
WHAT IMPACT DOES THE LEARNING ENVIRONMENT HAVE ON SELF- CONCEPT?

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Overarching Abstract

Self-concept represents perceptions of one's own attributes, skills and knowledge and is proposed as central to emotional wellbeing. Self-concept theory emphasises the relevance of social environments in self-concept formation and shaping, highlighting the integral role of significant others such as parents, teachers and peers.

A systematic review of ten studies examining the impact of the learning environment on adolescent self-concept is presented. When taken in synthesis, findings suggest that practices within schools such as ability grouping have significant impact on self-concept. Impact is not universal and is noted to differentially affect domain specific aspects of academic self-concept; there is limited evidence presented regarding impact on other aspects of self-concept. The review concludes that it is not possible to draw definitive conclusions due to issues of self-concept definition and methodological concerns.

A study of six dual registered pupils is then presented to explore how experiences in simultaneously accessing contrasting special and mainstream settings may impact on self-concept. In focusing study at the phenomenological level of individual experiences, this study draws on semi-structured interviews and Interpretative Phenomenological Analysis. Findings suggest that internalisation of messages received about the self is central to self-concept formation; participants' experiences further highlight the relevance of multiple intra- and inter-context factors to shaping academic and social self-concept. It concludes that dual registration may create tensions between anticipated positive outcomes of inclusion and adverse impact of experiences on self-concept, but that greater awareness is needed of practices within the school environment that mediate and shape self-concept.

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PART 1:

WHAT IMPACT DOES THE LEARNING ENVIRONMENT HAVE ON ADOLESCENT SELF-CONCEPT?

Abstract

Self-concept is a subjective construct at the individual phenomenological level which represents perceptions of one's own attributes, skills and knowledge. With the suggestion that positive self-concept is integral to emotional wellbeing as well as associated with academic success, it has significant relevance within the field of educational psychology. While understanding of the formation, structure and impact of self-concept continues to grow, it also lacks consensus. There is general acceptance, however, that self-concept is nested within social contexts and that significant others such as parents and peers play an integral role.

Based on the proposal that self-concept is formed through experience with the environment (Shavelson, Hubner & Stanton, 1976), this review explores the impact of the learning environment on self-concept in adolescence, an age premised to signify the greatest exploration and development of sense of self (Erikson, 1950). When taken in synthesis, the evidence from ten published studies suggests practices within the educational environment may have significant impact on self-concept. The majority of studies (N=7) focused on the impact of ability grouping / setting with evidence suggesting that such practices may result in adverse changes in self-concept. However, this review suggests it is not possible to draw definitive conclusions on the impact of the learning environment on self-concept due to issues of self-concept definition and methodological concerns. It is therefore proposed that there is a need to focus further study at the phenomenological level and seek wider exploration of factors moderating across domains of self-concept.

1.1 Introduction

1.1.1 Definitions and understanding of self-concept

Developing positive self-concept is proposed as central to a sense of self, integral to healthy psychological development (Harter 1986, 1988), and associated with greater achievement of positive outcomes: psychologically, physically, socially and academically (Marsh & Hau, 2003). There is no universally accepted definition of self-concept; instead proliferations of broad, often vague, attempts to provide coherent explanation exist. As Begley and Lewis (1998) identify, the lack of definitional consensus is likely to be rooted in historical conceptions of self-concept as a general term encompassing multiple aspects of self, alongside concepts such as self-esteem. Such broad views have made conception of a single agreed definition difficult; consequently the literature is replete with terms such as self-identity and self-concept being used interchangeably. In many instances self-esteem is also used interchangeably despite the multi-faceted construction of self-concept in contrast to the affective construct of self-esteem. Whilst both terms are most likely integrally associated, the two terms are differentiable and not to be considered synonymous.

Historically, self-concept was considered a unitary construct (Borislow, 1962), stable over time and context (Piers, 1984). A shift in perspective has, however, asserted that it is multi-faceted (Byrne & Shavelson, 1986; Marsh, 2005; Shavelson & Marsh, 1986), encompassing aspects such as academic, social, emotional and physical self-concept. The proposal of self-concept as a hierarchical construct has remained more contentious with suggestions of insufficient evidence reliably supporting this hypothesis (Yeung, Chui, Lau, McInerney, Russell-Bowie et al, 2000). However, acceptance of a differentiated model of self-concept has resulted in increasing fragmentation of research.

At the simplest level, self-concept may operationally be seen as individual perception of the self and one's own attributes, skills and knowledge. For the purpose of this review, self-concept is considered to be the beliefs and evaluations of the self in a given domain, a view congruent with Burns' (1982) definition. Importantly, self-concept must be viewed as a subjective construct and not an indicator of a 'real' self.

1.1.2 Construction of self-concept

Contrasting views on the formative process of self-concept exist. It is however generally accepted (e.g. Epstein, 1973; Mboya, 1996) that self-concept is nested within social contexts and interactions, although theories vary in the importance attached to individual phenomenological interpretation. The symbolic-interactionist perspective (Cooley, 1902; Mead, 1934) proposes the perceived views of others i.e. 'the looking glass self' (Cooley, 1902; Franks & Gecas, 1990) causally determine self-concept. In contrast, social comparison theory (Festinger, 1954) suggests comparisons an individual makes between their own attributes, beliefs and attainments and those of their immediate reference group will provide the subjective basis for creating and shaping self-concept. The emphasis on subjective-evaluative processes contributing to self-concept is congruent with the humanistic proposal that in understanding self-concept the individual's subjective view of the world is more important than objective reality. Perceptions from the external world provide the basic ingredients from which self-concept is maintained (Burns, 1979). As a result of changing experiences and continuous assimilation of new perspectives and interpretations of perceptions, self-concept is therefore considered neither a stable concept (Markus & Wurf, 1987; Onorato & Turner, 2004; Rogers, 1951), nor one that develops in sequential manner, but is instead a fluid and dynamic construct.

