Research Thesis Title

Unequal perceptions of school subject value: exploring Year Nine students' value attribution patterns and the psychological impact

By

Emma Speed

July 2019

A thesis submitted in partial fulfilment of the requirements of the University of East London for the Professional Doctorate in Educational and Child Psychology

Abstract

The research aimed to explore secondary school students' perceptions of the 'value' of UK curriculum subjects; considering what, how and why specific subject value attribution patterns are important for students, and the psychological impact of this on their wellbeing and self-efficacy beliefs (SEB). The research used a mixed-methods, sequential design, conducted in two stages. Stage 1 explored students' value attribution for specific subjects; and relationships between attribution patterns, SEB and wellbeing. Stage 2 aimed to further explore and explain Stage 1 findings, and the relationships identified. In stage 1, attainment data and questionnaires were collected from 38 Year 9 students. Thematic analysis explored students' value attribution for subjects; and Mann-Whitney and t-tests explored the relationships between attribution patterns, SEB and wellbeing. In stage 2, nine participants were interviewed, and relationships identified were thematically analysed. Three master themes (perceived usefulness, external factors and lessons' characteristics) justified the subject attributed value, wherein English Baccalaureate (EBacc) subjects were most frequently identified as 'most important'. Students with strengths in EBacc subjects had significantly higher SEB than those with strengths in non-EBacc subjects; the same results were found for students with strengths in subjects they had identified as 'important' versus those with strengths in subjects they had not identified as 'important'. Wellbeing measures did not yield statistical differences. Stage 2 findings suggested students with strengths in EBacc subjects felt cleverer, as their skills were respected by peers and appreciated by teachers; and EBacc subjects were perceived as more 'academic' than non-EBacc subjects. Students also discussed having fewer opportunities to progress in and receive positive feedback for skills in non-EBacc subjects, due to timetabling and the EBacc's academic value. As previous literature indicates SEB relate to education and employment opportunities, the current research suggests potential future educational and social inequalities for students with strengths in non-EBacc subjects.

University of East London

Professional Doctorate in Educational and Child Psychology

Assessment Proforma

Please read the following candidate's declaration, and tick the adjacent boxes to confirm that you have complied with each statement. Then complete the cover sheet below in full. Failing to do will result in your assessment being returned to you for resubmission. Please raise any queries regarding this form with your Academic and Professional tutor well in advance of submission.

CANDIDATE'S DECLARATION

I confirm that no part of this submitted material, except where clearly quoted and referenced, has been copied from material belonging to any other person (e.g., from a book, article, lecture handout, web site, or another candidate). I am aware that it is a breach of university regulations to copy the work of another without clear acknowledgement, and that attempting to do so will render me liable to disciplinary proceedings.	Tick to confirm ✓
I confirm that the word count cited below is accurate, and within the limit allowed for this type of assessment. The count includes all words in the body of text, diagrams, tables and footnotes (though not the contents page, references or appendices). I have presented the assessed work with page margins, line spacing, font size and page numbers as required in the relevant section of the handbook and module guide.	Tick to confirm ✓

COVER SHEET

UEL STUDENT NUMBER	1622747
MODULE CODE	Thesis
WORK TO BE ASSESSED (e.g., Year 1 Essay, Practical Report 3, SRR)	Research thesis
SUBMISSION DATE	28.06.2019
WORD COUNT	38,468

Acknowledgements

I would like to thank my Course Directors and Tutors at the University of East London for offering me a place on the Professional Doctorate course; allowing me to train as an Educational Psychologist (EP) in such a supportive and nurturing environment; providing the opportunity to conduct this research, and for granting my approval to do so. I would especially like to thank my research supervisors Dr Miles Thomas and Dr Helena Bunn for their invaluable guidance and advice on my research design and write up, and for their constant support throughout the process.

I would like to thank the schools involved in the research, and each member of staff who made this possible through their helpfulness and co-operation in permitting me to invite their students' participation. I would also like to thank the parents of the students who participated in the research for granting them permission to do so; and the students themselves for their involvement. This project would not have been possible without the students; I thank them for their time, enthusiasm and honesty.

I would also like to thank the County Council for whom I currently work as a Trainee EP, for not only permitting me to conduct the research, but for their continuous support in my becoming a qualified practitioner – for believing in me enough to offer me a job as an Assistant EP before I was granted a place on the Doctorate, and for their valued help throughout the process. I would like to thank my course-mates and fellow Trainee EPs for sharing this journey with me, and for being a constant and vital source of support and motivation.

I would like to thank my friends for their continuous encouragement, especially those who proof-read my work, and those who kindly and regularly housed me during my studies; completing the course would have been so much harder without their generosity, for which I will always be incredibly grateful. I would also like to thank my family, both for their reassurance and for always showing an interest in my research. In particular, I would like to thank my parents, sister and husband, for their kindness and patience with me, their endless offers of help, and their unwavering faith in my capability, not just while writing my thesis but throughout my entire postgraduate education; without you I would not and could not have succeeded.

Table of Contents

List of Tables

List of Figures

List of abbreviations

BPS – British Psychological Society

CLA – Cultural Learning Alliance

COP – Code of Practice

CYP – Children and young people

DfE – Department for Education

EBacc – English Baccalaureate

EEF - The Education Endowment Foundation

EP – Educational Psychologist

FSM – Free school meals

GCSE – General Certificate of Secondary Education

JCQ – Joint Council for Qualifications

KS3 – Key Stage 3

LA – Local Authority

MALS – Myself as a Learner Scale

NFER – National Foundation for Educational Research

NHS – National Health Service

RQ – Research question

SEB – Self efficacy beliefs

SEMH – Social and emotional mental health

SEN – Special Educational Needs

SENCO – Special Educational Needs Co-ordinator

SEND – Special Educational Needs and Disabilities

SES – Social economic status

SLT – Social learning theory

SRL – Self-regulated Learning

TA – Thematic analysis

WEMWBS – Warwick and Edinburgh Mental Wellbeing Scale

1. Introduction

1.1. Background of interest

While studying for my A-levels and asked which subjects I was taking, I generally received the same response to my answers. Although 'English' and 'Psychology' prompted fairly neutral responses, 'Art' and 'Maths' usually incited more pointed reactions. For instance, when revealing that I studied Art at A-level, peers would generally scoff at how that 'wasn't a real subject', and call it a 'doss'; however, when I then mentioned that I was also studying Maths, I would be told that 'that's alright then', as Maths was a 'proper subject'. Although this balance of responses generally left me feeing 'ok' about my subject choices, it always made me think: what about the people who aren't studying Maths? What about the talented, hard-working students in my Art class who are also studying Sculpture and Music? Would people tell them that none of their subjects are 'real'? And if so, how would this make them feel? Anyone who has studied Art past Key Stage 3 will know that it is far from a 'doss', and can take more time and energy than many other curriculum subjects (as I'm sure, do other creative subjects with which I am less familiar). How then, and why, did my peers perceive and treat creative subjects with so much less respect than other subjects, such as Maths and Science?

Although I had been lucky at school in that I was 'good' at a mixture of subjects, I always wondered how it would feel to be a student who was only attaining 'well' in the creative subjects, growing up in an environment wherein these subjects seemed to be generally looked-down on by peers. Even after starting university, this variance in attitudes towards different subjects remained apparent; wherein friends and family studying Undergraduate and even Master's degrees in subjects such as Design and Fine Art, always seemed to have a harder time in 'justifying' their choice of study, than those taking degrees in subjects such as English and Science. This is something which I have reflected on since starting postgraduate study in Psychology – particularly in relation to social learning theory (Bandura, 1997) and ecological systems theory (Bronfenbrenner, 1979) – suggesting that, at least in part, these attitudes may have related to the fact that while I was progressing through secondary

school, English, Maths and Science were always presented as the 'core' subjects, while others were considered more 'extra-curricular'. In the nearly 20 years since then, the UK curriculum and policies around secondary education have changed significantly and frequently, particularly during the last decade; including replacement of A*-G 'grades' with Levels 1-9 in 2017, a shift from modular to linear testing in 2011, and implementation of The English Baccalaureate (EBacc) in 2010.

1.2. The EBacc

The EBacc is a performance measure for schools in England, measuring the achievement of pupils gaining GCSEs in English, mathematics, the sciences, history or geography, and a language. The EBacc was first applied in September 2010, became a requirement for UK schools in 2015, and the Government aim for 75% of pupils to be entered for the EBacc by September 2022. According to the Department for Education (2015), the EBacc is designed to promote a more academic curriculum in schools, encouraging more students to take subjects deemed as 'core'. However, concerns have been raised regarding the potential negative impact of this policy change on the creative subjects not included in the EBacc (House of Lords (HoL), September 2017). Many concerns relate to a decline in GCSE intake of creative subjects; figures show that nationally, the number of GCSE students taking creative subjects dropped by 46,000 2016-2017 (Dawood, 2017). Since the EBacc was introduced in 2010, total entries for GCSE creative subjects have decreased by 238,000 (Cultural Learning Alliance, 2018). This national decrease has also been considered at county-level, through a recent survey of local secondary-schools; in which most respondent schools also reported declining GCSE intake of creative subjects since 2010 (Last, 2017). The survey also reports decreases in funding and resources for creative subjects, decreases in arts staffing, and a teacher perceived 'reduction in the value of creative subjects' (Last, 2017). This concern has been discussed nationally by politicians, high-profile creatives, and teachers (HoL, 2017).

1.3. Psychological theory and current research

Considering social learning (Bandura, 1997) and positive psychology perspectives (Seligman, 2000; to be discussed further), this decrease in the perceived value of

creative subjects, in addition to reductions in funding, resources, staffing and GCSE intake, could mean that students are also aware of these perceptions. Regarding those students for whom creative subjects are a relative strength or interest therefore, this could be problematic, particularly in terms of their wellbeing and self-efficacy beliefs (SEB) (wherein SEB can be understood as a person's beliefs in their capability to perform given tasks successfully (Bandura, 1997). However, although the potential impact of the EBacc is widely discussed and monitored by various sources both nationally and locally (Sterne, 2016), there is little research considering the potential emotional impact of the policy change on students, and/or their views of such; particularly from a psychological perspective. This could be considered a significant area of research for Educational Psychologists regarding the Special Educational Needs and Disabilities (SEND) Code of Practice (COP) (2014), due to its emphasis on including the voice of children and young people (CYP) within research and practice, as well as its increased focus on supporting social and emotional mental health (SEMH). Additionally, since wellbeing and SEB are found to positively predict academic attainment, future educational and career opportunities (Honicke & Broadbent, 2016) – while students with low attainment in EBacc subjects are more likely to be from lower socio-economic backgrounds (Department for Education, 2018) – this area of research could also be considered significant in terms of social-justice, and in promoting social mobility.

The current research therefore aimed to fill a gap in the literature regarding students' perceptions of the EBacc, and aimed to consider the potential psychological impact of such on students' wellbeing and SEB. This mixed-methods study, conducted in two stages, hoped to both explore a previously under-researched area, as well as to offer potential explanations of findings; aiming to provide practical information which can be applied in educational practice, and to ultimately, promote social justice. Further details of the informing literature and theoretical background of the research will be discussed in chapter 2. Details of the methodology will be considered in chapter 3. Research findings will be reported in chapter 4, and discussed further in relation to the informing theory and literature in chapter 5. Chapter 6 will consider the overall study, and aims to draw useful conclusions regarding significant findings from the research.

2. Literature review

This chapter will consider the available literature relevant to the current research. This will firstly include discussing the contextual background of the research (2.1); particularly regarding current Educational policy and the EBacc, and the recent national and local impact on GCSE intake. This chapter will also consider the theoretical background of the current research (2.2), in relation to the potential effect of the current Education system on students' perceptions of subjects' value, the potential psychological impact of this, and the wider social implications. This chapter also discusses findings from a systematic review of relevant research (2.3), and its implications for the current research aims and methodology (2.4).

2.1. Contextual background of the research

As discussed, this section will consider the contextual background of the research, particularly in relation to current Educational policy regarding the EBacc (2.1.1), as well as the national and local implications of such (2.1.2).

2.1.1. The EBacc

The EBacc is a performance measure of UK schools, linked to the General Certificate of Secondary Education (GCSE). The EBacc was first introduced by the UK government in September 2010 and became a requirement for schools in 2015. The EBacc measures the percentage of pupils gaining five or more Level 5-9 (formerly A*-C) GCSE qualifications in English; mathematics; the sciences; history or geography; and a language. The Government aim for 75% of students to be entered for the EBacc by September 2022, and for 90% of students to be entered by 2025. This follows the Government's response to the 'EBacc consultation' last year, wherein their original 2022 target of student entry was reduced from 90% to 75% (Department for Education (DfE), 2017). The EBacc aims to increase the number of students taking 'academic' subjects at GCSE; figures indicate that entries for the EBacc subjects have increased by 5% between 2017 and 2018 (DFE, 2018).

However, as outlined in the previous chapter, concerns have been raised regarding the potential negative impact of this on GCSE intake of creative subjects not included in the EBacc, such as Art, Music, Drama and the Technologies. According to the Cultural Learning Alliance (CLA) and Joint Council for Qualifications (JCQ), entries for GCSE creative subjects have decreased by 238,000 (35%) since the EBacc was introduced in 2010. This decrease, and the national and local responses, will be further discussed in the following section.

2.1.2. National and local implications of the EBacc

GCSE intake of 'creative' subjects has decreased by 35% since implementation of the EBacc in 2010 (CLA; JCQ). Between 2016 and 2017, Design and Technology (DT) and Art suffered the biggest declines, with 19,000 and 7,500 fewer students taking the subjects respectively in 2017 compared with 2016 (Dawood, 2017; Banks, 2017). GCSE intake of DT similarly decreased between 2017 and 2018 by 24%, as did GCSE intake of Music, Drama and Performing Arts; entries for which decreased by 7%, 6% and 41% respectively 2017-2018. This national decrease is similarly reported at county-level through a recent survey by Last (2017); findings indicate a 59% decline in GCSE DT intake, and a 57% decline in GCSE Art intake 2010-2017. According to Last, 40% of respondent schools reported staff reductions in Art and DT since 2010 (which exceeded the national average), that may be contributing to decreases in GCSE intake of such. This has been similarly reflected in a recent national survey conducted by the BBC (2018), involving over 1200 schools (over 40% of UK secondary schools). For instance, of the schools that responded, nine in every 10 said they reduced lesson time, staff and/or facilities in at least one creative arts subject since 2010; increased emphasis on 'core academic subjects', as well as funding pressures, was the most commonly given reason for such.

Similarly, a recent survey by Daubney (2018) suggests that 59% of schools responding to a neutrally worded question highlight the EBacc specifically to be negatively impacting on the provision and uptake of Music. Last (2017) also suggests that most teachers consider the recent decreases in GCSE intake of creative

subjects to be due to such having been "reduced in profile and value" since implementation of the EBacc. This has also been raised in the House of Lords (HoL), suggesting that the EBacc continues a 'Government trend' in devaluing creative subjects (Dawood, 2017). Similarly, 'Bacc for the future' (2017) considers the EBacc to "create an artificial and false hierarchy of subjects", by "excluding creative, artistic and technical subjects from counting towards school accountability measures". This concern has also been raised by a number of high-profile national Arts companies – such as the Royal Shakespeare Company (RSC), the Tate, and the Royal Guildhall of Music – who have contacted the Government regarding recent decreases in GSCE intake of creative subjects, and the impact of the EBacc. For instance, in May 2018, 104 UK artists – including 15 Turner prize winners, such as Lubaina Himid, Susan Philipsz, Richard Wright, and Mark Wallinger – signed a letter published by The Guardian; discussing how GCSE entries to arts subjects have fallen to their lowest level in a decade, and calling on the Government to "reverse its decision to blindly press ahead with the EBacc, regardless of the consultation responses and in the face of overwhelming evidence against the policy" (The Guardian, 2018).

Similarly, in August 2018, over 85 leading figures from the music sector – including Sir Antonio Pappano, Sir Simon Rattle, Nicola Benedetti and Julian Lloyd Webber – wrote to The Times to express concern over the continuing decline in GCSE intake of music, to "urge the Government to reverse its EBacc policy", and to "take action now to keep music in our schools" (The Times, 2018). Additionally, in November 2018, the artistic director of the Royal Albert Hall, Lucy Noble, wrote an open letter to Education Secretary Damian Hinds; commenting on how GCSE intake of creative subjects has decreased by more than a quarter in the past five years (Ofqual, 2018), and suggesting that "study of a creative art subject should be compulsory for GCSE students in England and Wales" (Sky News, 2018). From a local perspective, Last's (2017) survey reports that 78% of respondent schools similarly consider "public perception of the EBacc and/or government messages" to be the most influential reason for the recent reduction in GCSE intake of creative subjects. Similarly, 79% of respondent schools also consider "parent/carers' perceptions of the creative

subjects" to be an influential reason in students' choice of GCSEs, and for the recent decreases in GCSE intake of creative subjects.

According to the researcher's systematic literature review, there is no research into students' perceptions of the EBacc and/or opinions of a potential 'curriculum hierarchy' (to be discussed; Appendix A: literature search criteria and results). However, regarding social learning theory (SLT; Bandura, 1997) and ecological systems theory (EST; Bronfenbrenner, 1979), it could be suggested that some students consider creative subjects to be perceived as less 'valuable' than those included in the EBacc. It could also be suggested that this negative perception of creative subjects, in addition to reduced access, may have a negative psychological impact on students, which in turn could have wider social implications. This will be discussed further in the following section.

2.2. Conceptual and theoretical framework

This section will consider the theoretical background and informing psychological principles of the research, particularly in relation to the discussed contextual background of the research and its potential impact on students; including students' perceptions of subjects' 'value' (section 2.2.1), the potential psychological impact of this (section 2.2.2), and the wider social implications (section 2.2.1).

2.2.1. Student perceptions of subject 'value'

As discussed in the previous section, although research into students' perspectives of the EBacc and the potential 'curriculum hierarchy' is limited (Dawood, 2017), recent surveys suggest that both teachers and parents consider creative non-EBacc subjects to be perceived as less 'valuable' than EBacc subjects. As students generally have regular contact with their teachers and/or parents during their secondary education, it can be suggested that in relation to SLT and EST, students may be aware of, and hence influenced by, the views of their teachers and/or parents. This may be particularly relevant regarding the formation of the students' own perceptions of

subjects' value. For instance, SLT emphasises the significant influence of social-context in developing individuals' knowledge and perspectives (Bandura, 1997). Similarly, EST suggests that individuals' development is a product of their interactions with their environment; wherein Bronfenbrenner (1979) considers one's environment in terms of 'microsystems', one's immediate environment such as close family, friends or classmates; 'mesosystems', encompassing connections between microsystems, such as schools; 'exo-systems', one's indirect environment, such as that of family members; 'macrosystems', social and cultural values such as political values; and 'chronosystems', changes over time, such as changes to educational policy.

In this sense, students' perspectives of the EBacc and 'curriculum hierarchy' may be significantly influenced by their family, classmates, school and political climate; which according to the previously discussed literature and national/local concerns regarding the perceived 'decreased value' of creative subjects, could imply that students may not only be aware of these perceptions, but hold similar perceptions themselves. Furthermore, regarding positive psychology (Seligman, 2000), it could be suggested that students who either hold or are aware of these perceptions may be impacted psychologically, particularly in relation to their wellbeing and SEB. For instance, Seligman (2000) suggests that one's emotional wellbeing, self-esteem and SEB are significantly improved by having opportunities to recognise and develop individual strengths, and in having these strengths 'valued'. Therefore, students with strengths in EBacc subjects – which have not suffered the same decreases in funding as creative subjects, and have more frequent timetabled lessons – may develop greater wellbeing and/or SEB than students with strengths in creative subjects, due to having more opportunities to develop their individual skills, and being potentially aware of the 'value' of EBacc subjects compared others in the curriculum. This potential psychological impact on students will be considered further in the following section.

2.2.2. Potential psychological impact on students

As discussed in terms of SLT and EST, perceptions of subjects' value could have a negative psychological impact on students with strengths and/or interests in non-EBacc subjects; particularly regarding their wellbeing and SEB. Therefore, it could be important to not only explore students' perceptions of subjects' value, but also the potential psychological impact of this. The theoretical and psychological underpinnings of wellbeing and SEB will therefore, be considered.

2.2.2.1. Theories of wellbeing

According to the National Health Service (NHS) (2018), mental wellbeing can be understood as "feeling good about ourselves and the world around us", and "functioning well". While there are various methods by which one may improve their wellbeing – including by being active, developing positive relationships, giving to others and learning (NHS, 2018) – Seligman (2000) and theories of positive psychology suggest that developing one's strengths, engaging in one's personal interests, and feeling valued, can have significant benefits to one's mental health. In terms of further understanding these theories of wellbeing, positive psychology can be defined as the study of positive human functioning (Norrish, 2009); wherein outcomes of practice focus on promoting life satisfaction, happiness, and human thriving/flourishing (Compton, 2012). In this sense, positive psychology can be considered comparable to early humanism, constructivism and spiritual studies (Pargament, 2005); however, the term 'positive psychology' itself was not introduced until 1998 (Seligman, 2000). According to Seligman (2000), positive psychology aims to "catalyse a change" in the focus of psychology, moving away from its frequent "preoccupation" with "repairing the worst things in life", to also "building positive qualities". In other words, positive psychology can be considered a shift away from the more traditional 'deficit' model of psychology – focusing on identifying and addressing one's weaknesses and/or difficulties – to a more 'strengths-based' model (Kelly, 2008).

In relation to the current research therefore, positive psychology advances the notion that developing one's strengths can be more effective in preventing/treating psychological difficulties and in improving mental wellbeing, than 'repairing' one's deficits (Cowen, 2002). In this sense, if students have more opportunities to engage in EBacc subjects than non-EBacc subjects due to the reduction in timetabling, staffing and resourcing of creative subjects, those with strengths and/or interests in EBacc subjects may develop greater wellbeing than students with strengths in non-EBacc subjects. Additionally, reduced access to non-EBacc subjects may have the potential to negatively affect students' wellbeing overall, due to the positive relationship found between engaging in creative activities and positive mental wellbeing (Clarke, 2018). This may be considered particularly problematic, as recent data suggests that the number of children and young people (CYP) with SEMH needs has increased over recent years, as has 'waiting time' for specialist support (NHS, 2018). For instance, treatment and referral data indicate an increased demand for specialist mental health interventions over the past decade (Sarginson, 2017; Royal College of Emergency Medicine 2017), while a recent survey by the NHS (2018) suggests that 'emotional disorders' in CYP aged five to 15 years have increased from 3.9% in 2004, to 5.8% by 2017. In terms of the current research and focus on secondary school students, approximately one in seven (14.4%) 12-16 year olds were identified with a 'mental disorder' in 2017 (NHS, 2018).

Considering the EP role in relation to SEMH, amendments to the Special Educational Needs and Disabilities (SEND) Code of Practice (COP) (2014) place an increased emphasis on the need for professionals to support CYP's SEMH and wellbeing. Furthermore, wellbeing and positive mental health are often found to relate to SEB, which are widely considered a positive predictor of academic attainment, future educational opportunities, and career prospects (Honicke et al., 2016). In this sense, it may again be considered useful to explore how perceptions of subjects' value could impact on students' SEB specifically. This will be discussed in the following section, in relation to the psychological and theoretical background of self-efficacy.

2.2.2.2. Theories of self-efficacy beliefs

According to Bandura (1997) self-efficacy beliefs (SEB) can be defined as an individual's judgement of their capabilities to organize and execute courses of action required to achieve desired outcomes. Bandura (1977) suggests there are four main 'sources' of SEB: 'mastery experiences'; 'social persuasions'; 'vicarious experiences'; and 'physiological states'. For instance, mastery experiences refer to having a 'direct' experience of success; wherein Bandura (1977) suggests that witnessing such success and improvement in one's skills can improve SEB, while failure in such can undermine one's SEB. Similarly, vicarious experiences refer to our observations of others around us; according to Bandura (1977), witnessing the success of those similar to one's self can increase one's belief in their own abilities to do succeed, and therefore, increase SEB. Social persuasions refer to the 'social messages' about one's skills received from influential people in one's life – such as parents, teachers and peers – which Bandura (1977) suggests either strengthen or lessen one's belief in their capabilities. Finally, Bandura (1977) suggests that physiological states can affect one's SEB; wherein negative emotional and physiological states such as depression, stress, and anxiety can reduce one's confidence in their capabilities, whereas positive emotions (such as positive wellbeing), can improve one's confidence in their capabilities, and hence improve their SEB.

In this sense, students with strengths and/or interests in non-EBacc subjects may be at risk of developing lower SEB than students with strengths and/or interests in EBacc subjects; from having fewer opportunities for mastery and vicarious experiences – due to reduced timetabling of the subjects – fewer positive social messages – due to the EBacc and teacher/parent perceptions of subject value – and fewer opportunities to develop positive physiological/emotional states – due to the potential for these students to have lower emotional wellbeing, as discussed in the previous section. Developing low SEB may be additionally problematic, as SEB are found to have a significant positive relationship with academic attainment. For instance, within an academic context, SEB are frequently referred to as Academic

SEB, which defines learner judgements about their ability to successfully attain academic goals (Elias, Mahyuddin, & Pihie, 2004). According to a meta-analysis of studies published by Honicke et al. (2016), literature highlights the importance of academic SEB to learning and academic performance; including in Early Years settings (Joet, 2011), secondary schools (Alivernini, 2011), and universities (Robbins, Lauver, Le, David, & Langley, 2004). SEB have consistently been shown to correlate with academic performance, wherein meta-analytic studies report moderate to large effect sizes (Richardson, Bond & Abraham, 2012; Robbins et al., 2004); although, caution should be taken when interpreting correlational results, regarding direction of causality. A meta-analysis by Richardson et al. (2012) also found SEB account for 9% of the variance in the overall Grade Point Average for University students, after controlling for differences in social-economic status (SES).

SEB are also considered to have an integral role in 'self-regulated learning' (SRL), which in itself is a significant predictor of academic performance (Caprara, 2011); wherein SRL is defined as "the self-directive process by which learners transform their mental abilities into academic skills" (Zimmerman, 2002; p 65). For instance, Caprara (2004) finds that perceived self-efficacy predicts both the ability to regulate one's own learning, as well as academic performance, in Junior High schools, while results from a later study indicate that – after controlling for variations in SES – high levels of perceived self-efficacy for SRL at the age of 12 significantly relate to higher high-school grades (Caprara, 2008). In this sense, SEB may be considered particularly significant in relation to YPs' future educational and employment opportunities, and hence their future quality of life. Therefore, it could be extremely problematic for students to develop low SEB at school; which as previously discussed, may be considered more likely for those with strengths in non-EBacc subjects. Furthermore, as research suggests that YP from families of lower SES are more likely to have lower attainment in subjects such as English, maths and Science (Banerjee, 2016), all of which are EBacc subjects, this could mean that students who have relative strengths in non-EBacc subjects and/or difficulties in EBacc subjects may likely have lower SES (DfE, 2018). In this sense, the potential psychological impact of the EBacc could have additional social implications, particularly regarding social justice. These will be considered in the following section.

2.2.3. Wider social implications

2.2.3.1. Attainment in EBacc subjects

As discussed above, various research suggests that CYP from families with lower SES generally have lower academic attainment than CYP with higher SES, particularly in subjects such as English, Maths and Science (Banerjee, 2016). For instance, findings by Wood (2003) suggest that family income is a dependable indicator in the prediction levels of student performance, while Curtis (2005) similarly reports a significant correlation between socioeconomic factors of American high school students, and average student performance. According to a systematic review conducted by Banerjee (2016), Hanson (2011) identifies 'neighbourhood economic hardship' as a significant predictor of children's lower attainment in Maths specifically (N = 1006, US). Similarly, in a cross-national study using 'Programme for International Student Assessment' (PISA) data – a triennial international survey which evaluates worldwide education systems by "testing the skills and knowledge of 15-year-old students" in 72 different countries – Nonoyama (2005) finds family SES to have a significant relation to student academic achievement in Maths, Science and reading. Additionally and more recently, the Organisation for Economic Co-operation and Development (OECD) (2016) reports that PISA data indicates family, regional and social factors to be associated with students' differential attainment in Maths and Science. This supports findings from previous research conducted by Agirdag (2012) (N = 2845, Belgium), Rouse (2011) and Strutchens (2000); suggesting that higher SES is associated with higher attainment on various measures of mathematics achievement.

In terms of the attainment of UK students specifically in these subjects, data similarly indicates that YP from lower socio-economic backgrounds have lower attainment in English, Maths and Science than other students (DfE, 2015; 2018). For instance, according to the National Foundation for Educational Research (NFER), in 2015, only 36.5% of 'disadvantaged' students achieved five A*-C GCSEs including English and Maths, compared with 64% of all other pupils (DfE, 2015). This difference in student attainment between socio-economic groups was similarly

apparent in 2016; wherein data from the DfE indicates that across all ethnic groups, students eligible for free school meals (FSM) were still less likely to achieve grades A*-C in English and Maths GCSE than those who were not eligible. For instance, 39% of students eligible for FSM achieved grades A*-C in English and Maths, compared to 67% of those not eligible (DfE, 2016). The Education Endowment Foundation (EEF) (2017) similarly suggests that the 'widest attainment gaps' between different groups of UK students in 2016 were for 'disadvantage' and FSM, in relation to the percentage of students reaching the 'expected' standard in reading, writing and Maths. Additionally, the EEF (2018) finds that in 2017, by the age of 19, over 164,000 students (30% of the cohort) had "still not achieved a good standard of recognised English and Maths"; including 50.2% of all students eligible for FSM.

This is also reflected in more recent data from the DfE (2018), indicating that in 2017, FSM eligible students had lower attainment than that of other students for "all of the key performance measures at Key Stage 4". More specifically in 2017, attainment of Level 4 or above in English and Maths GCSEs was 40.4% for students eligible for FSM, and 67.4% for non-FSM students (DfE, 2018). Furthermore, since English and Maths are both EBacc subjects, this apparent trend for YP with lower SES to attain lower in these two subjects may also mean they are less likely to achieve the overall EBacc – gaining five or more Level 5-9 GCSEs in the EBacc subjects. This is indicated in data from the DfE (2018), showing that 10.3% of students eligible for FSM achieved the EBacc in 2017, compared with 25.8% of all other students. Since research suggests that achieving the EBacc can increase future educational and career opportunities (DfE, 2017), this could also therefore, be considered an issue of social justice. For instance, if YP from families with lower SES are less likely to achieve the EBacc than students from families of higher SES, this may negatively impact on their future quality of life, and inhibit social mobility.

2.2.3.2. School exclusions

Following on from above, Teach First (2018) also indicates that 10.7% of students eligible for FSM were either temporarily or permanently excluded from school (DfE, 2018). This is similarly reflected in reports by the EEF (2018), indicating that in

2017, students eligible for FSM had a permanent exclusion rate of 0.28%, and a fixed-term exclusion rate of 12.54%; this is approximately four times higher than the permanent and fixed-term exclusion rates of non-FSM students in 2017, which was 0.07% and 3.5% respectively. Students with special educational needs (SEN) also had a higher exclusion rate than non-SEN students, wherein students with SEN support had a permanent exclusion rate of 0.35%; nearly six times higher than the rate for students with no SEN (0.06%; EEF, 2018). Overall, the DfE (2018) indicates that over half of all permanent (57.2%) and fixed-term (52.6%) exclusions in 2017 occurred in Year 9 or above. More specifically, a quarter of all permanent exclusions in 2017 were for pupils aged 14, with that age group also having the highest rate of fixed-term exclusions (DfE, 2018). Consequently, secondary schools accounted for more than four in every five permanent and fixed-term exclusions in 2017, with "permanent disruptive behavior" being the most frequently named reason for such. Furthermore, the DfE (2018) suggests that the number of CYP excluded from schools in England increased between 2016 and 2017 by approximately 1000.

Regarding the potential longer-term impact of school exclusions, the EEF (2018) indicates that CYP who have been excluded are less likely to progress to higher qualification levels (such as A-levels, degrees or apprenticeships), and are therefore, more limited in terms of their job and career opportunities than those who have not been excluded. Additionally, since the EEF (2018) suggests that academic attainment has a wider positive impact for both individuals and society – including reduced criminal activity and better health outcomes – CYP who have been excluded may be less likely to achieve these benefits. Since as previously discussed, excluded CYP are more likely to be from families with low SES and/or have SEN, this could therefore, be considered extremely problematic to social justice. Additionally, since CYP with low SES are also more likely to have lower attainment in EBacc subjects (DfE, 2018), this suggests that many excluded students may similarly have difficulties in these subjects. In this sense, it could be considered that CYP with difficulties in EBacc subjects and/or strengths in non-EBacc subjects may already be at a social disadvantage, in addition to the potential negative implications of such for their wellbeing and SEB.

2.2.3.3. Mental health

Students with strengths in non-EBacc subjects may also be at a disadvantage in terms of not having equal opportunities to develop their strengths during the school day – due to reduction in timetabling, staffing and resources of these subjects – particularly in comparison to students with strengths in EBacc subjects. Additionally, those students with strengths in non-EBacc subjects are also from lower socio-economic backgrounds may be at a further disadvantage, since the CLA (2016) suggests that schools with a high proportion of FSM are more than twice as likely to withdraw creative subjects from the curriculum than more affluent schools. Additionally, Cambridge Assessment (Carroll, 2017) indicates that 26.7% of students living in areas of 'high deprivation' took seven or fewer GCSEs in 2016, compared with 11.8% of students living in areas of 'low deprivation' (Carroll, 2017). As the EBacc consists of seven subjects – none of which are arts subjects – if it had been mandatory to study the EBacc in 2016, these students would not have been able to take an arts subject at GCSE, even if offered by their school (Hill, Arts Professional, 2018). In this sense, if the Government achieves its aim for 90% of students to be entered for the EBacc by September 2025 (as discussed previously in the chapter), CYP living in the country's most deprived areas will be the most likely to miss out on studying creative subjects.

Furthermore, since engagement in the arts has been found to improve wellbeing and SEMH as discussed (Clarke, 2018), this could mean that the SEMH of CYP attending less affluent schools and/or living in areas of 'deprivation' could be particularly negatively affected. This has been reflected in recent research by the NHS (2018), indicating that in 2017, mental disorders were more common in CYP living in lower income households. More specifically, disorder rates were higher in CYP whose parents were in receipt of low-income benefits; additionally, emotional disorders were more prevalent among CYP living in households with the lowest household income (9.0%), compared to CYP living in households with the highest household income (4.1%) (NHS, 2018).

2.2.3.4 Social implications summary

Overall, it could be suggested that the contextual and theoretical background of the research – regarding the EBacc, students' perceptions of subjects' value, and the potential psychological impact of this – may have significant wider implications, in relation to social justice and social mobility. In this sense, there may be additional value in exploring students' perceptions of subjects' value – in relation to their individual strengths in EBacc subjects – and the potential psychological impact of this on their wellbeing and/or SEB. The following section therefore includes results from a systematic literature review regarding these areas of research. It aims to familiarise the researcher with the existing literature and any gaps, and to provide an opportunity to reflect on previously applied methodologies, to inform development of the current research.

2.3. Previous relevant research

This systematic literature review sought to identify research relating to students' perceptions of the current UK curriculum and the EBacc, and the effects of these perceptions on their wellbeing and/or SEB. A comprehensive search was completed on the following online databases: EBSCO, Education Research Complete, PsychInfo, PsychArticles, Child and Adolescent studies, Science Direct, Sage, Taylor & Francis online, and Google Scholar (Appendix A). Initial search filters varied in relation to each area of research, and are specified in following sections. Articles retrieved from Google search were also considered, such as news articles, as it was deemed relevant regarding the implications of the EBacc and public responses to such. References of retrieved papers were also considered for relevant sources.

Although the EBacc and its potential impact on the decline of creative subjects in secondary-schools is widely discussed (HoL, 2017), the literature review suggests there is minimal research considering students' perspectives of the current curriculum and/or its potential emotional impact; particularly from psychological perspectives. Therefore, the literature search was extended to include research which considers students' perspectives of the curriculum and/or school ethos generally, and

its potential impact on wellbeing and SEB. As the EBacc affects secondary-schools, the literature review focused on research involving 11-17-year olds, aiming to increase its relevance to the current research. Searches were conducted at the time of completing the initial research proposal (December 2017), and repeated a year later (December 2018), aiming to ensure relevance and currency of results.

2.3.1. Student perceptions of the EBacc

Using the discussed online databases to consider research into students' perceptions of the EBacc, initial search filters were set to 'EBacc' and 'student perceptions'. This produced 0 results in both 2017 and 2018. As discussed, the search was therefore extended to consider students' perceptions of the overall curriculum; wherein initial filters were set to 'students', 'perceptions' and 'curriculum'. Results were then filtered by 'subject major headings' and inclusion/exclusion criteria – regarding age of participants and date of research – to narrow the search results (Appendix A). Although this search did produce some results, most was conducted in America and Eastern Europe, so may not be considered entirely generalisable to the UK. Additionally, most research considered students' perceptions of specific curriculums such as the 'spiral curriculum'; again, reducing its potential relevance to the current research and students' perceptions of the EBacc. Considering the available literature, research suggests that secondary-school students value active approaches to learning, having choices, and studying at their own pace (Coelho, 2015; Bishop, 2005; Dalton 2004). Additionally, inviting students into 'dialogue about their learning' may positively affect their perspectives of the curriculum (Coelho, 2015).

Regarding the methodologies of the available literature, most research into students' perceptions of the curriculum applied use of surveys and/or questionnaires. This included a UK study conducted by Wakefield (2009), the purpose being to: replicate and extend an earlier national survey (Schools Council 1968); to investigate students' views concerning how they would reconstruct the curriculum; and to obtain students' suggestions as to how existing teaching of specific subjects could be improved. Participants included 60 male and female Year 8 and Year 9 students, attending a West Midlands city comprehensive school. Students were asked to

complete three questionnaires respective to the aims of the research, during Spring term of 2006. In Questionnaire 1, students' views were elicited using two three-point rating scales regarding 'usefulness' and 'interest' of subjects; the usefulness ratings scale being Useful v Neither v Useless; and the interests rating scale being Interesting v Neither v Boring. In Questionnaire 2 ('My ideas for a better curriculum'), students completed a blank timetable corresponding to the five daily session structure of the school timetable. In Questionnaire 3 ('Your views on improving the Curriculum'), students were requested to suggest ways in which (a) the school and staff could improve the teaching of each subject, and (b) what actions the student could take to improve their own learning of each subject. Results from and approaches to Questionnaire 1 will be considered in further detail, due to being most relevant to the current research.

According to Wakefield's (2009) Questionnaire 1, five subjects – English, Maths, Science, Information Computer Technology (ICT) and Physical Education (PE) – were identified as more useful than others. The five subjects receiving the highest ratings for 'interestingness' were PE, DT, Art, Music and ICT. Although these findings are interesting, and use of scaling in the questionnaires allowed for objective quantitative analysis of results (Stiles, 1999), it could be suggested that use of such 'closed-questions' may have limited the detail of information which students were able to share. In this sense, use of 'open-ended questions' and/or interviews may have provided opportunities to gather richer data from students regarding their perceptions of the subjects. Additionally, the study does not attempt to further explore the potential reasons for the students identifying certain subjects as more 'useful' or 'interesting' than others, which could be considered valuable in terms of further understanding the results. Furthermore, although the research involves a good number of participants in terms of effective quantitative analysis (N>30; Field, 2009), all students involved in the study were sourced from the same school, and identified by their teachers for participation. In this sense, the findings although interesting, may not be considered generalisable to other schools, either locally or nationally. Additionally, in terms of the focus of the current research, this study was conducted in 2006 (four years before the EBacc); meaning findings may have less

relevance to the current educational climate, suggesting a gap in the current literature.

2.3.2. Students' wellbeing

Using the discussed online databases to consider the potential impact of the EBacc on students' wellbeing, initial search filters were set to 'EBacc' and 'student wellbeing'. This produced 0 results in December 2017, and 1 result in December 2018 (to be discussed). The search was therefore extended to consider the potential impact of the overall curriculum on students' wellbeing; initial filters were set to 'students', 'wellbeing', and 'curriculum'. As results were also fairly limited, the search was further extended to consider general influencers of student wellbeing; initial filters set to 'students', 'wellbeing', 'contributing factors', 'protective factors' and 'influencing factors'. As this provided 327 articles, results were narrowed to focus on school environment; classroom-settings; protective factors; and other similar search-terms. Inclusion/exclusion criteria were also applied, again regarding age of participants and date of research (Appendix A). Most of the research explored how the curriculum could be used to support students' wellbeing *in* school/through the curriculum, rather than how school/the curriculum could be impacting *on* students' wellbeing. Additionally, much of the research was conducted in other countries such as Australia and America, so may not be considered generalisable to the UK. Considering the available literature, Shean (2015) – using semi-structured interviews (N=23, Australia) – suggests self-worth is a key protective process contributing to wellbeing; wherein self-worth is generated through unconditional relationships, boundaries, self-efficacy, existence, and purpose. Other research similarly highlights the importance of self-esteem in developing wellbeing (Renshaw, 2015), as well as positive relationships (Noble, 2012), social and physical factors (Meltzer, 2010).

The repeated literature review search in December 2018 produced one study from the initial search criteria of 'EBacc' and 'student wellbeing'. This research was conducted by Clarke and published in June 2018. It aimed to explore the relationship between adolescents' wellbeing and engagement in the arts, as well as links between

individual playfulness and wellbeing in the school context. The study involved 275 Year 7 and Year 10 students, who completed a battery of questionnaires; combining two existing measurements of students' subjective wellbeing (McLellan, 2015) and individual playfulness (Barnett, 2007), and two researcher-developed measurements of pupils' engagement in performing arts (PA), and perceived opportunities for playfulness in school. Mann-Whitney tests indicated that older pupils who engaged in PA had significantly higher subjective wellbeing and individual playfulness than their counterparts. This study may be considered to have numerous strengths, including its large sample size appropriate for Mann Whitney testing (Field, 2009). The use of pre-existing measures of wellbeing and playfulness may also be advantageous, as this removes the potential for researcher-biases such as 'question-order' and/or 'leading-question' bias (Dodou, 2014). Additionally, using pre-existing measures of wellbeing and playfulness may also improve the reliability and validity of research findings, due to the reliability and validity of the measures having been thoroughly tested and certified.

In this sense, using researcher-developed measurements of engagement in PA and perceived opportunities for playfulness in school may be considered to reduce the reliability and validity of findings, due to risk of the data collection methods being influenced by the researcher's aims and/or objectives (Dodou, 2014). Therefore, the results could require replication with a larger and more varied sample to validate findings, and to ensure the psychometric properties of the measures. Additionally, measures such as these which include number rating scales only, may limit the quality of data collected from students. In this sense, using a combination of scaled and 'open-ended' questions may provide richer information and interpretation of findings. Furthermore, although the study considers the perspectives of students which is extremely valuable, rating scales do not provide an opportunity for the 'voice' of CYP to be as fully explored as alternative methods of data collection, such as interviews. In terms of generalisability of findings, participants involved in the study all attended one school in North West England, again, meaning that findings may not be generalisable to other schools in the area and/or nationally. In relation to the focus of the current research, although the study explores the relationship between students' *engagement* in the Arts and their wellbeing, it does not explore the

relationship between the students' *perceptions* of the subjects' value and their wellbeing.

Similarly, an additional study found during the repeated literature search – a three-year longitudinal study of 30 schools, involving a survey of Key Stage 4 and 5 students (Thomson, 2018) – aimed to explore students' *participation* in arts and cultural activities, rather than their perceptions of the subjects' value, and/or its potential impact on their wellbeing. In this sense, it can be suggested that there is a gap in the current literature, regarding the potential impact of the current UK curriculum on students' wellbeing.

2.3.3. Students' self-efficacy beliefs

Considering the potential impact of the EBacc on students' SEB, initial search filters were set to 'EBacc' and 'student self-efficacy beliefs'. This produced 0 results in 2017 and 2018. The search was therefore extended to consider the potential impact of the overall curriculum on students' SEB, setting initial filters to 'students', 'self-efficacy' and 'curriculum'. Due to limited results, the search was further extended to consider the general influencers of student SEB; setting initial filters to 'students', 'self-efficacy', 'contributing factors', 'reasons' and 'causes'. Results were narrowed to focus on student attitudes, high school, academic self-concept, and other similar search-terms, and inclusion/exclusion criteria were applied (Appendix A). Although most research considered SEB in specific subjects such as Maths and Science, results suggested that SEB generally relate to mastery goal-orientation – learning and mastering new skills – intrinsic motivation – wanting to improve due to internal motivations rather than external rewards – and self-satisfaction (Bong, 2003). Additionally, the literature suggests that students may be at risk of developing negative academic self-concepts (Barber, 2011; Kauder, 2009) and low-academic self-efficacy (Dole, 2001; Siegle, 2002) if they do not experience these feelings of 'mastery'. Methods used to assess students' SEB mostly involved self-reports. Regarding assessment of academic SEB, the researcher was familiar with the 'Myself as a Learner Scale' (MALS) (Burden, 1998) from EP practice. Therefore, an additional search was completed, setting filters at 'students' and 'MALS'. Results

were narrowed to focus on secondary education and the curriculum, filtering by 'subject major heading' and inclusion/exclusion criteria (Appendix A).

This search resulted in two studies; Warhurst (2012) and Norgate (2013). As Warhurst (2012) focused on students attending resourced provision for specific learning difficulties, this study was considered less relevant to the current research and its focus on the general curriculum. Norgate's (2013) longitudinal study aimed to consider changes in students' academic SEB between Year 6 and Year 10, regarding gender and attainment. The study involved students from three secondary schools, and was conducted in three parts. Part 1 looked at changes in academic self-perception between primary school and the first year at secondary school; 229 pupils completed the MALS in Year 6 and Year 7. Part 2 looked at changes in academic self-perception across the second year at secondary school, and involved 380 students completing the questionnaires in Year 7 and Year 8. Part 3 looked at changes in academic self-perception between Years 7 and 10, wherein data was matched for 73 students between Years 7 and 10. A three-way mixed analysis of variance (ANOVA) was used to examine results; suggesting a significant drop in MALS scores between Year 6 and 7, and for girls' scores to decrease significantly more than boys'. Results also indicated that higher attaining pupils (as measured by KS2 levels in English, Maths and Science) had higher MALS scores. However, for Science this difference in MALS scores between higher and lower attaining groups did not emerge until Years 9 and 10; potential reasons for which Norgate (2013) leaves open.

In terms of the strengths of this study, again it can be considered that using pre-existing measures of SEB may improve validity and reliability of findings; due to both reducing the risk for researcher-bias in data collection, and the validity and reliability of the measures having been extensively tested (Dodou, 2014). Additionally, the study involved a large number of participants from three different schools, which may be considered to improve generalisability of findings; particularly in comparison to studies which involve participants from one school only. However, again the use of scaling may be seen to produce data which is limited

in terms of its richness of information, and does not facilitate the 'voice' of CYP. Additionally, although the study reports some interesting results, it does not attempt to explain such, or explore the potential mechanisms behind significant findings. This may reduce the usefulness of results in terms of practical application of such, for improving CYP's SEB. Furthermore, although the study considers the potential relationship between students' attainment and their SEB, this has already been explored in various previous research as discussed. Additionally, the study only considers this relationship in terms of three subjects (English, Maths and Science), without justification. Therefore, it can be considered that there is a gap in the current literature in relation to considering the potential psychological impact of the EBacc and students' *perceptions* of such, particularly in relation to their SEB.

2.4. Implications for current research

Overall, it can be suggested that although the EBacc and its relation to perceptions of subjects' 'value' have been widely discussed both nationally and locally – wherein non-EBacc subjects are considered to have decreased in 'profile' and 'value' (Dawood, 2017) – there is a gap in the current literature regarding *students*' perceptions of such. In relation to psychological theory however (SLT; EST), it can be suggested that students may similarly perceive non-EBacc subjects as less valuable than EBacc subjects. In terms of positive psychology (Seligman, 2000) and theories of SEB (Bandura, 1997), this may have psychological implications for students' wellbeing and SEB, wherein those with strengths in EBacc subjects may develop greater wellbeing and SEB than those with strengths in non-EBacc subjects. In terms of the current literature, systematic searches suggest that there is also a gap in considering students' wellbeing and/or SEB in relation to their perceptions of subjects' value. Additionally, since students with difficulties in EBacc subjects and/or strengths in non-EBacc subjects are often from lower socio-economic backgrounds (EEF, 2018) – while wellbeing and SEB are considered positive predictors of academic attainment, future educational and career opportunities (Honicke et al., 2016) – this may be problematic for social justice. The purpose of the current research, therefore, was not only exploratory to fill a gap in the literature,

but also emancipatory, in its consideration of social justice and aim to promote social mobility.

In order to achieve its aims and purpose as effectively as possible, strengths and limitations of the previously discussed research were reflected upon in designing the current research. For instance, in terms of generalisability of findings, the current research aimed to involve students from multiple schools, rather than only one. Regarding the use of pre-existing measures in previous research and the advantages to validity and reliability of findings – regarding reduced risk of researcher-bias (Dodou, 2014) – the current research similarly used pre-existing measurements of wellbeing and SEB. In relation to the discussed limitations of 'scaled' measurements and/or 'closed-questions', the current research also used 'open' questions, aiming to gather rich data from the students. Additionally, in terms of the potential limitations of not seeking to 'explain' significant findings, the research was conducted in two 'exploratory' and 'explanatory' stages. For instance, while stage 1 was exploratory – considering students' perceptions of subjects' value, their wellbeing and SEB – stage 2 was explanatory – aiming to expand on and explain stage 1 findings though conducting interviews with the students. Furthermore, use of interviews aimed to gather further rich data, and to more fully include the 'voice' of CYP in research.

2.5. Chapter summary

This chapter has discussed the available literature relevant to the current research; particularly regarding the contextual and theoretical background of such, and findings from a systematic literature review. Findings indicate that there is a gap in the current literature regarding students' perceptions of the EBacc, and the potential psychological impact of this. Additionally, the theoretical background of the research suggests that students with strengths in non-EBacc subjects may have lower wellbeing and/or SEB; which may not only negatively impact their future lives, but also social mobility. Strengths and limitations of previous research have been reflected on in relation to the design of the current study; particularly regarding gathering 'rich' data, including the 'voice' of CYP, and attempting to 'explain' findings for future application in practice. Overall therefore, the current research

aimed to gather students' perceptions of the current curriculum and subjects' 'value'; explore the reasons for these perceptions; and consider their potential psychological impact on students' SEB and wellbeing. The methodology of the research will be discussed further in the following chapter; regarding specific research questions, methods of data collection and analysis; and ethical considerations.

3. Methodology

This chapter will discuss the methodology of the current research. This will include clarification of the research aims and questions (3.1); reflection on the informing ontological and epistemological frameworks (3.2); the research purpose, design and procedure (3.3 – 3.7); methods of data collection and analysis (3.8); and ethical considerations (3.9).

3.1. Research aims and questions

As discussed in the previous chapter, the purpose of the research was to first fill a gap in the literature; by considering students' perceptions of the current UK curriculum regarding the EBacc, and the potential psychological impact. The research therefore, aimed to gather students' perceptions of subjects' 'value'; explore the reasons for these perceptions; and consider the potential impact of such on students' SEB and wellbeing. As discussed, the research also aimed to adhere to the SEND COP (2014), by including the 'voice' of CYP, and considering their SEMH. Furthermore, the research also aimed to promote social justice, and therefore had an additional emancipatory purpose. For instance, Last (2017) considers parents and teachers may perceive EBacc subjects as more valuable than non-EBacc subjects, which in terms of SLT (Bandura, 1997), suggests that students may have similar perceptions. Additionally, as discussed, research indicates that students from families with lower SES are less likely to have strengths in literacy and Maths, both of which are EBacc subjects (DfE, 2018). Therefore, students with lower SES may be less likely to have academic strengths in subjects perceived as 'high-value', which could put them at risk of developing low SEB and/or wellbeing; both of which can predict academic attainment, educational opportunities, career progression and income (Honicke et al., 2016).

In this sense, if students *were* to consider EBacc subjects as higher in 'value' than non-EBacc subjects, this could negatively affect the future quality of life for those whom EBacc subjects are not a strength. Furthermore, since research suggests that

students with low SES are less likely to have strengths in EBacc subjects (EEF, 2018), such perceptions of subject 'value' may inhibit social mobility and social justice. Additionally, as previously discussed, the decrease in access to the 'Arts' and non-EBacc subjects has been greater in schools with a high proportion of FSM than more affluent schools, meaning that students living in areas of social 'deprivation' may have less opportunities to develop strengths in non-EBacc subjects than others (CLA, 2016). In this sense, it could again be suggested that the current educational system and the EBacc has the potential to create academic and/or social barriers for some CYP, particularly those with lower SES. Therefore, the research aimed to consider the potential effects of the current UK curriculum on social justice, so that any relevant findings could be shared with the appropriate professionals and contribute to rectification of the situation if necessary. The discussed aims and purposes of the research therefore, informed the following 'Research Questions' (RQ) and 'Sub Research Questions' (SRQ); considering students' perceptions of the curriculum and the psychological impact of such, particularly regarding wellbeing and SEB.

RQ 1: What are Year 9 students' perceptions of the 'value' of UK curriculum subjects?

RQ 2: What is the psychological impact of these perceptions on Year 9 students?

