) and will be asked to undertake an interview that will explore how you felt undertaking your Sixth Form studies across the COVID-19 pandemic and how it may have affected your ability to undertake work now that you are back at school. The interviews will take between 20 and 30 minutes and can be undertaken face to face or online depending on current restrictions.

Possible risks

Although there are no major risks involved with this survey, if you have any questions regarding the survey or have been upset, distressed, or affected in any way by this survey please do not hesitate to email the researchers or supervisor.

GDPR and data

The only people in Sheffield Hallam University who will have access to information that identifies you will be people who need to contact you to take part in the study or give you feedback that you requested. Any identifying information will be anonymized

Sheffield Hallam University will keep identifiable information about you from this study for 10 years after the study has finished.

Legal Basis for Research

The University undertakes research as part of its function for the community under its legal status. Data protection allows us to use personal data for research with appropriate safeguards in place under the legal basis of public tasks that are in the public interest. A full statement of your rights can be found at https://www.shu.ac.uk/about-this-website/privacy-policy/privacy-notices/privacy-notice-for-research

However, all University research is reviewed to ensure that participants are treated appropriately, and their rights respected. This study was approved by UREC with Converis number ER25530927. Further information at: www.shu.ac.uk/research/excellence/ethics-and-integrity

Contact information & Complaints.

Please remember if you have any questions or would like to withdraw from the study at any time please do not hesitate in emailing the researcher or supervisor of this study.

Lewis Coates (researcher)- [redacted]

Charlotte Coleman (Supervisor)- [redacted]

You should contact the Data Protection Officer if:	**You should contact the Head of Research Ethics (Dr Mayur Ranchordas) if:**
• you have a query about how your data is used by the University • you would like to report a data security breach (e.g. if you think your personal data has been lost or disclosed inappropriately) • you would like to complain about how the University has used your personal data DPO@shu.ac.uk	• you have concerns with how the research was undertaken or how you were treated ethicssupport@shu.ac.uk

Postal address: Sheffield Hallam University, Howard Street, Sheffield S1 1WBT Telephone: 0114 225 5555

PARTICIPANT CONSENT FORM

Please answer the following questions by ticking the response that applies

	YES	NO
1. I have read the Information Sheet for this study and have had details of the study explained to me.	☐	☐
2. My questions about the study have been answered to my satiSFaction and I understand that I may ask further questions at any point.	☐	☐
3. I understand that I am free to withdraw from the study within the time limits outlined in the Information Sheet, without giving a reason for my withdrawal or to decline to answer any particular questions in the study without any consequences to my future treatment by the researcher.	☐	☐
4. I agree to provide information to the researchers under the conditions of confidentiality set out in the Information Sheet.	☐	☐
5. I wish to participate in the study under the conditions set out in the Information Sheet.	☐	☐
6. I consent to the information collected for the purposes of this research study, once anonymized (so that I cannot be identified), to be used for any other research purposes.	☐	☒
7. I consent to the audio recording of this interview.	☐	☐

Participant's Signature: _____ Date: _____

Participant's Name (Printed): _____

Contact details: _____

_____

Researcher's Name (Printed): _____

Researcher's Signature: _____

Researcher's contact details:
(Name, address, contact number of investigator)

Please keep your copy of the consent form and the information sheet together.

Covid Qualitative interviews debrief sheet

Thank you for participating in my study concerning Sixth Form experiences in undertaking A-levels over COVID and lockdowns. Sixth Forms a seen as elite institutions in Britain but have been largely overlooked in research, with only a handful of studies existing into Sixth Form students experiences. This lack of research surrounding Sixth Form is largely due to there being no international counterpart for Sixth Form institutions.

Through these interviews we expect to find experiences of Sixth Form students and what challenges that they may have faced not only undertaking their studies across COVID but how students' mindsets may have changed and whether the approach to work has been changed due to COVID.

We aim to explore the experience of an under researched cohort of student within the British education system. Furthermore, we aim to explore what factors are contributing to any potential or perceived stress that students at Sixth Form may face. Ultimately we aim to to better understand the challenges that they face and how students may manage the stress of those challenges and whether there can be any support created for Sixth Form students in future.