1.1.3 Importance of social context

The theories presented indicate social context and the role of others as integral in understanding self-concept. Shavelson et al (1976) highlight the importance of environmental reinforcements and the role of significant others such as parents, peers and teachers (Burnett, 1999; Demaray, Malecki, Rueger, Brown & Summers, 2009; Meeus, Oosterwegel & Vollebergh, 2002) in forming and shaping self-concept. Over time, social relations and an evaluation of them in relation to the self, provide the individual with views of their behaviours, successes and failures, leading to an internalised self-representation. However, from a situational perspective (Brittain, 1968), in some contexts particular feedback and environmental factors may be of greater influence than others

e.g. in the educational setting, the impact of teachers and peers, may be of greater relevance to self-concept than parents (Meeus et al, 2002).

1.1.4 Adolescent self-concept

It is premised that the greatest exploration and sense of self develops during the period of adolescence; consequently much of the literature focuses on this period. This perspective is largely the result of Erikson's (1950; 1968) assertion that adolescence (between 13-19 years) signified a transitory period of personal crisis of self. As a result of Erikson's work, adolescence is often regarded as a socially sanctioned time of exploration of ideals and views necessary to establishing stable self-concept in preparation for adulthood. At this time, the identifications of earlier childhood will be re-shaped or discarded to resolve confusion and fragmentation about the self (Good & Adams, 2008), and individuals move towards creation of a stable and positive self-concept to support the transition to adulthood. Regardless of whether a symbolic-interactionist or social comparison perspective is maintained, it is proposed that formation of self-concept requires a degree of metacognitive and metaperceptive skills for reflection and evaluation which may not emerge until adolescence (Byrnes, 2003).

As the lives of adolescents are arguably primarily embedded in the home and educational environments, it seems reasonable that school will be of significant psychological importance and salience in shaping self-concept. Furthermore, progression through adolescence signifies a transitional period when individuals are proposed to experience greater separation from parents (Grotevant & Cooper, 1986), leading to school social context gaining greater psychological significance.

1.1.5 The importance of self-concept in education

Self-concept is suggested to be closely linked to academic attainment with low self-concept related to academic failure (e.g. see Shavelson et al, 1976) and success increasing an individual's self-concept. Self-concept may therefore be

viewed as a dynamic function of school achievement (Enam, 2006), with debate as to the top-down or bottom-up directionality of this association. Alongside evidence that self-concept impacts on areas such as motivation and effort (e.g. Burns, 1979; Skaalvik, 1997), this highlights self-concept as having significant relevance within educational psychology. It is therefore an area in which greater understanding and development is required.

1.1.6 This review

Despite identification in the literature of the importance of contextual factors, this is an area of self-concept research lacking sufficient acknowledgement; as Lannegrand-Willems and Bosma (2006) identify, there is scant direct empirical exploration of the importance of the educational context on the formation and validation of self. If self-concept is a critical component of cognitive and social development, it is imperative to develop understanding of self-concept creation and its dynamic interaction with primary environments such as the school. This review therefore aims to examine the evidence available in considering the extent to which the learning environment impacts on self-concept in adolescents. For the purpose of this review, adolescents are considered to be secondary school-aged and 'learning environment' refers to any factors or practices an individual interacts with within school.

1.2 Method

1.2.1 Systematic review stages

This review follows the systematic method described by Pettigrew and Roberts (2006), summarised below.

1. Clearly define the review question
2. Determine the types of studies needed to answer the question
3. Carry out a comprehensive literature search
4. Screen studies using the inclusion criteria
5. Describe the studies to 'map' the field and critically appraise them for quality and relevance
6. Synthesise studies' findings
7. Communicate outcomes of the review

Table 1.1: Systematic review stages

1.2.2 Initial database search

An exhaustive search of electronic databases was conducted using the following search terms:

adolescen*, teenage*, secondary*, high school*
school, education*
context, environment
self-concept

Table 1.2: Database search terms

The following electronic databases were searched between 22 July and 5 September 2009: PsychINFO, ERIC (Educational Resource Index and Abstracts), Web of Knowledge, CSA Illumina, Informaworld, Science Direct, Scopus and Swetswise. Additional hand searches were conducted for journals deemed as relevant to the review: Journal of Adolescence, Journal of Early Adolescence and Journal of Research on Adolescence. Where possible, the key term search was limited to Abstract only as this would likely lead to identification of the most relevant articles. Due to consideration that electronic databases vary in the boundaries of their search period, the search was restricted to a period of thirty years i.e. from 1979 to 2009.

Initial screening of all study and article titles identified by the database searches was conducted to identify those unrelated to the review focus. In order to refine the identified studies and determine those to be included in the review, abstracts were read and relevance criteria set to screen the remaining studies:

Participants – students aged 11-18 years.

Settings – secondary aged educational setting; any country.

Study design – study explicitly states consideration of impact of the educational environment or factors within the educational context on self-concept as a focus; studies focusing solely on interaction between individual academic achievement and self-concept were excluded. Qualitative and quantitative studies were included; single case studies were excluded.

Language – studies in English.

Publication – studies were published / had been accepted for publication.

Time – only studies within the last thirty years were included.

1.2.3 Further refining studies selected for review

To further refine the studies, additional criteria were applied.

Participants – studies which incorporated a mix of ages (e.g. 5-14 years) were excluded; studies inexact in ages of students e.g. 'mostly 14 to 18 years' were excluded.

Settings – studies containing students in university settings were excluded.