> **RQ 2a:** What is the psychological impact of these perceptions on student wellbeing?
>
> > **RQ 2a1**: Does students' wellbeing relate to their individual academic strengths in EBacc subjects?
> >
> > **RQ 2a2:** Does students' wellbeing relate to the perceived 'value' of their individual academic strengths?
>
> **RQ 2b**: What is the psychological impact of these perceptions on student self-efficacy?
>
> > **RQ 2b1:** Does students' self-efficacy relate to their individual academic strengths in EBacc subjects?

RQ 2b2: Does students' self-efficacy relate to the perceived 'value' of their individual academic strengths?

SRQ 1: What do Year 9 students say are the reasons for their perceived 'value' of UK curriculum subjects?

SRQ 2: What do Year 9 students say can impact on their wellbeing and/or self-efficacy in school?

3.2. Theoretical, Ontological and Epistemological frameworks

As the research aimed to explore students' perceptions of subjects' 'value' and the reasons for such, conceptual and theoretical frameworks of EST (Bronfenbrenner, 1979) and SLT (Bandura, 1997) were considered relevant to the current research, and discussed in the previous chapter (2.2.1). As the research also aimed to explore the psychological impact of these perceptions on students' wellbeing and/or SEB, conceptual theories relating to positive psychology (Seligman, 2000) and SEB development (Bandura, 1977) were also discussed (2.2.3). To effectively develop the research methodology further, the researcher's ontological and epistemological beliefs will now be considered (Carson, 2001).

According to Hudson (1988), ontology can be understood as the nature of reality; while epistemology can be understood as "the relationship between the researcher and the reality", or how reality is known (Carson, 2001). Regarding psychology, Carson (2001) suggests there are two dominant ontological and epistemological paradigms: the ontological paradigms of *realism* and *relativism*, respectively relating to *positivist* and *interpretivist* epistemological paradigms. While realism and positivist approaches consider the world as external, and for there to be the existence of one objective reality, relativism and interpretivist approaches instead consider reality to be multiple and relative, and dependent on individuals (Hudson, 1998). In terms of research therefore, while realism and positivist approaches may value replicability and generalisability of findings, relativism and interpretivist approaches instead consider there to be no objective truth, and therefore, do not aim to generalise results (Carson, 2001).

Regarding the ontological and epistemological underpinnings of the current research, the researcher holds the belief that although people's experiences and/or interpretations of events vary, some aspects of the world may be understood as common 'realities'. For instance, regarding school-curriculum, it could be suggested that although different people may have alternate perspectives of such – including policy-makers, teachers, parents and students – there remains a common 'reality' of the defined and applied 'curriculum', including the EBacc. Referring to relevant literature, this consideration of the existence of individually-constructed *and* universally-accepted 'realities' may be understood as *critical realism* (Oltmann, 2012). For instance, according to Oltmann (2012), critical realism acknowledges "an absolute reality, independent of human action", but also challenges the idea that this reality can be observed objectively. In this sense, Danermark (2002) suggests critical realism can be considered as both an ontology and epistemology, as it makes assertions about both the nature of the world, and the way in which the world can be known. This may be considered comparable to the objective reality and existence of 'the curriculum' itself, but the notion that it may be perceived differently between individuals, and hence vary in its potential psychological impact.

According to Danermark (2002), critical realism developed from a critique of realism and positivist approaches, which are considered to have been popular within many of the social sciences since the 1930s. In this sense, in order to more effectively understand critical realism, it may be beneficial to first consider realism and positivist approaches. As a philosophy, positivism suggests that "knowledge stems from human experience" (Collins, 2010, p. 38), and considers the world to comprise of observable and discrete elements/events, which interact in an observable and fixed manner. In terms of research therefore, a study conducted from a positivist perspective would usually involve the researcher remaining independent from the study, and would involve quantifiable observations which can be considered in statistical analysis (Crowther, 2008). In this sense, an entirely deductive approach to research design would most likely be applied, through using pre-existing theories to test and develop hypotheses. Similarly, Wilson (2010) suggests that a researcher applying a positivist approach to a study would have minimal interaction with

participants, would consider both the research and results to be purely objective, and would therefore, assume findings to be factual and generalisable.

There are numerous criticisms of realism and positivist approaches. For instance, it can be suggested that these approaches rely on experience as a valid source of knowledge, while arguably a variety of fundamental concepts, such as time and space, are not based on experience (Dudovskiy, 2016). Additionally, realism assumes all processes are actions of individuals or relationships between individuals; while positivist research findings are only descriptive, and may therefore, lack in-depth insight into certain issues (Dudovskiy, 2016). According to Danermark (2002), it is such criticisms of realism from which critical realism developed; alternatively suggesting that knowing something about the world does not necessarily mean "knowledge is certain", or that "what we believe or think we know" is actually reality. According to Bhaskar (1978), this amalgamation of "what we can know" about the world, compared with what the world "actually is" can be understood as an 'epistemic fallacy'. Regarding the current research therefore, the epistemic fallacy could be understood in terms of individuals' perceptions of the curriculum and subjects' value – and the potential psychological impact of such – compared with the defined and nationally applied parameters of 'the curriculum' and the EBacc. In this sense, critical realism is a relevant philosophical paradigm to the research.

According to Danermark (2002), an advantage of critical realism is that it can be considered a "move away" from the traditionally "dualistic nature" of scientific research (Danermark, 2002). For instance, in more traditional research, quantitative methods have been contrasted with qualitative methods; realism with relativism; universalism with particularism; and positivism with interpretivism (Dudovskiy, 2016). Danermark (2002) suggests that such "polarised" perspectives have caused scientists to instead consider critical realism. This may provide an answer to the "serious dichotomy" of realism and relativism, and the fundamental debate regarding whether a world exists separately from human consciousness. Critical realism alternatively suggests there is a reality which exists independently of human consciousness, *as well as* a dimension which is determined by individuals'

experiences and knowledge about society (Bhaskar, 1978). Regarding the current research, although it aimed to explore students' individual perceptions of 'the curriculum' – which may be considered a socially constructed phenomenon – numerous aspects of the curriculum itself (including as discussed, the parameters of the EBacc), can be considered as 'realities' which exist independently from individuals' perceptions. Equally, it can be suggested that individuals' experiences and understandings of what the EBacc 'means' will be different. In this sense, critical realism can be considered a relevant ontological and epistemological perspective to the current research, and hence appropriate in informing its purpose and design.

3.3. Purpose of the Research

The research was conducted in two stages, wherein in its initial stage, the purpose of the research was exploratory. For instance, stage 1 of the research aimed to explore students' perceptions of the curriculum, their perceptions of subjects' 'value', and the potential psychological impact of such. According to Singh (2007), 'exploratory' research usually examines areas in which little or no previous research has been conducted; as previously discussed, the current literature suggests that there is very little research available regarding students' perspectives of the UK curriculum and/or its psychological impact. The purpose of stage 2 of the research was explanatory. For instance, stage 2 of the research aimed to further investigate and potentially explain stage 1 findings, through further data collection and analysis. This included further consideration of the potential mechanisms underlying students' perceptions of subjects' 'value', and potential explanations of any significant findings relating to students' wellbeing and/or SEB. The overall purpose of the research was emancipatory; to support students' wellbeing and SEB, and to promote social justice. For instance, by exploring and/or explaining the potential psychological impact of the curriculum on students' wellbeing and SEB – which as previously discussed, could include limiting the future opportunities of students with strengths in non-EBacc subjects, who may more likely have low SES – the research hoped to promote social mobility through disseminating any relevant findings.

3.4. Research Design

The design of the research was mixed-methods, using qualitive and quantitative methods of data collection and analysis to answer the RQs. It was considered that mixed-methods may be particularly relevant to critical-realism, due to the consideration of both qualitative and numerical data. The RQs were first considered through concurrent qualitative and quantitative analysis, using data collected from questionnaires and self-reports (stage 1). This was followed by additional qualitative data collection and analysis through semi-structured interviews (stage 2); aiming to further investigate and explain findings from stage 1. In this sense, the current research can be considered as mixed-methods, sequential and explanatory in design; aiming to seek elaboration, enhancement and clarification of quantitative results from stage 1 with qualitative results from stage 2 (Creswell, 2013). Additionally, this design can be considered particularly appropriate for research aiming to promote social-justice (Creswell, 2013) (Figure 3.1).

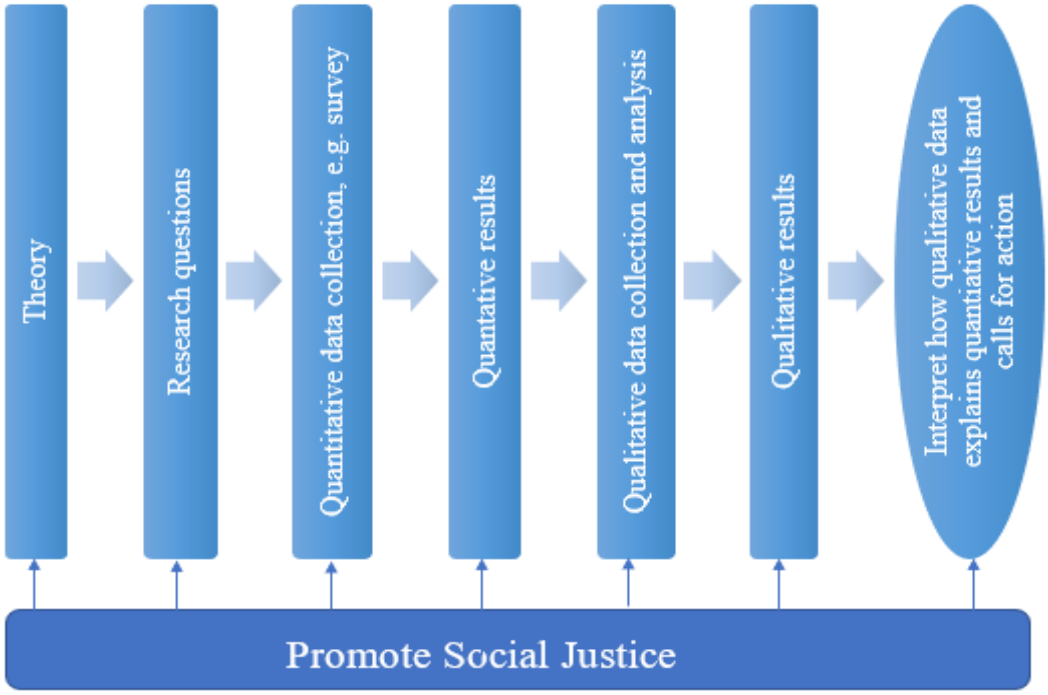


Figure 3.1. Social-justice research design (sequential-explanatory); Creswell, 2013

3.5. Research Participants

Participants consisted of Key Stage 3 (KS3) Year 9 students, currently attending a rural county secondary school. KS3 students were targeted for participation due to being 'pre-GCSE', and hence being enrolled on all curriculum subjects as offered by their school. The research involved Year 9 students specifically, as at the time of data collection (summer term 2017), Year 9s had recently submitted their GCSE options; therefore, it was considered that Year 9 students should be more familiar with the EBacc and its requirements than younger KS3 students, such as Year 7s and/or Year 8s. 'Mixed-ability' Year 9 classes were involved, aiming for participating students to be representative of their school, and to hence improve generalisability of data and results. Participants were recruited by contacting mixed-sex, state and independent secondary-schools within 20 miles of the county capital city, and randomly selecting 2-4 'mixed-ability' Year 9 classes within each participating school. The researcher went into each participating school to explain the research to the selected Year 9 students, and to provide parent consent forms. Students who provided parental consent as well as their own participated in the research (see section 3.9). As participants were of similar age and each attended a mixed-sex, rural county secondary-school (within 20 miles of its capital), this could be considered homogenous sampling. Involving participants from this locality of schools was also beneficial in a pragmatic sense, regarding the time restrictions of the research and data collection process. Additional specific criteria for participants is detailed below (Table 3.1).

Table 3.1.
Participant criteria

Inclusion criteria	Exclusion criteria
Year 9 students (aged 13-14 years)	Aged 12 years and/or under
Male and female	Aged 15 years or/or over
Currently attending a rural county secondary school	Not currently in secondary education in rural county
Functional reading level (to independently access questionnaires and self-reports)	Without full consent for participation

Functional hand-writing/typing skills (to independently complete questionnaires and self-reports)
Full individual, parental and school consent for participation

In stage 1 of the research, participants were asked to complete questionnaires and self-reports, aiming to explore their perceptions of the curriculum, their wellbeing, and their SEB (see section 3.7). Stage 1 therefore, aimed to involve 30+ students (5-10 students from each participating school), to have sufficient data for 'inductive' Thematic Analysis (TA) of questionnaires. The involvement of 30+ participants also aimed to provide sufficient data for non-parametric and parametric statistical analysis of self-reports, depending on 'normality' of data distribution (see section 3.8). A total of 38 Year 9 students were involved in stage 1 of the research. In stage 2 of the research, students were invited to participate in semi-structured interviews, aiming to further explore and explain stage 1 findings (see section 3.7). Stage 2 therefore, aimed to involve 10 students, to have sufficient qualitative data for effective 'deductive' and 'inductive' TA of interviews. These 10 students were selected from stage 1 participants, using random 'matched-group sampling' (see section 3.7); aiming to improve representativeness of data and generalisability of results. A total of nine Year 9 students were involved in stage 2 of the research.

3.6. Data Collection

The research explored the RQs through a mixed-methods design, collecting both qualitative and quantitative data. This included collecting qualitative data from questionnaires in stage 1; quantitative data from self-reports in stage 1; and qualitative data from semi-structured interviews in stage 2. All data was gathered from participating Year 9 students, sampled from nine mixed-sex, rural county secondary-schools within 20 miles of its capital. This included eight state schools and one independent school, totalling 38 participants. Stage 1 of the research gathered both qualitative and quantitative data; asking participants to complete an original questionnaire (Appendix B) – exploring their perceptions of the curriculum (RQ1) – and two standardised self-reports (Appendix C; Appendix D) – measuring

their SEB and wellbeing (RQ2). The questionnaires aimed to gather both qualitative and quantitative data regarding participants' perceptions of the curriculum, by including a combination of open and closed questions. For instance, open-questions such as 'How do you know this?' aimed to provide information for qualitative analysis, while closed-questions such as 'Please rank these subjects from 'most' to 'least' important' aimed to provide 'value-rankings' for use in quantitative analysis (to be discussed).

The self-reports in stage 1 gathered quantitative data only, by providing standardised 'scores' of participants' wellbeing and SEB. Further quantitative data was collected in stage 1 by accessing participants' most recent academic-attainment through school (with student and parent consent); wherein students' attainment in each subject was 'ranked' in order of 'highest' to 'lowest', creating 'attainment-rankings'. Each participant's 'attainment-ranking' was compared with their 'value-ranking', to create 'Groups' for quantitative analysis; wherein participants were 'grouped' based on the number of 'matches' between the top-3 subjects in their value-ranking and the top-3 subjects in their attainment-ranking. Participants were also 'grouped' based on the number of EBacc subjects in the top-3 subjects in their attainment-ranking (see section 3.8). Stage 2 of the research aimed to gather qualitative data only, aiming to further investigate all research questions, and to expand on stage 1 findings. Stage 2 qualitative data was collected by conducting semi-structured interviews with nine students, wherein the interview questions and 'prompts' were informed by stage 1 findings. Interviews were semi-structured to ensure relevance to the RQs and stage 1 findings, whilst also allowing for flexibility in participants' responses.

3.6.1. Reliability and validity considerations

Data was collected through questionnaires, self-reports and semi-structured interviews. A potential issue of validity and/or reliability regarding these data collection measures is social-desirability bias, wherein participants may answer questions in a way which they consider to be perceived favourably by others. In this sense, students' responses to the questionnaires, self-reports and interviews may not be entirely representative of their perspectives, meaning the data collected from such

may not be entirely valid. To reduce the risk of social-desirability bias in stage 1, the researcher sat away from the participants, who were given the questionnaire and self-reports to complete individually and anonymously (including their initials only). To reduce the risk of social-desirability bias in stage 2, the researcher conducted interviews with individual students, meaning that although the validity of participants' responses may still be at risk of social desirability bias through being 'face-to-face' with the researcher, the risk should be lower of that of group-interviews, due to students being removed from their peers (Dodou, 2014). As the questionnaire and interview questions were researcher-written, these data collection measures could also be subject to researcher-bias, particularly regarding 'question-order bias' and 'leading-questions-and-wording bias'; wherein researcher hypotheses influence how questions are presented, reducing representativeness of participants' responses and validity of data. Therefore, the questionnaire and interview questions were written using conceptual and theoretical frameworks (SLT and EST); aiming to provide structure and consistency to the process, to minimize the potential for researcher-bias. Additionally, the researcher was supervised by their tutor, who monitored and reviewed the question-writing process.

It may be considered that semi-structured interviews and pre-determined questions could reduce participants' responses and hence decrease the representativeness and validity of collected data. However, using a pre-determined structure aimed to reduce the risk of 'question-order' and 'leading-question-and-wording' bias during the interview process, provided the effects were effectively controlled for in earlier stages (Dodou, 2014). Interviews were audio-recorded and transcribed, aiming to ensure validity and reliability of data gathered before analysis. Similarly, data collected from questionnaires was input onto a data-base, again aiming for accuracy of data content before analysis. Although transcribing and data-inputting have potential for human error, it was hoped that remaining aware of this risk before, during and after the processes, should limit this where possible. As discussed, standardised, pre-existing self-reports were used to consider participants' SEB and wellbeing in stage 1; aiming to ensure validity and reliability of data collected from these measures. These self-reports included the 'Myself as a Learner Scale' (MALS) (Burden, 1998; Appendix C) and the NHS 'Warwick-Edinburgh Mental Well-being Scale' (WEMWBS) (Tennant, 2007; Appendix D). Specific validity and reliability of

these measures will be discussed in section 3.8. It was also considered that using standardised measures removed potential for 'question-order' and 'leading-question' bias, as previously discussed.

3.7. Research Procedure

As discussed, the research was conducted in two stages, to collect both qualitative and quantitative data for analysis. In stage 1, qualitative and quantitative data was collected from 38 participants through questionnaires and self-reports respectively. In stage 2, qualitative data was collected through conducting semi-structured interviews with nine participants. Stage 1 qualitative analysis involved inductive TA of participants' responses to questionnaires; themes from which informed the questions and prompts used in stage 2 semi-structured interviews. Stage 1 quantitative data analysis involved non-parametric and parametric testing of participants' MALS and WEMWBS scores. Participants' scores were 'compared' between Groups in relation to their individual academic attainment, using Mann-Whitney and independent t-tests (see section 3.8). Stage 2 qualitative data analysis involved inductive and deductive TA of semi-structed interviews, wherein 'themes' identified in stage 1, SLT and theories of SEB were used as a framework for deductive analysis. Further details (and timeline) below (Table 3.2).

Table 3.2

Step-by-step research procedure regarding data collection:

Stage	Step	Date	Procedure	Data collected			RQ
				Source	**Content**	**Type**	
Preparation	1	Jan. 2018	Gained ethical approval from UEL and Local Authority (Appendix E; F)				
	2	Feb. 2018	Identified mixed-sex rural county secondary schools within 20 miles of its capital; including state and independent schools.				
	3	Mar.-April 2018	Contacted Heads and SENCOs of identified secondary schools to discuss research proposal and invite participation, sharing 'school information letter' (Appendix G).				
	4	April-June 2018	Randomly selected 2-4 mixed-ability classes of Year 9 students within each participating school (collaboratively with schools).				
	5	May-July 2018	Went into schools to discuss the research with identified students, and to distribute 'parent' and 'pupil' information letters and consent forms (Appendix H; Appendix I).				
	6	May-July 2018	Students wanting to be involved returned signed 'pupil' and 'parent' consent forms, and were added to list of 'participants'.				
	7	May-July 2018	Identified suitable times with schools for participants to complete questionnaires.				
	8	May-July 2018	Went into schools to distribute questionnaires and self-reports to participants				
Stage 1	1	June-July 2018	Processed participants' completed questionnaires and self-reports. • Input results from questionnaires into word document (Appendix J) • Calculated MALS and WEMWBS scores from self-reports and input into Excel spreadsheet (Appendix K) and SPSS database.	Questionnaire	Perceptions of curriculum and 'value' of subjects	Qual.	RQ1
				Questionnaire	Given reasons for perceptions	Qual.	RQ1 SRQ1
				Questionnaire	'Ranked' subjects (in order of 'perceived-value')	Quant., ordinal	RQ1 RQ2
				Self-reports	'Subjective-wellbeing' (WEMBS) score	Quant., ordinal	RQ2a
				Self-reports	'Self-perception as learner' (MALS) score	Quant., ordinal	RQ2b
	2	June-July 2018	Calculated the frequency of each subject being identified as the 'most important' and 'least important'	Questionnaire	Frequency of subjects being highest and lowest in	Quant., discrete	RQ1 RQ2

			subject in participants' questionnaire responses ('value-ranking').		students' ranking of perceived-value ('value-ranking').		
	3	June-July 2018	Schools provided participants' most recent academic attainment (using initials/'student numbers').				
	4	June-July 2018	Participants' individual academic attainment in each subject was 'ranked' from 'highest' to 'lowest' ('attainment-ranking').	School records of students' attainment.	'Ranked' subjects, in order of individual student's attainment levels ('attainment-ranking')	Quant., ordinal	RQ2
	5	June-July 2018	Counted the number of EBacc subjects in each participant's 'top-3 subjects' in attainment-ranking and value-ranking (0, 1, 2 or 3 EBacc subjects).				
	6	June-July 2018	Compared each participant's 'top-3' subjects in value-ranking with top-3 subjects in attainment-ranking. Counted the number of 'matches' between each participant's top-3 subjects in value-ranking and attainment-ranking (0, 1, 2 or 3 matches).				
	7	June-July 2018	Grouped participants based on number of EBacc subjects in top-3 attainment-ranking. (Group E1 = 0 or 1 EBacc subjects; Group E2 = 2 or 3 EBacc subjects). Grouped' participants based on number of 'matches' between top-3 subjects in value-ranking and attainment-ranking. (Group M1 = 0 or 1 matches; Group M2 = 2 or 3 matches).	Self-reports and school records of student attainment	Number of EBacc subjects in top-3 attainment-ranking. Number of 'matches' between top-3 subjects in value-ranking and attainment-ranking	Quant., nominal	RQ2
	8	June-July 2018	Conducted quantitative analysis of students' MALS scores and WEMBS scores, comparing scores between 'Match groups' and 'EBacc groups' using Mann Whitney and t-tests through SPSS software. (See section 3.8 for further details).				
	9	June-July 2018	Conducted inductive Thematic analysis of participants' qualitative responses to questionnaires (perceptions of curriculum and 'value' of subjects; given reasons for perceptions). (See section 3.8 for further details).				
	10	June-July 2018	Constructed semi-structured interview questions using themes found through inductive and				

			deductive Thematic analysis of questionnaires.				
Stage 2	1	July 2018	Randomly selected 10 participants to invite to interview (5 from each E/M group)				
	2	July 2018	Contacted schools of selected participants to inform selected students of invitation to interview.				
	3	July 2018	Identified suitable times with schools to interview confirmed participants.				
	4	July 2018	Conducted individual, semi-structured interviews of roughly 45 minutes with nine participants.				
	5	Aug. 2018	Transcribed interviews.	Interviews	Interview transcripts	Qual.	RQ1 RQ2 SRQ1 SRQ2
	6	Sept. 2018	Conducted deductive and inductive Thematic analysis of interview transcripts, regarding resulting themes from 'stage 1' Thematic analysis, SLT and SEB. (See section 3.8 for further details).				
	7	Oct. 2018	Used findings to inform 'checklist' of potential strategies for supporting students' SEB and/or wellbeing in school.				
Outcome (following completion of research)	1	April 2019	Feedback research findings to participating schools.				
	2	May 2019	Co-construct potential school strategies for supporting Year 9 students' SEB and wellbeing.				
	3	July 2019	Share research findings and/or co-constructed strategies for supporting students' SEB and wellbeing with other schools in the Local Authority (if appropriate/with consent).				
	4	Sep. 2019	Share research findings and/or strategies for supporting students' SEB and wellbeing with relevant stake holders such us policy makers (if appropriate/with consent).				
	5	Sep. 2019	If strategies are implemented in schools, monitor and review effectiveness.				

3.8. Data Analysis

3.8.1. Qualitative Analysis

Qualitative data collected from questionnaires (stage 1) and semi-structured interviews (stage 2) was analysed using TA. According to Braun and Clarke (2006), TA provides a systematic approach for identifying, analysing and reporting themes across a dataset – wherein a theme represents some level of patterned response or

meaning – which is not tied to particular theory. TA was chosen for application firstly due to its applicability to the ontological underpinnings of the research (critical realism); as the process involves consideration of each data-set (each individual's perception of reality), whilst aiming to identify common themes/elements of 'truth' between them. Themes can be identified through a data-driven, 'bottom-up' approach – regarding the content of the data ('inductive' analysis) – a 'top-down' approach – using the data to explore particular theoretical ideas ('deductive' analysis) – or a combination of both. Data collected from the questionnaires was analysed using inductive TA, while data collected from the interviews was analysed using a combination of deductive and inductive TA (Braun, 2006). Inductive analysis was applied in stage 1 due to there being very little previous research into students' perceptions of the current UK curriculum and/or 'subject-value'. Deductive TA was applied in stage 2 – using stage 1 findings and relevant psychological theories as a framework (Bandura, 1977) – to further explore and explain stage 1 qualitative and quantitative results. Further details of the TA process are discussed below.

3.8.1.1. Thematic analysis process

In stage 1, the transcribed qualitative data was grouped in relation to each question of the questionnaire; aiming to more effectively consider the potential patterns of responses within them. These data sets were copied into a document containing two margins, wherein a detailed reading was carried out and initial thoughts were considered (Riessman, 1993). These initial notes related to concepts and phrases that the researcher considered interesting or significant regarding potential developing themes. The transcribed questionnaire responses then were read and re-read several times, aiming to 'immerse' the researcher in the data (Braun & Clarke, 2006). The researcher then 'coded' the data, and considered potential themes by combining similar codes (Appendix L), aiming to explain larger sections of the data. A thematic map was also generated, in order to aid generation of themes, and to further consider potential links and relationships between them (Braun & Clarke, 2006). Any themes deemed irrelevant to the research questions or that did not have enough supporting data were discarded. Once a clear idea of the themes and their relation to one another had emerged, each theme was defined and accompanied by a detailed analysis.

Considerations were made regarding both the story told within individual themes, as well as how the themes related to the overall story evident within the data. Stage 1 themes were refined by being divided into subthemes, aiming to further aid TA. Similar themes were then grouped into categories, again aiming to assist the analysis process. Stage 1 themes and subthemes informed the construction of stage 2 interview questions (Appendix M), and assisted stage 2 deductive TA. Interviews were transcribed by the researcher and re-read several times, aiming to immerse the researcher in the data (Braun & Clarke, 2006). The transcripts were then copied into a qualitative analysis program (Nvivo), to code the data (Appendix N). A deductive TA informed by Braun & Clarke (2006) was conducted; regarding themes as informed by stage 1 qualitative findings, and relevant psychological and theoretical frameworks as discussed. Stage 1 themes and/or subthemes which did not have enough supporting data from the interviews were discarded from stage 2 analysis. Space was also allowed for inductive TA of interviews, meaning that significant themes and/or subthemes emerging from the dataset which may have been relevant to the research questions were not excluded.

3.8.2. Quantitative data analysis

3.8.2.1. Descriptive statistics

Data collected from stage 1 questionnaires was analysed using descriptive statistics – particularly regarding the students' identification of the 'most' and 'least' important subjects – in order to consider RQ1. The frequency of a subject being identified as the 'most' and 'least' important was calculated in relation to the EBacc.

3.8.2.2. Non-parametric testing

Data collected from stage 1 self-reports (MALS and WEMWBS scores) was considered through statistical analysis, regarding RQ2. It is worth noting that as self-report scores are calculated using 'ratings' on number scales, MALS and WEMWBS scores are ordinal data, and may therefore, not be considered appropriate for

quantitative testing (Field, 2009). However, Schroder (2017) suggests that ratings are so often used to measure concepts such as SEB and wellbeing – due to being latent variables and hence "impossible to observe" – it can be considered "common practice" to "ignore the fact that such data is ordinal", and therefore, compare averages through non-parametric testing, parametric testing, and/or monotonic transformations. Therefore, it was considered permissible to use MALS and WEMWBS scores in the following quantitative analyses. As discussed, students' WEMWBS and MALS scores were 'grouped' using their 'attainment-rankings' (from school reports), and their 'value-rankings' (from questionnaires). Groups were created based on the number of EBacc subjects in students' top-3 subjects in attainment-rankings (E1= 0 or 1 EBacc subjects; E2 = 2 or 3 EBacc subjects); and the number of 'matches' between the top-3 subjects in their attainment-rankings and the top-3 subjects in their value-rankings (M1= 0 or 1 matches; M2 = 2 or 3 matches). This created two nominal 'EBacc-groups' (E), and two nominal 'Match-groups' (M). As the data violated the assumption of sample size (N = 38), a Mann-Whitney was used as a non-parametric substitution for an independent t-test to compare students' MALS and WEMWBS scores between groups (Field, 2009).

All data was entered in SPSS 16.0 software for statistical analysis. The independent variables were EBacc-group (IV1) and Match-group (IV2); while the dependent variables were MALS scores (DV1) and WEMWBS scores (DV2). Comparing the mean student MALS and WEMBS scores between groups using a Mann-Whitney allowed for statistical exploration of RQ2 and hypotheses testing; wherein N=38 is considered a sufficient sample size for analysis. The null hypotheses were that: there would be no significant difference in average MALS scores between EBacc groups (E1 and E2); there would be no significant difference in average WEMWBS scores between EBacc groups (E1 and E2); there would be no significant difference in average MALS scores between Match groups (M1 and M2); and there would be no significant difference in average WEMWBS scores between Match groups (M1 and M2) (H0). Regarding the reviewed literature and informing psychological principles of the research, the one-tailed hypotheses for testing were that: the average MALS scores would be lower for E1 than for E2; the average WEMWBS scores would be lower for E1 than for E2; the average MALS scores would be lower for M1 than for

M2; and the average WEMWBS scores would be lower for M1 than for M2 (H2). These one-tailed hypotheses for testing were informed by the reviewed literature and relevant psychological theories – including positive psychology, EST and SLT – suggesting that having strengths in subjects which are perceived as high in 'value' may positively affect students' SEB and/or wellbeing.

3.8.2.3. Parametric testing

It was considered that should results of the Mann-Whitney test be significant, the assumptions of a t-test would be re-evaluated to determine whether an independent samples t-test could be used for further assessment; wherein a Kolmogorov–Smirnov test would be used to assess the normality of distribution for both MALS scores and WEMWBS scores, and a 'power calculation' would be used to re-assess the appropriateness of the current sample size in parametric testing (Field, 2009).

3.8.3. Reliability and validity considerations

3.8.3.1. Qualitative analysis

As discussed, stage 1 and stage 2 both involved TA. As this can be considered a subjective process – and therefore, present risk of experimenter-bias which can reduce trustworthiness of results – data was double-coded by separate researchers. This aimed for high inter-rater reliability, to increase validity of findings. In stage 1, questionnaires were analysed using inductive TA; wherein themes were generated from the data. Using inductive TA rather than deductive TA – wherein themes are predetermined by the researcher – also aims to increase trustworthiness of results, through reducing the risk of experimenter-bias (Braun, 2006). This is particularly significant regarding the current research, as stage 1 findings were used for constructing stage 2 interview-questions, and conducting stage 2 TA. This process also aimed to develop reflexive-validity of the research, as stage 1 findings influenced and informed what would be explored in stage 2 (Stiles, 1999). As discussed, stage 2 involved deductive TA of interviews. Since deductive TA can be considered to limit trustworthiness of findings due to experimenter-bias – through ignoring potentially significant findings which do not relate to pre-determined

themes – stage 2 also allowed for inductive TA. Additionally, as the framework used for stage 2 deductive TA was informed by stage 1 inductive TA, this aimed to further increase the trustworthiness of stage 2 findings; by not using purely 'researcher-determined' themes. Stage 2 also provided opportunities to ensure testimonial-validity of data, through exploring and confirming participants' perspectives from stage 1 (Stiles, 1999).

3.8.3.2. Quantitative analysis

As discussed, the MALS (Burden, 1998; Appendix C) and the WEMWBS (NHS, 2007; Appendix D) were used to quantitatively measure students' SEB and wellbeing. MALS reports a Cronbach's alpha of 0.84 (internal consistency reliability), and a concurrent validity score of r=0.41 (with cognitive abilities test). WEMWBS reports a Cronbach's alpha of 0.89 (student-sample) and 0.91 (population-sample) – suggesting some item redundancy in the scale – high correlations with other mental health and wellbeing scales, and low correlations with scales measuring overall health. Test-retest reliability (at one week) is 0.83. Additionally, social-desirability bias is lower than that of other comparable scales. Both MALS and WEMWBS are standardised against UK norms, advantageous to the context of the research. Validity and reliability of results from the Mann-Whitney and t-test were considered through testing relevant assumptions of parametric and non-parametric testing –such as sample size, normality of data distribution, and homogeneity of variance (Field, 2009) – and making the correct adjustments regarding testing and reporting should any assumptions be violated. All assumptions, alterations and results were reported to ensure transparency.

3.9. Ethical considerations

Ethical approval of the research was gained from the University of East London (UEL) (Appendix E). The research was then approved by the Local Authority (LA) in which the researcher is employed as a Trainee EP. Following Ethical approval from both UEL and the LA, local secondary schools were sent emails to invite their participation in the research, attaching an 'information sheet' detailing the aims and

methodology of the research (Appendix G). Schools expressing an interest in being involved in the research were spoken to further explain their participation, and were asked to sign 'school consent forms' should they wish to proceed. The researcher negotiated a suitable time with each participating school to discuss the research with their Year 9 students, and to distribute parent and pupil information letters/consent forms (Appendix H; Appendix I). Students were required to gain written parental consent to participate in the research, and also signed their individual consent. This adheres to BPS (2010) ethical guidelines, stating that participants aged under 18 years should be granted parental/carer consent prior to research participation. Both the pupil and parent information/consent forms specified that students' academic attainment would be accessed using student-numbers (with informed student-consent), and that students may be invited for follow-up interviews which would be recorded and transcribed.

Measures of confidentiality and data-protection were also clarified in the parent and pupil letters. This included the fact that each participating student would be given a unique ID number, ensuring their attainment and responses to questionnaires, self-reports and interviews was confidential and anonymous. As discussed, the students were provided separate and specifically designed information letters and consent forms inviting their participation, detailing their role in the research and their right to withdraw. This corresponds to the BPS (2010) ethical guidelines for research, stating that participants should be aware of the function of their involvement. The content and language of forms were adjusted regarding the intended reader, aiming to ensure accessibility and relevance. Once full consent had been received from students and their parents, dates for distributing the questionnaires and conducting the interviews were negotiated with schools. Questionnaires and interviews were completed in students' respective schools, generally during their tutor periods – aiming to minimise students' time away from lessons, and to reduce their potential anxiety in research participation. This also corresponds to the BPS (2010) ethical guidelines for research, specifying to minimise potential harm to participants. Similarly, interviews were conducted individually, removing the potential anxieties of talking in front of peers.

3.10. Chapter summary

The methodology and design of the current research have been considered in relation to its aims, purpose and informing ontological and epistemological frameworks, while the research procedure itself – particularly regarding data collection and analysis – has been considered regarding potential reliability, validity and ethical issues. The mixed-methods research procedure consisted of two stages; stage 1 involving qualitative and quantitative data collection and analysis – through original questionnaires and self-reports – and stage 2 involving qualitative data collection and analysis – through semi-structured interviews. Research findings will be discussed in the following chapter.

4. Analysis and Findings

This chapter will discuss the findings from the research. Section 4.1 will discuss stage 1 of the research, including qualitative findings from the questionnaires, and quantitative findings from the 'Myself as a Learner Scale' (MALS) (Burden, 1998) and the 'Warwick-Edinburgh Mental Wellbeing Scale' (WEMWBS) (NHS, 2007); completed by 38 students from nine schools. Section 4.2 will discuss findings from stage 2 of the research; including qualitative findings from semi-structured interviews conducted with nine of the 38 students.

4.1. Stage 1

This section will discuss both qualitative and quantitative findings from stage 1 of the research. Section 4.1.1 discusses qualitative findings from the questionnaires, while section 4.1.2 discusses quantitative analysis of students' MALS and WEMWBS scores. Stage 1 findings will be considered separately in this way to aid initial understanding of results, before considering their relationships in the next chapter.

4.1.1. Stage 1 – Findings from questionnaires

This section will consider participants' responses to the questionnaires; aiming to explore students' perceptions of the 'most' and 'least' important curriculum-subjects and the potential reasons for such. As discussed, 38 students from nine different schools completed the questionnaires, and their qualitative responses were transcribed by the researcher. The transcribed data was grouped in relation to each question of the questionnaire, aiming to more effectively consider the potential patterns of responses within them. Students were initially asked 'What is the most important subject in school?' and 'What is the least important subject in school?', aiming to consider their perceptions of subjects' 'value', as outlined in the research aims. Students' responses to these two questions specifically will therefore, be discussed in the next section.

4.1.1.1. 'Most' and 'least' important subjects

Several students named two or three subjects in response to the questions 'What is the most important subject?' and 'What is the least important subject?'; wherein each subject was counted independently. The subject most frequently identified as 'most important' was English, followed by Maths and Science. An EBacc subject was identified by students as the 'most important' subject 44 times, while a non-EBacc subject was identified as the 'most important' three times (Table 4.1.1.1).

Table 4.1.1.1.

Subjects identified by students as 'most important' in school

EBacc or non-EBacc	**Individual subjects**		**Overall frequency**
	Subject	Frequency	
EBacc subjects	English	21	
	Maths	18	
	Science	4	44
	Modern Foreign Languages	1	(93.62%)
Non-EBacc	Physical Education	1	
subjects	Music	1	3
	Art	1	(6.38%)

The subject most frequently identified by students as the 'least important' subject in school was Art, followed by Music and Drama. An EBacc subject was identified by students as the 'least important' subject seven times, while a non-EBacc subject was identified as the 'least important' 39 times (Table 4.1.1.2).

Table 4.1.1.2.

Subjects identified by students as 'least important' in school

EBacc or non-EBacc	Individual subjects		Overall frequency
	Subject	**Frequency**	
EBacc subjects	Maths	2	
	Modern Foreign Languages	2	
	Science	1	
	History	1	7
	English	1	(15.22%)
Non-EBacc subjects	Art	16	
	Music	6	
	Drama	4	
	Design and Technology	4	
	Religious Education	4	
	Physical Education	3	39
	Information Computer Technology	2	(84.78%)

These findings indicate that according to the 38 participants (from nine different schools) involved, the subjects most frequently identified as the 'most important' at school were EBacc subjects, and the subjects most frequently identified as 'least important' were non-EBacc subjects. This appears relevant to the previously discussed literature, particularly regarding the 35% decrease in GCSE intake of creative subjects since implementation of the EBacc in 2010 (DfE, 2018). This may also be relevant to previously discussed research by Last (2017) – indicating that teachers consider non-EBacc subjects to have decreased in 'profile' and 'value' since implementation of the EBacc – as the above questionnaire results suggest that students have similar perceptions of the subjects' value. The potential reasons for these perceptions were further explored throughout the questionnaire and through thematic analysis (TA) of responses, as below.

4.1.1.2. Thematic analysis of questionnaires

As discussed in the previous chapter, an inductive TA approach informed by Aronson (1994) and Braun and Clarke (2006), was applied to text taken from students' original responses to questionnaires, aiming to explore the reasons for the students' perceptions of the 'most' and 'least' important subjects. The researcher familiarised herself with the data and compiled a list of initial ideas, before coding the data in relation to each question on the questionnaire. The coded data was then incorporated into emergent themes across questions, and further divided into subthemes (Appendix L). The themes were also clustered into three main categories, to aid understanding of results and assist deductive analysis of interviews in stage 2 (to be discussed) (Table 4.1.1.3).

Table 4.1.1.3.

Emergent themes and subthemes in each category

	Category	**Emergent themes**	**Sub-themes**
1	Usefulness of subject	1.1. Future usefulness	1.1.a. Future employment
			1.1.b. Future education
		1.2. Current usefulness	1.1.a. Current education
			1.1.b. Current everyday life
2	External factors	2.1. School environment	2.1.a. Timetabling of subject
			2.1.b. Assessments of subject
		2.2. Others' opinions	2.2.a. Peers' input
			2.2.b. Teachers' input
			2.2.c. Parents'/carers' input
3	Subject lessons	3.1. Demands in lessons	3.1.a. Quantity of work
			3.1.b. Difficulty of work
		3.2. Students' feelings during	3.2.a. Competence in subject
			3.2.b. Comparison to peers
		3.3. Lesson content	3.3.a. Teachers' impact
			3.3.b. Variety of work

The analytic narrative presented here includes extracts from the questionnaire responses to illustrate each category. Each category and its emergent themes and subthemes will be discussed separately.

4.1.1.2.1. Usefulness of subject

This category consists of two themes; the 'future' usefulness of a subject, and the 'current' usefulness of a subject (Figure 4.1.1.1). These themes were further subdivided into subthemes, as below.

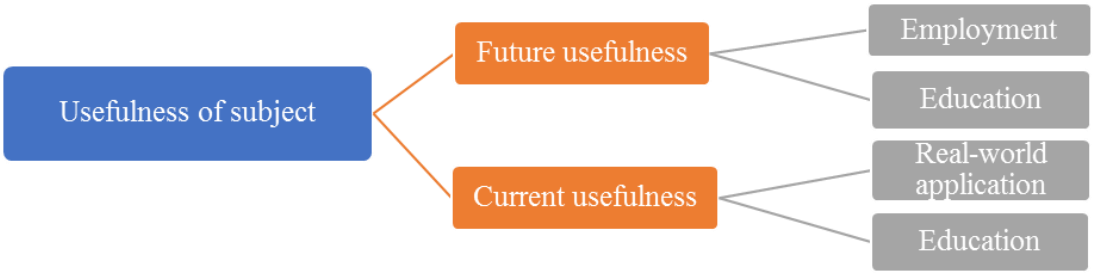


Figure 4.1.1.1. Category 1: 'Usefulness of subject'

Throughout the questionnaires, students frequently discussed the future and current usefulness of different curriculum subjects, particularly in relation to their thoughts on what made a subject 'most' and/or 'least' important. Each theme and subtheme within this category will be discussed separately below.

4.1.1.2.1.1. Future usefulness of subject

This theme consists of two subthemes; the usefulness of a subject for 'future employment', and the usefulness of a subject for 'future education'.

a) Usefulness for future employment

After being asked to identify the most/least important subjects in school, students were then asked 'How do you know this?' and 'Should this subject be the most/least important subject in school?'. In response to these questions, students often referred to how useful they considered the subject would be to their future career aspirations or jobs.

> I think that Maths should be the most important subject because nearly every job has maths as a big part of it.
>
> [Respondent 35; q. 1e]

> I know [English is most important] because I think that whatever job you do when you're older, you will use this subject rather a lot.
>
> [Respondent 25; q. 1a]

As previously discussed, English and Maths were the two subjects most commonly identified as the 'most important' subjects in school; 83% of students identifying either one or both as the most important. The above examples suggest that this may be due to students considering these subjects as useful to their future employment in a *general* sense, which was a common theme across responses. Most students who identified an EBacc subject as the most important in school (94%) due to its 'usefulness' to future employment frequently commented on the subject being useful to the *majority* of jobs and careers.

> They are both [English and Maths] vital for all careers in the future.
> [Respondent 24; q. 1a]

Comparatively, when a creative subject was identified as the 'most important' (6%) due to its usefulness to future employment, it was done so in a more *specific* sense.

> Because Art will help me in the future, because I want to be a marine biologist/photographer. Art and science will help in that.
> [Respondent 19; q. 1a]

Similarly, when students reported 'how they knew' a non-EBacc subject was the 'least important'– which as previously discussed, occurred in 85% of responses – references were often made to the subjects being only useful for *specific* jobs and careers, and therefore, not being important in school.

> Unless you want a job that involves acting or stage play you will not have much use for [Drama]. [Respondent 1; q. 2a]

> [Art] rarely applies to any jobs, other than artists, and is unlikely to improve our intelligence in other subjects.
> [Respondent 27; q. 2a]

> This is because [Art] is very specialised, and does not open many job opportunities. [Respondent 21; q. 2a]

The above examples suggest that the students generally only considered Drama and Art to be useful to future employment for careers relating specifically to those subjects. This was a common theme across students' responses when referring to non-EBacc subjects.

> I think of [Art, Drama and Music] as more hobby-like than a serious future career. They don't guarantee a good future or getting a job or anything like that.
>
> [Respondent 9; q. 2a]

> This is because of how little opportunities [Art and Music] allow.
>
> [Respondent 21; q. 2e]

> If others wish to go into the sporting careers [PE] may be important to them.
>
> [Respondent 24; q. 2b]

This suggests there may be a common conception amongst students that EBacc subjects are useful to a wide variety of future jobs and careers, and non-EBacc subjects are only useful to specialised careers. In this sense, EBacc subjects may be considered by students as 'more important' than non-EBacc subjects due to being seen to provide more job opportunities than non-EBacc subjects. In contrast therefore, non-EBacc subjects may be considered limiting for students' future career options, and hence be perceived as less valuable in school.

b) Usefulness for future education

Students also discussed how different subjects could be useful to their future education, particularly regarding those identified as the 'most important'. As previously discussed, English, Maths and Science were most frequently identified by students as the most important subject, and were often discussed in relation to their usefulness to future education.

> Because to get into some top universities you need a high GCSE grade in Maths.
>
> [Respondent 10; q. 1a]

> If you fail [English, Maths and Science] then you can't pass your GCSEs, and you have to re-do them.
>
> [Respondent 21; q. 1e]

> English can be found in all subjects, so in order to succeed in other subjects in the future (generally speaking), you have to be good at English, or at least able to do it.
>
> [Respondent 5; q. 1e]

The above examples suggest that the students considered Maths, English and Science as useful to their future education in a general sense; similarly to the previously discussed subtheme. In contrast, non-EBacc subjects were mostly referred to as being useful to future education regarding that subject specifically.

> Although interesting I am not interested in following [Drama and Music] further. I had a basic-average knowledge of all of them and I didn't care to learn more. [Respondent 19; q. 2a]

> Because you would only need [Art] for a few careers, and if you do need it then you would choose it for GCSE and it would be important. [Respondent 20; q. 2c]

> People will disagree [that Art is the least important subject] if they are interested in taking Art and have a passion for it.
>
> [Respondent 22; q. 2b]

Again, this may be considered comparable to the previous subtheme, regarding students' general consideration of non-EBacc subjects being only useful for specialised future employment. In this sense, the majority of students may have identified EBacc subjects as more important than non-EBacc subjects due to considering them as more useful to their future education in general, rather than being only useful to future study of specific subjects.

4.1.1.2.1.2. Current usefulness of subject

This theme consists of two subthemes: the usefulness of a subject for 'current education', and the usefulness of a subject for 'current real-world application'.

a) Usefulness for current education

In addition to discussing how the 'most/least' important subjects could be useful to their future education, students also referred to such being useful to their current education. As discussed, English was the subject most frequently identified as 'most important', and was often referred to being relevant to many other subjects in school.

> Being able to read and understand words is vital in any subject. You also learn a lot of skills that can be used in other subjects in English, such as essay writing. [Respondent 5; q. 1a]

> You use [English] in all other subjects. [Respondent 6; q. 1a]

> If you didn't have the skills from English you couldn't do most other subjects. [Respondent 7; q. 1e]

The above examples also indicate that the students may consider success in English to relate to success in other subjects, and hence to have additional value. This is similar to the previously discussed subtheme, wherein students' responses suggested that success in English and other EBacc subjects may be equated to success in their general future education. As previously discussed, Maths was the second most frequently identified subject as the 'most important', and was also discussed in terms of its relevance to other subjects.

> [Maths] is used in different subjects the most (if not counting English). [Respondent 9; q. 1a]

> [Maths] applies to different subjects. [Respondent 10; q. 1e]

In contrast, non-EBacc subjects were generally referred to as having limited relevance to other subjects.

> Art doesn't particularly help you in other subjects, and it doesn't really include any transferable skills. It is more for fun than anything.
> [Respondent 5; q. 2a]

> I think that R.E. is the least important subject because most subjects go 'cross-curriculum', e.g. Math and Physics, or Geography or History and English. And you would only do that subject if you want to be a priest.
> [Respondent 25; q. 2a]

> [Art] is unlikely to improve our intelligence in other subjects.
> [Respondent 27; q. 2a]

> RE doesn't really include anything that important, and it does not teach you skills that you can use in other subjects.
> [Respondent 5; q. 2e]

This suggests that students may have generally considered non-EBacc subjects to be of less use to their current education than EBacc subjects, which could have been a contributing factor for EBacc subjects being most frequently identified as the 'most important', and non-EBacc subjects being most frequently identified as the 'least important'. The second of the above responses also includes a further reference to a non-EBacc subject (R.E.) being only useful for specialised future employment, as discussed in the previous theme. Additionally, the above examples suggest that the students are more concerned with their performance in 'other subjects' than the named non-EBacc subjects; again, indicating the students to consider non-EBacc subjects as lower importance.

b) Usefulness for current everyday life

Students also frequently discussed how the subject they had identified as the most/least important was useful to their current everyday life, particularly regarding 'real-world' application.

> Because you use both [English and Maths] in everyday life, like you will use your maths skills or use your English skills to spell a word. [Respondent 33; q. 1a]

> [English] has applications to almost everything that you could possibly do. [Respondent 27; q. 1a]

> Because we use [English and Maths] in everyday life. I know this because we speak English in our everyday life and we use maths when we count things and spend money. [Respondent 2; q. 1a]

These examples suggest the students considered English and Maths to have both significant and frequent real-world uses. This could increase the perceived value of these subjects in school, and may therefore, be a contributing factor in the majority of students identifying English and Maths as 'most important'. Regarding English, the real-world applications of the subject were often discussed in relation to communication skills specifically.

> You use [English] every day when you speak/listen/write. [Respondent 23; q. 1a]

> I believe it is important to be able to articulate yourself, and English aids in this. [Respondent 21; q. 1a]

Although some students similarly included specific examples of when Maths could be applied in the real-world – such as counting money, as above – most responses were unspecific in their references to Maths being useful to everyday life.

> Because [Maths] is one we seem to use most in everyday life. [Respondent 20; q. 1a]

> Because we use lots of Maths in everyday life. [Respondent 31; q. 1a]

> [Maths is] used in most every day activities, used in most jobs. [Respondent 8; q. 1a]

This suggests there may be a general conception of Maths being used every day, which is so ingrained that specific examples do not seem necessary. (The above response also includes a further reference to Maths being considered useful to general future employment, as in the previous theme). EBacc subjects were often referred to in this way throughout the questionnaire. wherein students frequently discussed how the subjects were extremely relevant to their everyday life, without giving specific examples as to how/when.

> Because people usually consider it useful to have skills in either Science or Maths, and they are everywhere and you cannot avoid it. [Respondent 1; q. 1e]

> Because [English and Maths] teach us everyday things we need in life, and helps us to learn about other things as well. [Respondent 14; q. 1a]

> Science is important because it is all around you and it helps you understand everything better. Same goes for maths. [Respondent 1; q. 1a]

In contrast, when non-EBacc subjects were discussed regarding their real-world application, students generally referred to them as not having relevance or being useful outside of the specific subject.

> [Art is the least important subject] because you are never really going to need to draw anything. [Respondent 28; q. 2a]

> Because [Music] literally doesn't help with anything. You can listen to music and play it as a hobby, but you don't need to sing to get an office job. [Respondent 17; q. 2a]

> I think [Music] is least important because it might not help in day to day life. [Respondent 14; q. 2a]

This suggests that students considered non-EBacc subjects such as Music and Art to provide less transferable skills than EBacc subjects for real-world application, and to hence be less useful for current everyday life. This is similar to how students

generally considered non-EBacc subjects to have less transferability between subjects, and to therefore be less useful to their current education (previous subtheme). The above examples also include a further reference to students considering non-EBacc subjects to have limited relevance and use to general jobs, as discussed in the previous theme. This may again relate to why non-EBacc subjects were most frequently identified as the least important.

4.1.1.2.1.3. 'Usefulness of subject' summary

Considering this category of themes and subthemes overall, the majority of students frequently referred to EBacc subjects having a variety of uses in a *general* sense; regarding their future employment and education, as well as their current education and everyday lives. In contrast, non-EBacc subjects were frequently referred to as being useful in a *specific* sense only; regarding specialised careers or further study of that subject, or as being irrelevant and hence not useful to other subjects or real-world application. These may all be considered reasons as to why 94% of students identified an EBacc subject as the most important, and why 85% of students identified a non-EBacc subject as the least important. This may also relate to the previously discussed research by Last (2017), reporting a decline in GCSE intake of 'creative subjects' in schools since implementation of the EBacc; including a 57% decline in GCSE Art intake 2010-2017.