Data treatment

All of the responses recorded in this interview will be analysed as part of a larger dataset for the purpose of this PhD project. All responses and identifying information will be anonymised and any other identifying information will be removed. Findings will be used as a part of the PhD thesis and may be presented at academic conferences. Your responses will not be used for any other purpose other than stated on this debrief sheet.

Right to withdraw and contact information

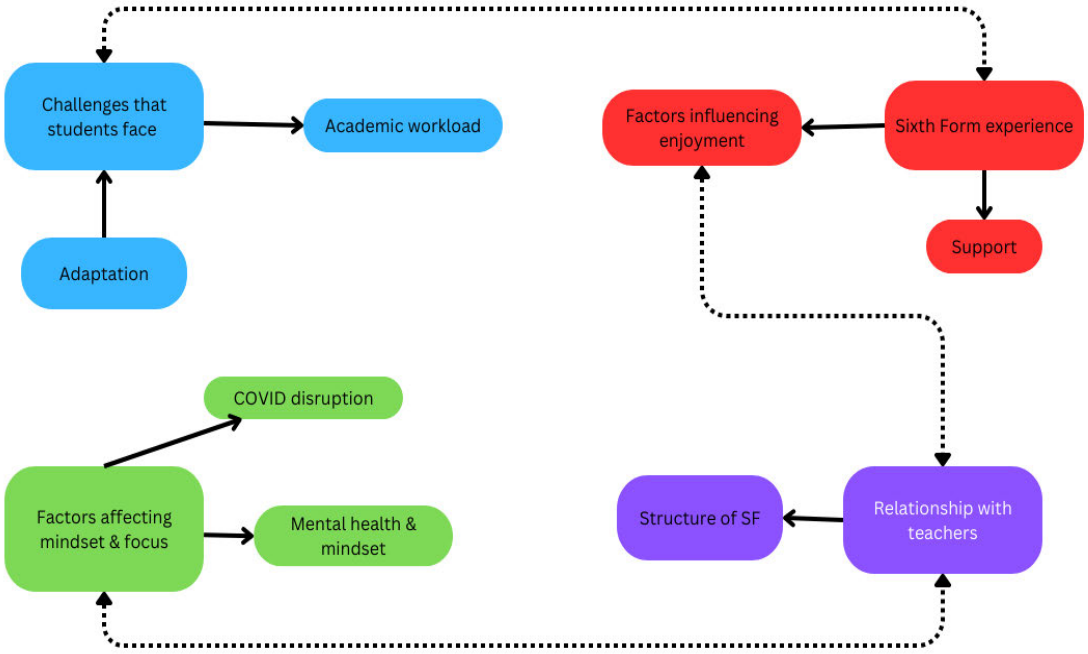
If you wish to withdraw from this study at any point for up to a 10 days after participating, or if you have any questions about the nature of the study or what you have experienced in this study, you may contact the researcher at any point with the details below.

A full statement of your rights can be found here:
https://www.shu.ac.uk/about-this-website/privacy-policy/privacy-notices/privacy-notice-for-research

If you have any questions about this project, please feel free to get in touch with the researcher: **Lewis Coates -** [redacted]

You can also write to the researcher write at: **Sheffield Hallam University, Howard Street, Sheffield, S1 1WBT.**

D2 - Thematic map of interviews.



D3 – One to one interview schedule

Checklist

-Make sure participant is comfortable + provided with drink of water if they want one. Talking is thirsty work.

-Place table between you but don't sit directly across, sit at an angle, it makes for an open yet secure space.

-Speak to them about their subjects/hobbies, don't go right into the formalities

-Remind them of right to withdraw and that they can take a break at any point in the interview (esp. if the questions are intense)

Questions:

Question: What are your thoughts and feelings on the overall experience of SF, especially over COVID?

Prompt: How have you been affected by COVID over SF?

Question: Could you tell me if you have faced any significant challenges over SF?

Prompt- these may be academic, personal, or other.

Follow on- How do you feel that these challenges have affected your experience of SF?