Study design:

- Studies focusing on a range of factors e.g. the impact of parents, peer group and school were excluded unless factors were isolated and those relevant to this review could be clearly identified.
- Studies focusing on the impact of ‘peers’ but made no distinction between those within and outside of school were also excluded.
- Studies using the concept of self-esteem as a general measure of self-concept were excluded.
- Studies must consider self-concept from the perspective of the individual, studies estimating self-concept based on a third person perspective e.g. parent or teacher, were not considered relevant.
- Articles were required to include empirical research; commentaries and reviews were excluded.

At this stage, citation searches were conducted based on reference lists of relevant selected studies to identify any further studies outside the parameters of the electronic search.

1.2.4 Developing an in-depth description of relevant studies

Following the multi-stage screening process, 10 articles met criteria for inclusion in the review. These studies were analysed to provide overviews of the following information:

Participants: number, age;

Study context: educational context and country;

Independent measure: the focus of comparison and study e.g. impact of ability grouping or specialist educational contexts;

Dependent measure: domain of self-concept affected;

Method of data collection: tools used to collect data for analysis;

Findings: As many studies reported findings on factors considered irrelevant to this review, only relevant findings are summarised. Specific statistics are not included in the summary.

1.2.5 Weight of evidence

Studies were analysed to determine the quality of evidence and the relevance of evidence to this review, based on the Evidence for Policy and Practice Information (EPPI) Centre weight of evidence guidance. (Details of stages in applying a weight of evidence judgement are presented in Appendix A)

It is acknowledged that despite adherence to EPPI-Centre guidance, weight of evidence rating is a subjective process and open to influence from individual bias and interpretation.

(Weight of evidence presented in Table 1.3; summary of studies presented in Table 1.4).

1.2.6 Effect Sizes

Effect sizes are increasingly regarded as the standard benchmark measure in research, with judgements regarding significance based on Cohen's (1988) defined benchmarks: an effect size is small if near 0.2, medium if near 0.5, and large if near or larger than 0.8. Effect size measurements were included in some studies; for others, effect size was calculated using the Effect Size Calculator available online through the Centre for Evaluation and Monitoring (CEM centre) based at Durham University. Where the CEM Centre calculator was used, confidence intervals are presented to allow more accurate interpretation of effect. For some studies insufficient information was available to calculate effect size.

Study	A Soundness of study in terms of research question	B Appropriate design and analysis for review question	C Relevance of focus to review question	D Overall weight in relation to review question
Liu, Wang and Parkins (2005)	Medium	Medium	Medium	Medium
Liu and Wang (2008)	Medium / low	Medium	Medium	Medium
Lalkhen and Norwich (1990)	Low	Medium / low	Medium / low	Medium / low
Ireson, Hallam and Plewis (2001)	Medium	Medium	Medium	Medium
Marsh and Hau (2003)	Medium / high	Medium	Medium	Medium
Zeidner and Schleyer (1999)	Medium / high	Medium / high	Medium / high	Medium / high
Ireson and Hallam (2009)	Medium	Medium	Medium	Medium
Trautwein, Ludtke, Koller and Baumertl (2006)	Medium / low	Medium / low	Medium / low	Medium / low
Marsh, Koller and Baumert (2001)	Medium	Medium	Medium	Medium
Hallam and Deathe (2002)	Medium	Medium / low	Medium / low	Medium / low

Table 1.3: Weight of evidence

Study	Participants	Context and country	Independent measure	Dependent measure	Method of data collection	Findings	Weight of Evidence
Ireson et al (2001)	3199 Yr 9 pupils across 45 schools	Secondary school; England	Level of setting in school (set, partially set, mixed ability) Ability grouping	<ul style="list-style-type: none"> Academic sc* General school sc * English sc * Maths sc * Science sc * 	4 subscales of Self-Description Questionnaire (SDQ-II); self report questionnaire. Created subscale for science self-concept	<p>General school self-concept higher in partially set than mixed ability</p> <p>General school self-concept higher in mixed ability than set schools</p> <p>Ability grouping leads to significantly lower self-concept in English sc of higher attaining pupils</p> <p>No significant effects of ability grouping on maths and science self-concept</p>	Medium
Zeidner and Schleyer (1999)	743 gifted adolescents, age 12-15 yrs	Junior high school; Israel	Specialist setting vs non-specialist setting for giftedness	<ul style="list-style-type: none"> Academic sc Social sc 	Adapted form of Multidimensional self-concept scale;	<p>Special classes lower mean academic self-concept, higher social self-concept than regular classes</p> <p>Educational context has significant effect on academic and social self-concept combined</p> <p>Context had significant effect on academic self-concept</p> <p>Sex, but not context significant effect on social self concept</p>	Medium / high
Marsh and Hau (2003)	103,558 15yrs across 3,851 schools	Secondary educational setting across 26 countries	School average achievement	<ul style="list-style-type: none"> Academic sc 	Academic self-concept items from SDQ-II	<p>School-average achievement has negative effect on academic self-concept</p> <p>Individual student achievement has positive effect on academic self-concept</p>	Medium
Liu and Wang (2008)	495 students, 1 st yr of secondary education	Secondary school; Singapore	Ability grouping; home / classroom environment	Academic sc (and relation to: perceived classroom climate, relations with teachers, relations with peers, teacher expectations)	Adapted self report questionnaires	<p>Significant correlations between academic self-concept and all factors (perceived classroom climate, relationships with teachers, relationships with peers, teacher expectations) for both higher and lower stream students.</p> <p>Perceived classroom climate significant predictor of academic sc for both higher and lower streams.</p> <p>Impact of perceived classroom climate reduces over time; reduces more quickly for higher stream students</p>	Medium