4.1.1.2.2. External factors

This category refers to the external factors mentioned by students when discussing their opinions on the most/least important subjects. The category of 'External factors' consists of two themes; the 'school environment' and 'others' opinions' (Figure 4.1.1.2). These themes were further divided into subthemes, as below.

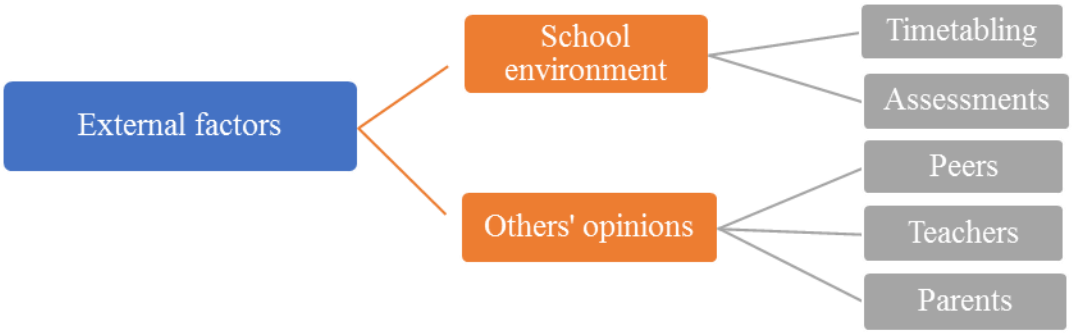


Figure 4.1.1.2. Category 2: 'External factors'

The themes in this category were particularly prevalent in students' responses to the questions 'How do you know this subject is the most important'; 'Does anyone else agree with you?' and 'How do you know this?' The aim of these questions was to explore the potential mechanisms behind the students' opinions on the most/least important subjects, in relation to SLT/EST. Each theme and subtheme within this category will be discussed separately below.

4.1.1.2.2.1. School environment

This theme consists of two subthemes; the 'timetabling' of subjects in school, and the 'assessments' of subjects in school.

a) Timetabling of subject in school

Students often referred to the frequency of lessons for different subjects, particularly in response to the question 'How do you know this is the most/least important subject'.

> [Maths] has the most lessons in a week on par with English and Science (only if triple) [Maths identified as the 'most important subject']. [Respondent 9; q. 1a]

> Textiles and construction may rarely be used and could also be learnt quickly. We have these lessons for only 6 weeks a year [Art and D.T as the 'least important' subjects]. [Respondent 15; q. 2a]

> English and Maths are core subjects, and they have to be taken from a very young age until GCSE [English and Maths identified as 'most important' subjects]. [Respondent 13; q. 1d]

This suggests that students considered the amount of time allocated to learning different subjects in school as an indicator of their value. As EBacc subjects are more frequently timetabled than non-EBacc subjects in most schools – and as referred to in the example above, are a significant part of the curriculum from primary school – this may relate to why most students identified EBacc subjects as more important than non-EBacc subjects.

b) Assessments of subject in school

As well as discussing the frequency of lessons, students also referred to the frequency of school assessments for different subjects.

> Because academically [English and Maths] are what we are most assessed on, also we can build other skills off of these subjects [English and Maths as identified as the 'most important' subjects]. [Respondent 12; q. 1e]

Similarly to the previous subtheme, this suggests that students may consider the number of assessments had for a subject to indicate its value. (The above response also includes further reference to English and Maths being useful for wider application, as in the previous category of themes). When non-EBacc subjects were discussed in relation to assessments, this was often done in terms of how the lessons reduced students' preparation time for exams in other subjects.

> There should be less time for [Music and Drama] because you need to prioritise subjects you have more exams in to get the best results. [Respondent 22; q. 2e]

> [Art] is practical but we should use that time to have GCSE lessons or more important lessons that will help us pass those exams. [Respondent 15; q. 2e]

This again suggests that students may consider the frequency of subjects' assessments to indicate their value – reference being made to how one should 'prioritise' subjects which have 'more exams' – which could be a contributing factor for most students identifying non-EBacc subjects as the least important.

4.1.1.2.2.2. Others' opinions

This theme consists of three subthemes. References made by students to their 'peers', 'teachers', and 'parents' in relation to their opinions on the 'most' and 'least' important subjects will be discussed separately.

a) Input of peers

Students often discussed whether they considered their peers would agree or disagree with their opinions on the most/least important subjects. Students who identified a non-EBacc subject as the most important generally considered that their peers would disagree.

> Most people disagree with my opinion [that Music is the most important subject]. Mostly my classmates, friends and siblings. When I tell them I like music and I think it is one of the most important subjects, they disagree with me. [Respondent 7; q. 2b]

In contrast, students who identified an EBacc subject as the most important generally considered their peers would agree.

> I feel quite a few students would agree with me [that English and Maths are the most important subjects], because these are the two most frequent lessons. [Respondent 12; q. 2b]

This response also includes a further example of 'timetabling' being associated with subjects' value, and suggests that students may consider this to be an association shared with their peers. Similarly, many students considered their perceptions of subjects' usefulness to be shared with their peers, particularly regarding 'usefulness for future employment'; as discussed in the previous category of themes.

> My friends would agree [that Art is the 'least important' subject] as they know the subject does not help with achieving their dream job. [Respondent 9; q. 2c]

> I think most of my friends would agree with me [that Maths is the most important subject] because they need maths for the jobs they want to do. We have had this brought up in conversations that we have. [Respondent 20; q. 1b]

The above responses also indicate that students are having discussions about the usefulness of different subjects in school, which were commonly referred to across responses.

> People agree with my statement [that Science and Maths are the most important subjects], mostly my classmates. My friends usually complain about both subjects but still consider it important. They tell me or we have conversations about it. [Respondent 1; q. 1b]

Students, therefore, seem to be aware of one another's perceptions of the importance of different subjects, due to their conversations. This could explain why 91% of students identified the same three subjects out of 14 as the most important. Students' peers were also referred to regarding their behaviour in lessons and attitudes towards different subjects; wherein peers were often described as being inattentive in non-EBacc lessons.

> My friends and some fellow students would agree [that Art and D.T are the 'least important' subjects]. They pay less interest in these lessons. Many don't try or don't finish the projects/homework because they don't find it important. [Respondent 15; q. 2c]

> They would agree [that R.E. should be the least important subject]. No one cares because you know you won't use this in later life, so people mess about. [Respondent 25; q. 5c]

This suggests that students considered their peers' behaviour in lessons to reflect their opinions of the subjects' importance, wherein a perceived lack of effort in class may equate to the subject being deemed unimportant. Similarly, students generally referred to their peers' attentiveness in EBacc subjects as an indicator of the subjects' perceived importance.

> Others would agree [that Science, English and Maths are the 'most important' subjects]. I always see people more concentrating in those lessons. [Respondent 32; q. 1c]

> Lots of students probably agree [that Maths and English are the 'most important' subjects]. They get the most stressed about it. [Respondent 3; q. 1c]

Additionally, the above responses suggest that students considered their peers' anxiety levels in lessons to indicate a subject's importance. This could relate to the previously discussed subtheme; wherein the frequency of assessments reflected a subject's perceived importance.

b) Input of teachers

As well as discussing their peers in relation to perceptions of subjects' value, students frequently mentioned their teachers. As in the previous subtheme, students who identified an EBacc subject as the most important generally considered that their teachers would agree.

> My maths teacher agrees [that Maths is the 'most important' subject] because if you practise in maths the easier most things will be. I talk to my maths teacher about why we need maths. [Respondent 31; q. 1b]

> English teachers probably agree [that English is the 'most important' subject]. Because they always stress about how important it is. [Respondent 17; q. 1c]

This again suggests that students are having conversations about the importance of different subjects, which may be contributing to their awareness of others' perceptions. The above response also refers to teachers highlighting the 'importance' of English, which could be considered a factor in students feeling 'stressed' about EBacc subjects – and hence concentrating more in respective lessons – as discussed in the previous subtheme.

c) Input of parents/carers

Students frequently referred to their parents when discussing whether others would agree with their perceptions of subjects' value. As in previous subthemes, students who had identified a non-EBacc subject as the least important considered their parents would agree.

> My parents agree [that Art is the 'least important' subject]. Because I have been told that it is not very important, as I do not want to use art in my future career. [Respondent 10; q. 2c]

This response includes further reference to the subject's 'future usefulness' to employment – as discussed in the previous category of themes – and suggests that students are having conversations about subjects' importance. Again, similarly to the previously discussed subthemes, students who had identified an EBacc subject as the most important generally considered that their parents would agree.

> I think parents would agree [that English and Maths are the 'most important' subjects] because they always tell me to focus and work hard on those subjects. [Respondent 33; q. 1b]

> Lots of people agree [that Maths is the most important subject]. These people are my parents, my family and a lot of teachers. I have been told to work very hard in Maths especially, and other people agree because almost everyone uses it in everyday life, even if they are not in school. [Respondent 10; q. 1b]

This again suggest that students are having conversations about subjects' importance, and includes further references to the perceived 'usefulness' of EBacc subjects for everyday life. The above responses also refer to the students being 'told' to 'work hard' in EBacc subjects by their parents; similarly to the previous subtheme, this could be a contributing factor to students feeling 'stressed' about EBacc subjects, and increase perceptions of 'high anxiety' subjects being 'high value'.

4.1.1.2.2.3. 'External factors' summary

Considering this category of themes and subthemes overall, it can be suggested that many students' perceptions of the most/least important subjects may be informed by external factors, such as their school environment and others' input. In particular, it can be suggested that students often interpreted the frequency of lessons and assessments to indicate a subject's importance. This may be considered in terms of EST (Bronfenbrenner, 1979), and relate to previously discussed research by Dawood (2017), suggesting that the EBacc policy creates a "hierarchy of subjects", by excluding non-EBacc subjects from school accountability measures. Students who identified an EBacc subject as the 'most important' generally considered that others would agree, while students who identified a non-EBacc subject as most important considered that others would disagree. Furthermore, students' responses suggested an acute awareness of others' opinions, due to conversations, peers' behaviour, and being encouraged to focus in certain lessons by teachers/parents. This may be considered in terms of SLT (Bandura, 1997), and relate to previously discussed research by Last (2017), wherein 79% of respondent schools considered parent/carers' perceptions of the 'creative subjects' to be the most influential reason for decreases in GCSE intake of non-EBacc subjects.

4.1.1.2.3. Subject lessons

This category consists of three themes; the 'demands of lessons', 'students' feelings' during lessons, and 'lesson content' (Figure 4.1.1.3). These themes were further subdivided into subthemes, as below.

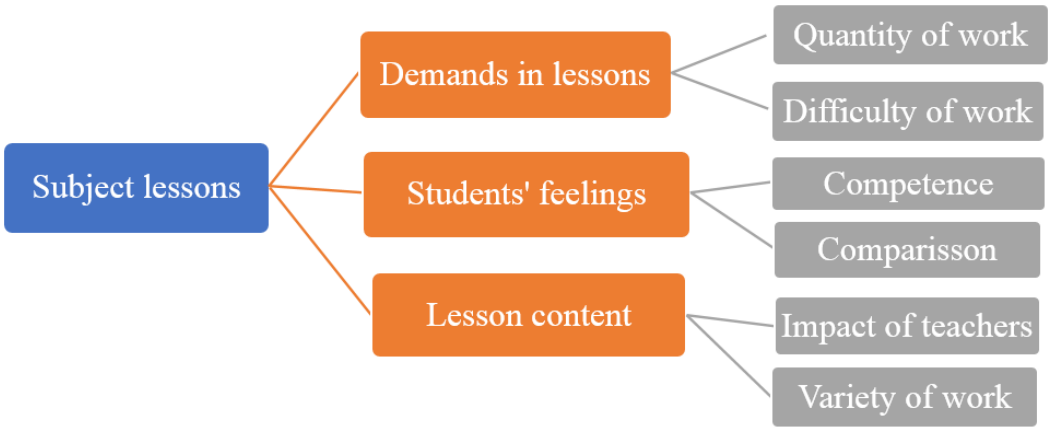


Figure 4.1.1.3. Category 3: 'Subject lessons'

These themes were particularly prevalent in students' responses to questions asking whether the subject they had identified as the most/least important was 'enjoyable' or not. Each theme and subtheme within this category will be discussed separately below.

4.1.1.2.3.1. Demands in lessons

This theme consists of two subthemes: the 'quantity of work' in lessons, and the 'difficulty of work' in lessons. These will be discussed separately.

a) Quantity of work in lessons

Students often referred to workload in relation to their reasons for finding a subject enjoyable/enjoyable, wherein a subject with high workload was generally identified as 'not enjoyable', while a subject with low workload was generally identified as 'enjoyable'.

> [English and Maths are not enjoyable] because I just find it very boring and there is too much stuff to learn. [Respondent 3; q. 4c]

> [Art] is enjoyable because you don't have to do much, but it also seems like a waste of time sometimes. [Respondent 6; q. 5c]

.

Interestingly, the subjects most frequently identified by students as 'enjoyable' (and with a low workload) were generally the same subjects they had identified as 'least important'; which as previously discussed, were mostly non-EBacc subjects (85%). In contrast, the subjects most frequently identified by students as 'not enjoyable' (and to have a high workload) were generally the same subjects they had identified as 'most important'; which as previously discussed, were mostly EBacc subjects (94%).

b) Difficulty of work in lessons

Students also discussed their enjoyment of the most/least important subjects in relation to the difficulty of lesson work; wherein difficult work was generally associated with a subject being 'not enjoyable', and easier work was associated with a subject being 'enjoyable'.

> [Maths is not enjoyable] because the things that we get taught are usually so hard that it stresses me out. [Respondent 20; q. 4c]

> [English is not enjoyable] because it is a lot of writing and reading, so it's quite hard/stressful. [Respondent 17; q. 4c]

This indicates a general trend similar to the previous subtheme, wherein EBacc subjects were mostly described as 'not enjoyable' due to 'difficult' lesson work. In contrast, and again similarly to the previous subtheme, non-EBacc subjects were mostly referred to as 'enjoyable', due to the lessons consisting of 'easier' work.

> [Drama is enjoyable] because lessons mostly involve 'drama related activities' which is code for games. [Respondent 19; q. 5c]

> [Art is enjoyable] because is not too hard and there is not many right and wrong answers. [Respondent 23; q. 5c]

This also links to the previous category of themes ('External factors'); wherein students described their peers as more attentive in EBacc lessons than non-EBacc lessons, due to perceptions of the subjects' importance as shared by their parents/teachers. This also relates to the first category of themes ('Usefulness'); wherein students described non-EBacc subjects as more recreational than EBacc subjects, due to being less 'useful' to their general education, everyday lives and future employment.

4.1.1.2.3.2. Students' feelings in lessons

This theme consists of two subthemes: students' feelings of 'competence' in lessons, and students' feelings of 'comparison' in lessons. These will be discussed separately.

a) Students' feelings of competence in lessons

Students frequently referred to their feelings of competence in lessons, in relation to their enjoyment of the subject.

> [English is enjoyable] because I know what I'm doing and my class is fun. [Respondent 6; q. 4c]

> I personally like maths as it makes a lot of sense to me, and I can do this. However, this is different for every person. [Respondent 13; q. 4c]

> I am quite good at Music and I like learning about it. [Respondent 7; q. 4c]

This suggests that students generally identified a subject as enjoyable if they felt confident and competent in such, for both EBacc and non-EBacc subjects. Similarly, students who referred to feeling unconfident in lessons generally identified the subject as 'not enjoyable'; again for both EBacc and non-EBacc subjects.

> [Art is not enjoyable] because I know that you have to have some artistic talent to begin with, which I don't have. [Respondent 10; q. 2a]

> [Maths is not enjoyable because] I just find it hard to wrap my head around. [Respondent 19; q. 4c]

> [D.T. is not enjoyable] because I am not good at DT at all, and my teachers are not the best. However, I know some people who love DT. [Respondent 13; q. 5c]

This suggests students' feelings of confidence in a subject may significantly relate to their enjoyment of such. However, their feelings of competence and enjoyment do not generally relate to which subject they had identified as the most/least important. For instance, most students identified an EBacc subject as most important, however both EBacc and non-EBacc subjects were described as enjoyable/not enjoyable.

b) Students' feelings of comparison in lessons

As well as discussing their individual competence in lessons, students also referred to how they felt in comparison to their classmates.

> [Maths is not enjoyable] because I'm in top set my class goes very quickly and I get confused. [Respondent 19; q. 4c]

> [I.C.T. is not enjoyable] because I don't understand coding or computers and when you don't understand a subject it's not fun, especially when everyone else does. [Respondent 31; q. 5c]

> [Maths is not enjoyable] because I don't understand it, but everyone else in my class does. When I get picked to ask a question I get so anxious because I don't know the answer. [Respondent 30; q. 4c]

This suggests that students generally identified a subject as 'not enjoyable' if they felt less competent than their peers during lessons. This may relate to the previously discussed subtheme, and suggests that students may judge their own abilities through comparison to classmates. Again as in the previous subtheme, this seemed evident in relation to both EBacc and non-EBacc subjects.

4.1.1.2.3.3. Lesson content

This theme consists of two subthemes; the 'impact of teachers' and the 'variety of work' in lessons, which will be discussed separately.

a) Impact of teacher in lessons

Students often referred to teachers having a significant impact on their enjoyment of a subject.

> One of the things that makes [English and Maths] enjoyable is the teachers I have. [Respondent 14; q. 4c]

> [R.E. is enjoyable because] usually the teachers are fairly understanding and nice which makes the lesson better and more enjoyable. [Respondent 30; q. 5c]

> [Maths and English are enjoyable] because our teacher seems to understand how we learn and how to make it enjoyable. [Respondent 24; q. 4c]

This suggest that students' enjoyment of both EBacc and non-EBacc subjects can depend on their teachers.

b) Variety of work in lessons

Students also discussed the teaching methods applied in lessons to relate to their enjoyment of a subject, particularly in relation to variety of work.

> [Maths is not enjoyable] because we usually have a lot of lessons on the same things. [Respondent 8; q. 4c]

> I don't find [English] fun because we always do the same things and write a lot. [Respondent 23; q. 4c]

> [Languages are not enjoyable] because of the way it is taught, always copying from the board. [Respondent 12; q. 4c]

This suggests that students considered repetitive work unenjoyable, particularly regarding copying and writing. In contrast, students discussed lessons which involved a variety of practical work as enjoyable.

> It makes [English] enjoyable by doing drama but not enjoyable staying in the classroom writing all the time. [Respondent 32; q. 4c]

> Our teachers make [Science] enjoyable, as the way the teach it. More practical work and experiments is more interesting than paper work. [Respondent 15; q. 4c]

This could also be a contributing factor to students generally identifying non-EBacc subjects as enjoyable, since these subjects – such as Art, Drama, Music and Technologies – generally involve more 'practical' work.

4.1.1.2.3.4. 'Subject lessons' summary

Regarding this category of themes overall, it can be suggested the subjects identified by students as 'most important' (mostly EBacc subjects) were generally considered 'not enjoyable'; while subjects identified as 'least important' (mostly non-EBacc subjects) were generally considered 'enjoyable'. As discussed, this could relate to students' perceptions of EBacc subjects being more useful and hence important than non-EBacc subjects, meaning students may feel more pressure in EBacc lessons. It can also be suggested that students' feelings of competence in a subject may significantly relate to their enjoyment of such. In this sense – regarding previously discussed theories of self-efficacy and positive psychology (Bandura, 1997;

Seligman 2000) – it could be suggested that students who feel competent in lessons which are most frequent (such as EBacc subjects) may be generally feel happier during school, and/or develop positive self-efficacy beliefs (SEB).

4.1.1.3. Summary of findings from questionnaires

In summary, the stage 1 findings from the questionnaires indicate that an EBacc subject was most frequently identified as the 'most important' subject (93.62%), and a non-EBacc subject was most frequently identified as the 'least important' subject (84.78%). TA of responses suggests that this may relate to students' perceptions of EBacc subjects being more useful than non-EBacc subjects (both currently and in the future), and external factors (such as school environment and input of others); including frequency of lessons and assessments, and perceptions that peers, parents and teachers have similar opinions of subjects' importance. In relation to previously discussed literature regarding positive psychology and SEB (Seligman, 2000; Bandura, 1977), this could suggest that students with strengths in EBacc subjects may have greater wellbeing and/or SEB than students with strengths in non-EBacc subjects, due to their skills being perceived as more useful. Stage 1 questionnaire findings also indicate that students find lessons enjoyable if they feel competent in the subject, and that they assess their abilities through comparison with peers. Similarly regarding the previously discussed literature (Bandura, 1997; Seligman, 2000), this could suggest that students who feel incompetent in lessons which are frequent (such as EBacc subjects) may be at risk of having lower wellbeing and/or SEB than those who feel incompetent in infrequent lessons (such as non-EBacc subjects).

As discussed, students also completed two self-reports (the WEMWBS and the MALS), which intended to measure and consider their wellbeing and SEB respectively; particularly in relation to their academic strengths and perceived value of such. Quantitative results from these self-reports will be discussed in the following section.

4.1.2. Stage 1 – Findings from self-reports and quantitative analysis

This section will outline the quantitative results from the 'Myself as a Learner Scale' (MALS) (Burden, 1998) and the 'Warwick-Edinburgh Mental Wellbeing Scale' (WEMWBS) (NHS, 2007), assessing students' SEB and wellbeing respectively.

4.1.2.1. Participant characteristics

Participants were 38 Year 9 students – 21 females and 17 males – aged either 13 or 14 years old and currently attending secondary school. The mean age was 13.84 years, with a standard deviation of 0.369. Participants were sampled by contacting mixed-sex, state and independent secondary-schools within 20 miles of the county capital, and randomly selecting 2-4 'mixed-ability' Year 9 classes within each participating school. All participants completed two standardised self-reports – the MALS (Burden, 1998) and the WEMWBS (NHS, 2007) – assessing the students' SEB and wellbeing respectively, providing MALS and WEMWBS scores.

Participants were grouped into two 'EBacc-groups' (E1 and E2), and two 'Match-groups' (M1 and M2); using each student's 'attainment-ranking' (taken from school reports) and 'value-ranking' (taken from completed questionnaires). The two EBacc-groups were created based on the number of EBacc subjects in the students' top-3 subjects in attainment-rankings (E1= 0 or 1 EBacc subjects; E2 = 2 or 3 EBacc subjects). The two Match-groups were created based on the number of 'matches' between the students' top-3 subjects in their attainment-rankings and the top-3 subjects in their value-rankings (M1= 0 or 1 subject matches; M2 = 2 or 3 subject matches).

4.1.2.1.1. EBacc-groups participants

EBacc-groups were created based on the number of EBacc subjects in the students' top-3 attainment rankings, taken from their school reports; wherein E1 = 0 or 1 EBacc subjects, and E2 = 2 or 3 EBacc subjects. Group E1 consisted of 17 students,

10 females and 7 males, ranging in age from 13 to 14 years. The mean age for Group E1 was 13.88 years with a standard deviation of 0.332. Group E2 consisted of 21 students, 11 females and 10 males, ranging in age from 13 to 14 years. The mean age for Group E2 was 13.81 with a standard deviation of 0.402. Table 4.1.2.1 includes the statistics of EBacc-group participants.

Table 4.1.2.1.

Participant information (EBacc-groups)

	Gender		**Age in years**					
	Females	Males	Thirteen	Fourteen	Mean	Std. Dev	Min.	Max.
Group E1 -	10	7	2	15	13.88	0.332	13	14
0 or 1 EBacc subjects	(58.8%)	(41.2%)	(11.8%)	(88.2%)				
Group E2 -	11	10	4	17	13.81	0.402	13	14
1 or 2 EBacc subjects	(52.4%)	(47.6%)	(19.0%)	(81.0%)				
Total participants	21	17	6	32	13.84	0.369	13	14
	(55.3%)	(44.7%)	(15.8%)	(84.2%)				

Group data was compared regarding participants' age in years, to ensure that there was no significant difference in the average age of participants between Groups E1 and E2. Due to the sample sizes ($N < 30$) being insufficient for an independent samples t-test (Field, 2009), a non-parametric equivalent Mann Whitney test was used for analysis. Results showed there was no significant difference in participants' ages in years between Group E1 and Group E2 ($U = 165.50$, $z = -0.604$, $p > 0.05$).

A Mann Whitney test was also used to determine that participants' age and gender had no effect on their MALS and/or WEMWBS scores. Results showed that there was no significant difference in students' MALS scores or WEMWBS scores between 13 and 14 year olds ($U = 85.50$, $z = -0.421$, $p > 0.05$; $U = 67.000$, $z = -1.162$, $p > 0.05$). Results also showed that there was no significant difference in students' MALS scores or WEMWBS scores between males and females ($U = 142.00$, $z = -1.073$, $p > 0.05$; $U = 139.000$, $z = -0.255$, $p > 0.05$).

4.1.2.1.2. Match-groups participants

As discussed, Match-groups were created based on the number of 'matches' between the students' top-3 subjects in their attainment-rankings and the top-3 subjects in their value-rankings; wherein M1= 0 or 1 subject matches, and M2 = 2 or 3 subject matches. Group M1 consisted of 27 students, 17 females and 10 males, ranging in age from 13 to 14 years. The mean age for Group M1 was 13.81 years with a standard deviation of 0.395. Group M2 consisted of 11 students, 4 females and 7 males, ranging in age from 13 to 14 years. The mean age for Group M2 was 13.90 with a standard deviation of 0.302. Table 4.1.2.2 includes the statistics of Match-group participants.

Table 4.1.2.2.

Participant information (Match-groups)

	Gender		**Age in years**					
	Females	Males	Thirteen	Fourteen	Mean	Std. Dev	Min.	Max.
Group M1 -	17	10	4	23	13.81	0.395	13	14
0 or 1 subject matches	(63.0%)	(37.0%)	(14.8%)	(85.2%)				
Group M1 -	4	7	2	9	13.90	0.302	13	14
1 or 2 subject matches	(36.4%)	(63.6%)	(18.2%)	(81.8%)				
Total participants	21	17	6	32	13.84	0.369	13	14
	(55.3%)	(44.7%)	(15.8%)	(84.2%)				

Group data was compared regarding participants' age in years, to ensure that there was no significant difference in the average age of participants between Groups M1 and M2. Due to the sample sizes ($N < 30$) being insufficient for an independent samples t-test (Field, 2009), a non-parametric equivalent Mann Whitney test was used for analysis. Results showed that there was no significant difference in participants' ages in years between Group M1 and Group M2 ($U = 134.50$, $z = -0.713$, $p > 0.05$).

Mann Whitney tests were also used to determine that participants' age and gender had no effect on their MALS and/or WEMWBS scores. Results showed there was no significant difference in students' MALS scores or WEMWBS scores between 13 and 14 year olds ($U = 85.50$, $z = -0.421$, $p > 0.05$; $U = 67.000$, $z = -1.162$, $p > 0.05$), or between males and females ($U = 142.00$, $z = -1.073$, $p > 0.05$; $U = 139.000$, $z = -0.255$, $p > 0.05$).

4.1.2.2. Grouped data analysis

Students' MALS and WEMWBS scores were compared between EBacc-groups E1 and E2, and Match-groups M1 and M2.

4.1.2.2.1. EBacc-groups analysis

4.1.2.2.1.1. EBacc-groups non-parametric testing

Table 4.1.2.3 shows the descriptive statistics for the students' MALS scores and WEMWBS scores between EBacc Groups. The median MALS score for Group E1 was 59.00, while the median MALS score for Group E2 was 72.00. The median WEMWBS score for Group E1 was 44.00, while the median WEMWBS score for E2 was 45.00. This indicates both the median MALS score and the median WEMWBS score as higher for Group E2 than Group E1. These results are illustrated in the table below. Figure 4.1.2.1 and Figure 4.1.2.2 are box plots for students' MALS scores and WEMWBS scores respectively.

Table 4.1.2.3.

Descriptive Statistics for MALS and WEMWBS scores

		Mean	**Median**	**Std. Dev.**	**Min.**	**Max.**
MALS score	Group E1	56.35	59.00	10.57	32.00	75.00
	Group E2	73.67	72.00	7.60	63.00	89.00
WEMWBS score	Group E1	42.88	44.00	10.28	23.00	64.00
	Group E2	46.48	45.00	8.15	28.00	61.00

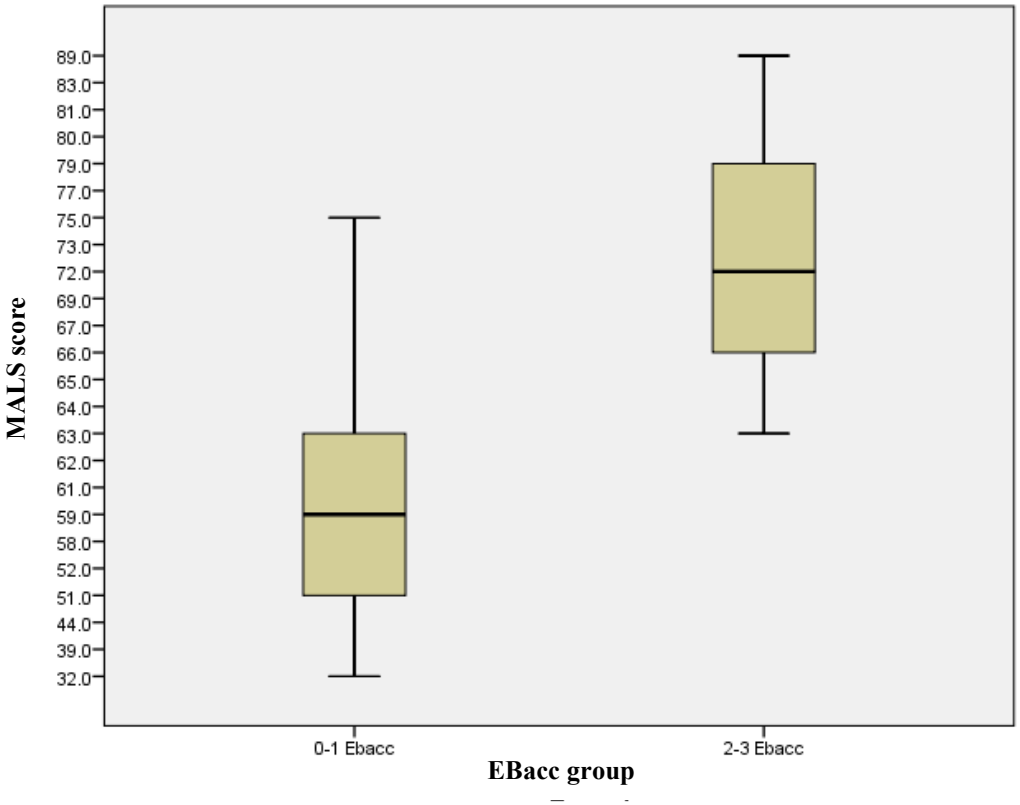


Figure 4.1.2.1. Box plot for MALS scores of Group E1 and Group E2.

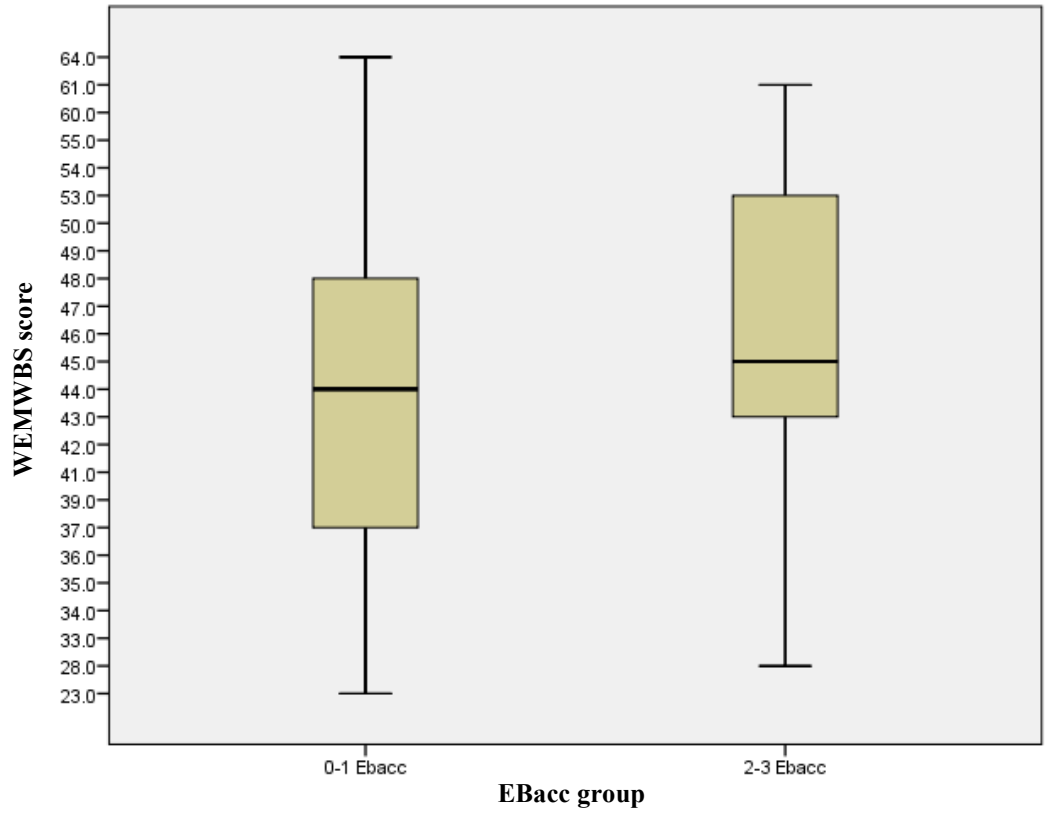


Figure 4.1.2.2. Box plot for WEMWBS scores of Group E1 and Group E2.

Mann Whitney tests were used to assess whether this difference in MALS scores and WEMWBS scores between EBacc-groups was significant. Results showed that there was a significant difference in MALS scores between Group E1 (Mdn = 59.00) and Group E2 (Mdn = 72.00), with a large effect size (U = 21, z = -4.63, p < 0.001, r = -0.75). Results showed that there was no significant difference in WEMWBS scores between Group E1 (Mdn = 44.00) and Group E2 (Mdn = 45.00), (U = 137, z = -1.22, p = 0.114). Due to the significant results of the Mann Whitney test regarding differences in MALS scores between Group E1 and Group E2, the assumptions of a t-test were re-evaluated (as below) to determine whether an independent samples t-test could be used for further assessment.

4.1.2.2.1.2. EBacc-groups parametric testing

a) Descriptives

The mean MALS score for Group E1 was 56.35, while the mean MALS score for Group E2 was 73.67. The mean WEMWBS score for Group E1 was 42.88, while the mean WEMWBS score for Group E2 was 46.48. This indicates both the mean MALS score and the mean WEMWBS score to be higher for Group E2 than Group E1. Figure 4.1.2.3 is a bar chart for the mean MALS and WEMWBS scores for Group E1 and Group E2; error bars are set at a confidence interval of 95%.

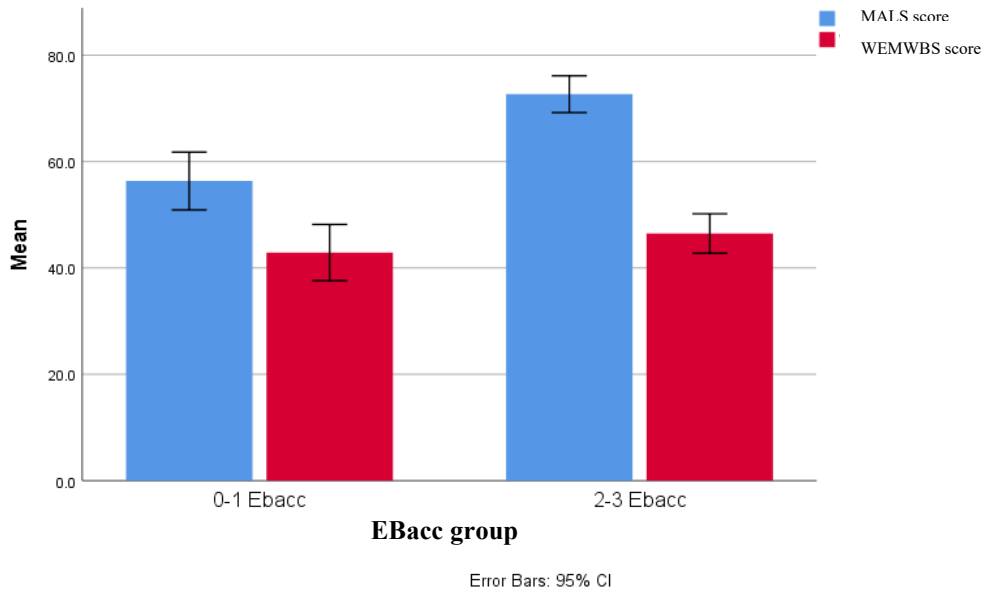


Figure 4.1.2.3. Bar chart and error bars for mean MALS and WEMWBS scores for Group El and Group E2.

b) Tests of normality

As the sample sizes were insufficient for central limits theorem to be applied to the assumption of normality (N < 30), a Kolmogorov–Smirnov test was used to analyse the data distribution of MALS scores for Group E1 and Group E2 (Field, 2009). Results showed that normality could not be assumed for MALS data in Group E1 ($D(17) = 0.209$, $p < 0.05$). Therefore, the skewness and kurtosis of MALS data for Group E1 were considered further. Skewness and kurtosis z-scores indicated that there was no significant skew ($z = -1.438$) or significant kurtosis ($z = 0.719$) in data distribution of MALS scores for Group E1 (at $p > 0.05$). Normality of distribution could be assumed for MALS scores in Group E2 ($D(21) = 0.160$, $p > 0.05$). Skewness and kurtosis z-scores also indicated there was no significant skew ($z = 0.838$) or significant kurtosis ($z = -0.949$) in data distribution of MALS scores for Group E2 (at $p > 0.05$).

Figure 4.1.2.4 and Figure 4.1.2.5 are histograms and Q-Q plots illustrating the data distribution of MALS scores in Group E1 and Group E2 respectively.

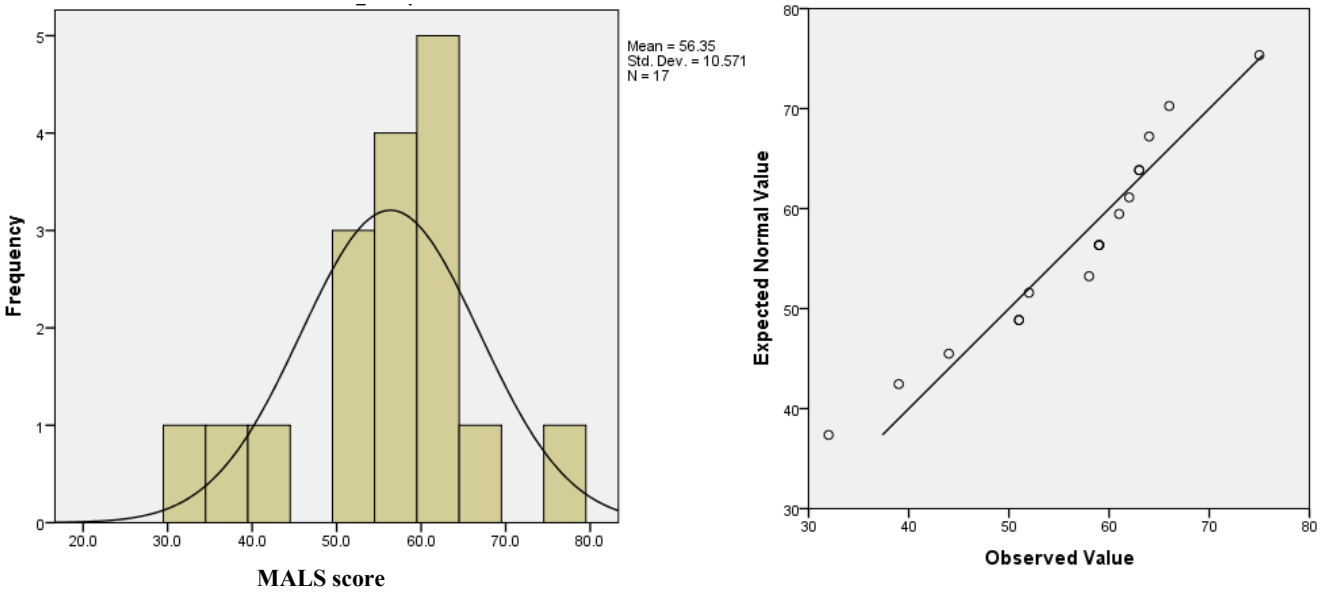


Figure 4.1.2.4. Histogram and Q-Q plot for distribution of MALS scores for Group E1.

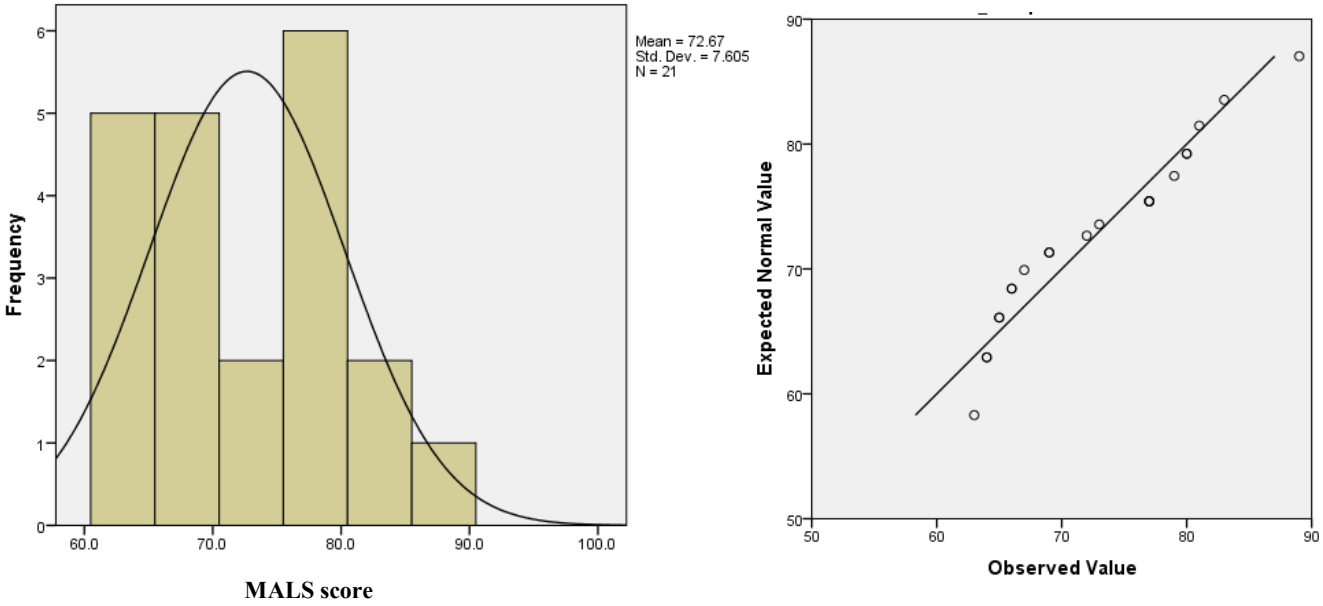


Figure 4.1.2.5. Histogram and Q-Q plot for distribution of MALS scores for Group E2.

c) Independent samples t-test

As no significant skew or kurtosis was found in distribution of MALS scores for Group E1 or Group E2, it was considered that an independent samples t-test could be used to further examine the difference in MALS scores between the two EBacc-groups. Additionally, since results from the non-parametric equivalent Mann Whitney had already been found to be significant, the inclusion of t-test results was considered to be justified. Results showed that there was significant difference in MALS scores between Group E1 (M = 56.353, SE = 2.564) and Group E2 (M = 72.667, SE = 1.660), with a large effect size; t(36) = -5.529, p < 0.001, r = 0.678.

4.1.2.2.2. Match-groups analysis

4.1.2.2.2.1. Match-groups non-parametric testing

Table 4.1.2.4 shows the descriptive statistics for the students' MALS scores and WEMWBS scores between Match Groups. The median MALS score for Group M1

was 63.00, while the median MALS score for Group M2 was 72.00. The median WEMWBS score for Group M1 was 45.00, while the median WEMWBS score for M2 was 50.00. This indicates both the median MALS score and the median WEMWBS score as higher for Group M2 than Group M1. These data are illustrated in Figure 4.1.2.6 and Figure 4.1.2.7, which are box plots for students' MALS scores and WEMWBS scores respectively.

Table 4.1.2.4.

Descriptive Statistics for MALS and WEMEBS scores

		Mean	**Median**	**Std. Dev.**	**Min.**	**Max.**
MALS score	Group M1	62.37	63.00	12.73	32.00	89.00
	Group M2	72.73	72.00	6.26	65.00	81.00
WEMWBS score	Group M1	43.56	45.00	9.21	23.00	64.00
	Group M2	48.09	50.00	8.79	34.00	61.00

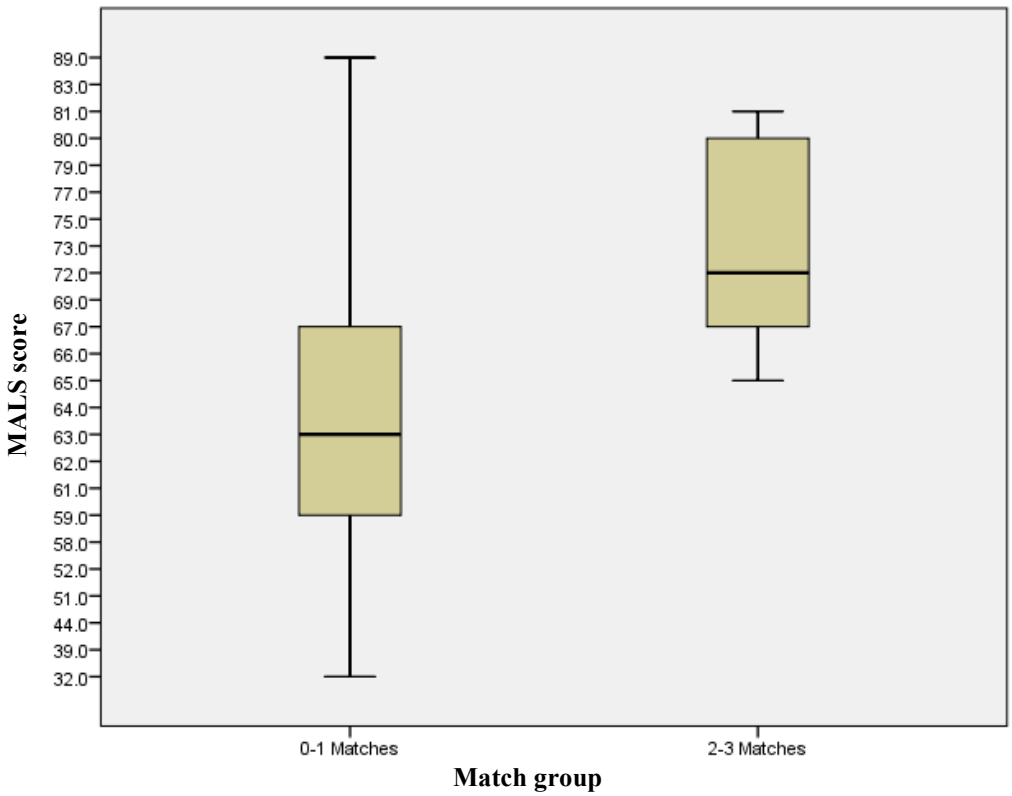


Figure 4.1.2.6. Box plot for MALS scores of Group M1 and Group M2.

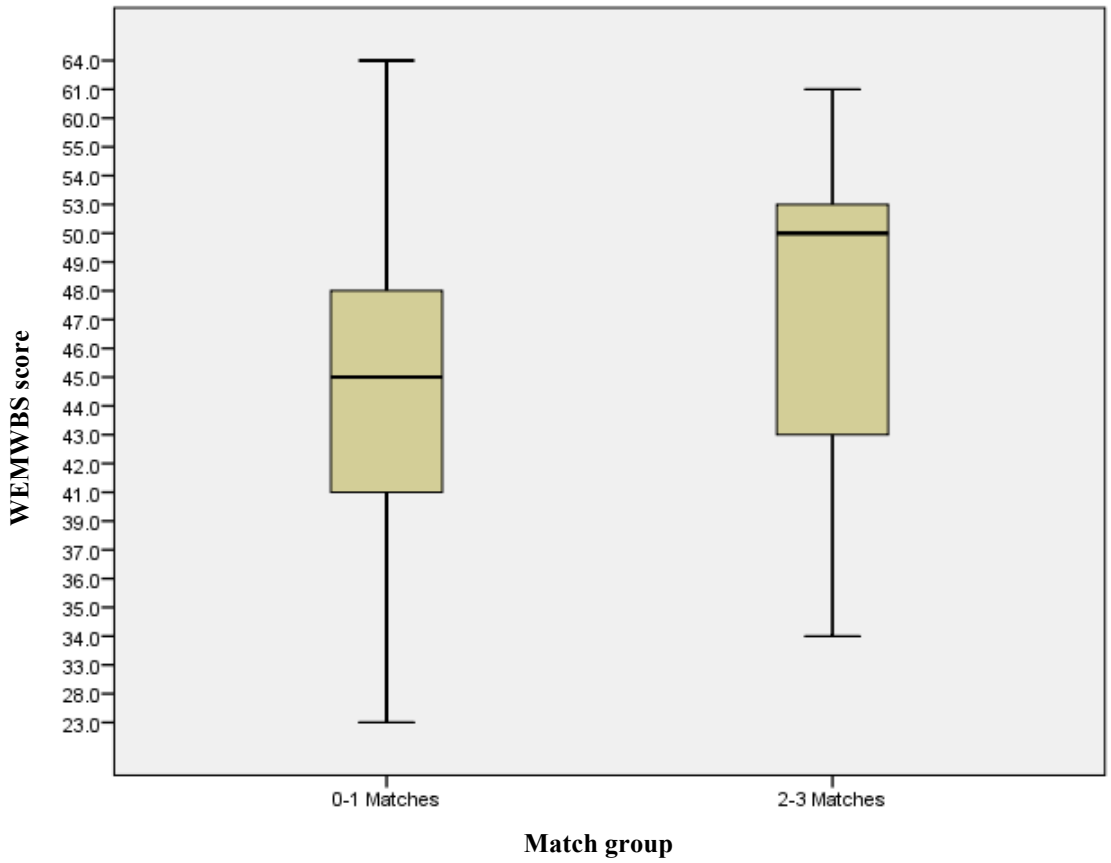


Figure 4.1.2.7. Box plot for WEMWBS scores of Group M1 and Group M2.

Mann Whitney tests were used to assess whether this difference in MALS scores and WEMWBS scores between Match-groups was significant. Results showed that there was a significant difference in MALS scores between Group M1 (Mdn = 63.00) and Group M2 (Mdn = 72.00), with a medium to large effect size (U = 55.50, z = -2.997, p = 0.001, r = -0.49). Results showed that there was no significant difference in WEMWBS scores between Group M1 (Mdn = 45.00) and Group M2 (Mdn = 50.00), (U = 105.50, z = -1.386, p = 0.085).

Due to the significant results of the Mann Whitney test regarding differences in MALS scores between Group M1 and Group M2, the assumptions of a t-test were re-evaluated to determine whether an independent samples t-test could be used for further assessment.

4.1.2.2.2.2. Match-groups parametric testing

a) Descriptives

The mean MALS score for Group M1 was 62.37, while the mean MALS score for Group M2 was 72.73. The mean WEMWBS score for Group M1 was 43.56, while the mean WEMWBS score for M2 was 48.09. This indicates both the mean MALS score and the mean WEMWBS score to be higher for Group M2 than Group M1. Figure 4.1.2.8 is a bar chart for the mean MALS and WEMWBS scores for Group M1 and Group M2; error bars are set at a confidence interval of 95%.