Question: How do you feel that the events of COVID and lockdown have affected your journey through SF?

Question: How has the events of COVID affected the way in which you approach work/revision?

Question: Do you feel as if your confidence in undertaking academic tasks (such as essays, or exams) has been affected by the events of COVID-19? If so how?

> Prompt: Think back to how you felt undertaking your studies over the lockdowns, how does your confidence compare?

Question: Have you felt any change in your levels of stress pre, during and post-COVID lockdowns? Could you explain why you felt like that?

> Prompt: Would you be able to explain why you felt that?

Question: Over the time at SF (especially COVID) has the way in which you approach and manage your stress changed? If so how?

Question: Over COVID, do you feel as if you were supported through your studies?

> Follow on: If so/not why?

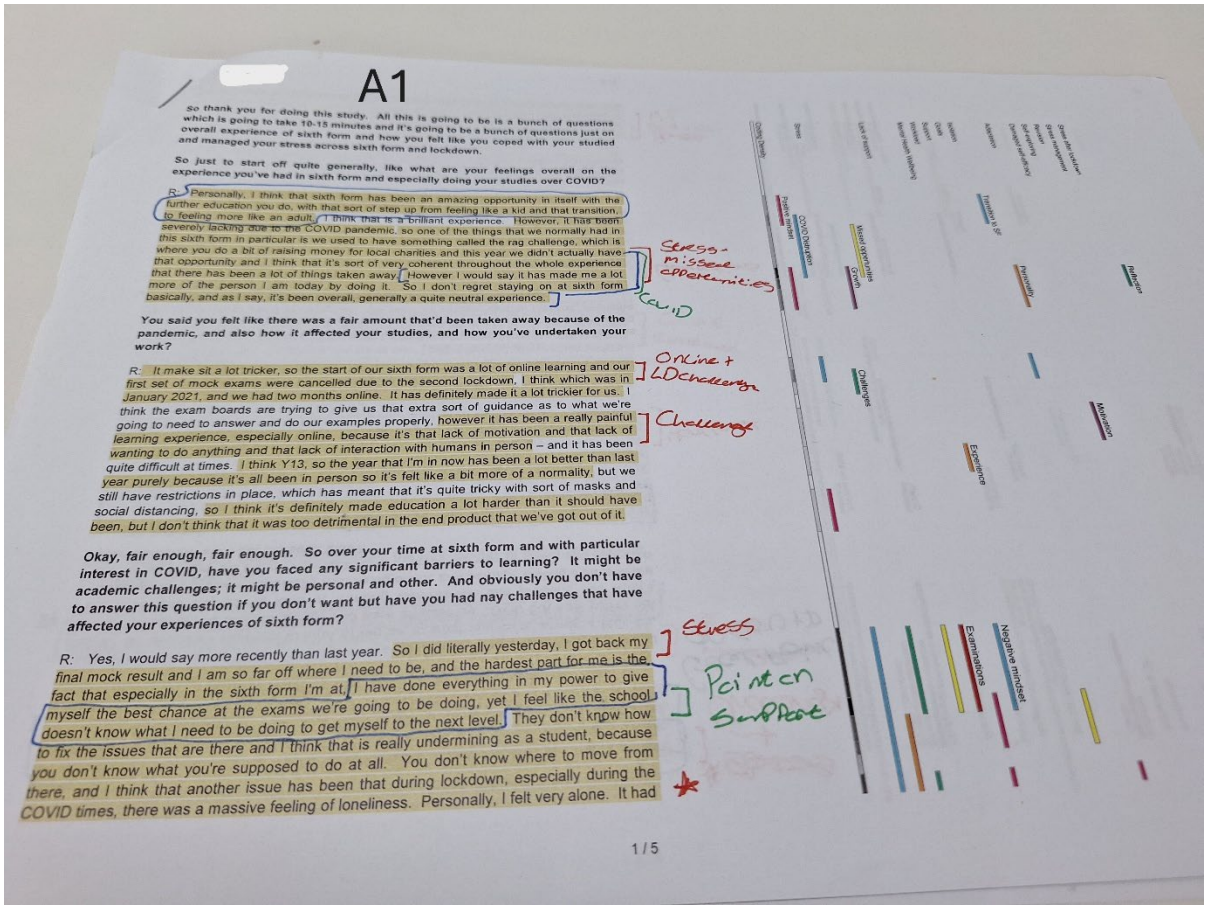
> Follow on: How do you feel that you could be further supported through future challenges?