Trautwein et al (2006)	5648 students, age 12-13yrs	Secondary school; Germany	School environment (meritocratic v ego protective)	Domain specific self-concepts: <ul style="list-style-type: none"> • German sc • Maths sc; Interaction with self-esteem	Self report items for domain specific self-concepts Short version Rosenberg self-esteem scale	<i>Meritocratic environments:</i> Initial interaction of self-concept and grades then indications of bottom up effects of achievement on maths self-concept <i>Ego-protective environments:</i> Indications of top down effects of self-esteem on maths self-concept Interaction of German grades and self-concept demonstrate top down and bottom up effects in both meritocratic and ego protective environments	Medium / low
Lalkhen and Norwich (1990)	39 pupils with physical impairments age 11-15yrs	Secondary comps, special school; special unit attached to mainstream school, UK	Setting (integrated, partially integrated and specialist settings)	<ul style="list-style-type: none"> • Physical sc • Social sc • Cognitive sc • General sc • Salient sc • Self-distinctiveness • Self-continuity 	Harter Perceived Competence scale for children Interviews for salient self-concept, self-continuity and self-distinctiveness	Significant difference in mean rating across domains of self-concept. No significant difference in self-concept rating between settings. Interview data showed significant difference in the salience of physical self-concept between settings.	Medium / Low
Marsh et al (2001)	2778 students, 7 th grade, mean age 13.4 yrs	Secondary setting; Germany	Selective academic grouping	<ul style="list-style-type: none"> • Maths sc 	Self-report questionnaire; Longitudinal design (1 year)	Higher class-average math achievement has a negative effect on maths self-concept ('Big Fish Little Pond Effect'). Impact was initially greater for students with previous experience of selective grouping; after 1 yr, no difference in impact of class average-achievement between groups. Students from environment where social comparison was encouraged (East Germany) had lower maths self-concept.	Medium

Liu et al (2005)	495 students, 13yrs	Secondary school; Singapore	Ability group streaming	<ul style="list-style-type: none"> Academic sc 	Self-constructed ASC (academic self-concept) scale; self-report	<p>Significant difference in academic self-concept between high and low stream over time</p> <p>Higher ability had higher academic self-concept immediately after streaming but lower self-concept after 1 yr</p>	Medium
Ireson and Hallam (2009)	1687 pupils, 14-15 yrs	Secondary school; England	Ability grouping	<ul style="list-style-type: none"> Academic sc General school sc English sc Maths sc Science sc 	4 subscales of Self-Description Questionnaire (SDQ-II); self report questionnaire. Created subscale for science self-concept	<p>Significant difference in academic self-concept between school types: students in set schools had highest academic self-concepts and students in mixed ability had lowest</p> <p>Significant effects of school type on general self-concept – students in set schools higher general self-concept than mixed ability schools</p> <p>Science self-concept related to school type – students in set schools had higher self-concept than students in part set</p> <p>No significant difference between school type for English, Maths and general self-concept.</p> <p>Number of years in ability group had no significant effect on self-concept in any subject</p>	Medium
Hallam and Deathe (2002)	234 students, Yrs 7-10	Secondary school; England	Ability grouping	<ul style="list-style-type: none"> General sc General school concept Maths sc 	Subscales of Self-Description Questionnaire (SDQ-II); self report questionnaire.	<p>Mean scores for self-concept in each domain increased from Yr 7 – 9 and decreased in Yr 10.</p> <p>Generally self-concept declined in line with the ability group in which students were placed.</p> <p>School self-concept initially highest in highest ability groups, but over time, middle sets had highest school self-concept</p>	Medium / low

Table 1.4: Summary of included studies

*sc = self-concept

1.3 Results

1.3.1 Synthesis of results

To support synthesis of findings across studies, findings were combined under common outcomes, with associated effect sizes.

Outcome variable	Study	Comparison	Significance?	Effect Size (effect size; 95% confidence intervals)
General self-concept	Ireson et al (2001)	Set vs mixed ability	Y	Medium (0.46)
		Part set vs mixed ability	Y	Large (-1.40)
	Lalkhen and Norwich (1990)	Separate vs partially integrated	Y	Medium (-0.41; -1.26 to 0.47)
		Separate vs fully integrated	N	Small (-0.11; -0.88 to 0.67)
	Ireson and Hallam (2009)	Set vs mixed ability	N	NP
		Set vs part set	N	NP
	Hallam and Deathe (2002)	Self-concept across year groups	Y	NP
		Across ability groups		
		Yr7	N	NP
		Yr8	Y	NP
		Yr9	Y	NP
Yr10	Y	NP		
Academic self-concept	Marsh and Hau (2003)	Impact of school average achievement	Y	Small (-.206)
	Zeidner and Schleyer (1999)	Special gifted class vs regular class	Y	Large (-1.00)
	Liu et al (2005)	High ability stream over time	Y	Large (-1.08; -1.24 to -0.92)
		Low ability stream over time	Y	Medium (-0.63; -0.81 to -0.45)
		High vs low ability streams over time	N	Small (Between -0.18 and 0.22)

	Liu and Wang (2008)	Relationship perceived home / school environment and self-concept	Y	All R > 0.32
	Ireson and Hallam (2009)	Set vs mixed ability	Y	Large (2.05)
		Set vs part set	N	NP
Social self-concept	Zeidner and Schleyer (1999)	Special gifted class vs regular class	N	Small (.09)
	Lalkhen and Norwich (1990)	Separate vs partially integrated	Y	Medium (0.58; -0.32 to 1.43)
		Separate vs fully integrated	N	Small (0.10; -0.68 to 0.87)
Cognitive self-concept	Lalkhen and Norwich (1990)	Separate vs partially integrated	Y	Medium (0.43; -1.27 to 0.46)
		Separate vs fully integrated	N	Small (-0.02; -0.79, 0.76)
Physical self-concept	Lalkhen and Norwich (1990)	Separate vs partially integrated	Y	Medium (-0.47; -1.32 to 0.41)
		Separate vs fully integrated	Y	Large (-0.74; -1.52 to 0.07)
Domain specific self-concept (English)	Ireson et al (2001)	Level of ability setting	Y	Small (-0.20)
	Ireson and Hallam (2009)	Amount of ability setting experienced	N	NP
Domain specific self-concept (Maths)	Ireson et al (2001)	Level of ability setting	N	NP
	Trautwein et al (2006)	Relationship between achievement, self-concept and self-esteem in meritocratic and egocentric environments.	Y	NP
	Ireson and Hallam (2009)	Amount of ability setting experienced	N	NP