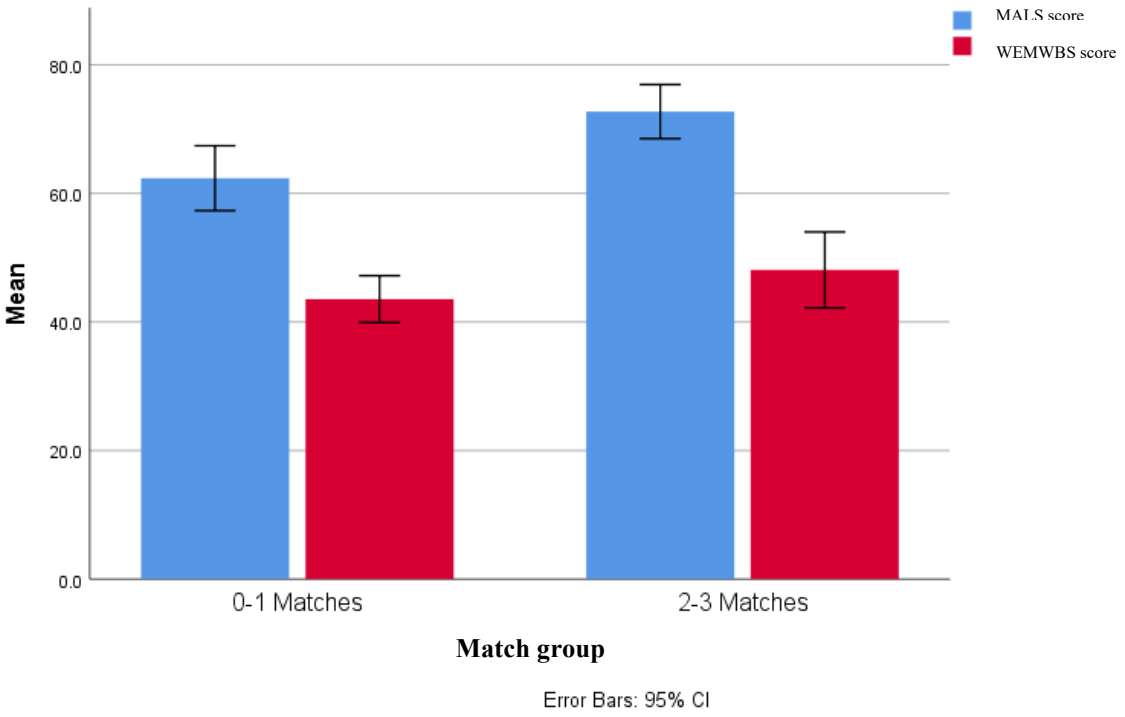


Figure 4.1.2.8. Bar chart and error bars for mean MALS and WEMWBS scores for Group Ml and Group M2.

b) Tests of normality

As the sample sizes were insufficient for central limits theorem to be applied to the assumption of normality ($N < 30$), a Kolmogorov–Smirnov test was used to analyse the data distribution of MALS scores for Group M1 and Group M2 (Field, 2009). Results showed that normality could be assumed for MALS data in Group M1 ($D(27) = 0.143$, $p > 0.05$). Skewness and kurtosis z-scores also indicated there to be

no significant skew (z = -0.538) or significant kurtosis (z = z = 0.685) in data distribution of MALS scores for Group M1 (at p > 0.05). Normality of distribution could also be assumed for MALS scores in Group M2 (D(11) = 0.205, p > 0.05). Skewness and kurtosis z-scores indicated there to be no significant skew (z = z = 0.307) or kurtosis (z = -1.406) in data distribution of MALS scores for Group M2 (at p > 0.05). Figure 4.1.2.9 and Figure 4.1.2.10 are histograms and Q-Q plots illustrating the data distribution of MALS scores in Group M1 and Group M2 respectively.

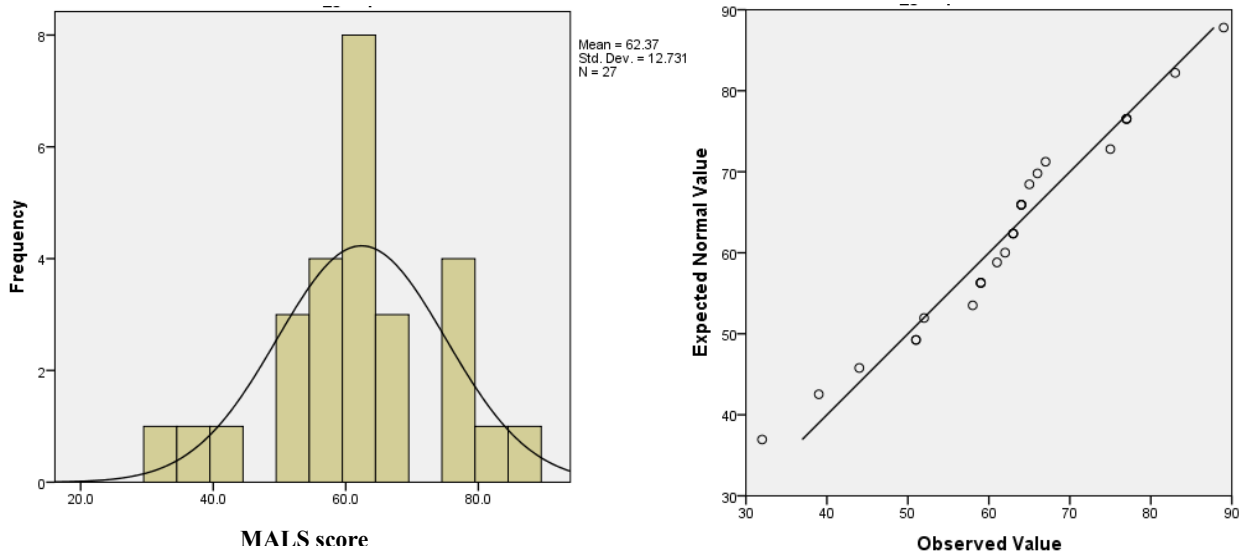


Figure 4.1.2.9. Histogram and Q-Q plot for distribution of MALS scores for Group M1.

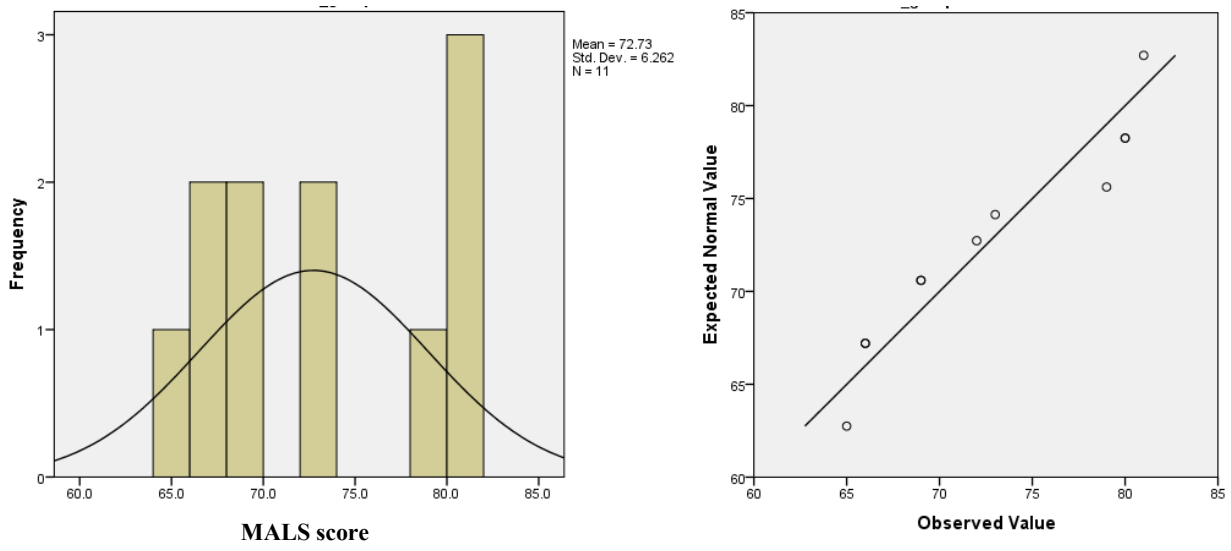


Figure 4.1.2.10. Histogram and Q-Q plot for distribution of MALS scores for Group M2.

c) Independent samples t-test

As normality of data distribution could be assumed in MALS scores for Group M1 and Group M2 – and no significant skew or kurtosis was found in distribution of MALS scores for Group M1 or Group M2 – it was considered that an independent samples t-test could be used to further examine the difference in MALS scores between the two Match-groups. Additionally, since results from the non-parametric equivalent Mann Whitney had already been found to be significant, the inclusion of t-test results was further considered to be justified. Results showed that there was significant difference in MALS scores between Group M1(M = 62.370, SE = 2.450) and Group M2 (M = 72.727, SE = 1.888), with a medium effect size; t(36) = -2.560, p = 0.008, r = 0.392.

4.1.2.3. Summary of self-report findings and quantitative analysis

In summary, results suggest that there were no significant differences in students' wellbeing between 'EBacc groups' or 'Match groups'. However, there was a significant difference in students' self-efficacy between both groups; wherein students with strengths in EBacc subjects had significantly higher MALS scores than students with strengths in non-EBacc subjects; and students with strengths in subjects which they had identified as important had significantly higher MALS scores than students with strengths in subjects which they had not identified as important. These differences were indicated to be statistically significant, by both Mann Whitney and t-tests.

4.1.3. Summary of stage 1 findings

Overall, stage 1 'exploratory' findings suggest that 93.62% of subjects identified by students as the 'most important' subject was an EBacc subject, while 84.78% of subjects identified as the 'least important' was a non-EBacc subject; perceptions around the usefulness of the subject, the frequency of lessons for the subject, and others' opinions of the subject may all be considered potential reasons for such.

Furthermore, stage 1 findings suggest that students with strengths in EBacc subjects and/or subjects which they consider to be 'most important' have significantly higher SEB (as measured by the MALS, Burden, 1998) than students with strengths in non-EBacc subjects and/or subjects which they do not consider to be 'most important'. The potential reasons for this difference were considered in stage 2 of the research ('explanatory'), wherein nine of the 38 students were interviewed. The interviews also aimed to further explore the themes identified from the questionnaires, to consider the potential mechanisms behind students' responses. Findings from stage 2 of the research will be discussed in the next section.

4.2. Stage 2

This section will consider qualitative findings from stage 2 of the research, including deductive TA of semi-structured interviews with nine students. These interviews aimed to further explore and expand on stage 1 qualitative findings, and to offer potential explanations of stage 1 quantitative findings.

4.2.1. Process of interviews and analysis

10 students were randomly selected between EBacc and Match groups from the original 38 participants. One student was ill on the day of interview, meaning nine students were interviewed in total; four students from EBacc/Match Group 1, and five students from EBacc/Match Group 2, from a total of five different schools. Interviews were semi-structured, aiming to allow for flexibility in students' responses, whilst also enabling the researcher to further explore the most prominent themes from stage 1 findings. In particular, the researcher aimed to further explore the perception of EBacc subjects being more 'useful' than non-EBacc subjects; and the extent to which 'other's opinions' and the students' 'school environment' may be influencing such. The researcher also aimed to further explore and consider the potential explanations of stage 1 quantitative findings – wherein students with strengths in EBacc subjects were found to have significantly higher MALS scores than students with strengths in non-EBacc subjects – by including a 'hypothetical scenario' question (to be discussed).

Interview questions were informed by stage 1 qualitative findings, as were 'prompts' which were used to facilitate students' responses when necessary (Appendix M). Students' interviews were transcribed by the researcher and re-read several times, aiming to immerse the researcher in the data (Braun & Clarke, 2006). The transcripts were then copied into a qualitative analysis program (Nvivo), to code the data. A deductive TA informed by Braun & Clarke (2006) was conducted, wherein transcripts were coded in relation to the themes and subthemes as informed by stage 1 qualitative findings. Themes and subthemes were also informed by the psychological and theoretical frameworks considered relevant to stage 1 findings

(SLT, EST, SEB development). Stage 1 themes/sub-themes that did not have enough supporting data from the interviews were discarded from stage 2 analysis. Space was also allowed for inclusion of any additional themes and/or subthemes emerging from the interview data which were considered relevant the research questions. The data was coded in relation to these themes, as included below (Table 4.2.1). Additional subthemes 'emergent' from the interview data are highlighted.

Table 4.2.1.

Themes and subthemes in each category

	Category of themes	Themes	Sub-themes
1	Usefulness of subject	1.1. Future usefulness	1.1.a. Future employment
			1.1.b. Future education
			1.1.c. Future everyday life
		2.1. Current usefulness	2.1.a. Currently education
			2.1.b. Current everyday life
2	External factors	2.1. School environment	2.1.a. Timetabling of subject
			2.1.b. GCSE options
		2.2. Others' opinions	2.2.a. Peers' input
			2.2.b. Teachers' input
			2.2.c. Parents' input
3	Theories of self-efficacy beliefs	3.1. 'Mastery experience'	3.1.a. Opportunities to develop skills
			3.1.b. Evidence of skills
		3.2. 'Social persuasion'	3.2.a. Perceived 'value' of skills
			3.2.b. Praise from others
			3.2.c. Rewards for skills

A thematic map was generated for each category of themes and for overall findings, to aid the analysis process. The analysis of the above themes is included in the following section, wherein each category of themes and subthemes will be discussed separately. The analysis will also include illustrative extracts from the interviews.

4.2.2. Thematic analysis of interviews

The themes and subthemes from each category will be discussed separately. Due to word restrictions of the current research, the most prevalent themes and those most relevant the research questions will be discussed in most detail.

4.2.2.1. Usefulness of subject

This category of themes was generated from stage 1 findings as previously discussed, and consists of two themes; the 'future' usefulness of a subject, and the 'current' usefulness of a subject (Figure 4.2.1). These themes were further divided into subthemes as below, regarding stage 1 findings and an additional emergent subtheme in 'future' usefulness.

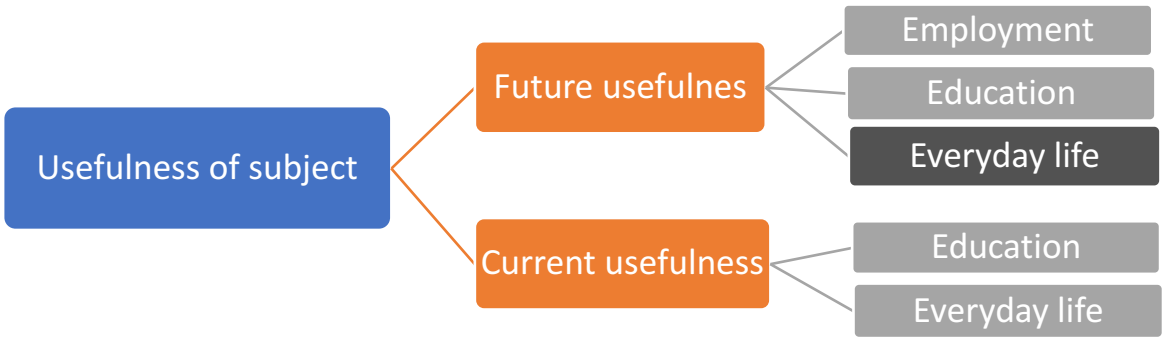


Figure 4.2.1. Category 1: 'Usefulness of subject'

As in the questionnaires, students frequently discussed the future and current usefulness of subjects during their interviews, particularly regarding their thoughts on what made a subject important. Each theme and subtheme within this category will be discussed separately below.

4.2.2.1.1. Future usefulness of subject

This theme consists of three subthemes; the usefulness of a subject for 'future employment', the usefulness of a subject for 'future education', and the usefulness of a subject for 'future everyday life'. While the first two of these subthemes were generated from stage 1 findings, the usefulness of a subject to future 'everyday life' is an additional subtheme emergent from interview data.

Transcript Key
TEP – Trainee Educational Psychologist
(.) – short pause
(..) – long pause
Underlined – emphasised speech

a) Future employment

Similarly to the questionnaires, one of the most prevalent themes within the interviews related to students' perceptions of a subject's usefulness to future employment.

PC: I think like (.) having (.) for example like Maths can give you like some (.) more ways of (.) getting different jobs than for example Art

TEP: Mm-hm

PC: Cos like (.) when you do Art you like (.) I think there's only like one way you can go with it like (.) Artist or something

Interviewee 5; line 121

AT: Yeh definitely because (.) I know that (.) like if I picked Music (..) there's not really anywhere I can go with that (.) like personally

TEP: Mm-hm

AT: Like (.) I'm not gonna be a Musician (.) cos you have to be like (.) I dunno really committed to that

TEP: Mm-hm

AT: And (.) I wouldn't want to be a Music teacher cos I'm not (.) good enough at that

Interviewee 8; line 345

As with students' responses to stage 1 questionnaires, EBacc subjects were frequently described as 'useful' for *general* future employment, while non-EBacc subjects such as Art, Music and Drama were referred to as only being useful to specialised careers. Furthermore, a number of students discussed non-EBacc subjects being 'not useful' for securing future employment.

> ID: Probably because (..) I just thought that [the 'creative' subjects] won't get us really anywhere (.) like (..) not too sure what I put (.) like Art or Drama and all that
>
> TEP: Yeh (.) and when you say 'won't get you anywhere' what do you mean
>
> ID: Like (.) jobs and that — Interviewee 6; line 49

> TEP: Yeh (..) so (.) you said you 'got the feeling that they thought you shouldn't take (.) music'
>
> SM: Yeh
>
> TEP: Yeh (..) and did you think there were any other subjects that (.) people thought like that
>
> SM: Um (.) like (.) it's quite similar like with Drama
>
> TEP: Mm
>
> SM: Like (.) things people (.) think that won't help you get a job (..) like PE and stuff like that
>
> Interviewee 3; line 289

This suggests that students considered non-EBacc subjects to have limited usefulness for their future employment. Additionally, the extracts indicate Art, Drama and Music to be often grouped together in this respect, which may relate to why these three subjects were most frequently identified as 'least important' in stage 1. The above extracts also suggest that others may be influential to students' perceptions of subjects' usefulness (to be discussed). In addition to describing EBacc subjects as more useful for general future employment than non-EBacc subjects, students also discussed how the *type* of jobs associated with EBacc subjects may be perceived as 'better' and 'higher-earning' than those associated with non-EBacc subjects.

> ID: [Students who are good at 'creative subjects'] probably wanna go and do like (.) Art and all of that (.) and the people who like (.) get good grades in Maths and all that (.) they probably (.) wanna get like a really good job when they're older (.) and all of that
>
> Interviewee 6; line 513

AM: Well (..) I think some people were (.) saying that 'if I do this and this' (.) 'and' (.) 'I get this job I'll get more money than if I do this and this'

TEP: (overlapping) ah ok

AM: (overlapping) 'in this job'

TEP: What kind of (.) ones were they saying for (.) each

AM: I don't (.) actually remember but I think some things like (.) Medicine and Art

TEP: Yeh

AM: And that was their comparison (.) that they made (..) and (.) yeh

Interviewee 4; line 194

Students not only considered success in EBacc subjects to increase their general employability, but to also relate to jobs of higher value and status. This may further increase the perceived value of EBacc subjects, and hence relate to why EBacc subjects were identified as 'most important' in 94% of stage 1 responses. Additionally, students often made direct comparisons between the types of jobs associated with EBacc subjects and non-EBacc subjects; potentially furthering a divide between them, and decreasing the value of non-EBacc subjects.

AM: Well um (.) unwanted (.) yeh (.) because like (.) you're still doing good in these [creative] subjects (.) but (.) you're not (..) people think you're not like (.) aspiring to do anything

TEP: Mm

AM: Yeh (.) with these they think (.) you're just gonna like (.) become an Artist on the streets or like (.) play music on the streets or something like that

TEP: Mm

AM: So yeh (.) and with this person [who is doing well in Maths, English and Science] they'd be like (.) 'oh you're going to get such a good job'

TEP: Mm

AM: Because you (.) you're good at these things

Interviewee 4; line 568

b) Usefulness to future education

Again as in stage 1, students often described EBacc subjects as useful to their future education in a general sense, particularly regarding 'higher education'.

> PC: Cos (.) I think like (.) there's the Science Maths and English (.) I think they (.) that that's what people look at (.) the most (.) when you go to say University or something.
>
> Interviewee 5; line 343

> ES: I mean I don't find it too bad but some people I know like a lot of my friends (.) they don't have a language [next year]
>
> TEP: Mm-hm
>
> ES: And now they're worried about what like (.) like (.) 'I can't get into a university because I haven't taken this language'
>
> Interviewee 1; line 457

Comparatively (and again as with stage 1 findings), non-EBacc subjects were only referred to being useful to future education if interested in studying that specific subject.

> ZK: But (.) you can't do Photography until I think (.) A-level or Year 11 (..) so you have to take the whole Art (.) so you have to do (.) lino you have to do etching (.) you have to do painting you have to do biro (.) to get (.) to Photography (..) which (.) people were annoyed at (.) but I don't mind (.) cos I enjoy it all ((laughs))
>
> Interviewee 2; line 194

This again suggests EBacc subjects are considered more useful than non-EBacc subjects in terms of keeping future options 'open', which could increase perceptions of the subjects' overall 'value'.

c) Usefulness to future everyday life

As discussed, this subtheme was emergent from the interview data itself, wherein students frequently referred to how useful they considered a subject to be to their future everyday life. Although in stage 1 students discussed subjects' usefulness for *current* everyday life, they did not discuss usefulness for *future* everyday life. This

may relate to the additional thinking and talking space given to students in interviews compared with questionnaires.

> SM: Like (.) Citizenship teaches us kind of like (.) bills which I think is really important cos (.) I don't know much about that and I really should (.) because that's gonna impact on me in the future
>
> Interviewee 3; line 36

Students often discussed the importance of learning 'life skills' such as paying rent/bills, particularly regarding what they would like to learn more of in school.

> ZK: And like houses and stuff (..) and even paying bills (.) like I know that you have (.) like a letter that comes (.) but (.) I don't know (.) do you send it back or something (.) like it's not that I'm like (.) not paying attention it's just (..) school isn't teaching us that
>
> TEP: Mm
>
> ZK: Like (.) they teach us that you have to (.) or that you (.) should go to University (.) and you could get a house (.) you have to pay bills (..) you have to do all this (.) but (.) they don't teach us the details
>
> TEP: Mm
>
> ZK: Yeh (..) so I think (.) things need to be a bit more detailed ((laughs))
>
> Interviewee 2; line 678

Additionally – and comparatively to previously discussed subthemes – the subjects referred to by students as most useful for future everyday life were generally non-EBacc subjects.

> BB: I think you can sort of (.) get knowledge from them obviously (.) like with Textiles (..) I sort of (.) I've learnt how to use a sewing machine (.) I've learnt how to (.) sew a little bit (.) I mean I kind of (.) knew already cos of my (.) Granny taught me a little bit
>
> TEP: Mm
>
> BB: Erm (.) so (..) I think you can (.) and those are kind of applicable because (.) I mean (.) not necessarily in modern society because obviously like (.) disposable (.) like you can just go (.) if you (.) I dunno (..) get a hole in your (.) jeans or something you can go and buy another pair for like £15
>
> TEP: Mm
>
> BB: So (..) but I still think it's like kind of a useful skill for the future
>
> Interviewee 9; line 701

AM: Well (.) we have (.) er in Year 10 we're doing something (.) like (.) um (.) like Business or something like that

TEP: Yeh

AM: During Form time (.) where basically like (..) they help you like (.) they (.) teach you to do your taxes I think

TEP: (overlapping) Ah

AM: (Overlapping) or something like that (.) and I think that's important (.) because (.) I think (.) I know a lot of adults who like (.) struggled a lot with that

TEP: Mm

AM: So (.) yeh and like (.) just basic things like that (.) or like (.) Food Tech I think that's really important because (.) if you can't cook (.) then (..) yeh (.) and (.) just things like that (.) just like (.) ordinary like household work

TEP: Mm

AM: That (.) you need to be taught by someone (..) that (.) maybe parents don't teach you

Interviewee 4; line 644

Students valued learning 'real-life' skills which could be applied in their future everyday life, and therefore identified subjects which could teach them such skills as important; including non-EBacc such as 'Technologies', which were mostly identified as 'least important' in stage 1. It could be suggested that having opportunity to further reflect on their perceptions of subjects' value may have resulted in this difference in responses between stage 1 and 2.

4.2.2.1.2. Current usefulness of subject

This theme consists of two subthemes as generated from stage 1 findings, regarding subjects' usefulness for 'current education', and subjects' usefulness for 'current everyday life'.

a) Usefulness for current education

As this subtheme was discussed in detail earlier in the chapter, and students' responses were similar between questionnaires and interviews, it will be briefly referred to here. Similarly to stage 1 findings in this subtheme, students often described English as being particularly useful to other subjects.

> AM: Um (.) I don't really know (.) I think just (.) English is the most important because we use it in everything (.) I guess
>
> Interviewee 8; line 6

> BB: Well they're kind of (.) well English I think (.) I argued was the most important because (..) you have to be able to read (.) to do (.) like Science or (.) and kind of (.) not really to do Maths but kind of (..) and to do all of the other subjects (.) erm (..) so (.) I guess it's sort of (.) if you can't really read then you can't do other subjects (.) like History and Science and Geography
>
> Interviewee 9; line 20

Additionally, as shown above, the students often referred to how English was particularly useful to other subjects involving essay writing, which are generally EBacc subjects (as previously discussed, an EBacc subject was identified as 'most important' by 94% of students in stage 1). In this sense, students may consider English to have additional value, due to its perceived positive relationship to other 'important' subjects; which could relate to English being most frequently identified as the 'most important' subject in stage 1.

b) Usefulness for current everyday life

As with stage 1 responses, subjects were often discussed regarding their usefulness to students' current everyday life.

> ZK: Um (.) Science (.) I (.) understand (.) because (.) it gives you (.) it gives you more knowledge of like (.) why things are happening (.) it gives you knowledge of like (.) like (.) gravity and like (.) how like (.) why the Earth is how it is and it like (.) it just makes you more well-rounded and it (.) means you can have a more educated (.) like educational conversation (..) and like (.) so it will be easier to (.) understand different points of views and stuff
>
> Interviewee 2; line 748

Similarly to questionnaire responses, students often referred to EBacc subjects such as Maths and Science being useful to everyday life, particularly early on during their interviews.

> ES: Yeh Maths stuck out to me like (..) kind of straight away because it's something we use every day so (.) it just makes sense
>
> Interviewee 1; line 6

> BB: So (.) in order to um (.) sort of get further you need to know all the basic Science (.) it's how the world works so (.) it's kind of (.) relevant to (.) daily life as well ((laughs))
>
> Interviewee 9; line 34

Also similarly to the questionnaires, non-EBacc subjects were often described as less 'useful' to everyday life, but enjoyable.

> PC: It's cos it's just fun to do (.) it's not something (.) like (.) especially Music (.) I never was like (.) I never used to do Music (.) at home (.) in my free time
>
> TEP: Mm-hm
>
> PC: So then doing Music in lessons was (..) like fun because it was trying something (.) trying something new out (..) Art was fun as well (.) but it was (.) I think it was (..) it's somewhat (.) less enjoyable than Music (.) because (.) you do like (.) the same thing (.) like you still just draw so it's like (..) pretty (.) pretty nice (.) but (.) I don't think I (.) learned a lot from them
>
> TEP: Mm
>
> PC: So for me they were just (.) more enjoyable I guess
>
> Interviewee 5; line 358

> ZK: People find that important because [Drama] (.) can relax them and can make them feel like (.) more confident and stuff (.) and although (.) it won't necessarily teach you anything that you actually use in every day (.) to day life (.) like you might in (.) Maths or Science for example (.) it's like (.) it's important because it lets you (.) calm down and refresh yourself and it gives you like a break
>
> Interviewee 2; line 148

However, unlike in stage 1 – and as shown in the above extract – students also discussed how 'enjoying' a non-EBacc subject could be additionally useful to their everyday life, particularly on an emotional level.

ES: I think (.) you have a creative outlet like it can be quite relaxing if you're (.) if you've just had a Maths test and you go into an Art classroom

TEP: Mm

ES: It's gonna be (.) quite nice (.) and relax you

Interviewee 1; line 903

SM: Yeh (.) Music and Drama help you with confidence

TEP: Mm-hm

SM: Which I feel is really important (.) for like (.) the outside world

TEP: Yeh

SM: Yeh I think that's really important

Interviewee 3; line 477

In particular, non-EBacc subjects such as Music and Drama – two of the subjects most frequently identified as 'least important' in stage 1 – were discussed as being useful for improving confidence.

AM: Yeh (..) I would like it if we had like more singing lessons

TEP: Mm-hm

AM: But then at the same time I wouldn't (.) because then I'd have to sing in front of everyone ((laughs))

TEP: ((laughs))

AM: But I still feel like (.) that would like (.) boost my confidence a little bit

Interviewee 4; line 375

Furthermore, students additionally discussed how improving their confidence could be useful for real-life application, outside of the specific subject.

BB: I think a lot of times (.) well [Drama] teaches confidence a little bit

TEP (overlapping) Mm

BB: (overlapping) Because you're going up on a stage and you're performing to a group of people

TEP: Yeh

BB: So it can help with things like (.) if you ever need to make a speech

TEP: Mm

BB: Or do a presentation (.) which you (.) like if you go to University don't you (.) have to do quite a lot of presentations

TEP: Yeh (.) yeh

BB: Erm so it kind of (.) I guess it can build confidence (.) in a way that it sort of gets you comfortable with (.) speaking to large groups of people Interviewee 9; line 723

AT: Whereas like (.) in Drama I mean you can (.) I dunno cos I'm not very good at Drama (.) but you (.) it's (.) it's not something that you can really (.) use outside (.) of a creative (..) I mean you could if you were presenting something

TEP: Mm

AT: Like that would be useful Interviewee 8; line 193

Regarding the above extract specifically, the student begins by discussing how Drama would not be useful outside of the specific subject, as did most students in stage 1 as discussed. However, she then reflects that the skills developed in Drama could be applied elsewhere. Therefore, it could be suggested that having additional thinking space within the interviews compared to questionnaires provided students an opportunity to further reflect on subjects' usefulness, including the uses of non-EBacc subjects which were initially not considered. Furthermore, students also made direct comparisons between the usefulness of non-EBacc and EBacc subjects, wherein EBacc subjects were often referred to as being *less* useful to everyday life.

ES: Yeh I think (.) the creative subjects should stay open to everyone as well like (.) even if you don't (.) enjoy it they're very good for character building because if you're (.) in drama they do persuade ((laughs)) they do try to persuade you to go up on stage which I can't do

TEP: Mm

ES: But (.) they persuade you to do this and a lot of people hate it (.) but it's still (.) good for you to do it because (.) it's (..) building character as well

TEP: Mm-hm

ES: Cos you don't (.) just want to build your knowledge you need to build as a person as well

TEP: Mm

ES: So (.) I feel like if you lean more towards the academic subjects you don't build as much as a person (.) you're just building all of your knowledge that (.) like (.) some of it you're just not gonna use ((laughs)) Interviewee 1; line 881

More specifically, the EBacc subjects most frequently identified as 'most important' in questionnaires and earlier in interviews, were often described as *not* useful to everyday life.

AM: I (.) don't know (.) that is my favourite thing yeh (.) Pythagoras (.) I love it yeh (.) but I don't know how I'm going to like (..) it's not going to help me

TEP: Mm

AM: Like (.) I I I (.) can't find a way (.) for it to help me (.) and it's just (.) that's the problem with Maths

TEP: Mm

AM: And English as well sometimes Interviewee 4, line 621

ES: Well (.) maths is important (.) I think some of the things they teach us (.) like (.) unless you <u>really</u> want to pursue a successful career in maths you are not going to need to know what 'a' equals (.) ever in real life ((laughs))

TEP: ((laughs)) Yeh

ES: You're just never going to use it (.) but like the basic maths that they teach you is important

Interviewee 1; line 162

ZK: English (..) mm (..) like (.) I think (.) some (.) most of English is good (.) like (.) I'm not really (.) like (.) analysis is good I guess and (.) learning how to properly write so you (.) can sound professional like (.) where to put commas (.) where to put capital letters (.) bla bla bla (.) erm (.) like (.) that's good (.) but some of the stuff like (.) where you have to be like (.) like say you're reading a paragraph and it's like (.) 'the curtain is blue'

TEP: Mm

ZK: And you have to analyse (.) why you think (.) the writer made the curtain blue (..) I don't think you're gonna need that (.) you're not gonna read a story (.) and analyse it (.) but with Maths (.) the basics (.) Maths I think (.) most people say are the most important (.) and like (.) you (.) have to do (.) you (.) you need Maths to get into lots of (.) Universities and stuff (.) but (.) I don't really get why Maths is so important (..) like as is important as it is (.) because (.) like (.) the stuff in A Level it looks like (.) horrendous how like (.) complicated the equations are (.) and (.) to be honest (.) you're never gonna use them I don't think

TEP: Mm

ZK: Well (.) the most (.) like the average person isn't (..) so I don't really know why Maths is so important

Interviewee 2; line 753

English and Maths were the two subjects most commonly identified as 'most important' in stage 1; either one or both of these subjects was identified as the most important in 83% of responses, frequently due to the subjects' perceived usefulness. However, the above extracts suggest that the more 'complex' aspects of English and Maths were considered not useful – which should decrease the subjects' value – despite the students having identified these subjects as the 'most important' in their questionnaires, and at the beginning of their interviews. In this sense, it could be suggested that the students' perceptions of the 'most' and 'least' important subjects may have altered during the interview process, after having had additional time and space to reflect on what they value in learning, and what skills they consider useful. This was acknowledged by one student, who referred to 'back-tracking' on her original perception.

ZK: Yeh (..) and [Maths] is the subject that everyone if (.) if you had to say (.) to someone (.) 'what subject do you not enjoy' (.) 'or find hard' (.) it's (.) like nine out of ten it's gonna be Maths

TEP: Mm

ZK: Which is really weird cos it's like (.) yeh it's really weird

TEP: Yeh (.) why (.) why d'you say it's weird

ZK: It's just weird how (.) I've (.) like kind of backtracked on myself (.) about how I say it's the most important (.) and yet it's the one everyone hates

TEP: Mm

ZK: And like (.) how I don't think it should be important (.) but it is (.) but everyone like (.) doesn't enjoy it (.) apart from the people that are really really good

Interviewee 2; line 772

4.2.2.1.3. 'Usefulness of subject' summary

Considering this category of themes and sub-themes overall, it can be suggested that although there are many similarities with stage 1 findings, there are also notable differences. For instance, although students in the interviews similarly referred to the 'future usefulness' of EBacc subjects (such as Maths) in relation to greater future employment and educational opportunities, they also referred to the usefulness of non-EBacc subjects (including Citizenship and Technologies) in relation to future everyday life, such as paying bills and cooking. Additionally, students in the interviews also referred to how non-EBacc subjects (such as Drama and Music) could be useful to their current everyday life by improving confidence, and how EBacc subjects (such as Maths and English) were not entirely useful. This may be particularly significant, since as previously discussed, most students in stage 1 and at the beginning of their interviews identified EBacc subjects as the most useful and important, and non-EBacc subjects as the least useful and least important. In this sense, it could be suggested that the students' initial responses – in both questionnaires and interviews – may have been 'reflex' responses, which altered after having additional time to reflect on their values in skills and learning. The potential factors informing these 'reflex responses' will be considered further through the next category of themes.

4.2.2. External factors

This category of themes was generated from stage 1 findings, and refers to the external factors mentioned by students when discussing subjects' importance. The category of 'External factors' consists of two themes; the 'school environment' and 'others' opinions' (Figure 4.2.2). These themes were further divided into subthemes as below, regarding stage 1 findings and an additional emergent subtheme in 'school environment'.

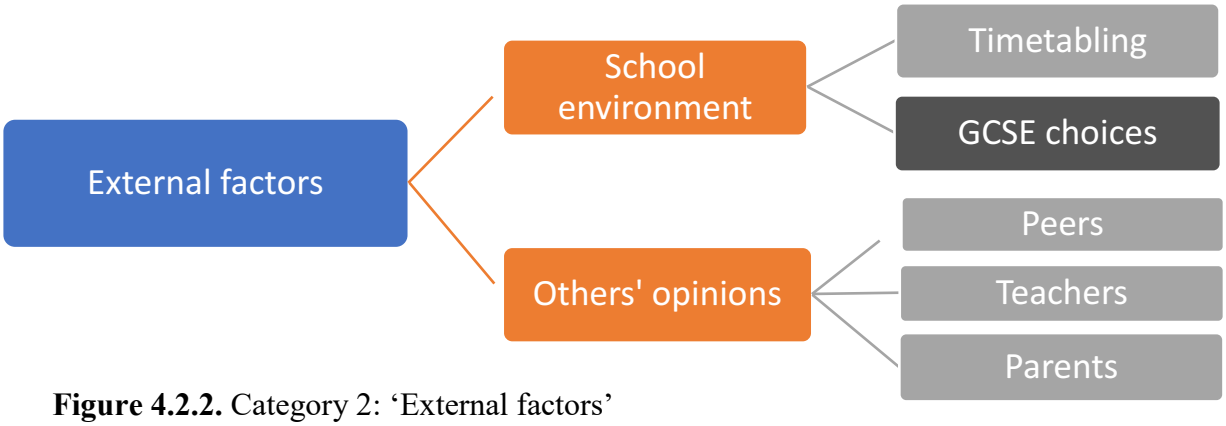


Figure 4.2.2. Category 2: 'External factors'

As discussed, these themes were considered in relation to offering potential explanations of the students' initial 'reflex' perceptions of subjects' value. Each theme and subtheme within this category will be discussed separately.

4.2.2.2.1. School environment

This theme consists of two subthemes: the 'timetabling' of subjects in school, and 'GCSE options'. While the first of these subthemes was generated from stage 1 findings, 'GCSE options' is an additional subtheme emergent from interview data.

a) Timetabling of subject in school

Similarly to stage 1 findings, students often described the frequency of lessons to indicate subjects' importance, wherein EBacc subjects were discussed as being more frequent on the students' timetables than non-EBacc subjects.

ID: [Geography] just feels more important [than Graphics]

TEP: Yeh (..) so why do you think it feels more important

ID: I don't know (..) I think it's cos we've just been doing Geography for longer (.) cos we did it in Year 8 and Year 7 (.) and we never did Graphics before that

Interviewee 6; line 419

English, Maths and Science were often referred to as being most frequently timetabled, both currently and earlier in the students' education.

ZK: Erm (..) well like (.) from when I first started school in like (.) in Reception

TEP: Mm

ZK: We didn't really do many (.) like subjects we mostly did reading (.) so (.) we first (.) and like (.) yeh mostly (.) learning to talk properly and stuff so English was first introduced

TEP: Yeh

ZK: Then as we got older (.) in Primary school we didn't really do any Science for some reason (.) we did a bit on like the water-cycle (.) but it was mostly Maths

Interviewee 2; line 174

ES: Because you could tell when teachers were teaching that they cared more about like the Maths and you spent so much time on that it was kinda of drilled into you

TEP: Mm

ES: That Maths and English and Science (.) were quite important because you that would be every day

TEP: Mm-hm

ES: You'd be doing Maths English Science in junior school (.) and then (.) like whatever in the afternoon

TEP: Ok

ES: So (.) they kind of showed you that it wasn't quite as important ((laughs))

Interviewee 1; line 243

English, Maths and/or Science were identified as 'most important' in 91% of responses in stage 1. This may not only relate to the frequency of the subjects on the students' current timetable – particularly in comparison to non-EBacc subjects – but also to the recalled prevalence of the subjects from earlier in the students' education.

This is similar to stage 1 findings, wherein students often discussed the amount of lesson time allocated to a subject as a reason for identifying such as the most/least important. However, in comparison to the questionnaires, students in the interviews generally referred to the timetabling of EBacc subjects to indicate *another's* perception of the subjects' value, rather than their own.

> SM: Cos like (.) when you're in Junior School
>
> TEP: (overlapping) yeh
>
> SM: (overlapping) [English, Maths and Science] are like (.) the main subjects they push onto you and they (.) like (.) make you think they're the most important cos they're the most academic
>
> TEP: Mm (.) ok so (.) so who do you mean by 'they'?
>
> SM: Kind of like (.) teachers and I guess the curriculum cos that's what they do
>
> TEP: Yeh (.) and (.) in what way do they they 'push them on' (.) 'onto you'
>
> SM: Um (.) we just kinda learnt about them more than other things (.) that I thought would be more important but they just (.) made us learn more about those
>
> Interviewee 3; line 48

> ES: Yeh you (.) I (.) definitely have like you can tell by looking at your timetable what [school] think is important (.) just based on like (..) how often I have Science lessons ((laughs)) and how often I have Maths lessons (..) it's very (.) Yeh, you can tell (.) it's quite obvious
>
> Interviewee 1; line 261

> IP: There might be (.) it's hard to say but (..) I think in terms of the (.) aforementioned 'system'
>
> TEP: Mm
>
> IP: Some of the lesser like (.) subjects such as Art or Drama (.) would receive a lot less attention
>
> TEP: Ok
>
> IP: Which you can tell that by how little they appear on the timetable
>
> Interviewee 7; line 137

Interestingly, despite the students distancing themselves from the value they considered 'timetabling' to place on subjects, each identified English, Maths and/or Science as the 'most important' in their questionnaires and interviews. In this sense, the students may not be aware of the extent to which external factors, such as

timetabling, may be impacting on their own, initial perceptions of subjects' value (EST; Bronfenbrenner). Only one student specifically acknowledged that her opinions on subjects' value may be affected by her environment.

> BB: Erm (.) so (..) I guess (.) I started thinking that Science was important about Year 8 (..) and that Maths was about (.) important (.) sort of (.) about (..) I think when I came to High School was probably when I realised that those were (.) important (.) but maybe only because (.) it was like (.) 'this is what you need to do for your GCSEs' (..) so it was sort of ingrained in me a little bit
>
> TEP: Mm
>
> BB: I don't know whether if I hadn't (.) if I'd have gone to a different school that hadn't sort of (..) said 'oh these are the important subjects' (.) 'this is what you need to do' (.) I would have had a different opinion (.) but I don't really know
>
> TEP: Yeh (..) hm (.) so how do you think it was (.) 'ingrained' (.) ingrained in you that those were (.) the important subjects
>
> BB: I dunno (.) I think it's just because we have them the most often
>
> Interviewee 9; line 365

b) GCSE options

This subtheme was emergent from the interview data itself. Students often discussed how the process of choosing their GCSEs options had prompted further thinking about subjects' importance, particularly regarding their 'usefulness' as discussed.

> IP: I think at the beginning of this year we really started to (.) think about [what subjects are most important]
>
> TEP: Mm
>
> IP: Especially (.) with things such as 'options'
>
> TEP: Ah ok
>
> IP: Getting us to think about (.) what we're going to do in the future Interviewee 7; line 28

> PC: Yeh when (.) we were given like this special form and (.) we could pick
>
> TEP: Yeh
>
> PC: So before we were like (.) discussing about it (.) and even now (.) when we had the options (.) about change them (.) some of them are like (.) 'oh I don't really enjoy this subject' (.) 'but I'm not gonna change it' (.) 'because it's like' (.) 'more useful than the other ones'
>
> Interviewee 5; line 43

More specifically, the students frequently referred to English, Maths and Science as the 'mandatory' GCSE subjects, and how this related to their perceived importance.

> IP: I do think that (.) the way that (.) the main (.) subjects are quite mandatory means that they have more (..) more value
>
> TEP: Ok
>
> IP: Than the other ones (.) which (.) you have a free choice
>
> Interviewee 7; line 97

> ZK: Maths and Science and English are (.) we know (.) are the main ones
>
> TEP: Yep
>
> ZK: So you have to keep doing them (.) whereas the other ones are a bit less (.) important (.) so you can (.) pick which ones you want
>
> TEP: Yeh (.) how do you know that they're the most (.) important ones (.) or main ones
>
> ZK: Well we do them (.) we do them (.) at GCSE without having to pick them
>
> Interviewee 2; line 13

As previously discussed, English, Maths and/or Science were identified as the 'most important' subject in 91% of stage 1 responses. Students considered specifications around 'GCSE options' to reflect the subjects' value; indicating 'mandatory' subjects as 'most important', and 'optional' subjects as less important. In this sense, the EBacc may create an additional 'hierarchy' of non-mandatory subjects; wherein those included in the EBacc (Geography, History and Modern Foreign Languages) may be perceived differently to those not included (Art, Music, Drama, Technologies and P.E.). This was reflected in the interviews, wherein students often 'grouped' EBacc and non-EBacc subjects separately.

> IP: And (.) I don't remember [the 'options forms'] well now but (.) the blocks themselves seemed to be quite split out into certain groups
>
> TEP: Mm
>
> IP: For example (.) like I said before (.) History and Geography are in the same group
>
> TEP: Yeh
>
> IP: For example and (..) Music (.) Drama and PE are also in its own block
>
> Interviewee 7; line 60

AT: Yeh (.) lots of (.) well (.) a few of my friends have chosen like (.) Art (..) and then I don't think out of my friendship group or my Form (.) too many people have chosen 'Techs'

TEP: Mm

AT: Most people have gone for (.) more academic subjects

TEP: Mm

AT: But I dunno (.) I don't think (.) I dunno (.) cos (.) like the people who obviously chose Art are like (.) really good at Art (.) but (.) I don't I don't think (..) most people have chosen at least one like (.) History or Geography kind of subject

TEP: Mm (..) yeh (.) and so just to check I'm like (.) understanding (.) what you mean by the 'academic' subjects (.) which ones do you mean

AT: Like (.) History Geography (.) like more like (.) less 'creative' subjects

Interviewee 8; line 98

Furthermore, and as indicated above, the students not only 'grouped' EBacc and non-EBacc subjects, but referred to EBacc subjects as 'academic', and non-EBacc subjects 'creative'.

ZK: Well (.) the (.) I think everyone thought the other ones (.) not the EBacc ones were more fun and it was like (.) more like (.) aca- (.) the EBacc ones are more academic (.) I think (.) and would help you (.) get like (.) I don't know better jobs

TEP: Mm

ZK: But erm the (.) the other ones like (.) the ones that aren't on it like Drama Music Art they're more like (..) kind of like (.) creative ones

Interviewee 2; line 83

The above extract also refers to EBacc subjects being associated with 'better jobs', and therefore, as 'useful' to 'future employment' as in the previous category of themes. When asked to expand on what constitutes an 'academic' subject, students generally referred to the difficulty of work (as discussed in stage 1), as well as the degree of writing involved.

AT: I dunno I think it's just because (.) they are (.) I'm not gonna say they're harder subjects

TEP: Yeh

AT: Because (.) I mean Art is equally as hard (.) but (..) I think (.) they (.) they just (.) involve a lot more (..) I don't know how to word it (.) they involve a lot more um (.) like actual writing

Interviewee 8; line 184

Additionally, students frequently discussed how choosing 'academic' EBacc subjects for GCSE was considered a reflection of intelligence.

> AT: Cos I know people that are really good at Art but (.) they chose (.) History (.) I think (.) most (.) I dunno (.) I think most people think that (.) if you choose to do like History or Geography (.) people will look at that and think you're smarter (.) than if you choose (.) Art
>
> Interviewee 8; line 120

> ZK: But (.) for the most part (.) people (.) were ok with being on [the EBacc] and (.) ok being off it (.) but some people that (.) weren't on the EBacc route were (.) kind of (.) upset (.) so they picked the stuff you have to do for EBacc anyway (.) to prove that they're smart enough (.) to do it (.) cos they picked (.) apparently the (.) top like (.) I think 100 people (.) like erm (.) intelligence wise to do it (.) and the people that weren't put on there (.) a lot of them were quite offended
>
> TEP: Mm
>
> ZK: That they weren't put on it so like (.) my other friend (.) she picked (.) Spanish and History (.) this year (.) just to kind of (.) spite the teachers (.) so she (.) could prove that she could do it
>
> Interviewee 2; line 54

Students may therefore, be aware of a perception that those taking EBacc subjects at GCSE may be viewed as more 'intelligent' than those taking non-EBacc subjects. This could be a contributing factor in the decreases in GCSE intake of creative subjects since implementation of the EBacc (DfE, 2018), and of stage 1 quantitative findings (to be discussed).

> PC: And so like (.) Art maybe (..) some people would (.) discussing that (.) they would not pick Art or like (.) DT (.) because they think it's a waste of a GCSE
>
> TEP: Ok
>
> PC: Because it (.) they are not learning (.) like anything special but (..) it's not (.) it doesn't help them in their career
>
> TEP: Mm-hm
>
> PC: I think that's why they didn't chose them
>
> Interviewee 5; line 32

This perception may also increase the 'value' of EBacc subjects and decrease the 'value' of non-EBacc subjects, which could again relate to stage 1 findings, wherein

an EBacc subject was identified as 'most important' in 94% of responses, and a non-EBacc subject was identified as 'least important' in 85% of responses.

4.2.2.2.2. Other's opinions

As this subtheme was discussed in detail earlier in the chapter, it will be more briefly referred to here. Similarly to stage 1, this theme consists of three subthemes; students' references to their 'peers', 'teachers', and 'parents' in relation to perceptions of subjects' value will be discussed separately.

a) Input of peers

Similarly to stage 1, students often referred to their peers' behaviour in lessons to reflect subjects' importance.

> ID: Yeh (.) like in Maths (.) more people concentrate
>
> TEP: Mm
>
> ID: And like Science and English as well
>
> TEP: Ah ok (.) and what about (.) other (.) subjects
>
> ID: Not (.) well they still focus but (.) not as much (..) like (.) Drama or Art you don't (.) there's not really that much important like (.) more important than like Maths or English
>
> Interviewee 6; line 71

> PC: Um I (.) well (.) always see people more concentrating in like Science English and Maths
>
> TEP: Mm-hm
>
> PC: As like the most (.) the most important ones
>
> TEP: Yeh
>
> PC: More some (.) most people take it more (.) really serious than some of the other ones
>
> Interviewee 5; line 337

> AT: It's just cos I don't (.) I dunno (.) I don't (.) I mean I enjoy ['the creative subjects'] just cos I can like (.) mess about with my friends but (.) I don't think (.) they're that (.) important
>
> Interviewee 8; line 63

Additionally, and continuing from the previously discussed subtheme, the students frequently referred to conversations had with their peers in relation to choosing their GCSEs.

> ES: My friends (.) we talk quite a lot about like what they're taking and stuff and kind of compare what we're doing
>
> Interviewee 1; line 39

In particular, students often described conversations in which their GCSE options were discussed regarding the subjects' usefulness to future employment, as previously mentioned.

> SM: I feel like [other students] (.) kind of (.) like (.) judged me because I chose music cos it's not like (.) important
>
> TEP: Mm
>
> SM: But (.) I enjoy it so I wanted to do it
>
> TEP: Yeh (.) well that makes sense (..) how how do you think they 'judged' you (.) what did people do (.) to make you think (.) that
>
> SM: They just (.) like (..) I don't really know (..) kind of (.) like (.) tried to encourage me to take something else kind of (..) um (..) like (.) it's quite similar like with Drama
>
> TEP: Mm
>
> SM: Like (.) things people (.) think that won't help you get a job (..) like PE and stuff like that
>
> Interviewee 2; line 270

> PC: As in (..) I dunno how to say it as well (.) I think more useful for the future than now (.) cos (.) if I wanted something useful for now I think would just pick something I can (.) play around (.) like Music or something
>
> TEP: Yep
>
> PC: But I know I'm not gonna be like a Musician or anything
>
> TEP: Mm
>
> PC: So I'd rather not (.) waste a GCSE (.) like what [my friends] say about it
>
> TEP: Yeh
>
> PC: And (.) I just pick something that I maybe not really interested in (.) but something that can (.) help me (.) in the future
>
> Interviewee 5; line 109

This again suggests the process of choosing GCSEs may be prompting students to reflect on subjects' perceived 'usefulness' and importance, wherein peer conversations regarding such may be particularly prevalent and hence influential. For instance, if students are aware of their peers' perceptions of subjects' importance, this may affect their chosen subjects both indirectly, regarding SLT (Bandura, 1997) and EST (Bronfenbrenner, 1979), and directly. For instance, one student described how a peer comment actively altered her GCSE options.

> ZK: For this year (.) erm (.) cos (.) I really really liked Drama (.) and my favourite teachers were teaching Drama (.) and (.) I always enjoyed Drama lessons and I (.) I looked forward to them and (.) also (.) if you wanted to do Drama (.) you could only pick it (.) for Year 9 (.) you couldn't pick it up in Year 10 like you could with Art (..) so I picked that because (.) if I didn't pick that (.) I wouldn't be able to do it ever again (..) but (.) then I realised (.) I think it was a comment that someone made it was like (.) erm (.) I can't really remember what they said (.) but it was like (.) I think (.) my (.) like this boy said it was like a waste of a GCSE
>
> TEP: Mm
>
> ZK: Cos it won't help you (.) I think he said it about Music as well (..) and that (.) kind of got to me (.) cos although I knew I (.) knew I would enjoy it (.) I was like (.) that's not gonna help me
>
> Interviewee 2; line 203

Again, this could be contributing to the decreases in GCSE intake of creative subjects since implementation of the EBacc, and reflects a 'devaluation' of non-EBacc subjects as described by Dawood (2017).

b) Input of parents/carers

Students also frequently referred to conversations had with their parents when discussing subjects' importance, particularly in relation to the process of choosing GCSE options.

> PC: I um (.) most the decision I made (.) on my own but (.) when I wasn't sure about something I just asked my mum
>
> TEP: Mm-hm
>
> PC: Cos I thought she might know something about it (..) and she somewhat helped me to make the decisions
>
> Interviewee 5; line 190

ES: When my mum was helping me choose options and stuff it was (..) make sure you get the academic ones ((laughs)) first (.) before you start thinking about other things

TEP: Mm (.) is that (.) is it something that you talk about a lot or

ES: Yeh quite a lot (.) because I think they really want me to go with those subjects ((laughs)

Interviewee 1; line 12

Furthermore, and as indicated in the above extract, students often described how their parents would generally encourage them to choose 'academic' EBacc subjects, rather than 'creative' non-EBacc subjects.

ID: Yeh [my parents] said that (.) they thought that Geography would be more important than (.) Graphics

Interviewee 6; line 397

ZK: Erm (.) well a lot of the (.) parents (..) again they said (.) Drama and Music (.) possibly even Art (.) but less so mostly Drama and Music (.) or (.) just Drama

TEP: Mm

ZK: They didn't want them to do it because like (.) the boy said it's (.) 'a waste of a subject' (.) cos they knew how hard it would (.) be to take that one further

Interviewee 2; line 357

More specifically, students also referred to how their parents considered EBacc subjects to be more 'useful' to their future employment than non-EBacc subjects, and to therefore be the better options for GCSE.