Question: How has the events of COVID affected influenced your plans for future education or job prospects.

> Prompt: Education, job, etc

Question: Is there anything else that you would like to say before the end of the interview?

D4 – Interview transcript samples



A1

So thank you for doing this study. All this is going to be is a bunch of questions which is going to take 10-15 minutes and it's going to be a bunch of questions just on overall experience of sixth form and how you felt like you coped with your studied and managed your stress across sixth form and lockdown.

So just to start off quite generally, like what are your feelings overall on the experience you've had in sixth form and especially doing your studies over COVID?

R: Personally, I think that sixth form has been an amazing opportunity in itself with the further education you do, with that sort of step up from feeling like a kid and that transition to feeling more like an adult. I think that is a brilliant experience. However, it has been severely lacking due to the COVID pandemic, so one of the things that we normally had in this sixth form in particular is we used to have something called the rag challenge, which is where you do a bit of raising money for local charities and this year we didn't actually have that opportunity and I think that it's sort of very coherent throughout the whole experience that there has been a lot of things taken away. However I would say it has made me a lot more of the person I am today by doing it. So I don't regret staying on at sixth form basically, and as I say, it's been overall, generally a quite neutral experience.

Stress - missed opportunities

COVID

You said you felt like there was a fair amount that'd been taken away because of the pandemic, and also how it affected your studies, and how you've undertaken your work?

R: It make sit a lot tricker, so the start of our sixth form was a lot of online learning and our first set of mock exams were cancelled due to the second lockdown. I think which was in January 2021, and we had two months online. It has definitely made it a lot trickier for us. I think the exam boards are trying to give us that extra sort of guidance as to what we're going to need to answer and do our examples properly, however it has been a really painful learning experience, especially online, because it's that lack of motivation and that lack of wanting to do anything and that lack of interaction with humans in person – and it has been quite difficult at times. I think Y13, so the year that I'm in now has been a lot better than last year purely because it's all been in person so it's felt like a bit more of a normality, but we still have restrictions in place, which has meant that it's quite tricky with sort of masks and social distancing, so I think it's definitely made education a lot harder than it should have been, but I don't think that it was too detrimental in the end product that we've got out of it.