	Marsh et al (2001)	Impact of class average achievement	Y	Small (-0.18 & -0.19)
		Experience vs no experience of ability streaming	Y	Small (-0.11)
	Hallam and Deathe (2002)	Self-concept across year groups	Y	NP
		Across ability groups		
		Yr7	N	NP
		Yr8	N	NP
		Yr9	Y	NP
		Yr10	Y	NP
Domain specific self-concept (science)	Ireson et al (2001)	Level of ability setting	N	NP
	Ireson and Hallam (2009)	Amount of ability setting experienced	N	NP
Domain specific self-concept (German)	Trautwein et al (2006)	Relationship between achievement, self-concept and self-esteem	Y	NP

(NP = not possible to calculate)

Table 1.5: Results according to outcome

Taken in synthesis the evidence suggests that practices within adolescents' educational environment may have significant impact on self-concept. More specifically, it suggests practices such as ability grouping may result in adverse changes in general self-concept and academic self-concept, but differentially affects subject specific self-concepts. However, despite the focus all the studies place on self-concept, a number of studies (Ireson et al, 2001, Ireson & Hallam, 2009; Marsh & Hau, 2003; Zeidner & Schleyer, 1999) fail to include any operational definition of self-concept or provide insufficient definition. This represents a considerable barrier to synthesising findings and calls into question whether outcomes presented in Table 1.5 are conceptually the same across studies.

1.3.2 Domains of Self-concept

With findings that educational settings and practices may differentially impact on specific domains of self-concept, these studies appear to support proposals of its multi-dimensional structure. It is, however, noted that the majority of studies focus solely on academic self-concept or in specific academic domains e.g. English, Maths, Science. When taken together, evidence suggests practices such as ability grouping have adverse effect on academic self-concept. Reduction in self-concept in line with increased achievement in the educational environment forming the individual's frame of reference is common across the findings presented in this review. This is labelled by Marsh (1984) as 'Big Fish Little Pond Effect.' Furthermore, this appears to hold for both mainstream students and students within 'gifted' education programmes.

Although the majority of findings support the conclusion that higher ability groups experience greater negative effect on self-concept, this is not conclusive. Both Ireson and Hallam (2009) and Ireson et al (2001) concluded that students in the most stratified settings e.g. where setting / ability grouping was most prevalent, demonstrated the lowest self-concept. However, while Ireson et al (2001) report that the most positive self-concept being found in schools implementing a partial approach to ability grouping, Ireson and Hallam (2009) concluded self-concept was highest in schools with the least ability grouping. This is further contrasted with Hallam and Deathe's (2002) indication that pupils in higher sets demonstrated higher self-concept. Overall conclusion is therefore unclear. Results further highlight that the impact on subject specific domains of self-concept is not universal, suggesting that the impact of factors such as ability grouping is not a simple linear process, but is differentially impacted and mediated by the dynamic interaction between factors within the learning environment and the individual.

The non-significant findings on the impact of integration practices on social, cognitive and physical self-concept, are based on one small study (Lalkhen and Norwich, 1990) with a number of operational and conceptual limitations. The evidence on other domains of self-concept is therefore extremely limited and it is not possible to draw conclusions on the impact of the learning environment on these.

1.3.3 Self-concept over time

Although five studies utilised a cross-sectional experimental design, Trautwein et al (2006), Liu et al (2005), Liu and Wang (2008), Ireson and Hallam (2009) and Marsh et al (2001) employed longitudinal design methods which would enable exploration of changes in self-concept over time.

The evidence suggests that practices such as ability grouping and streaming have an immediate adverse effect on self-concept as demonstrated by Marsh et al's (2001), Hallam and Deathe's (2002) and Liu et al's (2005) studies. These suggest that when young people have no previous experience of ability grouping, its introduction results in initial reduction in self-concept for both high- and low-ability streams. However, when the question of whether the observed decline has a short-term temporary effect or signifies an enduring decline is considered, there are contrasting findings. For Ireson and Hallam (2009), length of time that students experienced ability setting was not significantly related to domain specific self-concept; this is congruent with Marsh et al's (2001) assertion that only the initial impact of ability grouping creates a statistically significant effect. In contrast, Hallam and Deathe (2002) charted an initial rise and subsequent decline in self-concept. Liu et al (2005) and Liu and Wang (2008) highlight that despite an association between the classroom environment and academic self-concept, the extent of impact and strength of association differed between high- and low-ability streams.

The findings therefore provide an indistinct and varied picture, with no consistent evidence on whether the adverse effects are short-lived or more enduring. It is unclear whether changes in self-concept over time are caused by factors within the environment, or are impacted by factors external to school, or personal differences related to maturation.

1.3.4 Effect size of outcomes

Despite consistent findings that practices in the learning environment, such as subject specific ability grouping and streaming, create an adverse effect on academic self-concept and other domains, when results are reduced to effect sizes a number of issues are raised. Firstly, some effect sizes being reported

are considered small based on Cohen's (1988) benchmarks; Marsh et al's (2001) findings of the effect of ability grouping over time of -0.18, -0.19 and -0.19 can conceptually be described as 'small' effects, and therefore not as important as the study interprets.