BB: I think (.) one of my (.) someone I know (.) I ((laughs)) (.) met with their parent at like (.) parents' evening

TEP: Yeh

BB: And (..) they (.) I think they wanted them (.) her to do Geography a little bit ((laughs))

TEP: Oh right ((laughs)) so why did this friend (.) want um (.) why did her parents want her to do (.) Geography

BB: I don't know I think they must have just thought it had like (.) applicable skills or something

Interviewee 9; line 177

AM: I don't (.) it might be like (.) the influence of the adults around me (..) and (.) just like (.) what they say (.) and what they (.) what they're doing as well (.) and (.) things like that because (.) I don't see that (.) I I don't know that many people who are like (.) um (.) Actors or (..) Musicians (.) but I know like a lot of my friends (.) want to be Musicians and things like that (.) which is fine like I support them (..) but like (.) I'm getting (.) like negative feedback about this [from my parents and their friends]

TEP: Mm (.) So what kind of negative feedback (.) do you get about that

AM: It's just like (.) 'Music won't' (.) 'lead you anywhere you'll just' like (..) 'you won't' like (.) 'do anything' and like (.) 'being an Actor you need to know people'

Interviewee 4; line 792

Students seem aware of their parents' perceptions of subjects' importance, as well as the reasoning for such; including the subjects' perceived usefulness for future employment. In relation to SLT as discussed, this may be considered a mechanism behind most students identifying an EBacc subject as most important, and a non-EBacc subject as least important, as well as why subjects' usefulness was so frequently referred to by students. This may also relate to previously discussed research by Last (2017), suggesting that parents'/carers' perceptions of the 'creative subjects' are the most influential reason for recent decreases in GCSE intake of such. For instance, parents' opinions may influence which subjects students choose for GCSE; both indirectly in terms of SLT, and students developing a 'shared' perception of subjects' value; and directly, in terms of wanting to please their parents.

ZK: It like (..) it was (.) quite (.) a lot of pressure (.) because (..) some people's parents would want them to do this [subject]

TEP: Mm

ZK: So they'd (.) kind of (.) feel obligated to do it (.) and even though they might not want to

Interviewee 2; line 295

ES: Because (.) then your parents are saying something else to you like 'don't take that because you're never going to use it' (.) 'you're never going to need it' (.) and then you don't know what to do ((laughs)) so we're all getting quite confused Interviewee 1; line 116

Many students described the process of choosing their GCSEs as confusing due to others' opinions, and due to individual uncertainties regarding their desired future careers.

c) Input of teachers

Students also referred to the input of teachers regarding their perceptions of subjects' value. Many students referred to how teachers' attitudes towards certain subjects reflected their perceptions of its importance.

> ID: I just thought like (..) mm (.) I'm not too sure just (..) I don't really know (.) well (.) they just put like big pressure on us (.) saying that like Maths and English are like (.) the most important (.) that's what I thought anyway
>
> TEP: Yeh (..) ok (.) so who (.) who's put (.) pressure on you for that
>
> ID: Probably just like (.) most of the teachers
>
> Interviewee 6; line 16

> SM: I feel like the teachers they (.) tell you you should like (.) um (.) behave more in those classes cos they'll affect you more in the future
>
> TEP: Mm (..) so (.) which subjects are you talking about
>
> SM: Like the academic (.) subjects
>
> Interviewee 3; line 457

Students considered their teachers to particularly value 'academic' EBacc subjects such as Maths and English. This could relate to the EBacc being a 'performance measure', wherein schools are 'assessed' regarding their students' attainment in EBacc subjects. Regarding SLT (Bandura, 1997) as discussed, this could relate to most students identifying an EBacc subject as 'most important' in stage 1; particularly English and Maths. Students also described how teachers would discuss subjects' future usefulness, which may also influence students' perceptions of such.

> BB: [The teachers] always talk about 'these are the important ones for your GCSEs'
>
> TEP: Mm
>
> BB: 'These ones you need to succeed in life'
>
> Interviewee 9; line 378

Teachers' opinions of subjects' importance may also indirectly influence students' GCSE choices; comparable to the influence of parents and peers. Several students also referred to direct conversations had with their teachers regarding GCSE choices.

> PC: And I think [my friend] asked the teachers so (.) that um (.) helped him with his decision as well
> Interviewee 5; line 248

> ES: And I thought that PE was very important as well but (.) my friend was (.) cos you have a lot of teachers being like 'take my subject take my subject' you don't know what to do ((laughs))
> Interviewee 1; line 110

> BB: Like (.) [the teachers] are always like (.) 'right' (.) 'these choices' (.) like they (.) I dunno they just sort of like (.) 'make sure you right' (.) 'you've made the right choice because' (.) 'this is' (.) 'one of the important decisions of your life' (.) 'it' (.) 'can affect your whole future'
> Interviewee 9; line 242

These extracts additionally suggest that students felt unsure while choosing their GCSEs, wherein teachers' opinions may have further contributed to such. Regarding the above extract specifically, this again indicates teachers to be discussing the potential future impact of choosing GCSEs, which as mentioned in the previous subtheme, students often discussed as a cause for concern.

> ZK: I (.) luckily I knew what I want to do [as a career] (.) but lots of people didn't (.) so it was hard to (.) pick (.) not knowing what (.) how that would impact your life
>
> TEP: Mm
>
> ZK: So it was quite stressful (..) not for me but for most people it's quite stressful
> Interviewee 2; line 307

> ID: [Making GCSE options was] a bit (.) scary cos like (.) in Year 8 you don't really know what you wanna do
> TEP: Yeh
> ID: When you're older
> Interviewee 6; line 139

> IP: In our Group-chat [my friends] (.) were kind of panicking about [their options] (.) that (.) they wouldn't be able to do it (..) but (.) personally (..) I (..) I'm hoping (.) rather than (.) I will (.) that (.) I'm hoping that I will have the abilities to be able to work on that
>
> TEP: Yeh (..) ok (.) so what were they (.) panicking about
>
> IP: Like (.) that they won't be able to do it or that (.) it might be too complex or that they won't (.) live off of it well (.) in the future
> Interviewee 7; line 548

In this sense, others' opinions of subjects' future usefulness may also cause students to consider this a significant factor when choosing GCSEs; wherein most students found this difficult, due to being uncertain of career aspirations. The above extract also indicates the students to have had difficulties choosing GCSEs due to being uncertain of their academic abilities.

> BB: I went to speak to the Art teacher (.) to see if she thought (.) it would be (.) good for me to do Art (..) erm (.) like whether it (.) cos I'm not a very good drawer ((laughs)) so (.) I'm I'm ok at painting and things
>
> TEP: Yeh
>
> BB: But I'm not very good at drawing so (.) I was like (.) 'do you think this would be a sensible choice' (..) and then I also did that for my Geography teacher
>
> Interviewee 9; line 151

Several students referred to choosing their GCSEs after receiving confirmation from their teachers regarding their abilities in the subject.

> AM: And (.) I picked core PE but I think I might change it to um (.) health and fitness (..) because I spoke to cos (.) the teacher er who does health and fitness she came and spoke to me and she was like (.) 'yeh you probably should change' (..) 'because you're capable'
>
> Interviewee 4; line 49

> AT: Yeh it's like (.) my Music teacher said that I would cope fine with it (.) but equally (.) PE were like (.) 'well' (.) 'you're an ideal student'
>
> TEP: Mm
>
> AT: And I got (.) you had to get accepted into PE
>
> Interviewee 8; line 248

In this sense, teachers acted as a source of reassurance to students when choosing their GCSEs, wherein their academic abilities were seemingly validated by the teachers. This can be considered in relation to Bandura (1977), suggesting that one's SEB can be developed through 'evidencing' one's skills. This will be discussed further in the next category of themes.

4.2.2.2.3. External factors – summary

Considering this category of themes and subthemes overall, similarly to stage 1 findings, students frequently discussed lesson timetabling to indicate subjects' importance, wherein EBacc lessons were identified as being more frequent than non-EBacc lessons. Additionally, students described this discrepancy in timetabling to have been apparent from previously in their education; which in terms of Bronfenbrenner (1979) may relate to most students identifying English, Maths and/or Science as the 'most important' subject in stage 1. Furthermore – regarding theories of SEB and positive psychology (Bandura, 1977; Seligman, 2000) – it could be suggested that this discrepancy between EBacc and non-EBacc lessons could mean that students with strengths in EBacc subjects may develop higher SEB than those with strengths in non-EBacc subjects. As discussed, this was reflected in stage 1 quantitative results; wherein students with strengths in EBacc subjects were found to have significantly higher MALS scores than those with strengths in non-EBacc subjects (to be discussed). Unlike in stage 1 questionnaires, students also discussed the process of choosing their GCSEs in relation to subjects' perceived importance. For instance, students described the 'mandatory' subjects (English, Maths and Science) as 'most important', and 'optional' subjects as less important. Furthermore, there seemed to be an additional hierarchy of 'importance' within the optional subjects, wherein EBacc subjects were considered more 'academic' and useful to the students' future than non-EBacc subjects.

Additionally, students discussed that those taking EBacc subjects at GCSE would be considered more 'intelligent' than those taking non-EBacc subjects, which could again relate to stage 1 quantitative results (to be discussed). Furthermore, this perceived hierarchy of optional subjects could be a contributing factor in the recent decline in GCSE intake of creative subjects (DfE, 2018). Similarly, students often discussed peer conversations regarding GCSE options, wherein creative subjects such as Art, Drama and Music were described as a 'waste' of a GCSE, due to being perceived as less 'useful' to the students' future. Students also discussed conversations had with their parents regarding GCSE options, who similarly described EBacc subjects as more 'academic' and useful to the students' future

employment than non-EBacc subjects. Additionally, students referred to their teachers describing EBacc subjects such as Maths, English as Science as the 'most important' for their future, which in conjunction with their parents' views could be considered a mechanism behind the students so frequently discussing subjects' 'future usefulness' as an indicator of value (SLT; Bandura, 1997). Students described how their teachers assisted with their decision-making process in terms of confirming their academic abilities, which as discussed, can be considered regarding Bandura (1977), suggesting that one's SEB can improve through evidencing one's skills. This and other theories relating to SEB development will be discussed in the next category of themes, particularly regarding stage 1 quantitative findings.

4.2.2.3. Theories/sources of self-efficacy beliefs

This category of themes was generated in relation to the psychological framework and informing theories of SEB (Bandura, 1977), as discussed in previous chapters. This psychological framework/theory was considered particularly relevant in terms of understanding, exploring and explaining stage 1 quantitative findings, regarding the 'statistically significant' differences found between students' academic self-efficacy (MALS) scores. According to Bandura (1977), there are four 'sources' of SEB – mastery experience; social persuasion; vicarious experience; and physiological states – which were the informing themes applied in deductive analysis of interviews. 'Physiological states' and 'Vicarious experience' were discarded as themes due to there being insufficient supporting data. The category of 'Theories of SEB' therefore, consists of two themes: 'Mastery experience' and 'Social persuasion' (Figure 4.2.3). These themes were further divided into subthemes as below, which were emergent from the interview data.

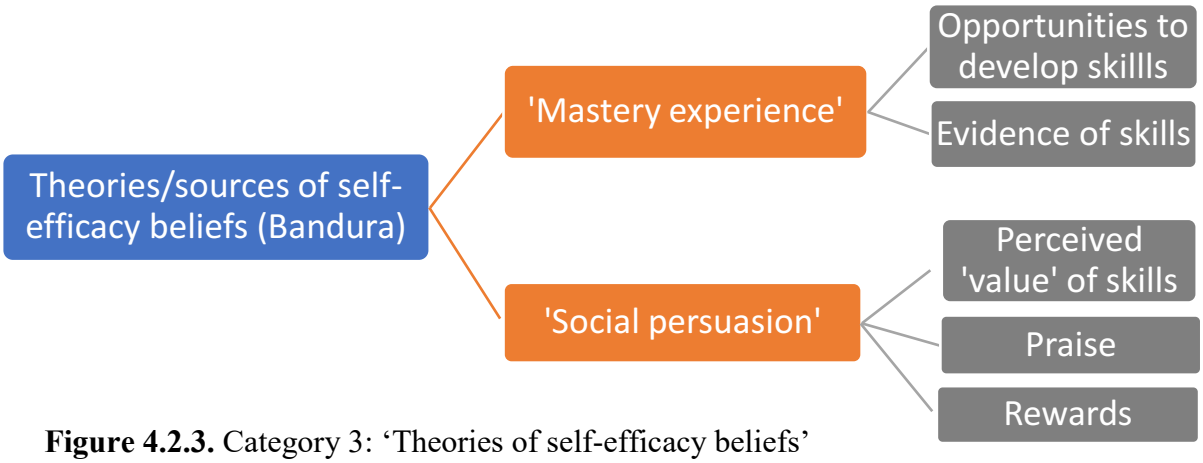


Figure 4.2.3. Category 3: 'Theories of self-efficacy beliefs'

As discussed, these themes were considered in relation to offering potential explanations of stage 1 quantitative findings, wherein students with strengths in EBacc subjects and/or subjects identified as 'important', had significantly higher MALS scores than students with strengths in non-EBacc subjects and/or subjects which had not been identified as 'important'. To further explore these findings during stage 2 interviews, students were asked the following hypothetical scenario question.

Student A has Level 8s in English, Maths and Science, and Student B has Level 8s in Art, Music and Drama. How do you think these students might feel?

These subjects were specifically chosen for the question, due to being the three subjects most frequently identified by students in stage 1 as the 'most' and 'least' important respectively. Students' responses to this scenario question often related to this category of themes and subthemes, which will be discussed separately below.

4.2.2.3.1. Mastery experiences

According to Bandura, 'mastery experience' is experiencing the results of self-efficacy, wherein individuals judge the effects of their actions. This theme consists of two subthemes as emergent from the interview data: students having 'opportunities' to develop their skills, and having 'evidence' of their skills.

a) Opportunities to develop skills

Throughout the interviews (and as discussed in the previous category of themes,) students often described the timetabling differences between EBacc and non-EBacc subjects as a reflection of the subjects' importance, wherein EBacc lessons were referred to as being far more frequent than non-EBacc lessons. When responding to the hypothetical scenario question as above, students often reflected on this further, particularly regarding the potential effects on students like 'Student A' (with strengths in EBacc subjects) and 'Student B' (with strengths in non-EBacc subjects).

> AT: I mean we don't get as much (.) like (.) creative subjects (.) like we don't get as much Art as we do like Geography
>
> TEP: Mm
>
> AT: So (.) that's probably a bit annoying for [students like Student B] (.) as we spend more time doing (..) like (.) more (.) academic subjects Interviewee 8; line 207

> ES: So being <u>forced</u> to take [the mandatory subjects] (.) and maybe (.) because you have <u>those</u> subjects not being able to (.) take one of these subjects that you actually <u>do</u> like (.) is gonna be a bigger problem but (.) Student A (.) who's more academic (.) is not gonna be bothered too much because (.) you <u>have</u> to take those subjects anyway
>
> Interviewee 1; line 491

This suggests that students considered the discrepancy between the frequency of EBacc and non-EBacc lessons to negatively impact on those with strengths in non-EBacc subjects; as the time allocated to mandatory subjects was seen to reduce the available time for students like 'Student B' to engage in their best lessons. Regarding SEB as discussed (Bandura, 1977), this suggests that students with strengths in non-EBacc subjects have less opportunities to have 'mastery experiences', which could reduce their opportunities to develop SEB. As well as considering the negative effects of spending *less* time in one's preferred and 'best' subjects, students also discussed the negative effects of spending *more* time in lessons which one does not enjoy or feel competent in.

ES: You don't get as many of (.) like the creative subjects (.) so probably (..) Student A would be a lot (.) like (.) more content in going into lessons

TEP: Mm

ES: Because 'this it the lesson that I like' (.) 'this is the lesson I'm good at' (.) but (.) cos (.) it's been taught to us that those other (.) lessons aren't as important (.) it's (..) you're not gonna be as happy going into Maths (.) because you know

TEP: Mm

ES: That you're better at doing (.) another subject that you don't (.) really get to do as often (.) and (.) you might not be able to take (.) because you have to take this subject instead (..) um (..) I think (.) you're not gonna be as happy like (.) overall if you're not getting to do the subjects

Interviewee 1; line 611

ZK: But like I said it's like (.) Art (.) if you're good at Art (.) you'll enjoy it (.) if you're not you won't (..) but (.) but Art (..) it's not mandatory (.) so it's fine

TEP: Mm

ZK: But Maths is (.) so if you don't enjoy it (..) tough luck you're gonna have to (.) you're just gonna have to do it

Interviewee 2; line 783

In these respects, students often discussed that having more time for non-EBacc subjects could be beneficial to students with strengths and interests in such.

AT: But (.) I dunno (..) I guess (..) yeh (.) I think as soon as the GCSEs start (.) and everyone (.) er like (.) starts doing the subjects they chose (.) it will be a lot better [for students like Student B]

TEP: Mm (..) yeh that makes sense

AT: Yeh because then (.) they're (.) spending more like the same amount of time on each (.) subject

Interviewee 8; line 213

IP: It depends (.) I think (.) if there were to (.) focus more on (.) what Student B does (.) whilst not sacrificing the main subjects (.) that would prove to be much more (..) healthy and more (.) good for the person in question

TEP: Mm

IP: And allow them to grow

TEP: Yeh

IP: And develop (.) for themselves

Interviewee 7; line 250

This suggests that students considered the discrepancy between the frequency of EBacc and non-EBacc lessons to not only indicate the subjects' 'importance', but to also have an emotional impact, particularly for students with strengths in non-EBacc subjects, due to having less time to engage and progress in their best subjects. This may therefore be seen to additionally limit opportunities for such students to have 'mastery experiences' (Bandura, 1977), and may negatively affect their SEB (as reflected in stage 1 quantitative findings).

b) Evidence of mastery experiences

Students also frequently discussed the way in which their skills were 'evidenced' in different subjects; wherein one's skills in EBacc subjects were generally described as 'easier' to measure, particularly regarding comparison with peers.

> PC: I don't know (..) it's probably like (.) in Maths and Science like the results we get
>
> TEP: Yeh
>
> PC: Like if you get more points than anyone (.) then you think (.) you think you're better
>
> TEP: Mm-hm
>
> PC: Then like Art and DT (.) and (.) and stuff it's (.) it's kinda harder (..) to say (.) I feel better than other person in class
>
> Interviewee 5; line 627

> BB: You'll say 'oh I got 35 out of' (.) '37 on this test'
>
> TEP: Mm-hm
>
> BB: 'And that was the highest in my class'
>
> TEP: Yeh
>
> BB: It's more (.) obvious (.) whereas (.) it's sort of like (.) you don't really know what everyone else has got for (.) that (.) what (.) Level everyone else has got for that Art piece (.) or whatever
>
> TEP: Mm
>
> BB: Or whatever (.) it's not like (.) <u>out</u> of something
>
> TEP: Yeh
>
> BB: Um (..) so you can't really (.) there's no way of (.) saying that you're the best at that ((laughs))
>
> Interviewee 9; line 795

In general, students discussed performance measures such as test 'marks' and 'grades' as being useful methods of 'evidencing' attainment and progress.

> AM: Yeh yeh helpful [to get marks back] because (..) then I'll know like (.) usually what I do ((laughs)) this is how I (.) progress er (.) I (.) target people who are doing better than me
>
> TEP: Yeh
>
> AM: And slowly like (.) I get better than them (..) until I reach the top where (.) it's someone who's at my level (.) now (.) and (.) it's always alternating between who gets the highest
>
> TEP: Ah (.) oh right
>
> AM: So (.) for me it's just competition Interviewee 4; line 470

> PC: I think they make you (.) they can make you feel good (..) because it's like (.) it probably depends on the test and the work you do (.) like (.) if you feel that you can't learn something then you might think that you're stupid (..) or if you get a low (.) mark on your test then that might make you feel bad of yourself
>
> TEP: Mm
>
> PC: But if for example you get good marks and do (.) well then you (.) think that you're really smart Interviewee 5; line 550

In this sense, attainment and progress in subjects which are not 'assessed' by these methods (such as non-EBacc 'creative' subjects) may be harder to evidence. This was also discussed by students in the interviews.

> PC: I think you can only see for example (.) a change in Art after long period time (.) like if you practise a lot then you can see for example that your drawing gets better and stuff (..) cos (.) and (.) probably Music as well (.) um (.) like in different subjects like Maths or something (.) you just get the mark (.) and if you can't do something one lesson (.) then you know you understand it (.) you just (.) see the progress (.) instantly (..) but for example Art (.) like (.) whereas maybe you're improving yourself (.) like this it's not like as obvious (.) for example maybe in one year you (.) improve a lot and then you can see the difference (.) and then (.) you cannot see an improvement (.) each lesson
>
> TEP: Mm-hm (..) yeh so (.) it can be harder to see that (.) progress in Art (.) instant progress
>
> PC: Yeh (..) which I think (.) that's why (.) people might not (.) think it's really important (.) cos they don't see like (..) a difference (.) after for example one less lesson (.) it's not there (.) and in different lessons you just see (.) the result
>
> Interviewee 5; line 561

Regarding SEB (Bandura, 1977), this could reduce mastery experiences for students with strengths in non-EBacc subjects, due to it being more difficult to recognise their skills in comparison to their peers, and to judge their progress. Similarly, students with weaknesses in EBacc subjects may also be at risk of developing lower SEB, due to receiving frequent 'verification' of their difficulties and/or limited progress. Regarding the potential difficulties in evidencing skills in non-EBacc subjects, students also reflected that those with strengths in these subjects could be at a disadvantage in terms of receiving rewards.

> BB: Yeh they are they're in like (.) Art and Drama and things (.) erm (..) I don't really know how you would (.) give someone a (.) because (.) at the moment (..) Drama isn't formally assessed (.) I don't really know how that would (.) would (.) well it's assessed as in like (.) performances (.) but I guess (..) yeh there aren't many people that have a Drama badge [award] I don't think
>
> TEP: Mm
>
> BB: I don't know how that (.) I think it's harder to get some of the creative ones (.) than it is to get (.) practical ones cos you can't show them a test and be like (.) 'this is' (.) 'done really well' (.) erm (..) you can only show them like (.) you can only say like (.) 'oh I did that performance very well' (.) 'could I have a badge' or something ((laughs))
>
> TEP: Yeh
>
> BB: Erm (..) so I don't know whether it's harder to get [the badges] in the creative subjects than it would be to get them (.) cos you don't (.) necessarily have any evidence
>
> Interviewee 9; line 676

> ID: Cos like (.) Maths and that (.) they're all on like paper
>
> TEP: Mm
>
> ID: And what they see (.) but like Music and that (.) they like perform it to like (.) the teacher
>
> TEP: Yeh
>
> ID: So they can't (.) they don't really have any evidence to give them the Postcards [awards]
>
> Interviewee 6; line 764

This may be additionally problematic, as external rewards may also contribute to the development of one's SEB (Bandura, 1977). This will be discussed further in the next theme.

4.2.2.3.2. Social persuasions

Bandura (1977) suggests that individuals develop SEB resulting from the 'social messages' they receive from others, wherein positive messages can encourage one's beliefs in their capabilities, and negative messages can negatively affect such. Bandura's (1977) conceptualisation of social persuasions is generally understood to consider the social messages received about one's competence and skills. However, emergent interview data generally related to the 'social messages' students had received regarding the perceived value of their competence and skills, particularly in terms of others' attitudes. This theme therefore consists of three subthemes as emergent from interview data, regarding the 'perceived value' of one's skills and competence, 'praise' received for one's skills, and 'external rewards' for one's skills.

a) Perceived value of skills

In response to the above scenario question, every interviewee considered that students like 'Student A' (with strengths in EBacc subjects) would feel differently to students like 'Student B' (with strengths in non-EBacc subjects), particularly regarding their self-perceived 'intelligence'. For instance, each interviewee suggested that 'Student A' would feel more positively about themselves than 'Student B', firstly due to the subjects' perceived 'value'.

IP: I think Student A (.) might feel a lot more clever

TEP: Mm

IP: Because (.) they're achieving on the main subjects — Interviewee 7; line 213

SM: Like (..) even though they have the same grades ['Student B'] wouldn't feel as clever (.) even though they are

TEP: Mm

SM: I feel (.) like (..) I don't think it would help their self-esteem

TEP: Mm-hm (..) yeh so um (.) why do you think they would feel (.) like that

SM: Because they (.) they know that they're like getting the same levels but their (.) their grades aren't being like appreciated

TEP: Mm-hm

SM: Because (.) like (.) their subjects don't seem as important

Interviewee 3; line 332

As previously discussed and indicated in stage 1 findings, most students considered English, Maths and Science the 'most important' subjects for various reasons; including the subjects being mandatory GCSEs. This was further reflected on by students in response to the scenario question, particularly regarding its potential impact on academic self-perceptions.

> BB: And because of the way that (.) the mandatory subjects are prioritised (.) I think it's kind of like (..) you don't really (.) yeh (..) you don't feel sort of (..) as clever (.) as the people that are really good at (.) like scoring Level 8s on essays and (.) things like that (..) for like Maths and (.) Science and English so (.) yeh
> Interviewee 9; line 782

In relation to the scenario question, students also reflected on EBacc subjects being considered as more 'academic' and 'difficult' than non-EBacc subjects; frequently suggesting that 'Student A' would be perceived as more intelligent than 'Student B', due to having strengths in the 'harder', more 'academic' subjects.

> SM: I feel like (.) Student A would be more like (..) um (.) like appreciated like (.) would be seen as more clever even though they have the same grades just because (.) they're at (.) the subjects they're good at are seen as more (.) academic than Student B's
> Interviewee 3; line 313

> PC: Maybe they're at similar level but Student A is like a better because (.) the subject (.) the subjects they're doing (..) it's like doing something hard and (.) there's someone who's doing something easy and it's like (.) and he does it good (..) then it's like somewhat impressive
> Interviewee 5; line 161

Some students similarly discussed perceptions of 'intelligence' in relation to different subjects, wherein those with strengths in EBacc subjects were referred to as being perceived as more intelligent than students with strengths in non-EBacc subjects.

> AM: And (.) yeh (..) um (.) I think like (.) people (.) people who like do Art and Photography er (.) when they like (.) ask well they usually ask me (.) oh 'what are you doing' and I say oh (.) 'triple Science and Psychology' they're always like (.) really surprised and they're like (.) 'oh you're so clever'
> Interviewee 4; line 252

AT: Like (.) the same grade (.) like a Level 8 in Art (.) is (.) less meaningful than a Level 8 in Geography Interviewee 8; line 123

ZK: And I'd never really thought about it like (.) I knew it but I never thought about it (.) and about how there's like (.) if you're not good at (.) Maths and Science it doesn't mean (.) you're not intelligent because you might be good at something else (..) but like (.) although if people look up to you (.) if you're really good at Art (.) or Drama or Music (..) you never (.) you're definitely not seen as (.) you're not seen as (.) intelligent almost (..) because (.) intelligence (.) in most schools is seen as (.) good at Maths (.) and Science
Interviewee 2: line 436

This suggests that students are receiving 'social messages' which indicate skills in EBacc subjects are more valued than skills in non-EBacc subjects (Bandura, 1997). In this sense, students with strengths in non-EBacc subjects may have less source for developing their SEB, which could relate to stage 1 quantitative findings. In terms of what may be informing these 'social messages', interviewees often referred to the school environment.

BB: I guess because the (.) school system has this idea that (.) writing essays is sort of (.) the way in which to succeed you might feel (.) less clever or a bit inadequate if you don't (.) know how (.) necessarily (.) or if you don't pick it up as quickly as other people
Interviewee 9; line 459

Students also referred to the attention given by others, wherein students with strengths in EBacc subjects were considered to receive more positive attention than students with strengths in non-EBacc subjects.

ID: [Teachers and parents] probably treat (.) like the people (.) with (.) high grades in Maths and stuff with like (.) more respect (..) cos they know that like (.) Maths and that are the most important subjects and like (.) Art and that are not the most important
Interviewee 6; line 523

ZK: But (..) people (.) will also respect you if you can draw (.) really (.) well but (..) I don't think people will as (.) will respect you as much than if you can Maths really quickly (.) I don't think Interviewee 2; line 477

AM: I think ok so since they're both doing (.) good on three subjects (.) I think (.) they would be (.) like happy with themselves (.) but I think that the (.) 'person B' (.) who's doing good at (.) Art and Drama and (.) I mean they are (.) would get like less attention than the person who's doing well like in English and Science

TEP: Mm

AM: Because (.) like (..) everyone sees like Science and Maths and English to be like (.) really important

TEP: Mm-hm

AM: And like those are the skills you need and like to like (.) get a good job and everything (.) but like you can still do a lot with er (.) Art Drama and Music

TEP: Mm-hm

AM: So (.) I still feel like this person would get more respected than this person

TEP: Mm

AM: Because of (.) subjects (.) and the importance of it Interviewee 4; line 508

This suggests that students with strengths in EBacc subjects may receive more 'respect' and 'attention' than students with strengths in non-EBacc subjects, which could be considered additional 'social messages' regarding the subjects' value. Regarding 'social persuasion' and sources of SEB (Bandura, 1997), this could be considered particularly significant in relation to stage 1 quantitative findings. The potential mechanisms underlying these 'social messages' of respect and attention will be considered further in the next subthemes.

b) Praise from others

As discussed, the interviewees considered students with strengths in EBacc subjects to receive more 'appreciation' and 'respect' from others than those with strengths in non-EBacc subjects. Regarding the potential mechanisms behind this perceived positive attention, students frequently referred to receiving 'praise' for their work, which could be considered an indicator of 'respect'. More specifically, students suggested that those with strengths in EBacc subjects received more 'praise' than those with strengths in non-EBacc subjects.

SM: Yeh I've got friends who are like (.) really good at Music and Art

TEP: Mm-hm

SM: And (.) they don't get as much praise as (.) other people who are good at like English Maths and Science

TEP: Ok (.) from (.) praise from

SM: Like (.) teachers and other people and like (.) students

Interviewee 3; line 345

PC: I think (..) people who are (.) better at the academic subjects the teachers are like (.) nicer and (..) um (.) like give them more good marks

TEP: Mm-hm

PC: But when they're good at like (..) less academic subjects they don't like (.) give them as much praise as they would other students Interviewee 5; line 407

In this sense, it could be suggested that students with strengths in non-EBacc subjects may receive fewer positive 'social messages' regarding their skills than students with strengths in EBacc subjects; which in terms of 'social persuasion', could negatively affect their SEB, and relate to stage 1 quantitative findings. 'Praise' may also be an indicator of 'appreciation' of one's work, due to others demonstrating an 'active interest' in such.

ID: Your teachers like (.) your teacher can ring you up (.) ring your parents up

TEP: Oh right

ID: And then (.) the teacher like (.) says how good work they've done

TEP: Ah

ID: And all of that (..) it's quite good Interviewee 6; line 818

BB: So um (.) I guess that's a way of like (.) and they'll tell (.) when they're handing them back to you

TEP: Yeh

BB: They'll be like (.) 'oh that's really nice' or they'll (.) come around and they'll (.) say 'oh that's really nice' or they'll say (..) 'put' 'maybe you could put a bit of charcoal on that' or something

TEP: Mm

BB: They'll give feedback while you're doing it

TEP: Ok

BB: And then (.) they can also put bits up on the wall (.) and I guess that's a way of (.) telling if the teacher likes what you've done ((laughs)) Interviewee 9; line 843

As indicated above, it could also be suggested that the students considered their work being on display as a form of 'praise', which could again be interpreted as appreciation and/or respect of their skills.

SM: Um (.) cos they mostly display like (.) work from like (.) Maths English Science

TEP: Mm

SM: I think they should display more like (.) Art and like Music work

TEP: Mm

SM: And see what people do in those subjects (.) so (.) they're not (.) there's more like (.) recognition for those so they're not (.) seen as like (.) unimportant Interviewee 3; line 388

In this sense, displaying students' work may provide positive 'social messages' to students regarding the value of their skills; which regarding Social Persuasion, could develop their SEB (Bandura, 1977).

c) External rewards

In addition to 'praise' and positive feedback, students also discussed receiving external 'rewards' for their work. Regarding SEB and social persuasion, rewarding students for work may provide positive 'social messages' about their skills, and therefore, develop their SEB.

BB: At our school we have Awards (.) like Period four today we have like an Awards Ceremony

TEP: Mm

BB: Which is like (.) um (.) they give people awards for people (.) they give you (.) people awards if they've (.) been the best in their subject or if they've made (.) they give improvement ones as well Interviewee 9; line 656

ID: Give them (.) we get like (.) Postcards home

TEP: Oh right

ID: So (.) that's like (.) it's like a Postcard and it says like 'well done for like Maths' (.) 'getting good marks on your test'

TEP: Mm

ID: And they don't really do that in like (.) Art or Graphics Interviewee 6; line 606

However, in relation to the previously discussed theme regarding 'evidence' of skills, it could be suggested that rewards systems such as these may put students with strengths in non-EBacc subjects at a disadvantage; as non-EBacc subjects are not generally assessed through frequent testing and 'scores'. As indicated above, interviewees similarly suggested that students receive more rewards in EBacc subjects than in non-EBacc in subjects.

ID: Um (..) well cos like (.) people who are good at (.) Maths and that get to go on trips (.) I think [students like Student B] should get (.) like trips for Art as well

Interviewee 6; line 782

In this sense, students with strengths in non-EBacc subjects may be less likely to receive the positive 'social messages' associated with traditional reward systems, and could therefore, have less source for developing SEB than students with strengths in EBacc subjects. As discussed, this could relate to stage 1 quantitative findings; indicating students with strengths in EBacc subjects to have significantly higher MALS scores than students with strengths in non-EBacc subjects.

4.2.2.3.3. Theories of self-efficacy beliefs – summary

Regarding this category of themes and sub-themes overall, it can be suggested that Bandura's (1977) theory of SEB can be considered a relevant theoretical framework

for understanding and potentially explaining stage 1 quantitative findings; particularly regarding 'mastery experiences' and 'social persuasions'. TA of interviews suggests that students with strengths in non-EBacc subjects may have fewer opportunities for mastery experiences than students with strengths in EBacc subjects, due to there being fewer lessons in non-EBacc subjects, and it being harder to 'evidence' skills in such. Students with strengths in non-EBacc subjects may also therefore have fewer opportunities for positive social persuasions than students with strengths in EBacc subjects, due to generally receiving less praise and rewards for their work; which may also be interpreted as indicators of respect and appreciation for their skills. Overall, therefore, it can be considered that qualitative analysis of students' interviews in relation to this category of themes, may offer potential explanations of stage 1 quantitative findings; wherein the significant difference found in students' MALS scores between groups may be due to students with strengths in EBacc subjects having more opportunities to develop their SEB, regarding mastery experiences and social persuasions (Bandura, 1977).

4.2.3. Stage 2 findings – summary

Overall, stage 2 findings suggest that similarly to stage 1, students generally identified EBacc subjects as more important than non-EBacc subjects, wherein the subjects' perceived 'usefulness' may be a significant contributing factor. However unlike in stage 1, students also discussed the future usefulness of non-EBacc subjects; suggesting that their initial responses may have been 'reflex', and altered through having additional time and space in which to reflect. Regarding the potential mechanisms behind these 'reflex' responses, timetabling of subjects, the process of choosing GCSEs, and input from others may all be considered particularly influential. Additionally, stage 2 findings suggest that in relation to choosing GCSEs, the EBacc may create an additional 'hierarchy' of optional-subjects, which could also influence perceptions of subjects' value. Stage 2 interview findings also offer potential 'explanatory' results of stage 1 quantitative findings, wherein theories of SEB and its 'sources' provide a useful psychological framework to improve understanding of statistically significant results (Bandura, 1977). For instance, it could be suggested that students with strengths in non-EBacc subjects may have less opportunities for mastery experiences and social persuasions than students with

strengths in EBacc subjects, which may negatively affect their SEB development. This therefore, could be considered a potential explanation of stage 1 quantitative findings, indicating students with strengths in non-EBacc subjects to have significantly lower MALS scores than students with strengths in EBacc subjects.

4.3. Chapter summary

Overall, findings suggest that 93.62% of subjects identified by students as the 'most important' subject was an EBacc subject, while 84.78% of subjects identified as the 'least important' was a non-EBacc subject. Findings also suggest that students' initial perceptions of subjects' importance may be 'reflex' responses; wherein perceived usefulness; frequency of lessons; GCSE options; and others' opinions, may all be considered potential mechanisms. The EBacc may also influence perceptions of subjects' value; as students generally referred to 'mandatory' subjects as 'most important', optional EBacc subjects as 'academic' and useful, and optional non-EBacc subjects as a 'waste'. Students also described their parents and teachers discussing similar views regarding GCSE options, which according to SLT (Bandura, 1997) may be particularly influential. Findings also indicate that students with strengths in EBacc subjects and/or subjects they consider 'important' have significantly higher MALS scores than students with strengths in non-EBacc subjects and/or subjects they do not consider 'important'. According to theories of SEB and stage 2 findings, this may relate to 'mastery experiences' and 'social persuasions' (Bandura, 1977), as students with strengths in non-EBacc subjects may have less time to engage in their strengths, less 'evidence' of their skills, receive less praise/rewards for their work, and feel their skills are less respected. Since SEB can predict academic attainment, future education and career opportunities (Honicke et al., 2016), this could be particularly significant to education practice and policy, suggesting that students with strengths in non-EBacc subjects may be at risk of lower SEB, and hence at an academic and social disadvantage.

These overall findings will be further discussed in the next chapter, particularly regarding the research questions; previously discussed literature; potential limitations and future directions of the research; and implications for EP practice.

5. Discussion

This chapter will discuss the overall findings from the research outlined in the previous chapter, particularly in relation to the research questions and previously discussed literature (5.1); the potential limitations (5.2) and future directions of the research (5.3); and the potential implications for future practice as an EP (5.4).

5.1. Findings

This section will consider the research findings in relation to the RQs specifically, and the previously discussed literature. This section will also consider the potential relationships between stage 1 and stage 2 findings, and the wider social implications.

5.1.1. Research questions

This section will consider the research findings in relation to the RQs, as outlined in the Methodology. This is to ensure the relevance of the findings and effectiveness of the research, regarding its original aims. Each question will be considered separately.

5.1.1.1. Students' perceptions of subject 'value'

RQ 1: What are Year 9 students' perceptions of the value of UK curriculum subjects?

In the questionnaires, 93.62% of the subjects identified by students as the 'most important' subject was an EBacc subject, wherein English, Maths and Science were the three subjects most frequently named as 'most important'. Comparatively, 84.78% of the subjects identified by students as the 'least important' subject was a non-EBacc subject, wherein Art, Music and Drama were the three subjects most frequently named as 'least important'. Prior to conducting the research, the researcher considered that students may identify the most/least important subjects in this way, in relation to previous research, SLT (Bandura, 1997) and EST (Bronfenbrenner, 1979). For instance, Last (2017) suggests that students' teachers

and parents consider 'creative' subjects to have decreased in 'value' since implementation of the EBacc, while 'Bacc for the future' (2017) considers the EBacc policy to "create an artificial and false hierarchy of subjects". In relation to SLT (Bandura, 1997) and EST (Bronfenbrenner, 1979), it was therefore considered by the researcher that students may have similar perceptions of the subjects' value; which findings from the current research indicate to be the case. In relation to the more specific mechanisms potentially informing students' perceptions of subjects' value, the research also aimed to answer the following sub-question:

> *SRQ 1: What do Year 9 students say are the reasons for their perceived value of UK curriculum subjects?*

TA of the questionnaires and interviews suggest that the perceived 'usefulness' of a subject, and 'external factors' such as school environment and others' opinions, could both offer explanations for the students identifying EBacc subjects as more important than non-EBacc subjects. These will be considered separately, in relation to the analysis.

5.1.1.1.1. Usefulness of subject

As discussed, findings from the current research suggest that students' perceptions of a subject's importance could relate to their perceptions of how 'useful' a subject is. For instance, students frequently discussed EBacc subjects being 'generally' useful – and non-EBacc subjects being only useful in a 'specialised' sense – to both their current and future lives. English was frequently referred to as being useful to other subjects in school, while Maths was described as necessary to 'most' and 'higher-earning' jobs. Comparatively, students discussed how non-EBacc subjects such as Art and Music were not useful to other subjects, and only useful to 'specialised' future employment. Similarly, EBacc subjects were referred to as being useful to general future education and university application, whereas non-EBacc subjects were only referred to as being useful for continued study of that subject specifically. This suggests students' perceptions of a subject's *usefulness* may significantly relate to their perceptions of its *importance*. This can be considered regarding Beardsley's (1975) theory of 'instrumental-value', suggesting that a thing is instrumentally valuable if it leads to, causes, or assists in bringing about a state of affairs that is

intrinsically valuable. This relationship between perceived 'usefulness' and 'value' could also therefore, be a reason for an EBacc subject being identified as the most important subject in 94% of responses, and a non-EBacc subject being identified as the least important subject in 85% of responses. This also reflects previously discussed findings by Wakefield (2009), and could relate to the 35% decreased in GCSE intake of 'creative subjects' since 2010 (DfE, 2018).

Although students similarly repeated references to EBacc subjects being more generally useful than non-EBacc subjects during their interviews – particularly at the beginning of such – many students also discussed how the more 'complex' aspects of English and Maths were not useful to their future and/or current lives. In relation to the above findings and theory of 'instrumental value' (Beardsley, 1975), this could be seen to decrease the students' perceived 'importance' of the subjects, despite having initially identified such as the 'most important'. Similarly, students in the interviews also discussed how the skills developed in non-EBacc subjects such as Drama and Art could be useful to their future and current everyday lives – such as by improving confidence – despite having identified these subjects as the least important and least useful. This alteration in students' perceptions of subjects' value during the interview process was acknowledged by one participant, who referred to having 'back-tracked' on her original perception of the importance of Maths. However, most students were either unaware of this change in their responses, or did not comment on such. In this sense, it could be suggested that the students' initial responses – in both the questionnaires and at the beginning of their interviews – may have been 'reflex' responses, which altered after having additional time and space to reflect on what skills they considered useful.

The potential mechanisms behind these initial 'reflex' perceptions can be considered in terms of SLT and EST (Bandura, 1997; Bronfenbrenner, 1979); particularly regarding thematic findings from the questionnaires and interviews relating to 'external factors'.

5.1.1.1.2. External factors

Qualitative findings from the current research suggest that 'external factors' – such as school environment and others' opinions – may relate to the students' 'reflex' perceptions of subjects' importance. For instance, in terms of the school environment, students frequently discussed the timetabling of subjects as an indicator of their importance, wherein lessons in EBacc subjects (such as English and Maths) were referred to as being far more frequent than lessons in non-EBacc subjects (such as Art and Music). Additionally, the students discussed how this discrepancy in timetabling was apparent from early on in their education. In relation to EST (Bronfenbrenner, 1979), 'timetabling' of subjects could, therefore, be considered a mechanism of the students' 'reflex' perceptions of subject value, as well as a contributing factor in English and Maths being most frequently identified as the 'most important' subject, and Art and Music being most frequently identified as the 'least important'. Furthermore, this discrepancy between the frequency of EBacc and non-EBacc lessons may mean that during the school day, there is greater opportunity for students with strengths and/or interests in EBacc subjects to develop their skills, than students with strengths/interests in non-EBacc subjects. According to Bandura (1977), this could result in students with strengths in EBacc subjects developing higher SEB, due to having more opportunities for 'mastery experiences'. This was reflected in stage 1 quantitative results, wherein students with strengths in EBacc subjects were found to have significantly higher MALS scores than those with strengths in non-EBacc subjects (to be discussed).

In terms of the potential effects of 'school environment', students also discussed the process of choosing their GCSEs as an indicator of subjects' value. For instance, while the "mandatory" subjects (English, Maths and Science) were described as 'most important', all other subjects were described as 'less important', due to not being compulsory for further study. Additionally, students discussed how EBacc subjects (such as Geography and History) were perceived as more 'academic' and useful to their future than non-EBacc subjects (such as Art and Drama), which could indicate an additional ranking of perceived 'subject value' amongst non-mandatory GCSE subjects. This may relate to previously discussed literature (Dawood, 2017);

suggesting that the EBacc policy creates a "hierarchy of subjects" by excluding non-EBacc subjects from school accountability measures. Furthermore, students also discussed that those taking EBacc subjects for GCSE were generally perceived as more 'intelligent' than those taking non-EBacc subjects, which could be a contributing factor to the recent decline in GCSE intake of creative subjects since implementation of the EBacc (DfE, 2018). In relation to theories of SEB and 'social persuasions', this could also result in students with strengths in EBacc subjects developing higher SEB than students with strengths in non-EBacc subjects, due to receiving more positive 'social messages' regarding their skills (Bandura, 1977). Again, this was reflected in stage 1 quantitative results, indicating students with strengths in EBacc subjects to have significantly higher MALS scores than students with strengths in non-EBacc subjects (to be discussed).

In terms of the 'social messages' received while choosing their GCSEs, students often referred to discussions had with peers, wherein creative subjects such as Art, Drama and Music were described as a 'waste' of a GCSE, due to being 'less useful' to their future. Students also discussed conversations had with their parents about GCSE options, who similarly referred to EBacc subjects as more 'academic' and useful to the students' future employment than non-EBacc subjects. Additionally, students referred to their teachers describing EBacc subjects such as Maths, English and Science as the 'most important' for their future. In this sense, the opinions of students' peers, parents and teachers regarding the 'instrumental-value' of subjects could be considered a potential mechanism behind the students equating a subject's perceived 'usefulness' to its importance (EST; Bronfenbrenner, 1979). This may also be considered in terms of SLT (Bandura, 1997), and relate to previously discussed research by Last (2017), wherein 79% of respondent schools considered parent/carers' perceptions of 'creative subjects' to be the most influential reason for the recent decreases in GCSE intake. Furthermore, students suggested that they were acutely aware of others' opinions of subjects' value, due to their peers' behaviour in lessons, and/or being encouraged to focus in certain subjects by teachers/parents. In this sense – and again regarding theories of SEB and social persuasions – others' opinions of subjects' value could negatively affect the wellbeing and/or SEB of

students with strengths in non-EBacc subjects; due to their skills being perceived as having less 'instrumental-value', 'academic-value', and importance.

The potential impact of students' perceptions of subjects' value will be further considered in relation to the next research questions; particularly regarding students' wellbeing and SEB.

5.1.1.2. Potential psychological impact

As well as exploring students' perception of subjects' value (and the potential mechanisms underlying them), the research also aimed to consider the psychological impact of these perceptions on students (RQ 2); again initially in an 'exploratory' sense. For instance, regarding the current research findings as discussed – particularly in relation to theories of SEB (Bandura, 1977) and positive psychology (Seligman, 2000) – it was considered by the researcher that students' perceptions of subject value may impact on their wellbeing and SEB, wherein students with strengths in EBacc subjects and/or subjects which are perceived as more 'important' may be develop greater wellbeing and/or SEB than students with strengths in non-EBacc subjects and/or subjects perceived as less 'important'. In order to explore this potential psychological impact, stage 1 participants were asked to complete the WEMWBS and the MALS, to measure their wellbeing and self-efficacy respectively. Stage 1 participants were also asked to 'rank' the curriculum subjects in order of 'importance', creating a 'value-ranking' for each student. The researcher additionally requested access to participants' attainment in each curriculum-subject, which were then 'ranked' from highest to lowest, creating an 'attainment-ranking' for each student.

Students were 'grouped' in relation to the 'top-3' subjects in their attainment-rankings, regarding both their strengths in EBacc subjects, and their strengths in subjects which they had identified as 'most important' in their value-rankings. This created two 'EBacc-groups' (E1 and E2) and two 'Match-groups' (M1 and M2). Group-E1 consisted of students with 0 or 1 EBacc subjects in their top-3 attainment-

rankings; Group-E2 consisted of students with 2 or 3 EBacc subjects in their top-3 attainment-rankings. Group-M1 consisted of students with 0 or 1 'matches' between the top-3 subjects in their attainment-rankings and the top-3 subjects in their value-rankings; Group-M2 consisted of students with 2 or 3 'matches' between the top-3 subjects in their attainment-rankings and the top-3 subjects in their value-rankings. Participants' WEMWBS and MALS scores were compared between Groups E1 and E2, and between Groups M1 and M2, using Mann-Whitney and t-tests. This aimed to explore the potential impact of students' perceptions of subject value on their wellbeing and SEB.

5.1.1.2.1. Students' wellbeing

As discussed, the research aimed to explore the potential impact of students' perceptions of subject value on their wellbeing (RQ 2a), in relation to their individual academic strengths; regarding both their strengths in EBacc subjects, and their strengths in subjects which they perceived as 'most important'. The research therefore aimed to answer the following question, regarding students' strengths in EBacc subjects:

> *RQ 2a1: Does student wellbeing relate to their individual academic strengths in EBacc subjects?*

Although as predicted, the mean and median WEMWBS scores were higher for Group-E2 (46.48; 45.00) than Group-E1 (42.88; 44.00), results from the Mann Whitney tests indicated that there was no significant difference between them ($U = 137$, $z = -1.22$, $p = 0.114$). This therefore suggests that Year 9 students' wellbeing does not relate to their individual academic strengths in EBacc subjects (to be discussed). The research also aimed to consider the potential impact of students' perceptions of subject value on their wellbeing, in relation to their strengths in subjects which they perceived as 'most important'. The research also, therefore, aimed to answer the following question:

RQ 2a2: Does student wellbeing relate to the perceived value of their individual academic strengths?

Again, although as predicted, the mean and median WEMWBS scores were higher for Group-M2 (48.09; 50.00) than Group-M1(43.56; 45.00), results from the Mann Whitney tests indicated that there was no significant difference between them ($U = 105.50$, $z = -1.386$, $p = 0.085$). Similar to the previous research question, this suggests that students' wellbeing does not relate to their individual academic strengths regarding their perceived 'value' of the subjects. Although there is a difference in scores between the EBacc-groups and the Match-Groups as predicted – wherein the scores of Group-E2 and Group-M2 are higher than that of Group-E1 and Group-M2 respectively – the differences between such may not be significant, as one's wellbeing can be affected by multiple factors outside of school, such as home-life, family relationships, peer relationships (Seligman, 2000).

5.1.1.2.2. Students' self-efficacy beliefs

As discussed, the research also aimed to explore the potential impact of students' perceptions of subject value on their SEB (RQ 2b), in relation to their individual academic strengths, regarding both their strengths in EBacc subjects, and their strengths in subjects which they perceived as 'most important'. Regarding students' strengths in EBacc subjects, the research therefore aimed to answer the following question:

RQ 2b1: Does student self-efficacy relate to their individual academic strengths in EBacc subjects?

As predicted, both the mean and median MALS scores were higher for Group-E2 (72.667; 72.00) than Group-E1 (56.353; 59). Results from the Mann Whitney test indicated that this difference in scores between the two groups was statistically significant, with a large effect size ($U = 21$, $z = -4.63$, $p < 0.001$, $r = -0.75$). Results from the subsequent t-test also indicated the difference between the two groups to be

significant, with a large effect size ($t(36) = -5.529$, $p < 0.001$, $r = 0.678$). This suggests that students' SEB do relate to their individual academic strengths in EBacc subjects, in that students with strengths in EBacc subjects had significantly higher SEB than students with strengths in non-EBacc subjects. Additionally, according to the standardised assessment measure, both the mean and median MALS scores for students in Group-E1 (those with strengths in non-EBacc subjects) were 'below average' (<60). This could be considered particularly significant and problematic, since as previously discussed, SEB are a positive predictor of academic attainment, and future educational and employment opportunities (Honicke et al., 2016). Furthermore, as 44.74% of participants were allocated to Group-E1 according to their attainment, this could suggest that a high proportion of students generally are at risk of having 'below average' SEB, and experiencing associated outcomes. The potential explanations of this statistically significant difference between groups were explored through stage 2 of the research during the semi-structured interviews, particularly in relation to Bandura's (1977) theories of SEB development (to be discussed).

The research also aimed to consider the potential impact of students' perceptions of subject value on their SEB, regarding their strengths in subjects which they perceived as 'most important'. The research therefore aimed to answer the following question:

> *RQ 2b2: Does student self-efficacy relate to the perceived value of their individual academic strengths?*

As predicted, both the mean and median MALS scores were higher for Group-M2 (72.727; 72.00) than Group-M1 (62.370; 63). Results from the Mann Whitney test indicated that this difference in scores between the two groups was statistically significant, with a medium to large effect size ($U = 55.50$, $z = -2.997$, $p = 0.001$, $r = -0.49$). Results from the subsequent t-test also indicated the difference between the two groups to be significant, with a medium to large effect size ($t(36) = -2.560$, $p = 0.008$, $r = 0.392$). This suggests that students' SEB do relate to their individual

academic strengths regarding their perceived 'value' of the subjects, wherein students with strengths in subjects which they perceive as 'most important' may have significantly higher SEB than students with strengths in subjects which they perceive as less important. As discussed, this could be both significant and problematic, as SEB can predict academic attainment, educational opportunities, and future employment (Honicke et al., 2016).