Online + LD challenge

Challenge

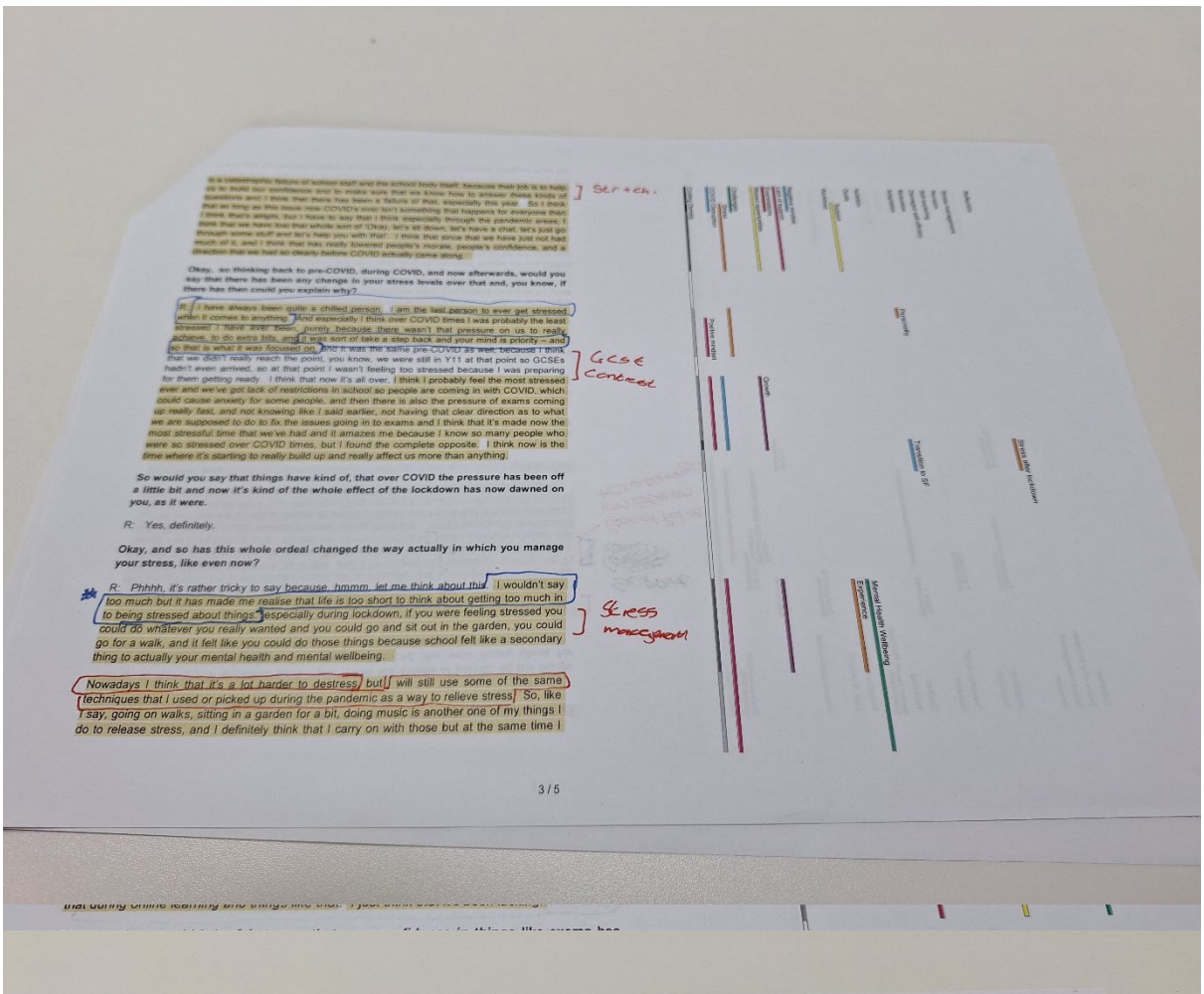
Okay, fair enough, fair enough. So over your time at sixth form and with particular interest in COVID, have you faced any significant barriers to learning? It might be academic challenges; it might be personal and other. And obviously you don't have to answer this question if you don't want but have you had nay challenges that have affected your experiences of sixth form?

R: Yes, I would say more recently than last year. So I did literally yesterday, I got back my final mock result and I am so far off where I need to be, and the hardest part for me is the fact that especially in the sixth form I'm at, I have done everything in my power to give myself the best chance at the exams we're going to be doing, yet I feel like the school doesn't know what I need to be doing to get myself to the next level. They don't know how to fix the issues that are there and I think that is really undermining as a student, because you don't know what you're supposed to do at all. You don't know where to move from there, and I think that another issue has been that during lockdown, especially during the COVID times, there was a massive feeling of loneliness. Personally, I felt very alone. It had

Stress

Point on support

1 / 5



Stretch.

Okay, so thinking back to pre-COVID, during COVID, and now afterwards, would you say that there has been any change in your stress levels over that and, you know, if there has then could you explain why?

R: I have always been quite a chilled person. I am the last person to ever get stressed when it comes to anything. And especially I think over COVID times I was probably the least stressed I have ever been, purely because there wasn't that pressure on us to really achieve, to do extra bits, and it was sort of take a step back and your mind is priority – and so that is what it was focused on. And it was the same pre-COVID as well, because I think that we didn't really reach the point, you know, we were still in Y11 at that point so GCSEs hadn't even arrived, so at that point I wasn't feeling too stressed because I was preparing for them getting ready. I think that now it's all over, I think I probably feel the most stressed ever and we've got lack of restrictions in school so people are coming in with COVID, which could cause anxiety for some people, and then there is also the pressure of exams coming up really fast, and not knowing like I said earlier, not having that clear direction as to what we are supposed to do to fix the issues going in to exams and I think that it's made now the most stressful time that we've had and it amazes me because I know so many people who were so stressed over COVID times, but I found the complete opposite. I think now is the time where it's starting to really build up and really affect us more than anything.