Secondly, despite views that effect sizes are important, this proposal may be problematic. The nomothetic use of effect sizes does not allow consideration of differential impact on individuals, instead assuming universal effect.

Additionally, studies reporting effect sizes fail to include associated confidence intervals. Without this information, interpretation of the effect size is incomplete and may lead to inconclusive results; for example the effect sizes calculated for the Lalkhen and Norwich (1990) study using the CEM Centre Effect Size Calculator show that despite initial interpretation of effect sizes in a number of cases as being 'large,' when the confidence interval is considered the effect size is less conclusive. Therefore, without confidence intervals for all effect sizes reported, results should be interpreted with caution.

Finally, there is question about the validity of reducing a dynamic and subjective construct to linear measurements for the purpose of comparison, calling into question the legitimacy attached to interpretations of effect size. Even if self-concept can be validly reduced to quantitative measure, the relevance of effect size remains. If it is important to maintain positive self-concept, then any adverse change is important regardless of effect size. Perhaps further understanding of the wider impact of self-concept on psychological well-being and individual outcomes is required before the 'significance' of effect size is judged.

1.3.5 Understanding the process of effect

Effect sizes and correlational data restrict a compelling case regarding association between learning environments and self-concept; a predictive relationship does not equate to a causal relationship. Despite findings indicating a *possible* relationship between self-concept and factors / practices within the school context, there is inadequate recognition that a myriad of distal and

proximal factors (e.g. relationships with peers and teachers, factors from home) may be interacting to create the effect measured.

Whilst Liu and Wang's (2008) findings of significant correlations between self-concept and classroom factors (e.g. academic support, classroom climate, relationships with teachers and teachers' expectations) may begin to guide us towards specific characteristics of the learning environment mediating self-concept, correlation does not inform causation. It is acknowledged that, while studies such as Ireson and Hallam (2009) and Zeidner and Schleyer (1999) draw on multi-level modelling to support analysis and examination of the interaction of factors such as gender and socio-economic background, the results again simply support acceptance or rejection of a relationship to self-concept.

1.3.6 Social comparison theory

Although none of the studies explicitly examine the process of social comparison theory (Festinger, 1954), it is offered as explanation of findings in a number of studies (Ireson & Hallam, 2009; Ireson et al, 2001; Lalkhen & Norwich, 1990; Liu et al, 2005; Marsh et al, 2001; Marsh & Hau, 2003; Zeidner & Schleyer, 1999). When considered together, findings on the impact of ability grouping and also those of Lalkhen and Norwich (1990) on the impact of integration on children with physical impairments, evidence does appear to support social comparison theory and its relevance to self-concept. However, these studies draw conclusions based on *assumptions* about social comparison. Through the use of self-report measures it is only possible to assume that comparisons are occurring within the immediate learning environment rather than directly exploring the process. None of the included studies offer alternative considerations, for example, students placed in higher ability sets may be subject to / perceive increased parental pressure to maintain achievement – internalisation may result in observed reduction in self-concept. Furthermore, despite speculation on the importance of social comparison, none of the studies consider how salient and predominant the social comparison cues are, how accessible social comparison information is (Dai and Rinn, 2008), or

whether the social comparison process is imposed by the environment or self-engendered by individuals.

1.3.7 Issues relating to methodology and experimental design

To determine the implications findings may hold, consideration must be given to validity and generalisability e.g. extent to which findings may be true of the wider student population.

Sample

Studies demonstrate considerable range in number of participants. The sample size used may raise questions of generalisability, an issue specifically relevant to Lalkhen and Norwich's (1990) study which is limited by small sample size – a limitation noted by the authors themselves. In contrast, the large data set of Marsh and Hau (2003) makes it difficult to develop an understanding regarding specific contexts in which effect is more / less likely to occur. This study therefore arguably provides information indiscriminate of valuable contextual information.

Experimental design

Five studies included longitudinal design, varying between time-sampling measurements taken over the course of one year (Marsh et al, 2001; Trautwein et al, 2006), measures at start and end of two years (Ireson and Hallam, 2009), and two studies were part of longitudinal studies with measures at the end of three consecutive academic years (Liu et al, 2005; Liu and Wang, 2008). Whilst most of these included the exploration of self-concept over time, the Ireson and Hallam (2009) study offered no indication of possible changes over the two year period.

Study design and sampling methodology are important in examining validity and verifiability of results. Four studies used stratified sampling methods (Ireson et al, 2001; Ireson and Hallam, 2009; Marsh et al, 2001, Trautwein et al, 2006),

with two other studies drawing on randomly selected classes in specifically selected schools (Liu et al, 2005; Liu and Wang, 2008). For two studies (Lalkhen and Norwich, 1990; Zeidner and Schleyer, 1999), no clarification is presented on selection process for schools, leaving open a question of bias. The remaining study (Marsh and Hau, 2003) used an opportunistic sample created through data collection for a larger national database; no information is presented about how students were selected for inclusion in the database. Although stratified sampling allows greater opportunities for the selection of a sample representative of the larger population being considered, without information on the strata used to support the sampling method, it is difficult to comment on sample generalisability.

Comparison of the information in the Ireson et al (2001) and Ireson and Hallam (2009) studies demonstrate that the same sample was used in each study. The latter would therefore appear to be a two year follow up to the former. In addition, although the focus and analysis of Liu et al's (2005) Liu and Wang's (2008) studies were different, they draw on measures from the same sample set. It is possibly disingenuous that these studies do not make the link more explicit. As a result, the studies presented in this review do not represent ten unique samples, but rather demonstrates ten analyses and findings based on eight sample sets.