Regarding the previously discussed statistically significant findings, it can be suggested that although there is a significant difference in students' MALS scores between 'Match-Groups', there is 'less' of a difference between Match-Groups than EBacc-Groups, and a smaller effect size. This could be considered in relation to the 'curriculum hierarchy', as discussed regarding the previous research questions. For instance, although students in Group-M1 had only 0 or 1 *specific* 'matches' between their top-3 attainment-rankings and value-rankings, the subjects which were not 'matches' were often other EBacc subjects. In terms of the previously discussed 'curriculum hierarchy' therefore – and the students' perceptions of EBacc subjects having higher instrumental-value and academic-value than non-EBacc subjects – although the students' top-3 subjects may not have been identified as one of their *top-3* most valued subjects, relatively high attainment in any EBacc subject may have still been considered more valuable than high attainment in a non-EBacc subject. In this sense, having a relative strength in an EBacc subject could be considered a 'protective factor' for students' SEB, due to the general perception of *all* EBacc subjects having 'high value'. This could also therefore, be seen to relate to why the mean and median MALS scores for Group-M1 (62.370; 63) are higher than that of Group-E1 (56.353; 59), and are just within the 'average range' (60-80).

These results may also be seen to offer potential explanations of previous longitudinal research, such as that by Norgate (2013), which found a difference in MALS scores between students with high attainment and low attainment in KS3 Science, which was not apparent in KS2 Science. For instance, in relation to the current research, it could be suggested that this difference between students' MALS scores in relation to their attainment in Science became apparent later in their

education, due to the perceived value of Science (along with other EBacc subjects) increasing in secondary school, through being a mandatory GCSE subject, and having more allocated lesson-time. In terms of the current research, therefore, the fact that there is a statistically significant difference between 'Match-Groups' as well as 'EBacc-Groups' suggests a potential 'direction of causality'; wherein the 'value' placed on EBacc subjects may be impacting on the students' SEB, rather than the students' SEB impacting on their attainment in EBacc subjects. However, potential confounding variables should also be acknowledged, such as individual differences. Further potential explanations of the statistically significant differences in MALS scores between groups were explored in stage 2 of the research, through deductive TA of semi-structured interviews; particularly regarding Bandura's (1997) theories of SEB development. This will be discussed in relation to the following and final sub-question of the research:

> *SRQ 2: What do Year 9 students say can impact on their wellbeing and/or self-efficacy in school?*

As there were no significant results found in relation to students' wellbeing in stage 1 of the research, the researcher decided to focus on exploring students' views on what can impact on their SEB in school; due to its potential to offer useful strategies for supporting such. Bandura (1977) suggests there are four 'sources' of SEB – mastery experiences; social persuasions; vicarious experiences; and physiological states – which were the informing themes applied in deductive analysis of students' interviews. Physiological states and vicarious experiences were discarded as themes due to there being insufficient supporting data emerging from the interviews. However, mastery experiences and social persuasions were both considered to provide a useful structure for more effectively answering the above research question, and for offering potential explanations of the statistically significant differences between students' MALS scores.

5.1.1.2.2.1. Mastery experiences

As discussed in the previous chapter, 'mastery experience' is experiencing the results of self-efficacy, wherein individuals gauge the effects of their actions, and their

interpretations of these effects help create their SEB (Bandura, 1977). Considering previously discussed findings regarding discrepancies between timetabling of EBacc and non-EBacc subjects, it can be suggested that students with strengths in non-EBacc subjects have fewer opportunities during the school day to develop their skills, and may therefore, have less opportunities for mastery experiences. This is something which students frequently commented on during their interviews. For instance, the students discussed how the time allocated to mandatory subjects reduces the available time for students with strengths in non-EBacc subjects to engage and progress in their best subjects. In relation to SEB and mastery experiences therefore, this suggests that students with strengths in non-EBacc subjects have fewer opportunities to experience 'mastery' of their skills, which could result in developing lower SEB than students with strengths in EBacc subjects (as indicated in quantitative results). Students also discussed the potential negative effects of spending *more* time in lessons in which one does not feel competent or enjoy. As previously discussed – and again in relation to theories of SEB development and positive psychology (Bandura, 1997; Seligman, 2000) – this could suggest that students who feel competent in lessons which are very frequent (such as EBacc subjects) may develop higher SEB than those who feel competent in lessons which are less frequent (such as non-EBacc subjects).

In terms of how students assessed their competence in lessons, TA of both interviews and questionnaires suggest the students often assessed their own ability through comparison with their peers. Additionally, students often spoke of how their skills in subjects were measured, wherein high assessment 'scores' were frequently described as significant indicators of one's competence in a subject. Students also discussed how such numerical assessment measures were far more common in EBacc subjects such as Maths, Science and Geography, than in non-EBacc subjects such as Music, Art and Drama. Additionally, interviewees reflected on how this could mean that it is difficult for students with strengths in non-EBacc subjects to 'know' the level of their skills. In terms of SEB (Bandura, 1977), this could also be seen to limit 'mastery experiences' for students with strengths in non-EBacc subjects, as it may be harder to recognise their skills in relation to their peers, and to judge their own progress. As previously discussed, fewer opportunities for mastery

experiences could result in lower SEB for such students (as is reflected in stage 1 quantitative findings). Similarly, students who have weaknesses in EBacc subjects (in which attainment and progress are generally measured by 'scores' as previously discussed), may also be at risk of developing lower SEB, due to receiving 'evidence' of their difficulties and/or limited progress.

5.1.1.2.2.2. Social persuasions

Students also discussed how the difficulty in evidencing attainment and/or progress in non-EBacc subjects could mean that students with strengths in these subjects receive fewer rewards for their achievements, particularly compared to students with strengths in EBacc subjects. Additionally, staff may be more inclined to reward and encourage attainment in EBacc subjects, due to schools being assessed on their students' performance in such. This can also be considered in relation to theories of SEB, particularly regarding 'social persuasions' (Bandura, 1977). For instance, Bandura (1977) suggests that individuals create and develop SEB through social persuasions and the 'social messages' they receive from others; wherein positive social messages can encourage one's beliefs in their capabilities, and negative social messages can have a negative impact on such. In this sense, rewarding students for their work may provide positive 'social messages' about their skills, and hence develop their SEB. Therefore, if students receive fewer rewards for their achievements in non-EBacc subjects than EBacc subjects – due to it being harder to 'evidence' attainment and/or progress, as well as schools having less incentive to do so from a 'performance measure' perspective – students with strengths in non-EBacc subjects may again, be at risk of developing lower SEB; through receiving fewer positive 'social messages' recognising their skills.

Similarly, the interviewees described 'praise' from teachers/parents as an indicator of their skills being 'appreciated' and 'respected', and discussed that students generally received 'most praise' for achievements in EBacc subjects. Again, this may be due to schools being assessed on their students' performances in EBacc subjects, and suggests that students may receive fewer positive 'social messages' for achievements in non-EBacc subjects. Additionally, the interviewees explicitly

discussed that students with strengths in EBacc subjects would feel 'more clever' than students with strengths in 'creative' non-EBacc subjects, due to being more 'respected' by their peers, and 'appreciated' by their teachers. Overall therefore, it can be suggested that that the significant difference found in students' MALS scores between EBacc-Groups and Match-Groups may be due to students with strengths in EBacc subjects having more opportunities to develop their SEB; particularly regarding mastery experiences and social persuasions. Additionally, it could be suggested that the degree of mastery experiences and social persuasions available to students may relate to the perceived 'importance' of a subject; regarding timetabling, GCSE choices, and the subjects' 'instrumental-value' (Beardsley, 1975). In this sense, considering the potential relationships between RQs may provide deeper understandings of findings, particularly regarding the possible mechanisms behind the differences in students' MALS scores, and hence how their SEB could be supported. This may be additionally useful, given the significant impact SEB can have on one's future (Honicke et al., 2016). This will be further explored in the next section.

5.1.2. Relationships between findings

As discussed, considering the research findings in terms of their relation to one another may be particularly valuable for further understanding and appropriately responding to the potential mechanisms behind stage 1 quantitative results, which indicated that students with strengths in EBacc subjects had significantly higher MALS scores than students with strengths in non-EBacc subjects, which were generally 'below average'. For instance, establishing more accurate explanations of these statistically significant findings may help to inform more effective methods for supporting students' SEB, which as discussed, may be particularly valuable due to how SEB can affect a person's future (Honicke et al., 2016). As considered in the previous sections, it can be suggested that in the first instance, this difference between students' MALS scores may be explained in terms of theories of SEB development (Bandura, 1997), regarding mastery experiences and social persuasions (Figure 5.1.1, below). For instance, it can be suggested that students with strengths in EBacc subjects have more frequent mastery experiences and positive social

persuasions during a school day, and therefore, more opportunities for positive SEB development.

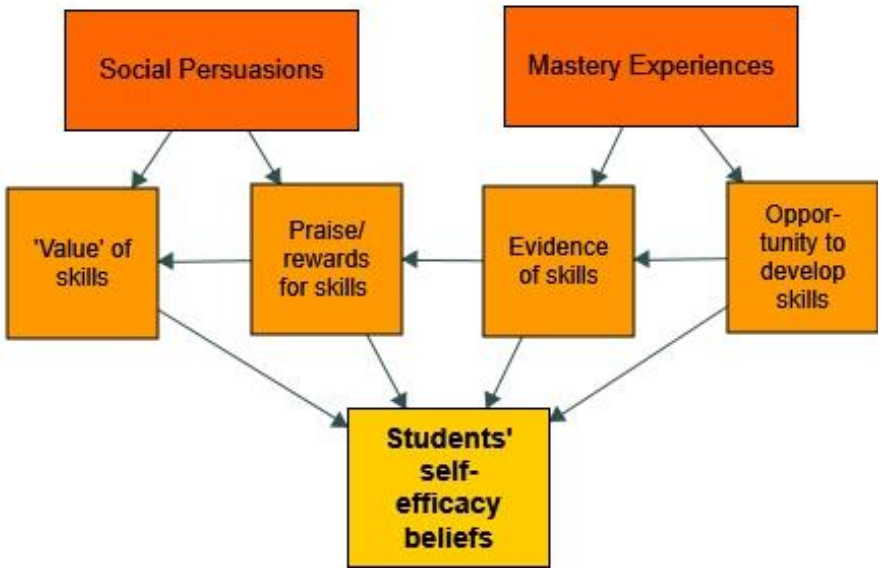


Figure 5.1.1. 'Self-efficacy beliefs'; concept map

As illustrated above, it can also be suggested that the frequency of 'opportunities' students have to develop their skills during the school day may affect the quantity of 'evidence' students gain regarding their skills/progress. In turn, this may affect the degree to which students receive praise/rewards for their skills, and hence influence their perceived 'value' of such.

Considering the potential relationships of these findings to other research questions, it could be suggested that 'external factors' – as discussed regarding students' perceptions of a subject's 'importance' – may affect opportunities for social persuasions and mastery experiences. This is illustrated below, particularly regarding the potential impact of 'others' opinions' and 'school environment' (Figure 5.1.2).

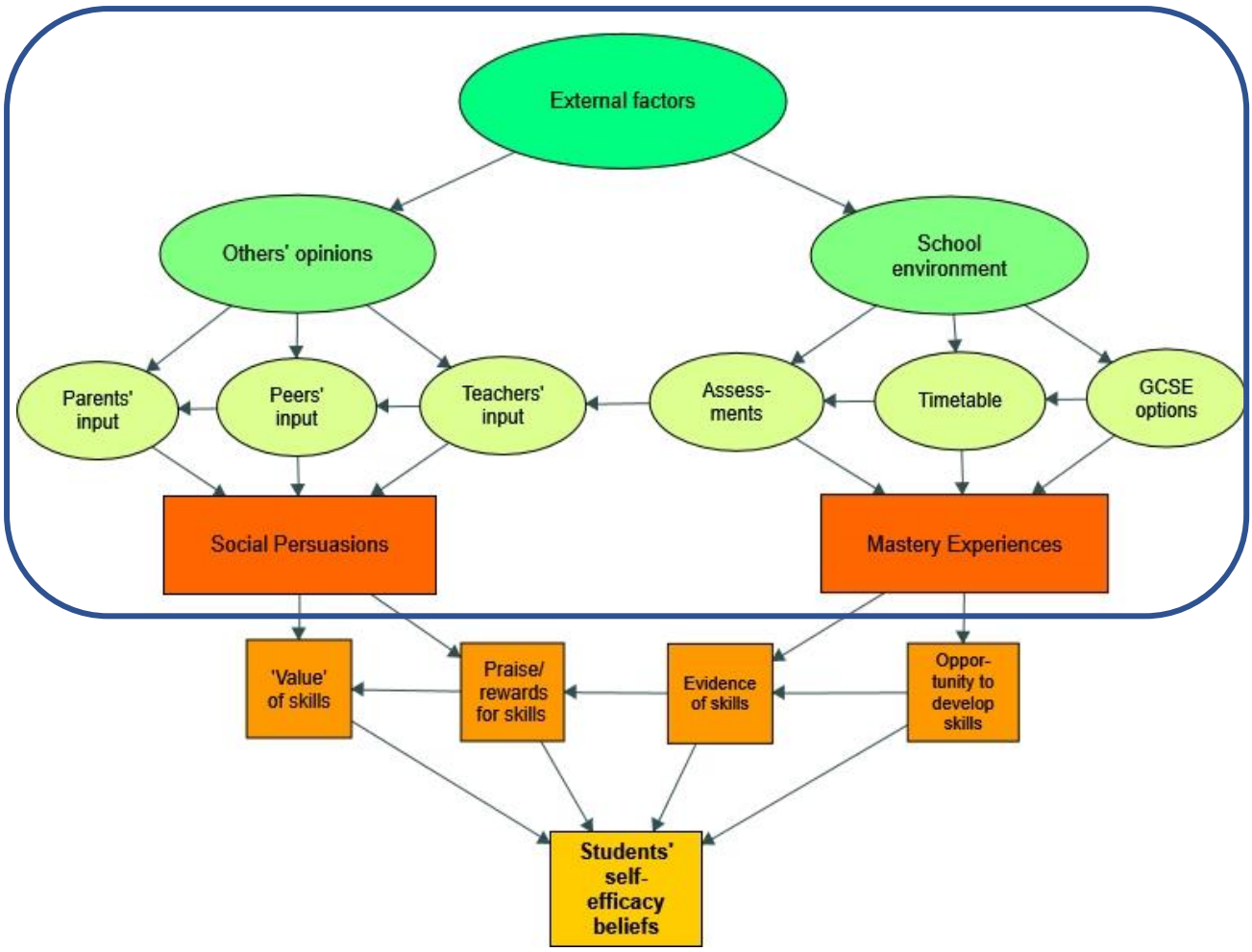


Figure 5.1.2. 'External Factors' relation to 'self-efficacy beliefs'; concept map

Firstly, regarding mastery experiences, it can be suggested that students' opportunities for such may be affected by their 'school environment'. For instance, mandatory and/or EBacc 'GCSE options' have more timetabled lessons, and hence more frequent assessments; both of which can increase mastery experiences in terms of 'opportunities to develop skills', and assessments/'evidence' of skills. In this sense, the average 'school environment' may be impacting on students' SEB, by providing students with strengths in EBacc subjects more opportunities for positive SEB development than students with strengths in non-EBacc subjects. The above figure also suggests that students' experiences of social persuasions may relate to 'others' opinions' of a subject's importance; particularly in terms of the praise/rewards received for their skills, and their consequential perceived 'value' of such. In terms of supporting students' SEB therefore, it may be beneficial to increase opportunities for students with strengths in non-EBacc subjects to have mastery

experiences and positive social persuasions, by targeting the influencing 'External factors' as above. This could include encouraging school-staff to increase praise/rewards given to students for their achievements in non-EBacc subjects, and/or allocating more time to these subjects.

However, since mastery experiences may mostly be influenced by 'school environment' – which from an individual practitioner level, may be difficult to change – it may be more effective as an EP to support students' SEB by focusing on social persuasions. In this sense (and as illustrated above), it may be particularly useful to further consider and target the potential factors impacting on 'other's opinions' of a subject's importance, which in terms of previously discussed findings, may relate to perceptions of a subject's 'usefulness' and 'academic value'. In particular, a subject's 'future' and 'current' usefulness was frequently equated to its importance, including its usefulness to students' employment, everyday life, and education. This is illustrated below (Figure 5.1.3).

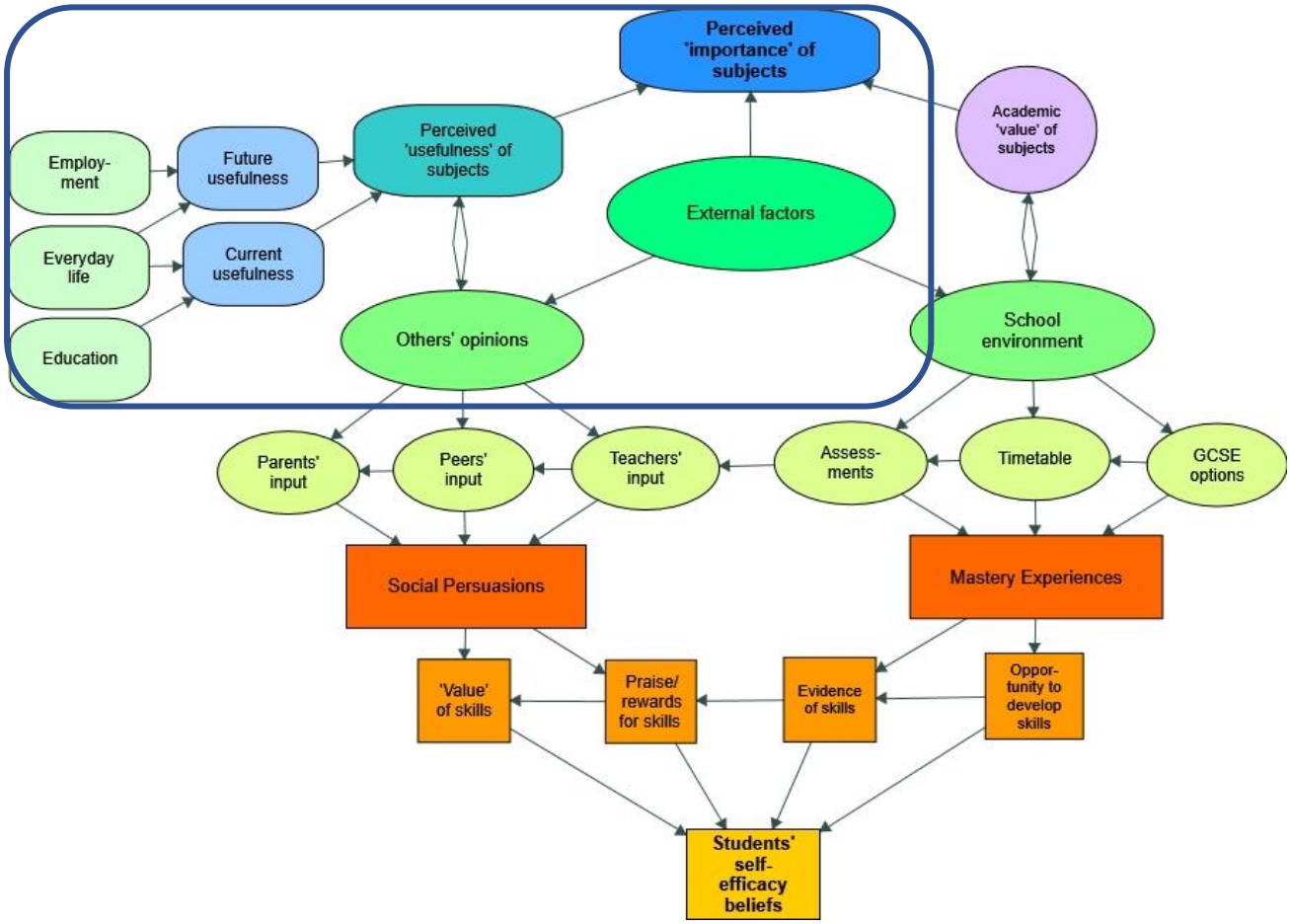


Figure 5.1.3. 'Subject importance' relation to 'self-efficacy beliefs'; concept map

As discussed, a subject's importance was most frequently discussed in relation to its 'future usefulness', wherein students initially discussed EBacc subjects as being more *generally* 'useful' to their future than non-EBacc subjects. However, this altered significantly during the students' interviews, suggesting that these initial perceptions of subjects' usefulness of may have been 'reflex' and/or conditioned responses. In this sense, targeting and reframing these reflex perceptions of the usefulness of non-EBacc subjects may alter students' perceptions of their instrumental-value and 'importance' (Beardsley, 1975). This may include encouraging school staff to emphasise how non-EBacc subjects may be useful to students' future employment and/or everyday lives, and encouraging relevant discussions. Additionally, highlighting the instrumental value of non-EBacc subjects may also affect 'others' opinions' on the subjects' value, including peers, teachers and/or parents. This could also therefore increase the positive social persuasions students receive for their skills in non-EBacc subjects, and provide further opportunities for students with strengths in non-EBacc subjects to develop their SEB. Therefore, by utilising these research findings from a theoretical and practical perspective – and including direct quotes from participating students – the researcher developed a 'checklist' of 'SEB support strategies' for schools (Appendix O); aiming to develop the SEB of students with strengths in non-EBacc subjects. This checklist will be shared firstly with participating schools, to co-construct effective and practical strategies appropriate to individual provisions (to be discussed).

5.1.3. Wider relationships of research findings

According to Burden (1997), utilising the current research findings to inform these 'SEB support strategies' may not only allow students with strengths in non-EBacc subjects to develop their SEB, but could also improve their academic attainment; which in turn, could additionally improve the students' future educational and employment opportunities. In this sense, supporting the SEB of students with strengths in non-EBacc subjects could also have wider benefits regarding social justice. For instance, research suggests that students from families of lower socio-economic status (SES) often have low attainment in 'mandatory subjects' (DfE, 2018). Therefore, supporting the SEB of students with strengths in non-EBacc

subjects and/or difficulties in EBacc subjects, may be improving the SEB of students with lower SES, hence improving their future educational, employment and life opportunities. Similarly, research also suggests that students who have been excluded from school for behaviour issues generally have low attainment in literacy and maths, while school exclusions relate to lower future education and employment, as well as increased risk of arrest (EEF, 2018). Therefore, supporting the SEB of students with difficulties in EBacc subjects may limit their risk of feeling frustrated in school and/or developing low self-concepts as learners, which may reduce any associated negative behaviours. This could therefore, decrease the likelihood of such students being excluded and affected by associated negative outcomes. In this sense, supporting the SEB of students with strengths in non-EBacc subjects and/or difficulties in EBacc subjects, may again have the potential to promote social justice.

However, regarding the potential factors impacting on students' SEB in school (as illustrated in the above figures), despite being able target social persuasions as an individual practitioner, the influences of the 'school environment' on mastery experiences – regarding timetabling, assessments and GCSE options – are less changeable, and could therefore, still negatively affect the SEB of students with strengths in non-EBacc subjects. In this sense, it may be useful to consider the potential wider factors influencing the 'school environment', to more effectively understand and respond to such, even if direct changes are not possible in EP practice. Regarding the most significant influencing factors therefore, it could be suggested that the UK Curriculum and EBacc itself may have a major impact on 'school environment', particularly regarding students' opportunities for mastery experiences, and social persuasions relating to a subject's 'academic value'. For instance, in terms of social persuasions, the EBacc is a 'performance measure' for schools, meaning that staff may be more inclined to encourage and reward students' achievements in EBacc subjects. Additionally, the students suggested that EBacc subjects are perceived as more 'academic' by their peers and parents than non-EBacc subjects, meaning students taking EBacc subjects at GCSE are more likely to be 'respected' and seen as 'clever'. In terms of mastery experiences, the EBacc also impacts on time allocated to each subject in a school day, and the extent to which students' skills and progress are assessed. This is illustrated below (Figure 5.1.4).

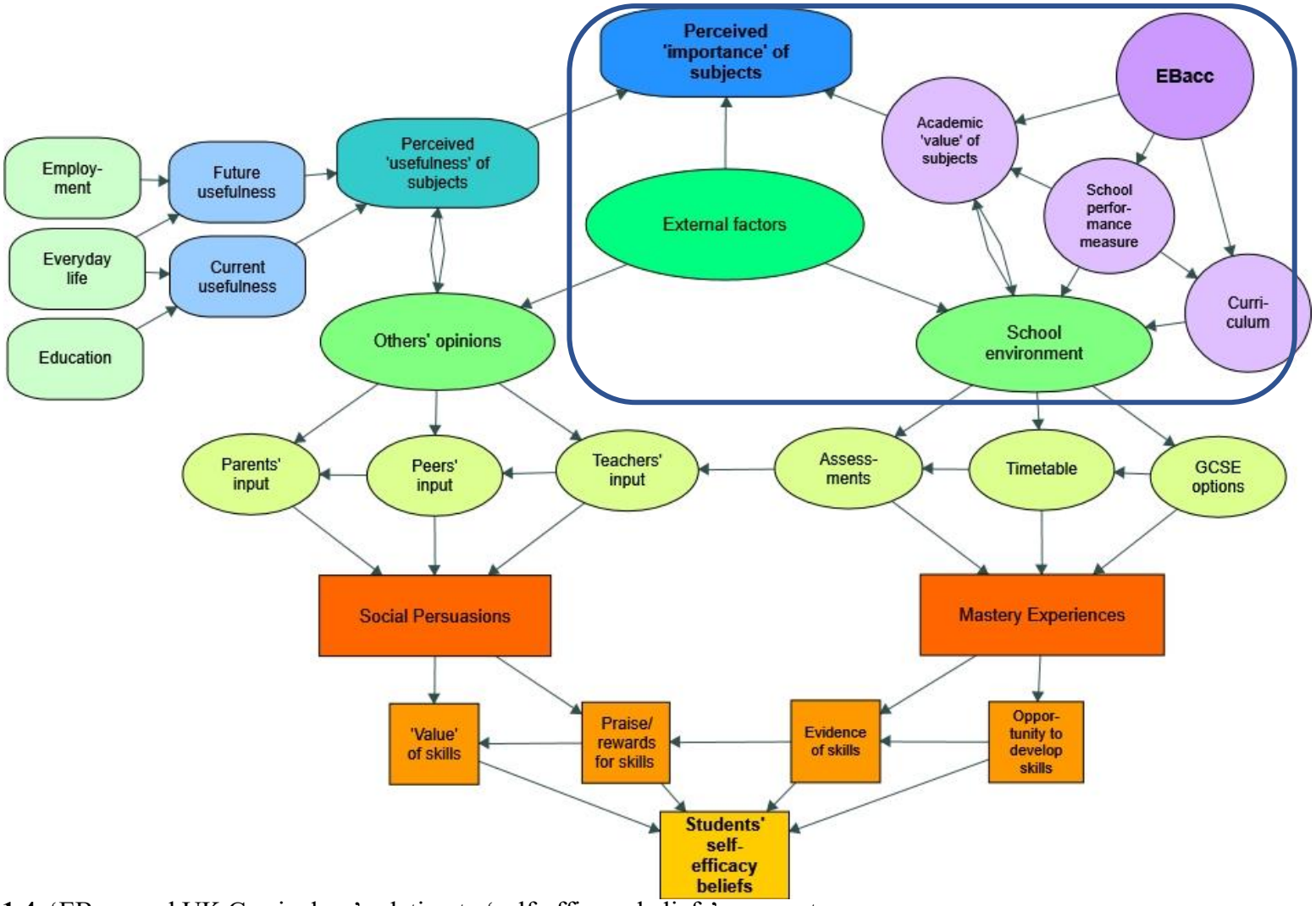


Figure 5.1.4. 'EBacc and UK Curriculum' relation to 'self-efficacy beliefs'; concept map

In this sense, even if individual practitioners were to reframe subjects' perceived instrumental-value as discussed, students with strengths in non-EBacc subjects may still develop lower SEB than students with strengths in EBacc subjects; by having fewer opportunities for mastery experiences, and less positive social persuasions regarding the subjects' 'academic-value', due to influences of the curriculum and EBacc. Therefore, it could be suggested that the EBacc and current UK curriculum have an indirect impact on students' SEB; wherein students with strengths in non-EBacc subjects – who are more likely to have lower SES and/or be excluded from school – may be most negatively affected. In this sense, the UK curriculum may be indirectly disadvantaging CYP with lower SES, and hence inhibiting social justice. In terms of the current research therefore, the EBacc itself may also be considered a mechanism behind the significant differences in students' MALS scores. However, in order to further consider the potential implications of the current research in this sense, it is necessary to acknowledge its limitations. These will be discussed in the following section.

5.2. Potential limitations of research

The research may be considered to have limitations in relation to the reliability and generalisability of its findings. For instance, although the research aimed to involve a variety of state and independent schools – nine schools in total – the participating schools were from one county only. In this sense, findings may not be considered generalisable, or relevant nationally. Additionally, the research only involved 13 and 14 year olds, meaning the perspectives of such may not be considered generalisable to other age groups. Similarly, as participants only consisted of students who had been first granted parental permission and then given personal consent, it could be suggested that those involved in the research may not have been representative of the overall student body. In this sense, an 'opt-out' method of participant recruitment may have been more beneficial – provided such was ethically approved – in order to include a wider variety of students in the research. Additionally, an 'opt-out' participant recruitment method may have resulted in a higher number of participants, which would have been advantageous to stage 1 quantitative analysis. For instance, 38 participants were included in the analysis, which although is considered sufficient

for the Mann Whitney and t-tests applied, a higher number of participants would have increased the power, and hence reliability, of statistical analysis (Field, 2009).

Another potential limitation of stage 1 quantitative analysis is that of unequal group sizes. For instance, although participant numbers were relatively equal between EBacc-Groups (wherein E1 consisted of 17 students and E2 consisted of 21 students), participant numbers between Match-Groups were more unequal (wherein M1 consisted of 27 students and M2 consisted of 11 students). Although this inequality between group sizes is not considered an issue for Mann Whitney tests – and the assumptions of a t-test were further investigated to ensure its appropriateness – greater equivalence between group sizes generally increases the statistical power of such analyses (Field, 2009). As the EBacc-Groups and Match-Groups are 'naturally occurring' groups in relation to students' individual academic attainment, it would not have been entirely possible to ensure equality in participant numbers between groups; however, increasing the number of participants overall could increase the probability of this. Additionally, even if group sizes remained unequal, having a greater number of participants in each group would have increased the overall power of statistical analysis. In this sense, it can again be suggested that an 'opt-out' method of participant recruitment may have been beneficial to the research, provided it had been ethically approved.

It can also be considered that there may be limitations with stage 1 and stage 2 qualitative data collection and analysis, in relation to validity and reliability of findings. For instance, as discussed in previous chapters, it could be suggested that the validity of students' responses to questionnaires, self-reports and interviews may be reduced due to risk of social-desirability bias (Dodou, 2014). Although the researcher attempted to minimise this risk where possible – by asking students to complete questionnaires and self-reports anonymously, and conducting individual interviews rather than group interviews – it is not possible to ensure that students' responses were entirely unaffected, and hence valid. Additionally, it may be considered that even if students' responses were unaffected by social-desirability bias, they may only be representative of the students' perspectives on that given day,

and may therefore, not be entirely valid or reliable. However, it can be suggested that in qualitative research this is always the case – and therefore cannot be avoided – but should be borne in mind when reporting and interpreting results.

It could also be considered that asking 'what it the most/least important subject?' in the questionnaires may have resulted in the students understanding and answering the questions regarding their perceptions of *others'* opinions on the subjects' importance, rather than their own. In this sense, questionnaire findings may not be entirely valid of Year 9 students' perceptions of subject value. However, according to EST (Bronfenbrenner, 1979) and SLT (Bandura, 1997), the students' perceptions of subjects' importance would always be influenced by others, meaning it may be difficult to effectively separate their opinions from their perceptions of others' opinions, even had the questions been more specific. Additionally, the lack of specificity in these questions aimed to give an indication of the students' 'reflex' responses, to further explore the potential explanations of such. In terms of grouping students based on 'ranked' attainment rather than actual grades/marks, the potential range of attainment within each group may have also had implications for findings. For instance, grouping based on ranked attainment may have resulted in a difference between the groups' actual attainment, which could relate to differences found between MALS scores. However, as the study aimed to explore the potential impact of the EBacc regarding students' relative strengths, grouping the students by ranking was considered most appropriate to the research questions. If the study were to be repeated, it may be useful to compare the groups' attainment before conducting parametric and/or non-parametric testing of MALS and WEMWBS scores, to ensure there are no significant differences.

Another limitation of the research is the potential risk of researcher-bias, particularly in qualitative data collection and analysis. For instance, as the questionnaires were analysed through inductive analysis in stage 1, it could be suggested that identified themes may have been influenced by the researcher's hypotheses; despite being monitored and reviewed by the researcher's supervisor. Similarly, although semi-structured interviews were conducted in order to reduce the risk of 'question-order'

and ‘leading-question-and-wording’ bias during the interview process, it can be suggested that data collected from the interviews may still be at risk of being affected by researcher-bias. For instance, it could be suggested that students’ responses may have been influenced by the researcher unintentionally offering non-verbal cues, such as facial expressions and gestures (Dodou, 2014). In this sense, using video recordings of interviews may have increased the validity and reliability of stage 2 data analysis, as the risk of researcher bias could have been more effectively monitored and accounted for during analysis. However, as well as requiring additional ethical approval, this may have resulted in the students feeling more self-conscious during their interviews, and hence reduced the validity of their responses and reliability of data. In this sense, audio recordings of interviews may still be considered most appropriate for stage 2 data collection; however, the risk of the researcher offering unintentional non-verbal cues during the interviews should be borne in mind when interpreting results.

5.3. Potential directions for future research

Regarding the potential limitations of the research as discussed, it could be beneficial to repeat the research on a larger scale across multiple counties, to increase ‘power’ of statistical analyses, and to assess whether findings may be generalisable nationally. This may be particularly important regarding stage 1 quantitative findings. For instance, both the median and mean MALS scores for students with strengths in non-EBacc subjects were ‘below average’ (<60), according to the standardised assessment (Burden, 1998). Furthermore, 44.74% of participants fell into this category, meaning nearly half of all participating students had strengths in non-EBacc subjects and ‘below average’ MALS scores. If similar results were found on a wider scale therefore, it could be considered problematic, particularly since as previously discussed, SEB relate to academic success, future educational and employment opportunities, and future quality of life (Honicke et al., 2016). In this sense, it could be suggested that nearly half of all students may be at risk of low SEB due to having strengths in subjects which are not perceived as ‘valuable’, and missing out on future educational and employment opportunities as a result. Furthermore, as previously discussed, the literature suggests that students with

strengths in non-EBacc subjects are more likely have lower SES, meaning this could also be an issue of social justice. Therefore, it could be considered beneficial to assess these findings on a wider scale, so that appropriate action can be taken if necessary.

It could also be useful to conduct the research in alternative educational provisions – such as those which 'specialise' in creative subjects – to assess whether students' perceptions of the usefulness and 'value' of creative subjects differ to those found in the current study. For instance, findings from the current research would suggest that students attending 'creative-specialist' provisions may have more positive perceptions of the usefulness and value of creative subjects, due to the potential influences of their learning environment, through both the timetabling of the subjects, and the 'social messages' received from their teachers, parents and peers. In this sense, it could also be useful to assess whether the differences found between students' MALS scores in the current research were similarly apparent in creative-specialist provisions. For instance, stage 2 findings would suggest that there may be less of a difference between students' MALS scores in creative-specialist provisions, due to students with strengths in non-EBacc subjects having more opportunities for mastery experiences regarding timetabling, and their skills being 'respected' by others in their learning environment. Therefore, repeating the research in creative-specialist provisions may provide an opportunity to develop findings and hypotheses from the current research; offering further information for developing effective 'SEB support strategies' for students with strengths in non-EBacc subjects.

In this sense, it may also be beneficial to conduct evaluative research into the effectiveness of the suggested 'SEB support strategies'. This could include 'follow-up' research with the schools which implement the collaboratively developed strategies, applying a 'repeated measures' methodology. For instance, following the schools' implementation of the SEB support strategies, participants involved in the current research could repeat the MALS, to assess whether students with strengths in non-EBacc subjects increase their scores, as intended. Alternatively, if support strategies were implemented at a 'whole school' level, an independent group of KS3

participants could be asked to complete the MALS, to assess whether there is a smaller difference between students' scores than in the current research. Additionally, if results from such evaluative research indicated the SEB strategies to be ineffective, further research could be conducted to explore what may be more helpful, and the strategies could be reviewed and adjusted as necessary. Alternatively, if evaluative research indicated the support strategies to be effective – either by original students' MALS scores increasing, or by a smaller difference being found between new participants' scores – the strategies could be recommended to other schools in the county, and hence have potential for a wider positive impact.

5.4. Implications for practice

In relation to the informing psychological principles of the research, this section will consider the potential implications of findings for EP practice in terms of its surrounding systems (Bronfenbrenner, 1979). The research and its implications for practice will therefore be considered regarding the individual EP and their service (microsystem); schools and other educational practitioners (mesosystem); and educational policy on a county (exo-system) and national level (macro-system).

5.4.1. Implications for individual EP practice

It can be considered that as a Trainee EP, the researcher firstly has a responsibility to disseminate research findings with participating schools and students. This will be done by producing an accessible summary of significant findings, and holding meetings with participating school-staff. There will then be collaborative discussions around how to most effectively disseminate these findings to participating students (and parents if considered appropriate), regarding the practicalities and policies of individual schools. The meeting will also involve discussing the suggested 'SEB support strategies', the aim being to improve the SEB of students with strengths in non-EBacc subjects. The strategies will be developed collaboratively with school-staff, to ensure their effectiveness and appropriateness to each school regarding individual resources and policies. The researcher will then share the findings with other EPs working within her local authority, presenting a summary of the overall

research, and paying particular attention to findings and collaboratively developed SEB support strategies. The reasoning for sharing the research with the local authority is to enable other EPs in the service to share the findings and support strategies with additional schools where appropriate, in order to widen the potential positive impact of such.

Regarding individual EP work, it could be suggested that remaining aware of the current research findings may be particularly beneficial to EP practice with secondary school students. For instance, if a referral was received for a YP whom school had identified as having low attainment in the 'mandatory' subjects, the EP could consider that the YP may be at risk of low SEB, and reflect on this during formulation and assessment processes. This may include individual work with the YP – such as asking them to complete the MALS, and/or having discussions about their self-perceptions as a learner – and triangulating relevant information through consultation with school and/or parents. In this sense, if it became apparent that the YP did have a low perception of themselves as a learner, the SEB support strategies as informed by the current research findings could be suggested by the EP as part of the YP's 'action plan'; wherein the impact of such could be monitored, reviewed and modified accordingly. Additionally, individual EPs could discuss the current research findings with schools during their termly planning meetings; encouraging secondary school staff to also to remain aware of students with strengths in non-EBacc subjects and/or difficulties in EBacc subjects, regarding their potential of having 'below average' SEB.

5.4.2. Implications for school practitioners

As discussed above, if the research were shared with secondary school staff such as SENCOs, teachers, and other educational practitioners, this could have implications for their practice, and benefits for YP. For instance, if school staff were made aware that students with strengths in non-EBacc subjects may be at risk of low SEB – as suggested by the current research – staff could remain mindful of this when working with such students, and hence respond appropriately to their potential needs in this area. This could include targeted intervention work with individuals, or

implementing the SEB support strategies at a 'whole-school' level. Staff could also share an accessible summary of the research findings with parents if considered appropriate, providing parents the opportunity to also remain aware of and responsive to this potential need, increasing the holistic support of YP's SEB. There could also be benefits in staff sharing the research findings with their teaching body – particularly teachers of non-EBacc subjects – which could have implications for their practice. For instance, if non-EBacc teachers were made aware that students with strengths in their subjects may be at risk of low SEB, they may be more encouraged to implement the suggested classroom SEB support strategies; such as increasing praise for achievements, emphasising students' progress, presenting rewards, displaying students' work, and discussing the outside 'usefulness' of the subject.

Additionally, implementing these suggested SEB support strategies at a whole-school level could act as a preventative measure for 'protecting' students' SEB. For instance, if staff were to consistently raise discussions regarding the 'usefulness' of non-EBacc subjects – and praise/reward students' achievements in non-EBacc subjects from the start of their transition to secondary school – this could increase the students' overall perception of the subjects' importance. This could then encourage students with strengths in non-EBacc subjects to perceive their skills as valuable, respected and appreciated during their progression through secondary school; which as discussed, can contribute to the positive development of SEB (Bandura, 1997). Furthermore, students may then feel more positively about choosing non-EBacc subjects for GCSE when in Year 9, and receive less negative 'social messages' from their peers and/or parents about doing so (as indicated in stage 2 findings). In this sense, implementing the suggested SEB support strategies as a preventative measure could have additional implications for school practice, in that it could encourage more students to study non-EBacc subjects at GCSE. As previously discussed, this could be particularly significant, as national GCSE intake of creative subjects has decreased considerably since implementation of the EBacc in 2010 (DfE, 2018). In this respect, the research could have further implications on a county level.

5.4.3. Implications for county and national practice

As considered above, it could be suggested that the research findings may have the potential to influence practice on a county level. For instance, if individual EPs were to share the research and suggested SEB support strategies with their schools – and staff were to implement the strategies both at an individual 'responsive' and whole-school 'preventative' level – it could be suggested that not only may this increase the number of students with positive SEB, but also the GCSE intake of non-EBacc subjects. As discussed, this could be significant regarding the recent decreases in GCSE intake of non-EBacc subjects, which Last (2009) considers a significant contributing factor for the low wellbeing of non-EBacc teachers. In this sense, the potential to raise the perceived 'value' of non-EBacc subjects – and the GCSE intake of such – could have an additional positive impact on non-EBacc teachers, by potentially improving their wellbeing. Similarly – since SEB are considered to relate to wellbeing, while engaging in creative activities can improve mood – developing students' SEB, and encouraging more students to pursue non-EBacc subjects, could additionally impact on YPs' SEMH (Clarke, 2018). In this sense, the research could potentially have implications for EP practice on an 'exo-system' level, as many YP referred to individual practitioners have SEMH needs.

Additionally, since a high proportion of YP who have been excluded from school for behaviour have low attainment in mandatory subjects (DfE, 2018), according to the current research findings these students may be at risk of having low SEB. As low SEB can relate to negative feelings such as frustration – which can lead to anger and associated 'disruptive' behaviours – it could be suggested that students with low SEB may be at higher risk of school exclusion. In this sense, supporting the SEB of students with strengths in non-EBacc subjects and/or difficulties in EBacc subjects, could reduce their potential of feeling frustrated at school, and hence lower their risk of exclusion. Furthermore – since as previously discussed, students with lower SES generally have lower attainment in EBacc subjects (EEF, 2018) – improving the SEB of such YP may positively impact social justice, and hence have potential implications on a wider (macro-system) level. For instance, since SEB can predict

future educational and employment opportunities (Honicke et al., 2016), developing the SEB of students with strengths in non-EBacc subjects and/or difficulties in EBacc subjects – whom as previously discussed, often have low SES – may improve the future life opportunities of YP with lower SES. In this sense, there may be social benefits to increasing the perceived value of non-EBacc subjects at a national level, which in relation to the current research findings (Figure 5.1.4) and educational policy, could include adding a 'creative subject' to the EBacc.

6. Conclusion

6.1. Research aims and findings

Overall, the current research aimed to explore KS3 students' perceptions of the UK curriculum and subjects' 'value', as well as the potential explanations for these perceptions. The research also aimed to explore the potential psychological impact of these perceptions on students' wellbeing and SEB, in relation to their individual academic strengths, and the potential explanations for such. These exploratory and explanatory research aims were considered through a mixed-methods, two-stage design. Stage 1 aimed to explore students' perceptions of the curriculum and the potential psychological impact of such, by asking 38 Year 9 pupils to complete original questionnaires, and two standardised self-reports (WEMWBS and MALS), measuring wellbeing and SEB. Students' responses to questionnaires were considered through inductive TA, while their WEMWBS and MALS scores were compared between 'EBacc-groups' and 'Match-Groups' – relating to their individual academic strengths – using Mann Whitney and t-tests. Questionnaire results indicated that 93.62% of subjects identified by students as the 'most important' subject was an EBacc subject, while 84.78% of subjects identified as the 'least important' was a non-EBacc subject; wherein a subject's importance was often equated to its perceived 'usefulness' to the students' future, which can be considered regarding Beardsley's (1975) theory of instrumental value. Students also discussed discrepancies between timetabling and assessments of subjects as indicators of value, and their peers, teachers and parents having similar perceptions of subjects' 'importance'.

Stage 1 quantitative results indicated that although there was no significant difference in students' WEMWBS scores between Groups, there was a significant difference in students' MALS scores between Groups. Students with strengths in EBacc subjects (Group-E2) had significantly higher MALS scores than students with strengths in non-EBacc subjects (Group-E1); students with strengths in subjects which they had identified as 'important' (Group-M2) had significantly higher MALS scores than students with strengths in subjects which they had not identified as

'important' (Group-M1). Furthermore, the mean and median MALS scores for students in Group-E1 were 'below average', according to the standardised measure. Stage 1 quantitative and qualitative findings, and potential explanations of such, were further explored in stage 2 of the research. This involved conducting semi-structured interviews with nine of the original participants, and deductive TA of transcripts; wherein stage 1 qualitative findings informed the interview questions and prompts, as well as the themes used in deductive TA. Stage 2 findings further suggested that students considered the usefulness of a subject to relate to its importance, particularly regarding usefulness to their future employment and everyday life. However, in contrast to stage 1 findings, students also discussed the future usefulness of non-EBacc subjects, despite originally identifying such as 'least important'. Similarly, students also discussed how more complex aspects of EBacc subjects were not important to their future, despite previously identifying the subjects as 'most important'. This suggests that students' initial responses may have been 'reflex' and conditioned, which as indicated by the current research findings, could relate to their school environment and others' opinions.

Stage 2 findings also suggested that students considered GCSE options to indicate a subject's importance. 'Mandatory subjects' were perceived as 'most important'; and 'free-choice' EBacc subjects were perceived as more 'academic' and valuable than non-EBacc subjects (which were often labelled a 'waste' of a GCSE). Furthermore, interviewees discussed that students taking EBacc subjects at GCSE would feel more 'clever' than students taking non-EBacc subjects, as their skills would be more 'respected' by their peers, and 'appreciated' by their teachers. This was considered regarding social persuasions and Bandura's (1977) theory of SEB development; suggesting that SEB are affected by the 'social messages' one receives regarding their skills. Therefore, the perceived value of EBacc subjects compared to non-EBacc subjects was considered a potential explanation for stage 1 quantitative findings. The concept of mastery experiences (Bandura, 1977) also aided explanations of stage 1 quantitative findings, suggesting that experiencing progress in one's skills can improve SEB. The current research suggests that due to external factors such as school environment, students have less opportunities to engage in non-EBacc subjects, meaning that students with strengths in non-EBacc subjects

have fewer opportunities to develop their skills. Furthermore, as discussed by interviewees, students' skills and progress in non-EBacc subjects may be more difficult to 'evidence', due to generally not being assessed by 'scores'. In this sense, students may also receive less rewards/praise for achievements in non-EBacc subjects, which could further relate to social persuasions.

Additionally, it could be considered that schools may be less inclined to reward and encourage students' achievements in non-EBacc subjects, since the EBacc is a 'performance measure' which assesses schools on students' performances in EBacc subjects. In this sense, it was considered that the curriculum and the EBacc itself may have an indirect effect on students' SEB, and, therefore, be an additional explanation of the current research findings (Figure 5.1.4). In relation to social persuasions and according to students' responses, the EBacc may firstly, impact on the perceived academic value of subjects, by excluding creative subjects from school accountability measures and creating a 'hierarchy' amongst non-mandatory subjects. Secondly as discussed, the EBacc as a school performance measure may influence teachers to reward achievements in EBacc subjects more than non-EBacc subjects, which could affect students' perceived appreciation of their skills. Thirdly and regarding mastery experiences, the EBacc means that more time is allocated to EBacc subjects in a school day than others, meaning that students with strengths in non-EBacc subjects have fewer opportunities to develop their skills. Similarly, students with difficulties in EBacc subjects will be therefore, be spending a significant proportion of their school day in lessons in which they are less confident, which could lead to feelings of frustration, and associated negative behaviours. This may be particularly significant, as previous research suggests that students whom have been excluded from school for behaviour issues, often have lower attainment in the mandatory subjects (DfE, 2018).

6.2. Potential implications

In this sense, supporting the SEB of students with difficulties in EBacc subjects and/or strengths in non-EBacc subjects may reduce the risk of such YP being excluded from school, and the associated negative outcomes, including lower

employability rates, and higher rates of arrest (EEF, 2018). Similarly, previous research suggests that students with lower SES are more likely to have lower attainment in the mandatory subjects, suggesting that supporting the SEB of students with difficulties in EBacc subjects and/or strengths in non-EBacc subjects may be supporting the SEB of YP with lower SES. Furthermore, as SEB can predict academic attainment, future education and employment (Honicke et al., 2006), supporting the SEB of these YP in particular, may have an additional positive impact on social justice. For this reason, the researcher developed a checklist of 'SEB support strategies' – informed by theoretical and conceptual findings from the research, and direct quotes from students – which will be shared and collaboratively developed with participating schools (Appendix O). The aim of the support strategies is to develop the SEB of students with strengths in non-EBacc subjects specifically; wherein future research into the effectiveness of such could be useful. The strategies consider how targeting the social persuasions around subjects' value in school may be particularly useful, including encouraging staff to reward and actively 'appreciate' students' achievements in non-EBacc subjects, and promoting student discussions around the instrumental value of non-EBacc subjects.

However, in relation to Bandura's (1977) theory of SEB and the current research findings (Figure 5.1.4), it could be suggested that even if students were to receive more positive social messages regarding the instrumental value of non-EBacc subjects, there would still be fewer opportunities for mastery experiences in such; due to the average school environment having fewer non-EBacc lessons on the timetable. Additionally, the perceived academic-value of the subjects and others' opinions of such may still be affected by the curriculum; regarding which subjects are included and/or excluded from the EBacc as a 'performance measure'. In this sense, the UK curriculum and the EBacc may significantly impact on students' SEB development, regarding both mastery experiences and social persuasions; wherein students with strengths in non-EBacc subjects are at risk of developing lower SEB, as indicated in the current research findings. Additionally, as nearly half of all participating students in the current research had strengths in non-EBacc subjects (and 'below average' MALS scores), this suggests that the UK curriculum may be failing a significant proportion of YP. Furthermore, since students who have been

excluded from school and/or have lower SES often have lower attainment in EBacc subjects (EEF, 2018), this could mean the curriculum and the EBacc may be disadvantaging YP from lower socio-economic backgrounds in particular, and inhibiting social justice.

In conclusion therefore, the current research suggests that KS3 students perceive EBacc subjects as more important than non-EBacc subjects, due to the school environment – regarding timetabling and assessments – perceptions of others' opinions – regarding praise/rewards and appreciation of skills – and a subject's perceived usefulness. The current research also suggests that students' SEB relate to their individual academic strengths. Students with strengths in EBacc/'important' subjects had significantly higher MALS scores than students with strengths in non-EBacc/'less important' subjects, while the mean and median MALS scores of students with strengths in non-EBacc subjects were 'below average'. The research also suggests that the potential explanations of these statistically significant findings relate to theories of SEB development (Bandura, 1977), particularly regarding mastery experiences and social persuasions, as students have fewer opportunities to progress in non-EBacc subjects due to timetabling, and have fewer positive social persuasions regarding achievements in these subjects, due to the academic-value of the EBacc. In this sense, the curriculum and EBacc may indirectly yet significantly affect students' SEB, disadvantaging students with strengths in non-EBacc subjects. This would be additionally problematic for social justice, as previous research suggests YP with lower SES have lower attainment in EBacc subjects, as do students excluded from school (EEF, 2018). In this sense, making a creative subject 'mandatory' for GCSE, or adding such to the EBacc, may allow more students to develop their SEB in school – by altering general perceptions of the subjects' importance, and increasing allocated lesson time – which could positively impact on social justice.

The education system should provide equal opportunities for all YP to progress in their individual strengths; to feel respected for their skills; to develop positive SEB; and to benefit from the associated outcomes – whatever their 'best' subject may be.

7. References

Agirdag, O., Van Houtte, M., & Van Avermaet, P. (2012). Why does the ethnic and socio-economic composition of schools influence math achievement? The role of sense of futility and futility culture. *European Sociological Review*, *28*(3), 366–378.

Alivernini, F., Lucidi, F. (2011). Relationship between social context, self-efficacy, motivation, academic achievement, and intention to drop out of high school: a longitudinal study. *The Journal of Educational Research*, *104*(4), 241-252.

Aronson, J. (1994). A pragmatic view of thematic analysis. *The Qualitative Report*, *2*(1).

Bandura, A (1977). Self-efficacy: toward a unifying theory of behavioral change. P*sychological review*. *84*(2).

Bandura, A. (1997). *Self-efficacy: The exercise of control.* NY: W.H. Freeman.

Banerjee, P. A. (2016). A systematic review of factors linked to poor academic performance of disadvantaged students in science and maths in schools. *Cogent Education*, *3*(1).

Banks, T. (2016). Further evidence emerges that less students are studying design. *Design Week (Online Edition)*.