GCSE context

So would you say that things have kind of, that over COVID the pressure has been off a little bit and now it's kind of the whole effect of the lockdown has now dawned on you, as it were.

R: Yes, definitely.

Okay, and so has this whole ordeal changed the way actually in which you manage your stress, like even now?

R: Phhhh, it's rather tricky to say because, hmmm, let me think about this. I wouldn't say too much but it has made me realise that life is too short to think about getting too much in to being stressed about things, especially during lockdown, if you were feeling stressed you could do whatever you really wanted and you could go and sit out in the garden, you could go for a walk, and it felt like you could do those things because school felt like a secondary thing to actually your mental health and mental wellbeing.

Stress management

Nowadays I think that it's a lot harder to destress, but I will still use some of the same techniques that I used or picked up during the pandemic as a way to relieve stress. So, like I say, going on walks, sitting in a garden for a bit, doing music is another one of my things I do to release stress, and I definitely think that I carry on with those but at the same time I

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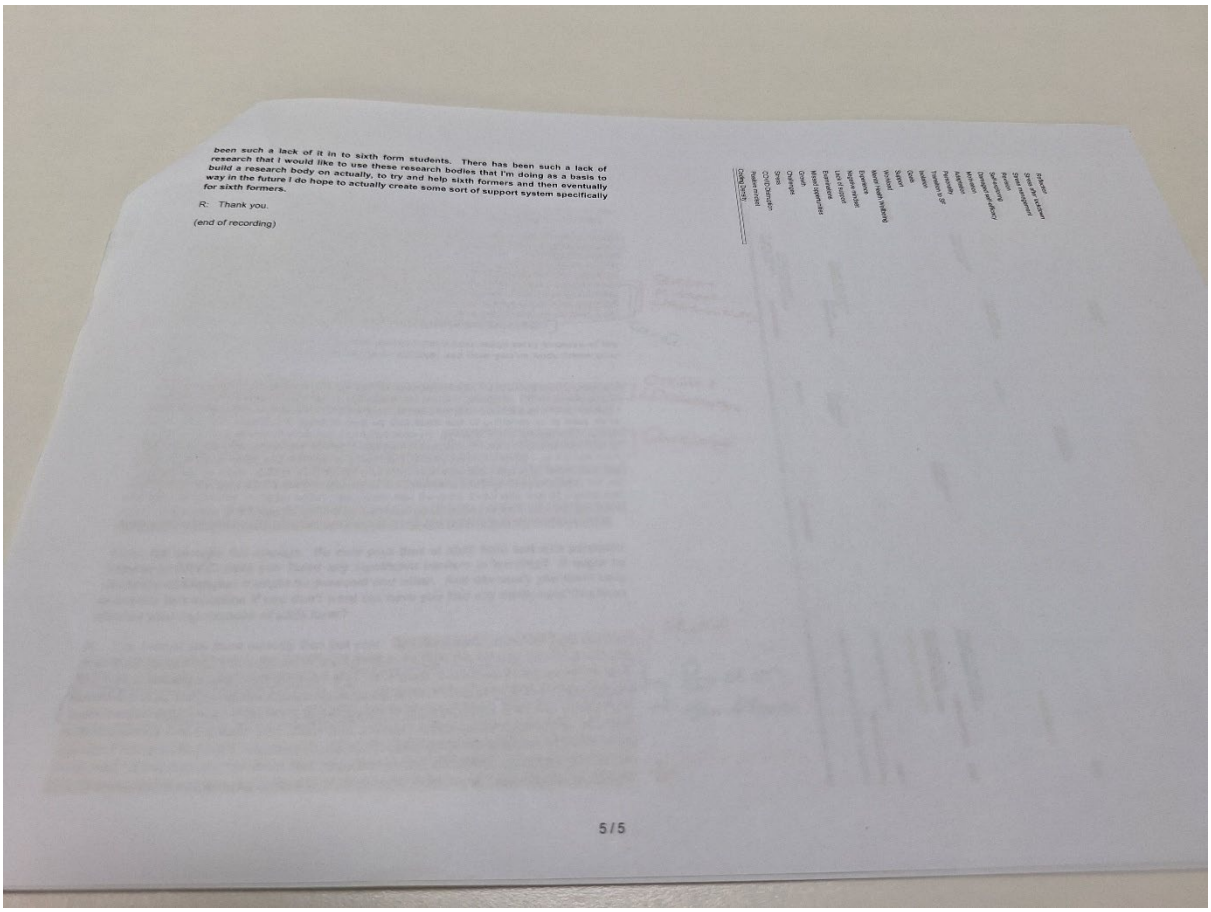