Data collection and analysis

All studies primarily draw on self-report questionnaires for data-collection. Whilst self-report methods are wholly appropriate and valid to explore self-concept, self-concept research is hampered by the inherent subjectivity of the construct and may be heavily influenced by recency effects of experiences and encounters within and outside of the learning environment (Marsh & Parker, 1984).

Whilst tools such as the Self-Description Questionnaire (SDQ; Marsh, 1990) purportedly allow quantitative comparisons between individuals, validity may be impacted by self-enhancement bias and possibility of deliberate mis-

representation. However, such tools assume application to all children in the same unilateral way. Furthermore, despite proposals that self-concept is a dynamic construct, self-report inventories constrain and interpret responses in a static manner, placing responses on a linear low to high scale. Whilst such approaches allow pragmatic exploration of a complex construct, they eliminate the possibility of idiosyncratic responses that allow greater understanding of naturalistic differences existing between individuals; assumption of universality neglects the individual phenomenological aspect of self-concept entirely. Self-concept lies in the heart of the individual phenomenal field and must be studied from the standpoint of the perceiving individual (Burns, 1979); it appears unlikely this can be achieved through static quantitative methods. Lalkhen and Norwich (1990) are acknowledged as the only study to draw on interview to gain more in-depth and idiosyncratic understanding of students' experiences and self-concepts.

Issues of study context

The range of countries drawn on, and differences likely to exist between these, raises concern that although self-concept may be a universal construct, findings may not generalise across countries and cultures. Both Marsh et al (2001) and Trautwein et al's (2006) studies were based in German schools following reunification of the East and West - contextual information explicit in both studies. However, neither study appears to give consideration to significant societal and cultural shifts happening in the country at the time. The findings are of interest in considering environmental changes and its potential impact on self-concept, but findings may therefore be culturally and temporally specific.

Furthermore, attention is drawn to consider that although six studies are based in Western countries, three are based in Eastern countries which may be characterised by more collective cultures than the individualised cultures and values of the West. Liu et al (2005) highlight that findings from Western cultures are often difficult to generalise to Asian contexts due to wider cultural differences and more specific differences in educational practices; the concept of self-concept may therefore differ across cultures. Whilst Marsh and Hau's

(2003) cross-cultural study may appear most relevant in considering generalisability of findings, this study is not without criticism in its assumption of universal and undifferentiated impact.

Therefore despite findings suggesting a relationship between self-concept and factors and strategies being employed in the learning environment, caution must be exercised in regarding findings as explanations of causation, with a need to be critical of the universal assumptions made.

1.4 Conclusions and recommendations

1.4.1 Summary

This review suggests that adolescents' educational environment may have a significant impact on self-concept. More specifically, it suggests practices such as ability grouping may influence adverse changes in general self-concept and academic self-concept, but differentially affects subject specific self-concepts. The evidence on social, cognitive and physical self-concept is extremely limited; drawing conclusions on such restricted evidence is unwarranted. Given the variability in specific findings and the lack of conclusions drawn regarding the 'preferable' setting in facilitating the highest level of self-concept, the effect is unlikely to be a universally linear process. Instead, it is a process resulting in differential impact, mediated by dynamic interaction between factors within and outwith the learning environment and the individual. Mediating factors may occur at the level of whole school ethos (Ireson & Hallam, 2001) or through classroom-specific factors (such as MacIntyre & Ireson, 2002). However, the included studies provide limited exploration of mediating factors, beyond speculation of the relevance of gender (e.g. Ireson et al, 2001; Zeidner & Schleyer, 1999), the impact of previously measured factors such as past individual achievement (e.g. Ireson & Hallam, 2009), and past self-concept (Ireson & Hallam, 2009). Although Liu and Wang (2008) identify specific factors within the classroom, correlational data alone is insufficient to guide further understanding of the process.

Due to a dominant focus on self-concept measurement with little explanation of process, there is therefore currently an incomplete picture. Despite the suggestion that in academic situations academic self-concept is of greatest salience (Marsh & Hau, 2003), with the exception of Zeidner and Schleyer (1999) no other studies examining ability grouping considered impact on other domains e.g. social self-concept or cognitive-self-concept. It appears an ungrounded assumption that only academic self-concept was of valued exploration as there may be potentially positive impacts on social self-concept of being grouped with 'like minded' peers.

Although it may be assumed that students placed in lower sets or segregated in specialist provision would demonstrate lowest self-concept, this is not borne out in findings. The picture is unclear and suggests that students placed in higher ability sets and individuals with 'impairments' integrated into mainstream settings experience adverse impact on self-concept. The findings may imply a 'trade off' effect between an environment 'better' suited academically to individual needs and the resulting impact on self-concept (Kulik & Kulik, 1982; Zeidner & Schleyer, 1999). There is, therefore, a need to evaluate existing assumptions in educational practice on what constitutes the most appropriate environment for student placement; this may have implications for strategies employed, including ability grouping and more widely, inclusion.

1.4.2 Limitations of this review

It is acknowledged that this review has a number of limitations. Firstly, by being conducted by a single reviewer, it lacks the verification process that multiple reviewers would offer; this has implications for decision making in identifying and coding key findings within studies and determining the weight of evidence of studies. Additionally, the increasing use of electronic databases as the primary means of searching and identifying relevant studies may have limitations. Despite offering the facility to search a greater number of studies than is possible by hand, it is limited by the studies referenced within the database and the time period over which it is possible to search. Although journal hand searches and citation searches were used to expand the search parameters, further studies may exist that were not identified for inclusion in this study.

Finally, this review is subject to Rosenthal's (1979) 'file drawer problem' which highlights that studies which present significant findings are more likely to be accepted for journal publication, leading to a bias in the studies available for review. By excluding unpublished studies, this review may therefore be skewed towards studies providing evidence of significant findings.