Barber, C., & Mueller, C. T. (2011). Social and self-perceptions of adolescents identified as gifted, learning disabled, and twice-exceptional. *Roeper Review*, *33,* 109–120.

Barnett, L. A. (2007). The nature of playfulness in young adults. *Personality and Individual Differences*, *43*(4), 949–958.

BBC (2018). *Creative subjects being squeezed, schools tell BBC*. https://www.bbc.co.uk/news/education-42862996.

Beardsley, M. (1965). Intrinsic value. *Philosophy and Phenomenological Research 26*(1),1-17.

Bhaskar, R. (1978). *A realist theory of science*. Hassocks: Harvester Press.

Bishop, P. A., & Pflaum, S. W. (2005). Student perceptions of action, relevance, and pace. M*iddle School Journal*, *36*(4), 4–12.

Bong, M., & Skaalvik, E. M. (2003). Academic self-concept and self-efficacy: How different are they really? *Educational Psychology Review*, *15*, 1–40.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*, 77–101.

British Psychological Society. (2010). Code of human research ethics. *Division of Educational and Child Psychology.*

Bronfenbrenner, U. (1979). *The ecology of human development: experiments by nature and design*. Cambridge, MA: Harvard University Press.

Burden, R. L. (1998). Assessing children's perception of themselves as learners and problem solvers. *School Psychology International*, *19*, 291–305.

Caprara, G. V., Barbaranelli, C., Pastorelli, C.,& Cervone, D. (2004). The contribution of self-efficacy beliefs to psychosocial outcomes in adolescence: Predicting beyond global dispositional tendencies. *Personality and Individual Differences*, *37*, 751–763.

Caprara, G. V., Fida, R., Vecchione, M., Del Bove, G., Vecchio, G. M., Barbaranelli, C., *et al*. (2008). Longitudinal Analysis of the role of perceived self-efficacy for self-regulated learning in academic continuance and achievement. *Journal of Educational Psychology*, *100*, 525–534.

Caprara, G., Vecchione, M., Alessandri, G., Gerbino, M. & Barbaranelli, C. (2011). The contribution of personality traits and self-efficacy beliefs to academic achievement: a longitudinal study. *British Journal of Educational Psychology*, *81*, 78-96.

Carroll, M & Gill, T. (2017). Uptake of GCSE subjects 2016. *Statistics Report Series No. 114.* Cambridge, UK: Cambridge Assessment.

Carson, D., Gilmore, A., Perry, C., & Gronhaug, K. (2001). *Qualitative marketing research*. London: Sage.

Clarke, T., & Basilio, M. (2018). Do arts subjects matter for secondary school students' wellbeing? The role of creative engagement and playfulness. *Thinking Skills & Creativity*, *29*, 97–114.

Coelho, C.S. & Moles, D. R. (2015). Student perceptions of a spiral curriculum. *European Journal of Dental Education.* University of Plymouth, Plymouth.

Collins, H. (2010). *Creative research: the theory and practice of research for the creative industries.* AVA Publications.

Compton, W. C. & Hoffman, E. (2012). *Positive psychology: the science of happiness and flourishing*. Cengage Learning.

Cowen, E. L. & Kilmer, R. P. (2002). Positive psychology: Some plusses and some open issues. *Journal of Community Psychology*, *30*, 449–460.

Creswell, J. W. (2013). *Steps in conducting a scholarly mixed methods study.* University of Nebraska-Lincoln.

Crowther, D. & Lancaster, G. (2008). *Research methods: a concise introduction to research in management and business consultancy*. Butterworth Heinemann.

Cultural Learning Alliance (2018). https://culturallearningalliance.org.uk/wp-content/uploads/2018/08/Patterns-in-GCSE-entries-2010-to-2018-England-only.pdf

Dalton, B., & Wright, L. (2004). Eliciting student perceptions regarding curriculum redundancy. *Journal of Teaching in Social Work*, *24*(1-2), 55–72.

Danermark, B., Ekström, M., Jakobsen, L. & Karlsson J. C. (2002). *Explaining Society: Critical Realism in the Social Sciences.* Routledge, London.

Daubney, A., & Mackrill, D. (2018). *Changes in secondary music curriculum provision over time 2016-18/19*. University of Sussex.

Dawood, S. (2016). MPs 'urge Government to think again' over GCSE EBacc excluding art and design. *Design Week (Online Edition)*, *4*(1).

Dawood, S. (2017). Government push for EBacc 'sidelines creative education', says arts chief. *Design Week (Online Edition)*, *1* (1).

Dawood, S. (2016). Ken Baker launches bid to reform EBacc. *Education Journal*, *281*(1).

Dawood, S. (2012). Northern Ireland minister orders GCSE review. *Education Journal*, *140*(15).

Dawood, S. (2017). EBacc creative and technical subjects. *Education Journal*, *313*, 41–43.

Department for Education (2018). *Permanent and fixed period exclusions in England: 2017 to 2018.* https://www.gov.uk/government/statistics/announcements/permanent-and-fixed-period-exclusions-from-schools-2017-to-2018

Department for Education (2017). *Permanent and fixed period exclusions in England: 2016 to 2017*. https://www.ethnicity-facts-figures.service.gov.uk/education-skills-and-training/11-to-16-years-old/percentage-achieving-a-c-in-english-and-maths/latest

Department for Education/Department of Health (2015). *Special educational needs And disability code of practice: 0-25 years*. Retrieved January 19, 2016, from:https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/398815/SEND_Code_of_Practice_January_2017.pdf

Dodou, D. & de Winter, J. (2014). Social desirability is the same in offline, online, and paper surveys: A meta-analysis. *Computers in Human Behavior*. *36*(487–495). 10.1016/j.chb.2014.04.005.

Dole, S. (2001). Reconciling contradictions: Identity formation in individuals with giftedness and learning disabilities. *Journal for the Education of the Gifted*, *25*, 103–137.

Dudovskiy, J. (2016). *The ultimate guide to writing a dissertation in business studies: a step-by-step assistance*. Routledge.

Education Empowerment Foundation (2018). *Attainment gap report 2018*. https://educationendowmentfoundation.org.uk/public/files/Annual_Reports/EEF_Attainment_Gap_Report_2018_-_print.pdf

Elias, H., Mahyuddin, R., & Pihie, Z. A. L. (2004). Students' perception on the inculcation and understanding of values in the school curriculum. *Pakistan Journal of Psychological Research*, *19*(3), 151–160.

Field, A. (2009). *Discovering Statistics using SPSS.* Sage.

Hanson, M. J., Miller, A. D., Diamond, K., Odom, S., Lieber, J., & Butera, G. (2011). Neighborhood community risk influences on preschool children's development and school readiness. *Infants and Young Children, 24*, 87–100.

Hill, L. (2018). EBacc would exclude 133,000 pupils from the arts. *Arts Professional*. https://www.artsprofessional.co.uk/news/exclusive-ebacc-would-exclude-133000-pupils-arts

Honicke, T., & Broadbent, J. (2016). The influence of academic self-efficacy on academic performance: A systematic review. *Educational Research Review*, *17*(63–84). https://doi.org/10.1016/j.edurev.2015.11.002

Hudson, L., & Ozanne, J. (1988). Alternative ways of seeking knowledge in consumer research. *Journal of Consumer Research*, *14*(4), 508–521.

Joët, G., Usher, E.L., Bressoux, P. (2011). Sources of self-efficacy: an investigation of elementary school students in France. *Journal of Educational Psychology*, *103*, 649-663.

Joint Council for Qualifications (2018). https://www.jcq.org.uk/examination-results/gcses/2018/main-results-tables.

Kauder, J. K. (2009). *The impact of twice-exceptionality on self-perceptions*. (Unpublished doctoral thesis). The University of Iowa, Iowa City, IA.

Kelly, B., Woolfson, L. & Boyle, J. (2008). *Frameworks for practice in educational psychology: a textbook for trainees and practitioners*. Kingsley publishers.

Last, J. (2017). *A crisis in the creative arts in the UK?* Higher Education Policy Institute, Policy Note 2.

McLellan, R., & Steward, S. (2015). Measuring children and young people's wellbeing in the school context. *Cambridge Journal of Education*, *45*(3), 307–332.

Meltzer, H. (2010). The influence of social, demographic and physical factors on mental disorders in children and adolescents. In C. L. Cooper, J. Field, U. Goswami, R. Jenkins, B. J. Sahakian, C. L. Cooper (Ed), … B. J. Sahakian (Ed) (Eds.), *Mental capital and wellbeing.* (485–495). Wiley-Blackwell.

Miller, J. W. (2000). Exploring the source of self-regulated learning: The influence of internal and external comparisons. *Journal of Instructional Psychology*, *27*(1), 47–52.

National Foundation for Educational Research (NFER) DFE (2015). *Supporting the attainment of disadvantaged pupils – briefing for school leaders*.

Noble, T., & McGrath, H. (2012). Wellbeing and resilience in young people and the role of positive relationships. In S. Roffey & S. Roffey (Ed) (Eds.), *Positive relationships: Evidence based practice across the world.* (17–33). New York, NY, US: Springer Science + Business Media.

Nonoyama, Y. (2005). *A cross-national, multi-level study of family background and school resource effects on student achievement* (Order No. 3188772). Retrieved from ProQuest Dissertations & Theses Global: 305014497.

Norgate, R., Osborne, C., Warhurst, A. (2013). Change in Myself-As-a-Learner Scale (MALS) scores as pupils transfer to and progress through secondary school. *Educational. Psychology in Practice. 29*(2), 122–137.

Norrish, J. M., Vella-Brodrick, D. A. (2009). Positive psychology and adolescents: Where are we now? Where to from here? *Australian Psychologist*, *44*(4), 270-278.

Organisation for Economic Co-operation and Development. (2016). Low performing students: Why they fall behind and how to help them succeed. *PISA*. Paris.

Oltmann, C. & Boughey, C. (2012). Using critical realism as a framework in pharmacy education and social pharmacy research. *Research in Social and Administrative Pharmacy, 8*(4), 333–337.

Pargament, K. I., & Mahoney, A. (2005). Sacred matters: Sanctification as a vital topic for the psychology of religion. *International Journal for the Psychology of Religion*, *15*(3), 179–198.

Renshaw, T. L., Long, A. C. J., & Cook, C. R. (2015). Assessing adolescents' positive psychological functioning at school: Development and validation of the Student Subjective Wellbeing Questionnaire. *School Psychology Quarterly*, *30*(4), 534–552.

Richardson, M., Bond, R. & Abraham, C. (2012). Psychological correlates of

university students' academic performance: a systematic review and meta-analysis. *Psychological Bulletin*, *138*, 353-387.

Riessman, C.K. 1993. Narrative Analysis. *Qualitative Research Methods Series*, No. 30. Newbury Park, CA: Sage.

Robbins, S. B., Lauver, K., Le, H., David, D. & Langley, R. (2004). Do psychosocial and study skill factors predict college outcomes? A meta-analysis. *Psychological Bulletin*, *130*, 261-288.

Rouse, H. L., Fantuzzo, J. W., & LeBoeuf, W. (2011). Comprehensive challenges for the wellbeing of young children: a population-based study of publicly monitored risks in a large urban center. *Child and Youth Care Forum, 40*, 281–302.

Royal College of Emergency Medicine (2017). *Mental Health in Emergency Departments: A Toolkit for Improving Care.* https://www.rcem.ac.uk//docs/RCEM%20Guidance/Mental%20Health%20Toolkit%202 017.pdf

Sarginson, J., Webb, R., & Stocks, S. J. (2017). Temporal Trends in antidepressant prescribing to children in primary care 2000-2015. *Journal of Affective Disorders*.

Schröder, C., & Yitzhaki, S. (2017). Revisiting the evidence for cardinal treatment of ordinal variables. *European Economic Review*, *92*(Supplement C), 337–358.

Seligman, M. E. P. & Csikszentmihalyi, M. (2000). Positive psychology: an introduction. *American Psychologist*, *55*(1), 5-14.

Shean, M. B., Cohen, L., & de Jong, T. (2015). Developing well-being in Australian youth: Contingencies of self-esteem. *International Journal of Child and Adolescent Health*, *8*(2), 179–187.

Siegle, D., & McCoach, D. B. (2002). Promoting a positive achievement with gifted and talented students. In M. Neihart, S. Reis, N. M. Robinson, & S. M. Moon (Eds.), *The social and emotional development of gifted children* (237–249). Washington, DC: The National Association of Gifted Children.

Strutchens, M. E., & Silver, E. A. (2000). NAEP findings regarding race/ethnicity: Students' performance, school experiences, and attitudes and beliefs. In E. A. Silver & P. A. Kenney (Eds.), *Results from the seventh mathematics assessment of the National Assessment of Educational Progress* (45-72). Reston, VA: National Council of Teachers of Mathematics.

Singh, K. (2007). *Quantitative social research methods*. Routledge.

Sky news (November, 2018). *Creative arts 'should be compulsory at GCSE', says Royal Albert Hall director.* https://news.sky.com/story/creative-arts-should-be-compulsory-at-gcse-says-royal-albert-hall-director-11561266

Sterne, C. (2016). MPs to debate exclusion of arts subjects from GCSE EBacc curriculum. *Design Week (Online Edition)*.

Stiles, W. B. (1999). Evaluating qualitative research. *Evidence Based Mental Health, 2*(99).

Tate demands place for arts in secondary curriculum and EBacc. (2012). *14-19 Learning & Skills Bulletin*, *68*(4).

Teach First (August, 2018). *Disadvantaged pupils 'more likely to be excluded than achieve the EBacc'.* https://www.teachfirst.org.uk/press-release/disadvantaged-pupils-more-likely-be-excluded-achieve-ebacc

Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., Stewart-Brown, S. (2007). The Warwick-Edinburgh Mental Well-being Scale (WEMWBS): development and UK validation. *Health and Quality of Life Outcomes*, 5(1), 63. https://doi.org/10.1186/1477-7525-5-63

The Guardian (May, 2018). *British artists: EBacc will damage creativity and self-expression,* https://www.theguardian.com/culture/2018/may/08/british-artists-ebacc-will-damage-creativity-and-self-expression

The Times (August, 2018). *Grade inflation and the threat to music GCSE,* https://www.thetimes.co.uk/article/grade-inflation-and-the-threat-to-music-gcse-gk7ls6bll

Thomson, P., Hall, C., Earl, L., Geppert, C. (2018). The tracking arts learning and engagement project (TALE), Key stage 4 and 5 students' participation in arts and cultural activities: who does what? *Overall survey results*, research.tale.net.

Wakefield, P., & Pumfrey, D. (2009). Illuminating and improving National Curriculum development: students' perceptions and suggestions. A pilot study in a state secondary school. *Educational Review*, *61*(1), 63–83.

Warhurst, A., & Norgate, R. (2012). Progress of pupils attending resourced provision for specific learning difficulties. *Educational Psychology in Practice*, *28*(1), 91–103. https://doi.org/10.1080/02667363.2011.646090

Wilson, J. (2010). *Essentials of Business Research: A Guide to Doing Your Research Project*. SAGE Publications.

Zimmerman, B. J. (2002). *Becoming a Self-Regulated Learner: An Overview. Theory Into Practice, 41*(2), 64–70. https://doi.org/10.1207/s15430421tip4102_2

8. Appendices

Appendix A: Systematic literature review search (next page)

Search criteria *key words, ** subject heading, ***inclusion and ****exclusion criteria based on 'themes' of literature review: the EBacc, student perceptions of curriculum, student wellbeing, self-efficacy, attainment and socio-economic status									**Saved articles for deeper reading and included in literature review**	
Search date	**Data base**	**Key words /subject index ***	**No. of articles**	**Subject heading****	**No. of articles**	**Inclusion criteria *****	**Exclusion criteria ********	**No. of articles**	**Author and date**	**Title**
06.12.17	Education research complete Psych Info Psych Articles Child and Adolescent studies	Key words: Ebacc	132	Key words: Ebacc Students	6	Key words: Art		4	Banks, T. (2016).	Further evidence emerges that less students are studying design.
									Dawood, Parliament debate (2017).	EBacc creative and technical subjects.
									Carroll, M & Gill, T. (2017).	Uptake of GCSE subjects 2016.
									Last, J. (2017).	*A crisis in the creative arts in the UK?*

03.12.18	As above	As above	89	As above	8 (2 new papers since 2017 search)	As above		5 (+1 since 2017 search)	Thomson, P., Hall, C., Earl, L., Geppert, C. (2018).	The tracking arts learning and engagement project (TALE), Key stage 4 and 5 students' participation in arts and cultural activities: who does what?
06.12.17	Education research complete Psych Info Psych Articles Child and Adolescent studies	Key words: Ebacc Arts	8	Key words: Government	6		Academic jounrals	6	Dawood, S. (2016).	MPs 'urge Government to think again' over GCSE EBacc excluding art and design.
									Dawood, S. (2017).	Government push for EBacc 'sidelines creative education', says arts chief.
									(2016).	Ken Baker launches bid to reform EBacc.
									(2012).	Northern Ireland minister orders GCSE review.
									Sterne, C. (2016).	MPs to debate exclusion of arts subjects from GCSE EBacc curriculum.
									(2012).	Tate demands place for arts in secondary curriculum and EBacc.
03.12.18	As above	As above	9	As above	7 (+1 new papers since 2017 search)			7 (+1)	Daubney, A., & Mackrill, D. (2018).	*Changes in Secondary Music Curriculum Provision over time 2016-18/19*.

06.12.17	Education research complete Psych Info Psych Articles Child and Adolescent studies	Ebacc Student perceptions	0					0		
03.12.18	As above	As above	0					0 (+0)		
06.12.17	Education research complete Psych Info Psych Articles Child and Adolescent studies	Ebacc AND Student Self-efficacy	0					0		
03.12.18	As above	As above	0					+0		

06.12.17	Education research complete Psych Info Psych Articles Child and Adolescent studies	Ebacc AND Student Wellbeing OR Well-being OR Well being	0					0		
03.12.18	As above	As above	1					1 (+1)	Clarke, T. (2018).	Do arts subjects matter for secondary school students' wellbeing? The role of creative engagement and playfulness.
06.12.17	Education research complete Psych Info Psych Articles	Key words: Students Perceptions Curriculum	300	Subject major heading: Curriculum Student attitudes Perception	103	Age: Adolescence (13-17 yrs) 'Secondary school' aged students	Pre-2000 Research	5	Elias, H., Mahyuddin, R., & Pihie, Z. A. L. (2004).	Students' perception on the inculcation and understanding of values in the school curriculum
									Coelho, C.S. & Moles, D. R. (2015).	Student perceptions of a spiral curriculum.

	Child and Adolescent studies			Educational reform Students Education Curriculum development		Key words: high school students attitude (psychology) educational programs school environment			Bishop, P. A., & Pflaum, S. W. (2005).	Student Perceptions of Action, Relevance, and Pace.
									Dalton, B., & Wright, L. (2004).	Eliciting Student Perceptions Regarding Curriculum Redundancy.

						secondary education			Wakefield, P. (2009).	Illuminating and improving National Curriculum development: students' perceptions and suggestions. A pilot study in a state secondary school.
07.12.17	Education research complete Psych Info Psych Articles	Key words: Socio-economic status Students	13	Subject major heading: curriculum high school students	7	Age: adolescence (13-17 yrs) Subject heading: Academic	Pre-2006 research	6	Banerjee, P. A. (2016).	A systematic review of factors linked to poor academic performance of disadvantaged students in science and maths in schools.

	Child and Adolescent studies As above	Attainment		academic achievement		attainment Lower income level Socio-economic status			Hanson, M. J., Miller, A. D., Diamond, K., Odom, S., Lieber, J., & Butera, G. (2011).	Neighborhood community risk influences on preschool children's development and school readiness
									Nonoyama, Y. (2005).	*A cross-national, multi-level study of family background and school resource effects on student achievement*

									Strutchens, M. E., & Silver, E. A. (2000).	NAEP findings regarding race/ethnicity: Students' performance, school experiences, and attitudes and beliefs.
									Agirdag, O., Van Houtte, M., & Van Avermaet, P. (2012).	Why Does the Ethnic and Socio-economic Composition of Schools Influence Math Achievement? The Role of Sense of Futility and Futility Culture.
									Alivernini, F., Lucidi, F. (2011).	Relationship between social context, self-efficacy, motivation, academic achievement, and intention to drop out of high school: a longitudinal study.
07.12.17	Education research complete Psych Info	Key words: Students	104	Subject Major Heading: self-efficacy	36	Age: adolescence (13-17 yrs)	Pre-2001 research	11	Honicke, T., & Broadbent, J. (2016).	The influence of academic self-efficacy on academic performance: A systematic review.

	Psych Articles Child and Adolescent studies	Self-efficacy AND Contributing factors OR Reasons OR Causes		motivation high school students					Robbins, S. B., Lauver, K., Le, H., David, D. & Langley, R. (2004).	Do psychosocial and study skill factors predict college outcomes? A meta-analysis.
									Zimmerman, B. J. (2002).	*Becoming a Self-Regulated Learner: An Overview. Theory Into Practice,*

									Dole, S. (2001).	Reconciling contradictions: Identity formation in individuals with giftedness and learning disabilities.
									Kauder, J. K. (2009).	*The impact of twice-exceptionality on self-perceptions*.
									Barber, C., & Mueller, C. T. (2011).	Social and self-perceptions of adolescents identified as gifted, learning disabled, and twice-exceptional.
									Bong, M., & Skaalvik, E. M. (2003).	Academic self-concept and self-efficacy: How different are they really?

									Caprara, G. V., Barbaranelli, C., Pastorelli, C.,& Cervone, D. (2004).	The contribution of self-efficacy beliefs to psychosocial outcomes in adolescence: Predicting beyond global dispositional tendencies
									Caprara, G. V., Fida, R., Vecchione, M., Del Bove, G., Vecchio, G. M., Barbaranelli, C., *et al*. (2008).	Longitudinal Analysis of the role of perceived self-efficacy for self-regulated learning in academic continuance and achievement.
									Caprara, G., Vecchione, M., Alessandri, G., Gerbino, M. & Barbaranel	The contribution of personality traits and self-efficacy beliefs to academic achievement: a longitudinal study.

									li, C. (2011).	
									Siegle, D., & McCoach, D. B. (2002).	Promoting a positive achievement with gifted and talented students
07.12.17	Education research complete Psych Info Psych Articles Child and Adolescent studies	Key words: Students Wellbeing OR Well-being AND	327	Subject Major Heading well being risk factors protective factors psychosocial factors	99	Age: adolescence (13-17 yrs) Subject major heading: Adolescent Curriculum	Pre-2010 research	7	Meltzer, H. (2010).	The influence of social, demographic and physical factors on mental disorders in children and adolescents.
									Noble, T., & McGrath, H. (2012).	Wellbeing and resilience in young people and the role of positive relationships.

		Contributing factors OR Protective factors OR Influencing factors		sociocultural factors		School environment			Renshaw, T. L., Long, A. C. J., & Cook, C. R. (2015).	Assessing adolescents' positive psychological functioning at school: Development and validation of the Student Subjective Wellbeing Questionnaire.
									Shean, M. B., Cohen, L., & de Jong, T. (2015).	Developing well-being in Australian youth: Contingencies of self-esteem.
									McLellan, R., & Steward, S. (2015).	Measuring children and young people's wellbeing in the school context.
									Rouse, H. L., Fantuzzo, J. W., & LeBoeuf, W. (2011)	Temporal Trends in antidepressant prescribing to children in primary care 2000-2015.
									Sarginson, J., Webb, R., &	

									Stocks, S. J. (2017).	
07.12.17	Education research complete Psych Info Psych Articles Child and Adolescent studies	Key words: Students Myself as a Learner Scale	12	Subject Major Heading Self-concept Curriculum Self-perception Student attributes Academic self concept Education High school students Secondary education	9	Secondary school students	Pre-2012 research	2	W Warhurst, A., (2012).	Progress of pupils attending resourced provision for specific learning difficulties.
									Norgate, R., (2013).	Change in Myself-As-a-Learner Scale (MALS) scores as pupils transfer to and progress through secondary school.

	'Other' literature sources									
07.12.17 03.12.18	Department for Education									
07.12.17 03.12.18	Google news	Classic fm TES Cambridge Assess. Teach First 'Bacc for the future' Arts Professional								
07.12.17 03.12.18	https://www.baccforthefuture.com/news	News Archives								
07.12.17 03.12.18	https://www.artsprofessional.co.uk	News Archives								

Appendix B: Curriculum questionnaire

School and the Curriculum

1. My thoughts on subjects in school

Your School……..

Your Initials/Student Number…….

Male/Female…….

Age…….

Today's date……..……

My thoughts on subjects in school

On the next page there are 5 questions asking what you think about the different subjects which you might be studying at school.

This is not a test. There are no right or wrong answers, so please try to answer the questions as best as you can. Your answers will not be shown to anyone else.

Instructions

Please read the following questions carefully, and answer in the way that best describes your thoughts and feelings.

1. What is the **most important subject** in school?

……

……

1. a) How do you know this?

……

……

……

……

1. b) Does anyone else agree or disagree? Who?

……

……

……

……

1. c) How do you know they agree/disagree?

……

……

……

……

1. d) Do you think that this subject **should** be the 'most important' subject in school?

No ☐ Not sure ☐ Yes ☐

1. e) Why do you think this?

……

……

……

2. What is the **least important subject** in school?

……

……

2. a) How do you know this?

……..

……

……

……

2. b) Does anyone else agree or disagree? Who?

……

……

……

……

2. c) How do you know they agree/disagree?

……

……

……

……

2. d) Do you think that this subject **should** be the 'least important' subject in school?

No ☐ Not sure ☐ Yes ☐

2. e) Why do you think this?

……

……..

……..

3. Please could you rank the following subjects in order of **most important** to **least important,** by numbering the boxes (1=most important; 14=least important) (If your school does not teach one these subjects, please put a 0 in the box)

- ☐ Art and design
- ☐ Design Technology (D.T.)
- ☐ Drama
- ☐ English
- ☐ Food Technology (F.T.)
- ☐ Foreign Languages (e.g. French, German, Spanish)
- ☐ Geography
- ☐ History
- ☐ I.C.T (Computing)
- ☐ Maths
- ☐ Music
- ☐ Physical Education (P.E.)
- ☐ Religious Education (R.E.)
- ☐ Science

4. How do you normally find the **most important** subject? (the subject from **question 1** and **question 5**)

a) Mostly easy ☐ OR Mostly difficult ☐

b) Mostly enjoyable ☐ OR Mostly not enjoyable ☐

4. c) What makes **this subject** mostly enjoyable/mostly not enjoyable?

……..

……

……

……

5. How do you normally find the **least important** subject? (the subject from **question 1** and **question 5**)

a) Mostly easy ☐ OR Mostly difficult ☐

b) Mostly enjoya ☐ OR Mostly not enjoyable ☐

5. c) What makes **this subject** mostly enjoyable/mostly not enjoyable?

……..

……

……

……

Thank you!

Appendix C: Myself as a Learner Scale (Burden, 1998)

Appendix D: Warwick-Edinburgh Mental Well-being Scale (NHS, 2007)

Wellbeing self-assessment

WEMWBS (The Warwick-Edinburgh Mental Well-being Scale)

How happy are you?

Good mental wellbeing - some people call it happiness - is about more than avoiding mental health problems. It means feeling good and functioning well.

This tool uses WEMWBS, a scale which is often used by scientists and psychologists to measure wellbeing.

To get your wellbeing score, go through the following statements and tick the box that best describes your thoughts and feelings over the last two weeks.

<u>About the wellbeing scale</u>

This tool uses WEMWBS (The Warwick-Edinburgh Mental Well-being Scale) to measure your mental wellbeing. WEMWBS was created by mental wellbeing experts, and is often used by scientists and psychologists.

The WEMWBS questionnaire for measuring mental wellbeing was developed by researchers at Warwick and Edinburgh Universities (see Tennant R, Hiller L, Fishwick R, Platt P, Joseph S, Weich S, Parkinson J, Secker J, Stewart-Brown S (2007) The Warwick-Edinburgh Mental Well-being Scale (WEMWBS): development and UK validation, Health and Quality of Life Outcome; 5:63 doi:101186/1477-7252-5-63).

QUESTIONS

1. I've been feeling optimistic about the future

a) None of the time (1 point)

b) Rarely (2 points)

c) Some of the time (3 points)

d) Often (4 points)

e) All of the time (5 points)

2. I've been feeling useful

a) None of the time (1 point)

b) Rarely (2 points)

c) Some of the time (3 points)

d) Often (4 points)

e) All of the time (5 points)

3. I've been feeling relaxed

a) None of the time (1 point)

b) Rarely (2 points)

c) Some of the time (3 points)

d) Often (4 points)

e) All of the time (5 points)

4. I've been feeling interested in other people

a) None of the time (1 point)

b) Rarely (2 points)

c) Some of the time (3 points)

d) Often (4 points)

e) All of the time (5 points)

5. I've had energy to spare

a) None of the time (1 point)

b) Rarely (2 points)

c) Some of the time (3 points)

d) Often (4 points)

e) All of the time (5 points)

6. I've been dealing with problems well

a) None of the time (1 point)

b) Rarely (2 points)

c) Some of the time (3 points)

d) Often (4 points)

e) All of the time (5 points)

7. I've been thinking clearly

a) None of the time (1 point)

b) Rarely (2 points)

c) Some of the time (3 points)

d) Often (4 points)

e) All of the time (5 points)

8. I've been feeling good about myself

a) None of the time (1 point)

b) Rarely (2 points)

c) Some of the time (3 points)

d) Often (4 points)

e) All of the time (5 points)

9. I've been feeling close to other people

a) None of the time (1 point)

b) Rarely (2 points)

c) Some of the time (3 points)

d) Often (4 points)

e) All of the time (5 points)

10. I've been feeling confident

a) None of the time (1 point)

b) Rarely (2 points)

c) Some of the time (3 points)

d) Often (4 points)

e) All of the time (5 points)

11. I've been able to make up my own mind about things

a) None of the time (1 point)

b) Rarely (2 points)

c) Some of the time (3 points)

d) Often (4 points)

e) All of the time (5 points)

12. I've been feeling loved

a) None of the time (1 point)

b) Rarely (2 points)

c) Some of the time (3 points)

d) Often (4 points)

e) All of the time (5 points)

13. I’ve been interested in new things

a) None of the time (1 point)

b) Rarely (2 points)

c) Some of the time (3 points)

d) Often (4 points)

e) All of the time (5 points)

14. I've been feeling cheerful

a) None of the time (1 point)

b) Rarely (2 points)

c) Some of the time (3 points)

d) Often (4 points)

e) All of the time (5 points)

RESULTS

0-32 points

Your wellbeing score is very low.

Most people have a score between 41 and 59. You may want to begin by talking to a friend or health professional about how you can start to address this.

There are five evidence-based steps we can all take to improve our mental wellbeing. They are:

- Get active
- Connect with others
- Keep learning
- Be aware of yourself and the world
- Give to others

32-40 points

Your wellbeing score is below average.

Most people have a score between 41 and 59. Why not take action to improve your mental wellbeing?

There are five evidence-based steps we can all take to improve our mental wellbeing. They are:

- Get active
- Connect with others
- Keep learning
- Be aware of yourself and the world
- Give to others

40-59 points

Your wellbeing score is average.

Most people have a score between 41 and 59. You can still improve your mental wellbeing by taking action.

There are five evidence-based steps we can all take to improve our mental wellbeing. They are:

- Get active
- Connect with others
- Keep learning
- Be aware of yourself and the world
- Give to others

59-70 points

Good news, your wellbeing score is above average.

Most people have a score between 41 and 59. Continue doing the things that are keeping you happy.

There are five evidence-based steps we can all take to improve and maintain our mental wellbeing. They are:

- Get active
- Connect with others
- Keep learning
- Be aware of yourself and the world
- Give to others

NHS Choices 2011

Appendix E: Ethical approval (UEL)

School of Psychology Research Ethics Committee

NOTICE OF ETHICS REVIEW DECISION

For research involving human participants
BSc/MSc/MA/Professional Doctorates in Clinical, Counselling and Educational Psychology

REVIEWER: Matthew Jones Chesters

SUPERVISOR: **XX**

STUDENT: XX

Course: Professional Doctorate in Educational and Child Psychology

Title of proposed study: TBC

DECISION OPTIONS:

1. **APPROVED:** Ethics approval for the above named research study has been granted from the date of approval (see end of this notice) to the date it is submitted for assessment/examination.

2. **APPROVED, BUT MINOR AMENDMENTS ARE REQUIRED BEFORE THE RESEARCH COMMENCES** (see Minor Amendments box below)**:** In this circumstance, re-submission of an ethics application is not required but the student must confirm with their supervisor that all minor amendments have been made before the research commences. Students are to do this by filling in the confirmation box below when all amendments have been attended to and emailing a copy of this decision notice to her/his supervisor for their records. The supervisor will then forward the student's confirmation to the School for its records.

3. **NOT APPROVED, MAJOR AMENDMENTS AND RE-SUBMISSION REQUIRED** (see Major Amendments box below)**:** In this circumstance, a revised ethics application must be submitted and approved before any research takes place. The revised application will be reviewed by the same reviewer. If in doubt, students should ask their supervisor for support in revising their ethics application.

DECISION ON THE ABOVE-NAMED PROPOSED RESEARCH STUDY
(Please indicate the decision according to one of the 3 options above)

APPROVED

ASSESSMENT OF RISK TO RESEACHER *(for reviewer)*

Has an adequate risk assessment been offered in the application form?

YES

Please request resubmission with an adequate risk assessment

If the proposed research could expose the researcher to any of kind of emotional, physical or health and safety hazard? Please rate the degree of risk:

[ ] HIGH

Please do not approve a high risk application and refer to the Chair of Ethics. Travel to countries/provinces/areas deemed to be high risk should not be permitted and an application not approved on this basis. If unsure please refer to the Chair of Ethics.

[ ] MEDIUM (Please approve but with appropriate recommendations)

[X] LOW

Reviewer comments in relation to researcher risk (if any).

Reviewer *(Typed name to act as signature)*: Matthew Jones Chesters

Date: 25/01/2018

This reviewer has assessed the ethics application for the named research study on behalf of the School of Psychology Research Ethics Committee

RESEARCHER PLEASE NOTE:

For the researcher and participants involved in the above named study to be covered by UEL's Insurance, prior ethics approval from the School of Psychology (acting on behalf of the UEL Research Ethics Committee), and confirmation from students where minor amendments were required, must be obtained before any research takes place.

For a copy of UELs Personal Accident & Travel Insurance Policy, please see the Ethics Folder in the Psychology Noticeboard

Appendix F: Ethical approval (Local Authority)

Application for research governance approval

Research title	An exploration of Key Stage 3 (KS3) students' perspectives of the UK curriculum and its potential emotional impact – does a student's perceived-value of their academic strengths relate to their wellbeing and academic self-efficacy

Research details

Ethics
Which ethical framework informs this study (eg. that of a professional body such as the British Sociological Association, a university, or public/third sector organisation)? University of East London; British Psychological Society (BPS)
Has ethical approval been sought or granted (eg. by university REC, Social Care Research Ethics Committee, Association of Directors of Children's Services or Adult Social Services)? Ethical approval granted by University of East London REC.
How do you plan to ensure the confidentiality of participants during collection, storage, analysis, transmission and disposal of digital and paper based information? In Stage 1, data will be gathered using participants' 'student numbers', meaning the names will not be known to the researcher. These student numbers will be used to contact the randomly selected students for inviting to interview. In Stage 2 therefore, the researcher will know the names of the 6-8 participants involved when conducting the interviews. Steps to ensure anonymity of data at this stage of the research is discussed below. In Stage 2 of the research, although the researcher will know the names of the students being interviewed, the data will be recorded and filed using the participants' student numbers, ensuring the data remains anonymous to others. Following the complete collection of data, participants' student numbers will be replaced with unique ID numbers, to further anonymise the data. This anonymous data will be kept following completion of the research project – for potential publication and/or further research purposes – and destroyed after 5 years.
Please explain how your arrangements meet the requirements of the 1998 Data Protection act and subsequent revisions. Data will be stored anonymously, and destroyed within the time required by the Data Protect

Safeguarding
Does the proposed research involve children under 16? Yes
Does the proposed research involve vulnerable* young adults or older people? Yes (children/young adults)
Does the researcher require a DBS (Disclosure and Barring Service) check to carry out the

work? Yes
Does the project involve lone working? (If so, please explain what procedures are in place to minimise risk.) No
** 'Vulnerable' refers to individuals with a learning or physical disability or a physical or mental illness. It also includes individuals who receive any of the following services: accommodation and nursing/personal care in a care home or nursing/personal care to support independent living, social care services from an establishment for people with learning difficulties.*

Risk management
Please list potential risks to participants, researchers, and the project itself. Questionnaires and self-reports (wellbeing and self-efficacy); potential emotional impact for students. Semi structured interviews; potential emotional impact for students and researcher.
What arrangements are in place to manage each of the identified risks? **Questionnaires and self-reports (wellbeing and self-efficacy); potential emotional impact for students:** Debriefing students, providing contact information of researcher and other relevant support services. Remaining vigilant on the day, making teachers aware. **Semi structured interviews; potential emotional impact for students and researcher:** Reminding participants of right to withdraw at any time, providing further contact details of support services. Researcher's access to supervision both academically and in service. Remaining aware on the day, adjusting interview as necessary to individuals, making teachers aware.

Sponsor and researcher agreement		
Please sign below to complete the application form and to show you have read and agree to the following statement about data protection. PLEASE NOTE THAT IF YOUR APPLICATION IS ACCEPTED, IT IS ON THE UNDERSTANDING THAT YOU WILL ADHERE TO THE ACTIONS REGARDING THE SAFE AND LAWFUL USE OF PERSONAL PROTECTION YOU DESCRIBED IN SECTION 7 7 (AND ANY SUBSEQUENT REVISIONS WE HAVE ASKED YOU TO INCLUDE).		
Sponsor name XX (PEP)	Sponsor signature XX	Date 28.02.2018
Researcher name XX	Researcher signature XX	Date 02.01.2018

NCC Research Governance Guidance

Appendix G: School letters, information sheets and consent forms

Research Information for Schools

"An exploration of Key Stage 3 students' perspectives of the UK curriculum and its potential emotional impact"

My name is XX and I am a Trainee Educational Psychologist for XX County Council. As part of my Doctorate, I am conducting some research into Key Stage 3 students' perspectives of the curriculum – hoping to gain a better understanding of their views and experiences, and how these might relate to their wellbeing and academic self-efficacy. Part of this research involves inviting Key Stage 3 students to take part in a questionnaire, self-report and interview, which will explore their perspectives of the curriculum, their wellbeing and academic self-efficacy.

This involvement of students is important, as it will give them the opportunity to share their perspectives of their current learning environment, to help identify the reasons for these perspectives, and its potential emotional impact – particularly regarding students' wellbeing and academic self-efficacy. This could also help in constructing strategies to supporting other students in the future.

Why is this research being done?

Previous research has suggested that some professionals consider the current curriculum (particularly regarding the EBacc) to be negatively impacting on creative subjects; particularly regarding decreases in GCSE intakes; decreases in funding, resources and staffing; decreases in arts teacher wellbeing; and decreases in the perceived value of creative subjects. However, there is currently a lack of research into students' perspectives of the current UK curriculum, the 'value' of curriculum-subjects, and its potential emotional impact. By talking to students in Key Stage 3, I aim to fill this gap in the literature, and to learn their views of the curriculum from their perspective.

Which students can take part in this part of the study?

I am looking to work with 2-3 'mixed-ability' classes of year 9 students (such as tutor groups) with a 'functional level' of reading ability – to be able to comfortably and independently access questionnaires and self-reports – with whom the potential of being interviewed will not cause any harm or discomfort.

What would this project involve?

- I will provide the school with consent forms which I will ask you to send to parents.

- Following the return of these forms, I will arrange to meet the students for a short informal chat to explain my project to them, answer any questions, and gain their written consent.
- If the students agree to take part, I will arrange a time to ask students to complete the written questionnaires and self-reports – these will include questions about their perspectives of the curriculum; subject 'values'; reasons for these perceptions; and their wellbeing and academic self-efficacy. This should take approximately 20 minutes.
- After questionnaire and self-report data has been collected, I will analyse the results in relation to students' current academic attainment (with their consent, and using their 'student numbers' to maintain their anonymity to the researcher).
- I will then randomly select 1-4 students to invite for an interview.
- If students agree to take part in the interview, I will meet with them at your convenience to conduct a one-to-one interview that should last between 15 and 35 minutes.
- I will ask questions about their perspectives of the curriculum; subject 'values'; reasons for these perceptions; and their wellbeing and academic self-efficacy – aiming to better understand their previous responses to the questionnaires and self-reports.
- During the interviews, I will record students using an audio recorder. The only time I would break confidentiality is if they told me something that put themselves/somebody else in danger.
- If a student becomes upset when talking about their views, they will be able to stop straight away. I will ensure to spend individual time with them to check that they are okay.

What would I do with the information once it has been collected?

- First of all, I will change all the student details so nobody can be identified.
- I will then look for themes in what all the students have said, in order to gain a clearer understanding of their perspectives.
- I will check back with the students in interviews that these themes are an accurate representation.
- Using these themes, I will write up the research findings, and make these available to school and the students involved.

What if I have more questions?

If you have any questions, or you wish to discuss the details of this research then please contact:

Researcher: XX
Email: xx@xx.gov.uk
Phone: xxx

Educational Psychology and Specialist Support
XX County Council (Children's Services)

Thank you for taking the time to consider taking part in this study.

School Consent Form

This is the consent form for the Head Teacher or school's SENCo to complete if you are happy for me to carry out this research project with students in your school. Please make sure you read all the details below before signing and dating the form at the bottom.

Please return this form to Emma Speed as soon as you are able to, either via email or post using contact details provided in the 'Research information' form.

1. I have read the attached information about the research project and I understand what it is about.

2. I am happy for the selected year 9 students to take part in the research, to share their perspectives of the curriculum and discuss their wellbeing and academic self-efficacy.

3. I understand that someone will meet with students on up to two occasions, lasting a total of no more than two hours.

4. I understand that students will be recorded using an audio device.

5. I understand that all information will be kept confidential unless there is a concern about the safety of a student.

6. I understand that any details that could be used to identify students will be taken out of the write-up.

7. I agree that the information gathered will be reported in Doctorate Thesis and potentially published if appropriate.

Name	**Signature**	**Date**

Thank you for agreeing to participate in the project. I look forward to working with the students in your school in the near future.

Appendix H: Parent letters, information sheets and consent forms

June 2018

Key Stage 3 students' opinions of the UK curriculum, and its potential emotional impact

Dear parent/carer,

My name is xxx and I am a Trainee Educational Psychologist. I am interested in learning what Secondary School students think about the current UK curriculum – to gain a better understanding of their views, and how these views might affect their learning and wellbeing. Part of this work is to talk to Year 9 students attending XX Secondary Schools about their opinions.

I am inviting Year 9 students to take part in this research project, which will explore their opinions of the curriculum, their wellbeing and 'self-efficacy beliefs' (how good a learner they think they are). XXX has expressed an interest in being involved with the project, and with your permission (and your son'/daughter's permission), I would very much like to invite your child to take part.

The involvement of Year 9s in this research is important, as it will give them the opportunity to share their opinions on the curriculum, to help learn the reasons for these opinions, and consider its potential emotional impact. This could also help support other students in the future, and contribute to policy development.

Should you be happy for your son/daughter to take part in the research project, you will need to sign the parental permission slip attached to this letter. Before doing so, please read over the following information carefully, as it outlines why this project is being done and what it will involve. You may wish to discuss the information with me (the researcher), your child's Head of Year, or the school SENCO.

1. Why is this research being done?

Research suggests that many professionals consider the current curriculum (particularly regarding the EBacc) to have a negative effect on the value of creative subjects. However, there is a significant lack of research into the students' opinions of the UK curriculum; of their opinions on subjects' 'value'; and of the potential emotional impact of this. By talking to Year 9 students, I hope to fill this gap in the literature, and learn their thoughts on the curriculum from their perspective.

2. What would the research project involve?

I would meet with your son/daughter for a short informal chat to explain the research to them, answer any questions they might have, and gain their written consent if they want to take part.

If your son/daughter would like to take part, I will ask them to complete a short questionnaire about their opinions of the curriculum, and which subjects they think are important and why. I will also ask them to complete two short self-assessment questionnaires, to consider their wellbeing and academic self-efficacy. Overall this should take approximately 20 minutes, most likely during their Tutor Period.

With your child's consent, their responses to the questionnaires and self-reports would be considered with their top three subjects at school – to see if there are any links between them. This would be done without their names to maintain their confidentiality. Following this, all students' data would be coded using a unique number, to ensure their full anonymity.

After completing the questionnaires and self-reports, roughly 5 students (from all the schools involved in the research) will be randomly selected and invited to take part in a short interview at a later date – giving them the chance to talk more about their opinions of the curriculum, their questionnaires and self-reports. The interviews would take place in a 1-1 setting at school, and last approximately 20 minutes.

During the interviews I would record the students using an audio recorder. The only time I would share what they have said is if they told me something which puts themselves or somebody else in danger. The interviews would then be transcribed, and I would look for common themes between what all the students have said. Again, this would be done without their names.

If for any reason your son/daughter were to become upset during the interview, they would be able to stop straight away. I would spend individual time with them and refer them to a trusted member of staff to make sure they are okay.

3. What would you do with the information once it has been collected?

As discussed, I would change all of your son/daughter's details so they cannot be identified.

Using their answers to the questionnaires, self-reports, and interviews (if applicable), I would look for themes and/or common phrases between all students involved – including those from other schools.

4. What if I have more questions?

If you have any further questions, or you wish to discuss the details of this research, then please feel free to contact me:

Email: xx@xx.gov.uk

Phone: xxx

Thank you for taking the time to consider your child's involvement with this research project.

Parent/carer Consent Forms

This is the consent form that parents/carers need to complete if they are happy for their son/daughter to be invited to take part in the research project. Please make sure you read all the details below before signing and dating the form at the bottom. Please return this form to School, either to your child's Form Tutor, Head of Year, or XX, who will forward it to me.

1. I have read the attached information about the research project and I understand what it is about.

2. I am happy for my son/daughter to complete questionnaires about their opinions of the curriculum.

3. I am happy for my son/daughter to complete self-reports about their wellbeing and self-efficacy.

4. I am happy for my son/daughter's top three subjects to be shared with their consent (without their names to maintain confidentiality).

5. I am happy for my son/daughter to be invited to interview (if applicable), to talk about their opinions of the curriculum, and their responses to the questionnaires and self-reports.

6. I understand that my son/daughter will be recorded using an audio device if interviewed.

7. I understand that all information will be kept confidential unless there is a concern about the safety of a student.

8. I understand that any details that could be used to identify my child will be removed.

9. I understand that the information gathered will be used to explore common themes between all participating Year 9 students and their opinions of the current UK curriculum.

10. I understand that the overall findings of the research project may be presented in events such as school meetings, conferences or journals for professionals working with children and young people.

Name:

Signature:

Date:

Name of child:

Thank you for agreeing for your son/daughter to be invited to take part in the research project. I look forward to hopefully working with them soon.

Appendix I: Student information sheets and consent forms

This sheet gives you some information about

a Research Project happening in your school

Hi,

My name is XX, I am a Trainee Educational Psychologist and I work at XX County Council.

This is me →

I would like to learn about Secondary School students' opinions of the current UK curriculum, and how it might make them feel. To do this, I would love to talk to Year 9 students like you, so I can find out about your opinions.

I want to find ways to make things better for students in the future, by asking you what you think about the curriculum.

With your help I want to find out about:

- What your opinions are about the curriculum
- Which subjects in school you think are most important
- Which subjects in school you think are less important
- Why you think this/how you know
- How you feel about school
- How you feel about yourself 'as a learner'
- How you feel about your wellbeing

If you want to be part of this project, this is what would happen:

1. I will come into school for a short chat about the project, and will answer any questions you might have.

2. If you are interested in the project, I would ask you to sign a form that says you are happy to take part.

3. I would then arrange a time to give you and the other students taking part a short questionnaire and 'self-report', which includes some 'open-ended' questions, and some multiple-choice questions. It shouldn't take more than 20 minutes to do this, and would likely be during a Tutor Period.

4. I would ask school to let me know your top 3 subjects, without your name. This would be done using student-numbers so you would be anonymous to me.

5. I would then randomly select 5 students (from all the schools involved), and invite them to talk to me in person a bit more about their opinions of the curriculum.

6. If you were randomly selected to be invited to interview, and were happy to take part, we would talk for roughly 20 minutes. I would meet you in school, in a place that you already know.

What else do you need to know?

- If we met again to talk after you have completed the questionnaires, I would use an audio-recorder so I can remember what we talk about. If you were not sure about this, we could talk about it in the first meeting.
- I would not tell others what you say in the interview. The only time I would have to speak to anybody else is if you told me something that we thought meant you or somebody else might be in danger.
- After you have told me about your opinions on the curriculum and how you feel as a learner, I would put everything together and look at what everyone has said (including students from all different schools taking part).
- I would then write about what I find and share this with other people. Your names would be removed so nobody would know what you said, and the information you provided would remain anonymous.

What to do next:

I very much hope you are interested in taking part in this research project, as you (the students!) are the experts on the current curriculum. If you do not think that you want to take part however, that is fine.

If you are interested, **please ask your parents to sign your permission form and return this to school**. If you are not sure yet, do not worry! When your parents sign your permission form, you can always decide later if not you definitely want to take part or not.

Thanks for taking the time to read this, and hopefully I will see you soon!

<u>This is the sheet you must complete if you wish to take part in the research project</u>

If you want to take part in the research project, then please read this form carefully and sign it at the bottom. If you have any questions you can ask me when I next come into school.

1. I have seen the information about the project and I understand what I will be involved with.
2. I am happy to complete questionnaires about the curriculum, how I feel as a learner, and my wellbeing.

3. I am happy for school to share my top 3 subjects without my name.

4. I would be happy to be invited to talk about the curriculum and learning.

5. If I have an interview, I understand that I will be recorded using an-audio recorder.

6. I understand that my name will not be used.

7. I understand that the things I say will not be shared with anybody unless the adults are worried about my safety of the safety of someone else.

8. I understand that the research project may be used to help other students, and to let other school professionals know what is important to Year 9 students.

Name	**School**	**Initials OR Student number**	**Signature**	**Date**

Thank you for taking part in the project.

I look forward to working with you!

Appendix J: Qualitative questionnaire responses (next page)

School	Pupil	Most important subject	STEM /Arts	How do you know this?	Does anyone else agree/disagree? Who?	How do you know they agree/disagree?	How happy are you that this is most important subject? / Do you think this SHOULD be the most important subject?	Why do you feel like this? /Why do you think this?	How do you normally find this subject?	What makes this subject mostly enjoyable/mostly not enjoyable?
HW	1 (AM)	Science and maths	STEM	Science is important because it is all around you and it helps you understand everything better. Same goes for maths.	People agree with my statement, mostly my classmates. My friends usually complain about both subjects but still consider it important.	They tell me or we have conversations about it.	Very happy (5)	Because people usually consider it useful to have skills in either science or maths and they are everywhere and you cannot avoid it.	N/A	N/A
HW	2 (DJ)	English and maths	STEM	Because we use them in everyday life. I know this because we speak English in our everyday life and we use maths when	Maybe some adults.	-	Not happy or unhappy (3-4)	I feel this way because a lot of other adults would agree with me.	N/A	N/A

				we count things and spend money.						
J	3 (ID)	Maths and English	STEM	Teachers say it is the most important subject	Lots of students probably agree.	They get the most stressed about it	N/A	N/A	Difficult Not enjoyable	I just find it very boring and there is too much stuff to learn.
N	4 (IP)	English	STEM	I know this due to it being brought up in terms of work experience. Additionally, I think it's key in communication both at home and abroad.	I think certain people may disagree due to finding the other subjects, maths and science much more	Whenever I discuss or have discussed our GCSEs, we find that we agree and disagree on what subjects is more important than the others.	Happy (4)	I think I feel happy about this due to how I find the subject to be in a more personal level.	Difficult Enjoyable	In order to write up a story or analysis, you have to think a lot about what to put in, and to ensure a good balance of techniques.
N	5 (BB)	English	STEM	Being able to read and understand words is vital in any subject. You also learn a lot of skills that can be used in other subjects in English, such as essay writing.	I'm sure people do disagree.	You could argue that science is more important, because it helps people gain an understanding of the world around them; or maths, because you need to be able to do basic	Happy (4)	English can be found in all subjects, so in order to success in other subjects (generally speaking), you have to be good at English, or at least able to do it.	Easy Enjoyable	I enjoy English because I like reading. It's really as simple as that.

						maths to be a successful adult.				
N	6 (AT)	English	STEM	You use it in all other subjects	A few people disagree because maths is equally important.	They don't like my English class but they like my maths class.	Happy (4)	If you didn't have the skills from English you couldn't do most other subjects.	Easy Enjoyable	I know what I'm doing and my class is fun.
N	7 (TM)	Music	Arts	It is a creative subject which allows students to express their emotions and learn about different cultures through musical interaction.	Most people disagree with my opinion. Mostly my classmates, friends and siblings.	When I tell them I like music and I think it is one of the most important subjects, they disagree with me.	Happy (4)	N/A	Easy Enjoyable	I am quite good at music and I like learning about it.
S	8 (NS)	Maths	STEM	Used in most every day activities, used in most jobs.	Agree, maths teacher.	They tell us, a lot.	Not sure	Most of the subjects are important, I think it just depends on what you want to do later in life.	Difficult Not enjoyable	We sometimes have a lot of lessons on the same things, and then less lessons on other things.
S	9 (PC)	Maths	STEM	It is used in different subjects the most (if not counting English). It also has the most lessons in a week on par with English	I never asked anyone about their opinion of most important subjects, but I would assume	They don’t enjoy the subject or seem very interested in the lesson, which can give	Not sure	It applies to different subjects, but is not extremely practical in every day life.	Easy Enjoyable	Sometimes the work is a really nice and easy task which is enjoyable, but even more challenging tasks can be enjoyable as well.

				and Science (only if triple)	some people will disagree with me.	the impression of them not caring about the subject itself.				
H	10 (ES)	Maths	STEM	Because I use it in every day life, and to get into some top universities you need a high GCSE grade in maths.	Lots of people agree with this. These people are my parents, my family and a lot of teachers.	Because I have been told to work very hard in Maths especially, and other people agree because almost everyone uses it in every day life, even if they are not in school.	Not sure	Because it is one of the few subjects that people use after university. However, algebra and trigonometry and other such parts are not used so regularly.	Easy Not enjoyable	It is taught in a way that is more efficient, but does not really drill it into your head. Some things are moved over very quickly.
H	11 (AS)	English, French, RE and Maths	STEM	English – it helps us learn how the language is developed, and will overall help us in life. French – It's good to be at least partially fluent in a foreign language	NA	NA	Yes	B	Easy Enjoyable	They are subjects that can be picked up very quickly and enable you to have different perspectives and be able to communicate with people you otherwise may not have beeen able to.

				and a lot of people speak French. RE – it can help with the understanding of society and what is right and wrong. Maths – This is needed in everyday situations and will be used in every job.						
H	12 (FH)	English and Maths	STEM	I know this because these subjects are what your other skills are based off.	I feel quite a few people would agree with me, because these are the two most frequent lessons.	I personally know this as I have asked them for their opinions on the most important subjects.	Yes	Because academically these subjects are what we are most assessed on, also we can build other skills off of these subjects.	Difficult Not enjoyable	It really depends on the teacher and how they teach it to you etc. Text books or through a game.
H	13 (LG)	It depends on the person, I don't think there is just one most important subject (Maths)	(STEM)	Everyone has different strengths and aspirations so everyone's most important subject differs – I don't think of any subjects as the most important, but I do have my favourite subjects.	Some people may disagree if they are certain that one subject is more important than others. I think that the government would say that English and	English and Maths are core subjects and they have to be taken from a very young age until GCSE.	No	I do not think students should be constricted in any way from following their dreams, and forcing them to take subjects because some people think they're important is a way of restricting them.	Easy Enjoyable	I personally like maths as it makes a lot of sense to me, and I can do this. However, this is different for every person.