been such a lack of it in to sixth form students. There has been such a lack of research that I would like to use these research bodies that I'm doing as a basis to build a research body on actually, to try and help sixth formers and then eventually way in the future I do hope to actually create some sort of support system specifically for sixth formers.

R: Thank you.

(end of recording)

5 / 5

D5 – Interview comments table

School A	
A1	(SF after lockdowns) *"it has been a really painful learning experience, especially online, because it's that lack of motivation and wanting to do anything and that lack of interactions with humans in person."*
	"They (school) don't know how to fix the issues that are there, and I think it is really undermining as a student, because you don't know what you are supposed to do at all".
	"I think since that we have just not had much of it (support) and I think that it had really lowered peoples morale, people's confidence and a direction that we so clearly had before COVID actually came along"-
A2	*"But it's just inspiration and it's kicking me to do even better at the next ones (exams) and I have improved, and things have gone up every single exam that I have done"*
	"I was struggling at the beginning of Y13, with all my different essays and things to do…but you just have to learn about time management and just have to learn what to prioritise and in this instance, it was my workload that I just had to make sure that I had my mind on".
A3	*"I feel like I am engaging more now, because I need to understand it"*
A4	*"I suppose it's had a positive impact in a way that before lockdown it was very easy to stress about certain things like exams, like GCSE's and stuff , whereas then during lockdown you kind of get used to it being more stressful, so you often get used to it in a way….so I suppose that has helped coming up to exams now, whereas obviously before I would really stressed out, but now I have seen that it's not stressful."*
A5	*"I knew how I felt (in lockdown) so I made an effort to kind of reach out, but they (friends) did as well, we all felt it, so we all knew what to do to help each other's wellbeing".*
A6	*"I was definitely less prepared for my A-levels, knowing I have never done an exam before"*
	"…I came into my A-levels without really taking a proper formal exam, besides my SATS from year 6 (10-11 years of age), which is quite a long time ago (6-7 years ago)"
	"…it was definitely a big jump because we had an eight-month break (lockdown) between ending my GCSE's and doing my A-levels so I found the jump quite a big jump, especially after not studying for eight months".
	"I remember me and my friends all went to [Name of country park] we just socially distanced and we were all having a nice time and I found that it was probably the best way for me to kind of make sure I have people I could go and see and I need to stay in contact with everyone because personally I am quite bad at staying in contact with people…"
	"Yeah, I mean the teachers and the SF team have done everything that they could do for helping us in lockdown. Like as difficult as it has been I feel like they have done the best that they could."
	"We have just hammered on and kept going and I have found it a lot easier"
A7	*"Yeah I think that I can verbalise and talk to people….stress and explain that better now and I know how to deal with it myself better now. If I was stressed before I think I would probably sit and wallow in my stress whereas now I tend to take a more active approach towards it."*

School B	
B1	*"When you're at home, or I have been at home for like a term when I've isolated before…it doesn't seem to come across the same over ZOOM for me personally, so I found that quite difficult to adapt to….I had 20 weeks off where I've really not done*

	anything now being thrown back into A-levels, that is quite stressful, jumping straight back into it."
	"It's (A-Level) been quite novel and not really kind of undertaken before".
	"Because I do kind of look back at it (lockdown) and think 'If I can get through that, then I can get through most of what's coming my way'".
B2	*"Horrible, to sum it up"*
	"…in Y12 they did not give us as much support as I personally think that they should have, so they basically left us to our own devices and over half the year left in my SF".
	"I was proper cocky and confident, and I came here and I don't know if it was because I was around smarter people than before. I don't know, but I just fell behind so quickly, and I didn't realise that had happened for A-levels, but it did…"-
	"(My) Confidence has gone very downhill".
	"It's like I have forgotten all the work ethic I've had has just gone downhill, yes."
	"I'm not good with stress management, at all. So, I just kind of avoid doing it, then I get even more stressed."
B3	*"I think that lockdowns have made it significantly harder as well, for study, because I do A-level Spanish and a big element of that is speaking it, so we haven't been able to have speaking practice as much as we used to…"*
	"I think what I found most challenging is that jump, I think especially in English, that jump between A-level and GCSE because I didn't realise how different it would be
	I'm hoping to do my teacher training and become a teacher and I also was like 'is there any point?' Am I just going to be behind a computer screen teaching a class and never actually go into a school and be a proper teacher, what I know as a teacher, is that ever going to be the same again? And it didn't put me off doing that job for quite a while, but then I thought 'no, I have always wanted to do it, so I will just go with it and hope for the best'".
B4	*"I feel like a couple of the teachers are quite supportive as well. I don't think the SLT…I don't think that they're that supportive, to be honest- I think that they think they are, but they are not really".*
B5	*"…I didn't do my GCSE's and then straight into A-levels and it was quite a big jump without even sitting and exam in Y11."*
	"I think that maybe it would have been a slightly better experience without COVID, maybe, because obviously, I didn't do my GCSE's and the straight into A-levels and it was quite a big jump without even sitting an exam in Y11".
	"I was really keen on applying to top universities and things like that, but I suppose during COVID, I don't know if I got less motivated or whatever I feel quite directionless with it because I don't really know what career I want to do and it's very much a 'take it or leave it' situation'
	"My friends and I, most of us feel the same way. We are not ambitionless, I suppose that's the wrong word, but it's kind of like 'Oh well, if I got into uni but if I didn't, I wouldn't really mind' sort of thing. Like no one has really got drive or something they really want to do anymore. It's kind of like we are floating through sort of thing".
B6	N/A
B7	*"I like to think that I have developed a couple of slightly healthier coping mechanisms for the stress, and I've managed to get support systems in place with friends."*
B8	N/A
B9	*"…It's quite good in A-levels because they do so much, so many revision sessions that we can go to and because we have 'frees' now, in GCSE we had a full timetable, but now we have gaps in the day where we can sit down on the computers and revise or go and see some teachers and ask them for help".*
B10	*"I feel like we missed out a lot of practical skills in that subject (design subject), so when it came to doing an actual project, we were sort of clueless on where to go and what to do."*

	"We had to do most of it online, on CAD (computer design software) and doing concepts instead of actually getting in with the physical skills".
	"I would only say because of lack of motivation. Because of COVID, which added to that a bit, but I wouldn't say much in terms of how I revise"
	"Erm, I would say that it's (COVID) reduced confidence a fair bit throughout all subjects".
B11	N/A
B12	*"Online learning just doesn't work; do you know what I mean? It just doesn't work."-*
	"it's just embarrassing to ask for help or anything, it's just hard. And then the teacher goes too fast or the Wi-fi breaks down. Just a lot of stuff gets in the way and I feel as if it is not as efficient"
	"I think like during lockdown I think that my confidence did grow like towards the end and then in SF, at the start I was a lot less confident than how I feel now. I feel like I have grown a lot, like drastically since then"-

Appendix E Literature summary

https://acrobat.adobe.com/id/urn:aaid:sc:EU:0f7a4060-f7b0-4330-a793-afaaff9706cb