					Maths are most important, but other responses vary.					
H	14 (CA)	English and Maths	STEM	Because it teaches us everyday things we need in life, and helps us to learn about other things as well.	I don't know.	NA	Not sure	Because there are other subjects that are important too.	Difficult Enjoyable	One of the things that makes it good is the teachers I have. Another thing that makes it enjoyable is the way they teach it.
H	15 (MR)	Science	STEM	It teaches us more about the world around us and how it works, as well as our body and how to keep healthy.	Some of my fellow students may disagree.	They always seem interested in the subjects we learn about and try their best. Many of them express and interest in the subject wider than just the lesson.	Yes	Because there is a lot to learn, and so may interesting things that we can find out about ourselves.	Easy Enjoyable	Our teachers make the subject enjoyable, as the way the teach it. More practical work and experiments is more interesting than paper work. Also, what we learn is interesting.
H	16 (MT)	Citizenship	Other	I know this because it helps us in the future to know what's appropriate and not, or just help you in life. For	People may disagree as some of the lessons are about religion. For example people who do	I know this as it is a guide/booster for them in the future.	No	I think that all subjects are important, because any subject can lead to enjoyment or careers.	Easy Not enjoyable	Because we learn things for example like religion that does not help in life, but other things do.

				example, credit cards and important supplies.	not believe don't care. However, people who need guide with life would choose this subject.					However they come on a rare basis.
H	17 (ER)	Probably English as it's really the only thing we actually use in life.	STEM	Because we speak our language every day, and never really use other subjects like maths every single day (we don't need algebra).	English teachers probably agree.	Because they always stress about how important it is.	No	I think we should have more things that we actually need such as insurance lessons and how to pay taxes/bills.	Difficult Not enjoyable	English is a lot of writing and less reading, so it's quite hard/stressful.
H	18 (SM)	Citizenship/PSHE	Other	It teaches us things about the real world, that we'll need to know when we leave school.	Most people would say things like maths, science and English.	They think because they're academic subjects they're more important than other classes.	Yes	When we leave school we're on our own, and lessons like PSHE teach us what to do and how to do them, e.g. laws, buying a house, rent, mortgage etc.	(English) difficult Enjoyable	I know it will benefit me in the future, so I try to enjoy it and get myself involved.
H	19 (ZK)	Art and science (personally), Languages Maths and	STEM	Because Art and science will help me in the future, because I want to be a marine biologist/photographer. Art and science	A lot of people in my class don't enjoy art and geography, even science because it has no interest to them.	Because they have told me they don't enjoy it because it has no	Yes (MFL, maths, science) Not sure (Geography) No (Art)	I have ticked multiple boxes because I mentioned multiple answers. I think it's all dependent on what path you	(Maths) Difficult Not enjoyable	I'm not sure I just find it hard to wrap my head around. Because I'm in top set my class goes very quickly and I get

		Science (overall)		will help in that. Geography will help me to better understand the ecosystem and global warming.		relevance/impact to their lives.		choose in life. But language and maths will help in most.		confused. I have got a tutor though.
H	20 (NB)	Maths	STEM	Because that is one we seem to use most in everyday life.	I think some of my friends would agree with me because they need maths for the jobs they want to do.	Because we have had this brought up in conversations that we have sometimes.	Not sure	Because we also need English and that's quite important, but not everyone needs that as much as maths with the careers they want.	Difficult Not enjoyable	Because the things that we get taught are usually so hard that it stresses me out.
L	21 (ER)	English	STEM	I believe it is important to be able to articulate yourself, and English aids in this.	I assume people disagree but I don't know how specifically.	Everybody has different opinions.	Not sure.	As I believe all subjects should be given equal time and resources.	Difficult Enjoyable	I enjoy that it allows me to be creative.
L	22 (BA)	PSHE	Other	It helps you a lot with later life and teaches you things you always need to know.	I don't know.	NA	No	Because you need to prioritise subjects you have exams in to get the best results.	Difficult Not enjoyable	I don't find the subject fun because we always do the same things.
L	23 (JB)	English	STEM	You use it every day when you speak/listen/write	NA	NA	Not sure	Because you need to be able to read/write/speak but you don't need to be able to write an essay on a book from memory.	Difficult Not enjoyable	It's hard work and not very interesting at times but you need it in your life.

L	24 (EP)	Maths of English	STEM	They are both vital for all careers in the future.	Others may disagree as they may feel that they are not needed for all careers.	My friends and I have differing opinions.	Not sure	All subjects have their own importance.	Easy Enjoyable	Our teacher seems to understand how we learn and how to make it enjoyable.
L	25 (TC)	English	STEM	I know this because I think that whatever job you do when you're older, you will use this subject rather a lot.	NA	NA	Not sure	Whatever job you do when you're older you will use this subject rather a lot.	Difficult Not enjoyable	English is boring because one side of the subject is the actual grammar ad how to write a letter/email (you will use this in your actual job), and then the other side is the creative writing and poem or P.E.E.; you will probably not use this in later life.
L	26 (HH)	Maths	STEM	Because it helps you on in later life but not everything like algebra, the basics.	NA	NA	Not sure	Because we don't need to learn everything, just basics to get far in life and have a good job.	Easy Enjoyable	Easy to understand or learn as it is less complex than other subjects, so you have more fun.
L	27 (TS)	English	STEM	It has applications to almost everything that you could possibly do.	NA	NA	Yes	If we are able to improve the way we communicate at an early age, then it	Easy Enjoyable	Not sure

								should help us at a later stage.		
LS	28 (TB)	English	STEM	Because you need it in everyday life.	I think parents would agree.	Because talking is kind of English.	Yes	Because you can learn verbs and adjectives.	Not enjoyable	If the teacher is nice and puts fun into lessons.
LS	29 (DS)	Maths	STEM	Because we use maths everyday.	Maybe teachers	They take time to teach us.	Not sure	Because English is also an important subject.	Difficult Not enjoyable	It's hard work and I think a lot of what we learn we are going to forget or not use.
LS	30 (AD)	English	STEM	Because in any job you go to you will need to read or write.	English teachers.	Because when you go out for a job they know you need it.	Yes	So there would be more English literacy lessons.	Easy Enjoyable	You know that you are going to learn something and that it will help.
LS	31 (SD)	Maths	STEM	Because we use lots of maths in everyday life.	My maths teacher agrees because if you practice in maths the easier most things will be.	I talk to my maths teacher about why we need maths.	Not sure	Because lots of people (me included) think it is important but don't enjoy it and struggle a lot.	Difficult Not enjoyable	I don't understand it, but everyone else in my class does, and when I get picked to ask a question I get so anxious because I don't know the answer.
LS	32 (JG)	English	STEM	Cause you need it in everyday life.	I am sure there are people who agree and disagree but I'm not sure who.	I don't.	Not sure	As there are other key subjects you need.	Difficult Not enjoyable	It makes it enjoyable by doing drama but not enjoyable staying in the classroom writing all the time.

LS	33 (DH)	Maths and English	STEM	Because both of them in everyday life you will use your maths skills or use your English skills to spell a word.	I think parents would agree because they always tell me to focus and work hard on those subjects.	I know they agree because they tell me most days to work hard.	Not sure	You don't always need the same subject for one job.	Easy Enjoyable	Because I have good classmates and the teacher is very nice and supportive.
LS	34 (LB)	PE	Other	Because it gets you fit.	I don't know.	I don't know.	Yes	Because it's good.	Easy Enjoyable	It keeps you fit.
W	35 (DP)	Maths	STEM	NA	I don't know	NA	Yes	I think that maths should be the most important subject because nearly every job has maths as a big part of it.	Difficult Enjoyable	I just find looking at numbers fun.
W	36 (SS)	English /maths	STEM	This is because you use these subjects the most for jobs.	Maybe people that don't need them disagree.	Because you need them for most jobs.	Not sure	Because it depends on who you are.	Easy Enjoyable	I would not change anything
W	37 (LC)	English	STEM	Because you need it the most for jobs.	Yes some parts of my family and other people disagree.	Because you need other things not just English, for example Maths and Science.	Not sure	Because you may need it but you need maths as well.	Easy Enjoyable	Because you learn different ways of saying the same thing.
W	38 (LM)	English	STEM	It's a core subjects and is based on our country's language.	Yes, the English department.	They teach the subject.	Not sure	It's up to a student to decide what they make their priority.	Easy Enjoyable	The subjects we focus on in each lesson.

Appendix K: Quantitative questionnaire and self-report responses (examples; students 1-13)

Pupil	Subject rank	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Category				Top subject match ? Y/N	Subject-match Group	No. 'top 3' subject match	No. of 'top 3' Ebacc	MALS Score	Description	Wellbeing score	Description
																Top three	Bottom three	category match ? Y/N	Category-match Group								
1(AS)	Value ranking	Science	Maths	English	Geog	MFL	History	ICT	PE	DT	Art	Music	RE	FT	Drama												
	Category	Ebacc	Ebacc	Ebacc	Ebacc	Ebacc	Ebacc	Other	Other	Other	Other	Other	Other	Other	Other	Ebacc	Other										
	Attainment ranking	RE	English	Geog	History	Music	FT	MFL	Science	Drama	Maths	PE															
	Category	Other	Ebacc	Ebacc	Ebacc	Other	Other	Ebacc	Ebacc	Other	Ebacc	Other				Ebacc	Other	Yes	1	Yes	1	1	2	83	Above average	47	Average
2 (DJ)	Value ranking	English	Maths	Science	History	Geog	DT	PE	FT	Art	Drama	MFL	ICT	RE	Music												
	Category	Ebacc	Ebacc	Ebacc	Ebacc	Ebacc	Other	Other	Other	Other	Other	Ebacc	Other	Other	Other	Ebacc	Other										
	Attainment ranking	Art	PE	DT	FT	RE	Science	Drama	Geog	ICT	English	History	Maths	Music	MFL												
	Category	Other	Other	Other	Other	Other	Ebacc	Other	Ebacc	Ebacc	Ebacc	Ebacc	Ebacc	Other	Ebacc	Other	Ebacc	No	2	No	2	0	0	58	Below average	33	Below average
3 (ID)	Value ranking	Maths	English	MFL	RE	History	Geog	ICT	Science	PE	Art	Music	Drama														
	Category	Ebacc	Ebacc	Ebacc	Other	Ebacc	Ebacc	Other	Ebacc	Other	Other	Other	Other			Ebacc	Other										
	Attainment ranking	Spanish	PE	Graphics	English	History	Geog	Science	Philosophy	Maths																	
	Category	Ebacc	Other	Other	Ebacc	Ebacc	Ebacc	Ebacc	Other	Ebacc						Other	Ebacc	No	2	No	2	1	1	59	Below average	46	Average
4 (IP)	Value ranking	English	Science	Maths	Geog	ICT	MFL	History	Art	Drama	Music	DT	RE	FT	PE												
	Category	Ebacc	Ebacc	Ebacc	Ebacc	Other	Ebacc	Ebacc	Other	Other	Other	Other	Other	Other	Other	Ebacc	Other										
	Attainment ranking	History	Science	Drama/English	Drama/English	Maths	Geog	ICT	RE	DT	Music	German	Art	Spanish	PE												
	Category	Ebacc	Ebacc	Other	Other	Ebacc	Ebacc	Other	Other	Other	Other	Ebacc	Other	ebacc	Other	Ebacc	Other	Yes	1	Yes	1	2	2	66	Average	42	Average

5 (BB)	Value ranking	English	Maths	Science	DT	MFL	History	Geog	FT	ICT	PE	Music	Drama	Art	RE	Ebacc	Other										
	Category	Ebacc	Ebacc	Ebacc	Other	Ebacc	Ebacc	Ebacc	Other	Other	Other	Other	Other	Other	Other												
	Attainment ranking	English	History	RE	Drama	Art	Geog	German	Music	DT	Science	Spanish	PE	Maths	ICT	Ebacc	Other										
	Category	Ebacc	Ebacc	Other	Other	Other	Ebacc	Ebacc	Other	Other	Ebacc	Ebacc	Other	Ebacc	Other			Yes	1	Yes	1	1	2	65	Average	45	Average
6 (AT)	Value ranking	English	Maths	Science	Geog	History	MFL	PE	RE	ICT	FT	Music	DT	Drama	Art	Ebacc	Other										
	Category	Ebacc	Ebacc	Ebacc	Ebacc	Ebacc	Ebacc	Other	Other	Other	Other	Other	Other	Other	Other												
	Attainment ranking	English	Geog	History	Music	RE	PE	Maths	Spanish	ICT	Science	German	Art	Drama	DT	Ebacc	Other										
	Category	Ebacc	Ebacc	Ebacc	Other	Other	Other	Ebacc	Ebacc	Other	Ebacc	ebacc	Other	Other	Other			Yes	1	Yes	1	1	3	89	Above average	55	Average
7 (TM)	Value ranking	Music	Science	Art	Drama	FT	MFL	PE	Geog	English	DT	History	ICT	RE	Maths	Other	Other										
	Category	Other	Ebacc	Other	Other	Other	Ebacc	Other	Ebacc	Ebacc	Other	Ebacc	Other	Other	Ebacc												
	Attainment ranking	Music	Drama	RE	Geog	English	History	Maths	DT	Art	ICT	German	Spanish	Science	PE	Other	Ebacc										
	Category	Other	Other	Other	Ebacc	Ebacc	Ebacc	Ebacc	Other	Other	Other	Ebacc	Ebacc	Ebacc	Other			Yes	1	Yes	1	1	0	52	Below average	41	Average
8 (NS)	Value ranking	Maths	English	History	ICT	Science	Geog	DT	PE	RE	FT	Art	Music	Drama	MFL	Ebacc	Other										
	Category	Ebacc	Ebacc	Ebacc	Other	Ebacc	Ebacc	Other	Other	Other	Other	Other	Other	Other	Ebacc												
	Attainment ranking	History	Maths	ICT	Science	PE	English languag e	English literature	Busines s studies	Health and social care						Ebacc	Other										
	Category	Ebacc	Ebacc	Other	Ebacc	Other	Ebacc	Ebacc	Other	Other								Yes	1	Yes	1	2	2	69	Average	50	Average

9 (PC)	Value ranking	Maths	English	Science	MFL	Geog	History	ICT	PE	RE	DT	FT	Art	Music	Drama	Ebacc	Other										
	Category	Ebacc	Ebacc	Ebacc	Ebacc	Ebacc	Ebacc	Other	Other	Other	Other	Other	Other	Other	Other												
	Attainment ranking	Science	Maths	ICT	Business studies	English	DT	English literature	PE	Health and social care																	
	Category	Ebacc	Ebacc	Other	Other	Ebacc	Other	Ebacc	Other	Other						Ebacc	Other	Yes	1	Yes	1	2	2	65	Average	34	Below average
10 (ES)	Value ranking	Maths	Science	English	MFL	PE	RE	History	Geog	FT	DT	Art	Music	Drama	ICT												
	Category	Ebacc	Ebacc	Ebacc	Ebacc	Other	Other	Ebacc	Ebacc	Other	Other	Other	Other	Other	Other	Ebacc	Other										
	Attainment ranking	RE	Science	Maths	Geog	History	English	DT	Art	ICT	PE	MFL															
	Category	Ebacc	Ebacc	Ebacc	Ebacc	Ebacc	Ebacc	Other	Other	Other	Other	Ebacc				Ebacc	Other	Yes	1	Yes	1	2	3	73	Average	47	Average
11 (AS)	Value ranking	English	Maths	RE	MFL	ICT	Geog	Music	History	FT	Art	DT	PE	Drama	Science												
	Category	Ebacc	Ebacc	Other	Ebacc	Other	Ebacc	Other	Ebacc	Other	Other	Other	Other	Other	Ebacc	Ebacc	Other										
	Attainment ranking	Science	RE	Maths	Geog	History	DT	Art	ICT	PE	MFL																
	Category	Ebacc	Other	Ebacc	Ebacc	Ebacc	Other	Other	Other	Other	Ebacc					Ebacc	Other	Yes	1	Yes	1	1	2	64	Average	28	Very low
12 (FH)	Value ranking	English	Maths	Science	History	Geog	Drama	RE	Art	ICT	Music	FT	MFL	PE	DT												
	Category	Ebacc	Ebacc	Ebacc	Ebacc	Ebacc	Other	Other	Other	Other	Other	Other	Ebacc	Other	Other	Ebacc	Other										
	Attainment ranking	RE	History	DT	Science	Art	Maths	English	ICT	PE	Drama	MFL															
	Category	Other	Ebacc	Other	Ebacc	Other	Ebacc	Other	Other	Other	Other	Ebacc				Other	Other	No	2	No	2	0	1	51	Below average	37	Below average
13 (LG)	Value ranking	Maths	History	Science	Geog	English	MFL	PE	RE	Art	ICT	DT															
	Category	Ebacc	Ebacc	Ebacc	Ebacc	Ebacc	Ebacc	Other	Other	Other	Other	Other				Ebacc	Other										
	Attainment ranking	RE	Art	DT	Geog	ICT	Maths	Science	PE	MFL	Music																
	Category	Other	Other	Other	Ebacc	Other	Ebacc	Ebacc	Other	Ebacc	Other					Other	Other	No	2	No	2	0	0	44	Below average	28	Very low

Appendix L: Coded questionnaire responses ('What is the most important subject?')

Subject	**How do you know this?**	**Codes ('Complete coding'; 'data-derived'/'semantic' codes)**	**Themes**
Science and maths	Science is important because it is all around you and it helps you understand everything better. Same goes for maths.	- Subject is all around you (everyday life) - Helps you understand other things	Usefulness - everyday life - understanding of world
English and maths	Because we use them in everyday life. I know this because we speak English in our everyday life and we use maths when we count things and spend money.	- Used in every day life	- everyday life
Maths and English	Teachers say it is the most important subject	- Teachers say subject is important	External factors Being told by others - teachers
English	I know this due to it being brought up in terms of work experience. Additionally, I think it's key in communication both at home and abroad.	- Work experience - Key in communication outside of school	Usefulness - jobs - Life outside school
English	Being able to read and understand words is vital in any subject. You also learn a lot of skills that can be used in other subjects in English, such as essay writing.	- Important to be able to read - Useful to other subjects	Usefulness - other subjects - transferable skills
English	You use it in all other subjects	- Useful to other subjects	Usefulness - other subjects
Music	It is a creative subject which allows students to express their emotions and learn about different cultures through musical interaction.	- Express emotions - Learn about other cultures	Emotions - Express emotions - interest
Maths	Used in most every day activities, used in most jobs.	- Used in everyday life - Used in jobs	Usefulness - everyday life - jobs
Maths	It is used in different subjects the most (if not counting English). It also has the most lessons in a week on par with English and Science (only if triple)	- Useful to other subjects - Most lessons per week	Usefulness - other subjects External factors - Timetabling - most lessons per week

Maths	Because I use it in every day life, and to get into some top universities you need a high GCSE grade in maths.	- Used in everyday life - Need for university admission	Usefulness - every day life - University admission
English, French, RE, Maths	English – it helps us learn how the language is developed, and will overall help us in life. French – It's good to be at least partially fluent in a foreign language and a lot of people speak French. RE – it can help with the understanding of society and what is right and wrong. Maths – This is needed in everyday situations and will be used in every job.	- Used in everyday life - Usefulness of language - Help understand society - Useful to jobs	Usefulness - in everyday life - jobs - communication - understanding of world
English and Maths	I know this because these subjects are what your other skills are based off.	- Useful to other subjects/skills	Usefulness - other subjects
Maths	Everyone has different strengths and aspirations so everyone's most important subject differs – I don't think of any subjects as the most important, but I do have my favourite subjects.	- Aspirations - Strengths	Emotions - personal preferences
English and Maths	Because it teaches us everyday things we need in life, and helps us to learn about other things as well.	- Used in every day life - Useful to other things	Usefulness - everyday life
Science	It teaches us more about the world around us and how it works, as well as our body and how to keep healthy.	- World around us - Staying healthy	Usefulness - understanding of world
Citizenship	I know this because it helps us in the future to know what's appropriate and not, or just help you in life. For example, credit cards and important supplies.	- Help in future	Usefulness - future life
Probably English as it's really the only thing we actually use in life	Because we speak our language every day, and never really use other subjects like maths every single day (we don't need algebra).	- Used in everyday life	Usefulness - everyday life - communication
Citizenship/PSHE	It teaches us things about the real world, that we'll need to know when we leave school.	- Useful in real world	Usefulness - future life

Art and science (personally), Languages Maths and Science (overall)	Because Art and science will help me in the future, because I want to be a marine biologist/photographer. Art and science will help in that. Geography will help me to better understand the ecosystem and global warming.	- Future career - Understanding of world	Usefulness - job - understanding of world
Maths	Because that is one we seem to use most in everyday life.	- use in everyday life	Usefulness - everyday life
English	I believe it is important to be able to articulate yourself, and English aids in this.	- Articulation	Usefulness - communication
PSHE	It helps you a lot with later life and teaches you things you always need to know.	- future life	Usefulness - future life - everyday life
English	You use it every day when you speak/listen/write	- Everyday life - communication	Usefulness - Everyday life - communication
Maths or English	They are both vital for all careers in the future.	- vital for careers	Usefulness - Future life
English	I know this because I think that whatever job you do when you're older, you will use this subject rather a lot.	- used in every job	Usefulness - Future life - Job
Maths	Because it helps you on in later life but not everything like algebra, the basics	- Helps in later life	Usefulness - Future life
English	It has applications to almost everything that you could possibly do.	- applied in everyday life	Usefulness - everyday life
English	Because you need it in everyday life.	- everyday life	Usefulness - everyday life
Maths	Because we use maths everyday.	- everyday life	Usefulness - everyday life
English	Because in any job you go to you will need to read or write.	- needed for jobs - communication	Usefulness - Future life - Job - Communication
Maths	Because we use lots of maths in everyday life.	- everyday life	Usefulness - everyday life
English	Cause you need it in everyday life.	- everyday life	Usefulness - everyday life

Maths and English	Because both of them in everyday life you will use your maths skills or use your English skills to spell a word.	- everyday life - communication	Usefulness - everyday life
PE	Because it gets you fit.	- keeping fit	Usefulness - everyday life
Maths	NA		
English /maths	This is because you use these subjects the most for jobs.	- needed for jobs	Usefulness - Future life - Job
English	Because you need it the most for jobs	- needed for jobs	Usefulness - Future life - Job
English	It's a core subjects and is based on our country's language.	- core subject - everyday language	Usefulness - everyday life - communication

Appendix M: Initial analysis and Interview prompts

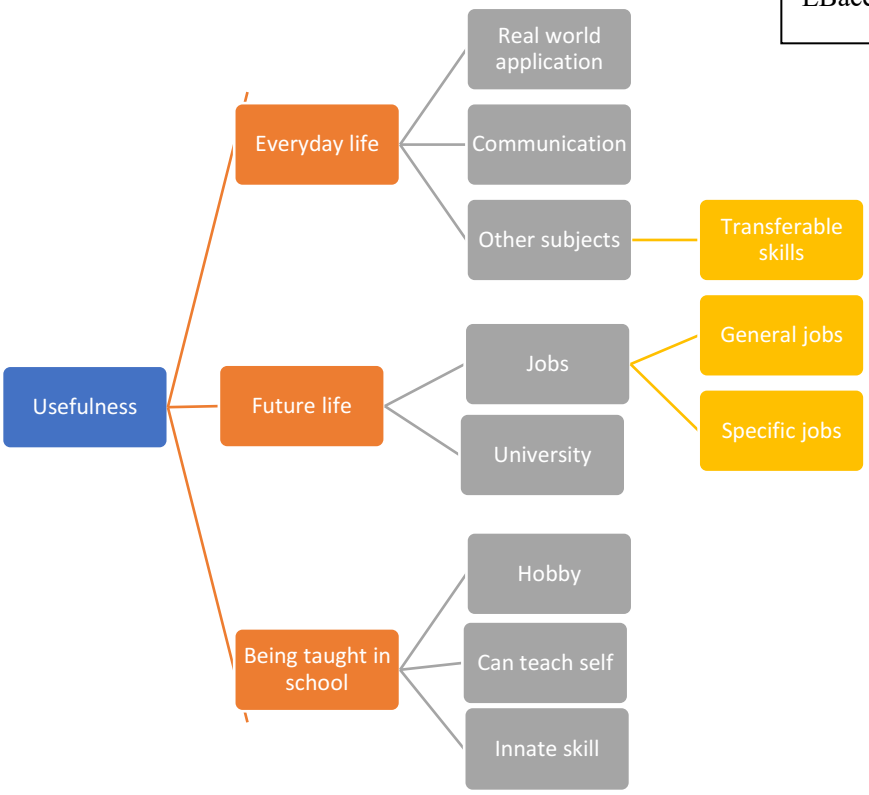
Themes from questionnaires

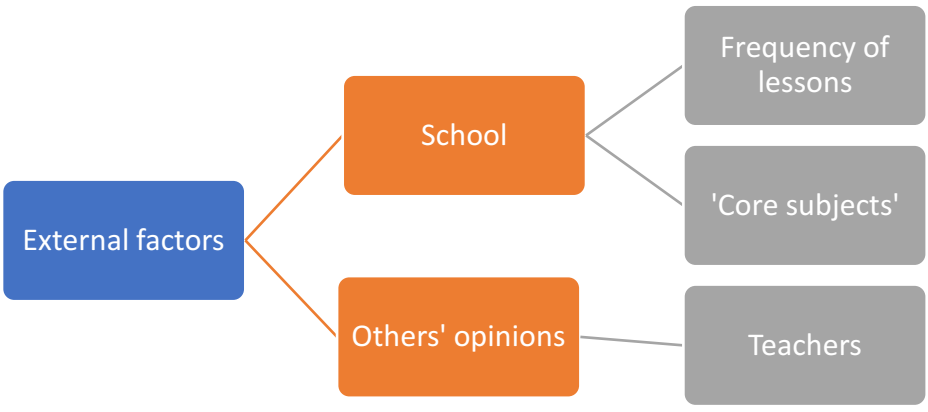
1. What is most/least important subject? How do you know this?

Most frequently named subjects

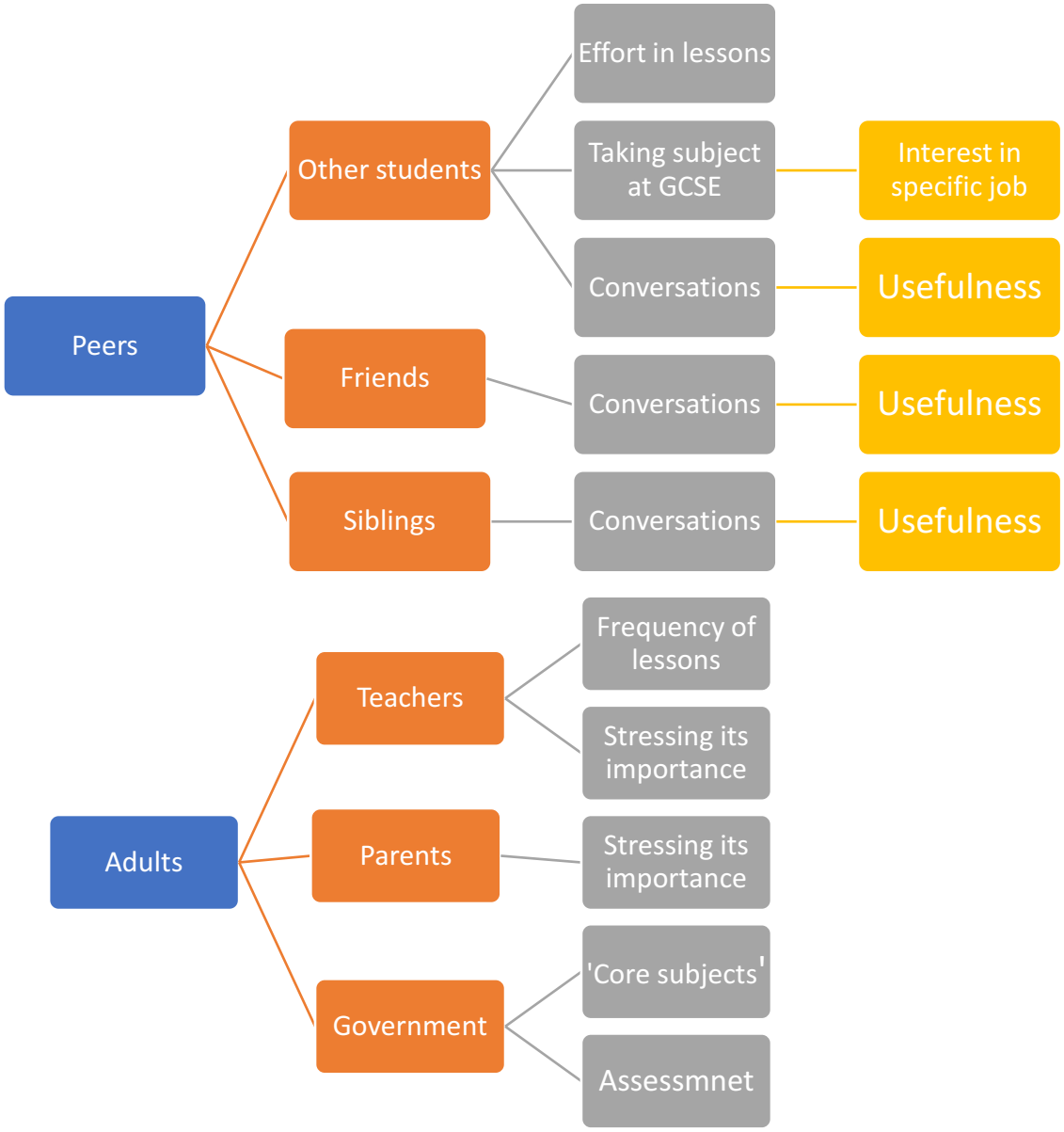
Most important: Maths, English, Science (ALL EBacc)

Least important: Art, Music, Drama (NONE EBacc)

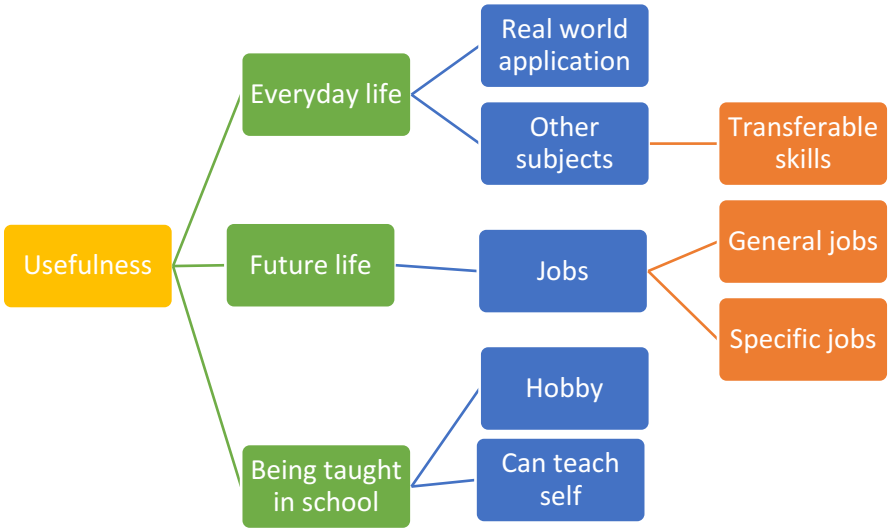




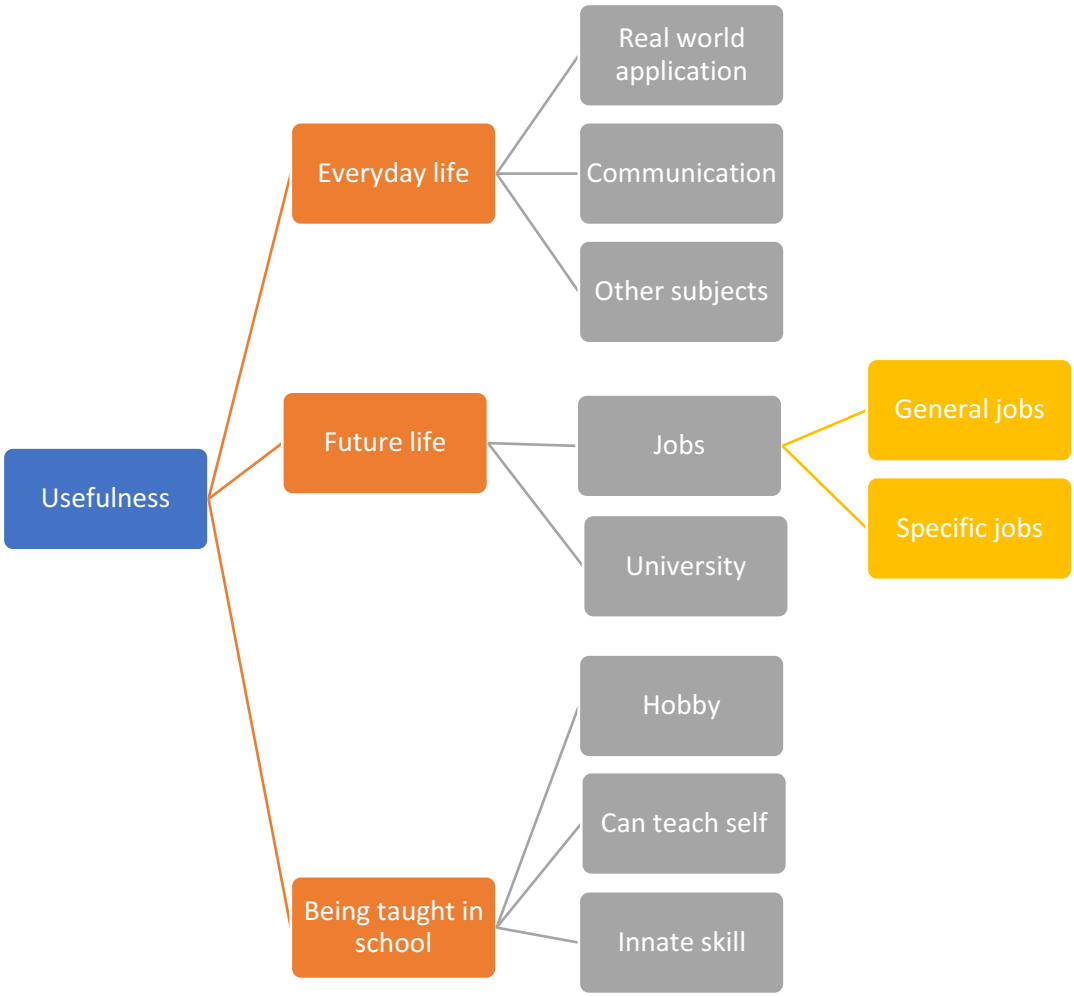
2. Does anyone agree/disagree with you? How do you know?

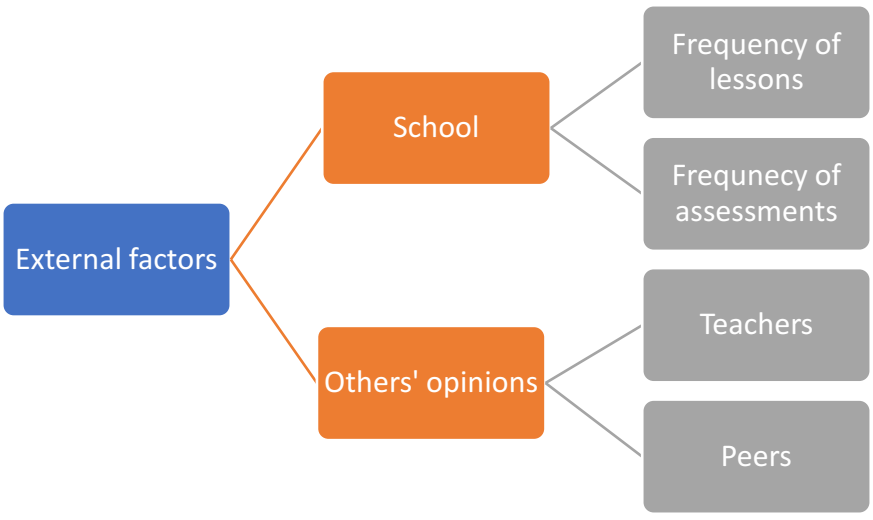


'Usefulness' sub-theme (question 2)

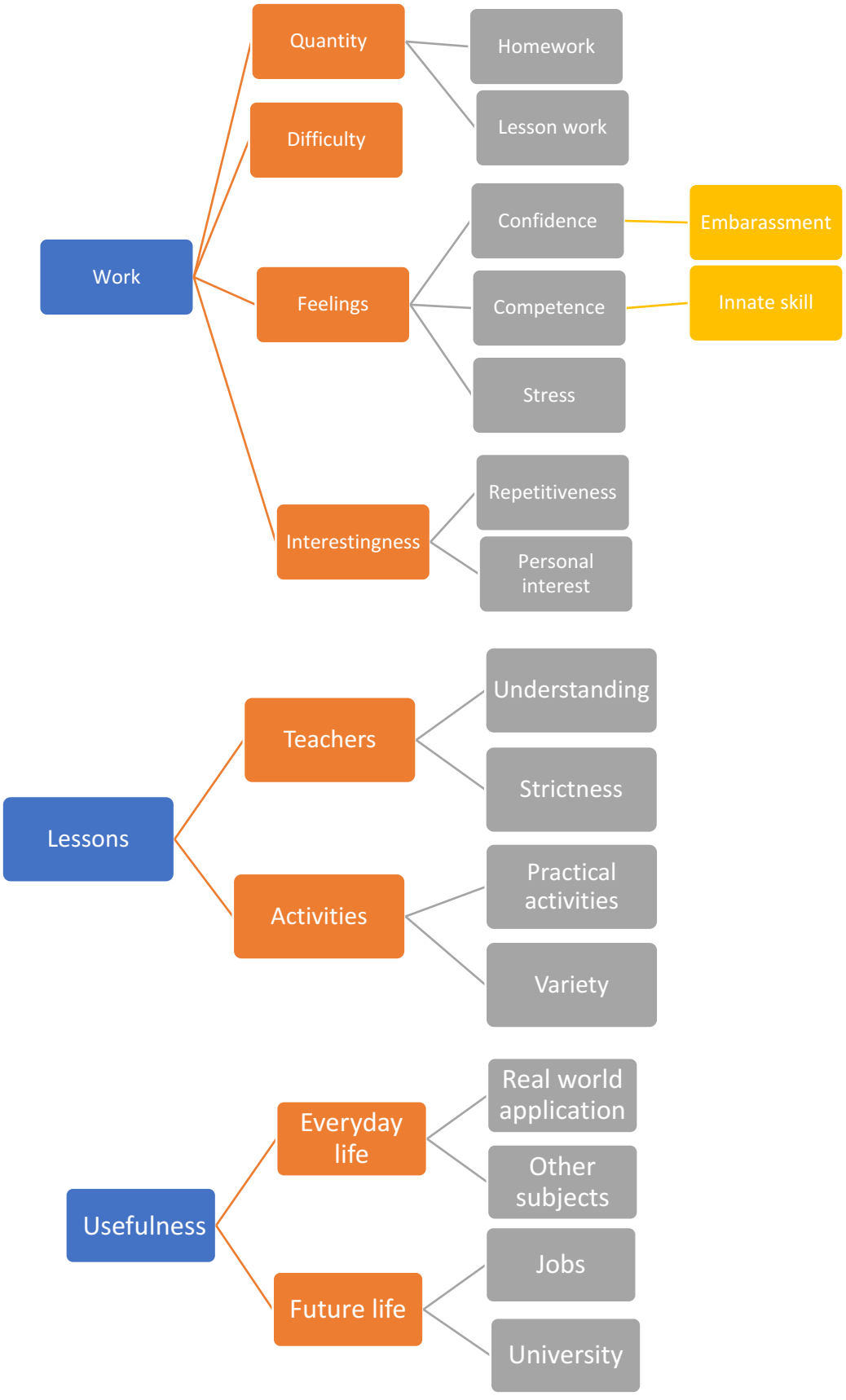


3. Do you think this should be the most/least important subject? Why?





4. What makes this subject enjoyable/not enjoyable and easy/difficult?



Themes to further explore in interview

- **Usefulness and 'importance' of subjects**
  - Where do these thoughts on 'usefulness'/importance come from? Especially for FUTURE LIFE/JOBS and TRANSFERABLE SKILLS – **potential mechanisms behind these perceptions?**
  - Why are skills developed in GCSE Maths/English seen as more useful in GENERAL jobs/life than skills developed in GCSE drama/art?
  - How long have students been thinking this about these subjects?
  - Is there usefulness in enjoyment? Less important subjects = more fun?

- **Others' opinions**
  - What do parents/teachers say that make students think that they believe certain subjects are more important than others?
  - What/when do students discuss subjects' importance with one another?
  - Why do the majority of students assume most people disagree with them, despite most students giving very similar response on questionnaires?

- **SELF-EFFICACY**
  - **Students with a majority of EBacc subjects in their 'top 3' attainment have significantly higher SEB** than students with a majority of EBacc subjects in their 'top 3' attainment (N=38).
    - Students with 0 or 1 EBacc subjects in their top 3 'attainment rankings' have significantly lower MALS scores than those with 2 or 3 EBacc subjects in their top 3 attainment rankings (Mann Whitney & t-test).
    - Students with 0 or 1 'matches' between the top 3 subjects in their 'attainment rankings' and 'value rankings' have significantly lower MALS scores than those with 2 or 3 matches (Mann Whitney & t-test).
  - Do students think that those who are 'good' at EBacc/'important' subjects may feel more 'clever' than students who are good at non-EBacc subjects?
  - What do students think can affect their SEB in school?
  - What do students think can be done to help their SEB in school?

Semi-structured interview questions (40-60 minutes)

1. a) Importance of different subjects – is this something you have thought/talked about before?

   b) When?
   c) Where?
   d) With who?

   Prompts if necessary:

- Talking to others – peers, parents, teachers
- School – timetable, assessments, primary school

Exploring/explaining Stage 1 qualitative results (clear patterns of which subjects are perceived as 'most' and 'least' important – where do these perceptions come from/what are the potential mechanisms?)

Prompts from Stage 1 Thematic analysis

2. a) When is the first/earliest time you remember thinking/talking about importance of different subjects?

   b) When?
   c) Where?
   d) With who?

   Prompts if necessary:

- Peers, parents, teachers
- School timetable, assessments

Exploring/explaining Stage 1 qualitative results (where do students' perceptions of which subjects are most/least important come from/what are the potential mechanisms?)

Prompts from Stage 1 Thematic analysis

3. a) What makes a subject important?

   b) How long have you thought this?
   c) Are these things you have spoken about with others?
   d) Which subjects come up in conversation?

   Prompts if necessary:

- Future 'usefulness' – employment, education, 'everyday' life
- Current 'usefulness' – education, 'everyday' life, transferable skills
- 'Difficulty' and/or 'enjoyment' of subject
- Peers, teachers, parents

Exploring/explaining Stage 1 qualitative results (patterns of students' perceptions on what makes a subject 'important' – further exploration and potential explanation of where perceptions come from)

Prompts from Stage 1 Thematic analysis

4. *Vignettes of two 'students' with **the same attainment levels in their top 3 subjects (Level 8s; highest level)**.

Example subjects taken from Stage 1 'value-rankings'

"Student A has Levels 8s in English, Maths and Science; Student B has Level 8s in Art, Drama and Music".

Exploring/explaining Stage 1 quantitative findings (EBacc-Group 1 (0 or 1 EBaccs) have significantly lower MALS scores than EBacc-Group 2 (2 or 3 EBaccs); Match-Group 1 (0 or 1 'matches') have significantly lower MALS scores than Match-Group 2 (2 or 3 'matches').

a) How do you think both these students might feel in school?
b) Why do you think this?
c) How do you think students might get treated at school?

Prompts from Stage 1 Quantitative analysis (Mann Whitey shows Group-E1 and Group-M1 have lower wellbeing scores and MALS scores than Group-E2 and Group-M2 respectively).

Prompts if necessary:

- Do you think that both students would feel equally clever; or that Student A would feel more clever than Student B; or that Student B would feel more clever than Student A?
- Do you think that both students would feel equally happy at school; or that Student A would feel happier at school than Student B; or that Student B would feel happier at school than Student A?
- Treatment by peers, teachers, parents

5. a) What do you think can affect how clever/confident someone feels at school?

Exploring/explaining Stage 1 quant. findings (significant differences in MALS scores between EBacc-Groups and Match-Groups).

Prompts if necessary:

- Being 'good' at things which are valued
- Having opportunities to develop strengths
- External validation

Prompts from theories of SEB and positive psychology

b) What can school/teachers do to make students feel more clever/confident/happy at school?

Exploring potential **support SEB strategies** for students in school (particularly those without EBacc subjects in their 'top subjects').

Prompts if necessary:

- Having opportunities to develop strengths
- Feeling useful/appreciated
- Feeling like skills are valued

Prompts from theories of SEB and positive psychology

6. a) Is there anything you would change about the curriculum/the different subjects you learn? Why?

Appendix N: Interview transcriptions (USB attached)

Appendix O: Research 'summary for schools' and SEB support strategies

Student perceptions of school subject 'value' & psychological impact (Speed, 2019)

What did we do?

- 38 Year 9 students from eight different schools completed original questionnaires exploring their perceptions of the 'importance' and value of the curriculum subjects. Students' most recent attainment data was collected. The students also completed two self-reports measuring their wellbeing and self-efficacy beliefs
  - Wellbeing refers to feeling good about ourselves and the world around us, and functioning well (NHS, 2018)
  - Self-efficacy refers to our beliefs in our capabilities to successfully complete a given task (Bandura, 1997)
- Nine of these 38 students were randomly selected and interviewed to further explore findings from the questionnaires and self-reports

What did we find?

EBacc: English; Maths; Science; History; Geography; Modern Foreign Languages
Non-EBacc: Art; Music; Drama; Technologies; Physical Education

Students' views of subjects' 'importance'

- An English Baccalaureate (EBacc) subject was identified as the 'most important' subject in 94% of student responses; a non-EBacc subject was identified as the 'least important' in 85% of responses
- 'Themes' from questionnaires and interviews suggested the students equated subjects' value to:
  - The subject's perceived 'usefulness' (to their future employment; current and future education; and current and future everyday lives)
  - 'External factors' relating to their 'school environment' (frequency of lessons and assessments); and 'others' opinions' (especially those of peers, teachers and parents)
  - 'Lesson characteristics'; such as how 'difficult' and/or 'enjoyable' subjects were ('harder' subjects being considered as more 'important' than 'easy' and/or 'fun' subjects)

Students' self-efficacy and wellbeing

- Students with relative strengths in EBacc subjects had significantly higher self-efficacy beliefs than students with strengths in non-EBacc subjects
- Students with strengths in subjects they had identified as 'important' had significantly higher self-efficacy beliefs than those with strengths in subjects they had identified as 'not important'
- No 'statistically significant' differences were found between students' wellbeing

Potential explanations of differences in self-efficacy

- Two main 'sources' of self-efficacy beliefs are thought to be 'mastery experiences' (experiencing success and witnessing improvement in one's skills), and 'social persuasions' ('social messages' received from influential people in one's life about one's skills) (Bandura, 1997)
- Main 'themes' from students' interviews suggested that:
  - Students' skills in EBacc subjects are more 'respected' by peers, and more 'rewarded' and 'appreciated' by teachers and parents
  - Students who are good at EBacc subjects and choose them for GCSE are seen as 'cleverer', as these subjects are considered 'academic' (non-EBacc often labelled 'waste')
  - Students good at non-EBacc subjects may feel 'less happy' at school than those who are good at EBacc subjects, because there are far fewer lessons in these subjects
  - It might be harder for students with strengths in non-EBacc subjects to *know* they are 'good', because these subjects are not assessed by 'scores', or as regularly as EBaccs

Why does this matter?

- The current research suggests that students with strengths in non-EBacc subjects and/or difficulties in EBacc subjects may be at risk of having low self-efficacy beliefs; due to the high perceived 'value' of the EBacc, and less opportunities to engage/progress in non-EBacc subjects
    - Students with lower attainment in EBacc subjects are more likely to come from lower socio-economic backgrounds and/or be eligible for free school meals (FSM) (DfE, 2018)
    - School exclusion rates in 2017 were four times higher for students eligible for FSM than non-FSM students (Education Endowment Foundation, 2018)
    - Various research shows that self-efficacy beliefs predict academic performance; future educational opportunities; employment prospects; and quality of life (Honicke, 2016)
- Supporting the self-efficacy beliefs of students with strengths in non-EBacc subjects and/or difficulties in EBacc subjects may benefit them individually, and promote social justice

How can we help?

- Theories of self-efficacy development (Bandura, 1997) and themes from students' questionnaires and interviews suggest that we can support the self-efficacy beliefs of students with strengths in non-EBacc subjects by:

Increasing positive 'social persuasions'

- Helping students feel like their skills in non-EBacc subjects are 'respected' and 'appreciated' by peers, teachers and parents (e.g. equal 'rewards' for achievements in EBacc and non-EBacc subjects; prizes/certificates/praise; letters home; displaying work)
- Helping students to recognise the 'value' of skills developed in non-EBacc subjects, particularly the wider 'usefulness' of such to their current/future lives (e.g. discussing the usefulness of confidence, creative thinking and team work for future employability)

Increasing opportunities for 'mastery experiences'

- Giving students more opportunities to engage in non-EBacc subjects where possible (e.g. lunchtime/after school clubs where timetables do not allow for additional lessons)
- Giving students more opportunities to see their progress and successes in non-EBacc subjects (e.g. comparisons between previous and current work; 'plotting' improvement)

Remaining aware of this potential risk

- Be aware that students with lower attainment in EBacc subjects (such as those in lower 'sets' for English, Maths and/or Science) may have low self-efficacy beliefs
- Can use self-reports (such as the 'Myself as a Leaner Scale'; Burden, 1998) to assess students' self-efficacy beliefs; target those with low levels using suggested strategies
- Implement above suggested strategies at a whole class/school level as a protective and 'preventative' measure, encouraging positive development of all students' self-efficacy

All young people deserve to develop positive self-efficacy beliefs at school – to progress in their individual strengths; to feel respected for their skills; and to benefit from the associated positive future outcomes – whatever their 'best' subject may be.

Bandura, A. (1997). *Self-Efficacy: The exercise of control*. NY: W.H. Freeman; Honicke, T., & Broadbent, J. (2016). The influence of academic self-efficacy on academic performance: A systematic review. *Educational Research Review*, 17, 63–84.