1.4.3 Recommendations for further research

This review recommends further research to develop specific understanding of factors in the learning environment mediating self-concept. In doing this, however, there is a need for research to make explicit that it is individual perception and relativistic impressions of factors that result in differential impact rather than any absolute 'reality' of practices. In addition, further analysis of the causal path with exploration beyond relational data and analysis is required. This may require greater research at the idiographic level in order to explore the phenomenological subjectivity underpinning self-concept. Furthermore, if self-concept is bound in a process of social comparison, there is a need to further discern psychological reasons that motivate the individual to engage in such a potentially adverse process (Taylor, Wayment, & Carillo, 1996).

The dynamic nature of self-concept should be central to further research and development, with consideration afforded to exploring how social and cultural forces may interact with the educational environment, and their impact on conceptualisations of self-concept, as well as perceptions that individuals have of their environment and themselves. In order to develop clarity in the focus of future studies, researchers must be clear in their theoretical definition of self-concept and should give due consideration to the validity of the method of data collection.

Finally, there is a need to develop research into the interaction between self-concept and other dimensions of emotional well-being, and the long term effect of positive or negative self-concept – either at a general level or in domain specific areas.

1.4.4 Conclusion

This review concludes that practices within the educational environment such as streaming or ability grouping do impact on adolescent self-concept. At this stage, it is not possible to conclude the extent to which practices and factors in the wider educational environment impact on differing self-concept domains. This review recommends that practitioners are aware of the potential impact that practices may have on adolescent self-concept and the possibility that

practices assumed to support the creation of environments congruent with individual needs, may lead to adverse effects. It is suggested that the available evidence is potentially limited by its use of standardised methods to explore a construct that is created and exists at a phenomenological level. Whilst the phenomenological ontology of self-concept represents a challenge to researchers, without adequate consideration of the methodology of research, it will be impossible to fully understand the processes underpinning self-concept and the differential impact that is observed across individuals. Research that goes beyond the relationship between academic self-concept and ability grouping to examine the impact of further educational factors on other domains of self-concept will also provide a more detailed picture.

As Burns (1979) suggests, self-concept appears to be ubiquitous and integral to any learning situation, highlighting its importance as a construct for educational psychology. This review therefore suggests a need for educational psychology as a field to return attention to self-concept and to develop greater understanding of a construct which has potentially considerable implications for our professional domain.

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Appendix A

Weight of Evidence Judgements

This involves a four stage approach:

A – assesses the study and its methodological coherence in its own right. Can the study be trusted in answering the research question indicated in the study?

B – examines the appropriateness of research design and analysis for addressing the question, or sub-questions, of this specific systematic review.

C - examines the relevance of the particular focus of the study (including conceptual focus, context, sample and measures) for addressing the question or sub-questions of this specific systematic review.

D – brings together the ratings allocated for A, B and C to determine overall weight of evidence each study provides to answer the question of this review.

PART 2:

MOVING FROM SYSTEMATIC REVIEW TO EMPIRICAL RESEARCH

2.1 Introduction

In completing the systematic review on the impact of the learning environment on adolescent self-concept presented in Part 1, a number of issues were highlighted:

- The picture of the relationship between self-concept and factors / practices within the educational environment is indistinct and varied, making conclusions difficult;
- Research on self-concept is largely reliant on linear self-report measures. This may raise questions regarding the validity of measures being used and how they relate to individualised construct such as self-concept;
- Presented data largely correlational, suggesting a relationship between factors but does little to explore causation;
- Research focuses largely on the domain specific area of academic self-concept with little exploration of other areas such as social self-concept;
- Studies often fail to adequately explore the complex interaction of factors in the classroom environment e.g. specific behaviours of peers / teachers and tasks set.

These issues highlight the potential for further exploration into a number of areas of self-concept development. This document therefore considers one gap I have identified as needing exploration and explores issues in developing an appropriate research methodology. Whilst Part 1 was presented using the passive voice more traditionally associated with academic writing, this document and the following research write-up are presented in a more personal voice; this acknowledges my active role in the research process.

2.1.1 Developing a research focus

Given evidence that an individual's immediate environment has implications for self-concept, I was struck by what relevance this would have for students who are dual registered i.e. students attending both mainstream and segregated specialist settings. These represent two contrasting environments and could therefore have interesting implications for self-concept.

Exploration into the self-concept of individuals considered to have additional needs (i.e. requiring additional intervention and support) is limited, particularly for those considered to demonstrate more 'severe' level of needs. Wylie (1974) suggests that valid and reliable assessment of self-concept for those with 'learning difficulties' is fraught with difficulty (terms such as learning difficulties / disabilities are used here to reflect the language used in cited studies). However, Fox and Norwich (1992) argue that assessment is necessary in order to understand any association between social factors such as labels, stigmatisation (Kelly and Norwich, 2004; Norwich 2002) and internalised self-concept.

It has been suggested that students with learning difficulties placed within a mainstream setting demonstrate relatively lower academic self-concept than those in separate specialist provision (Chapman, 1988). Results have, however, proved largely inconsistent and inconclusive. If students placed in mainstream settings demonstrate lower self-concepts than those placed in separate provision, this raises an interesting question regarding students accessing dual provisions; an area currently lacking in any published studies. The learning environment in which a student is located seems to generate a myriad of factors impacting on individual self-concept; how does a student based in two learning environments make sense of these experiences and integrate these into their self-concept?

2.2 Refining methodology

Theoretical perspectives of self-concept, such as those deriving from symbolic-interactionism (Cooley, 1902; Mead, 1934) or social comparison theory (Festinger, 1954), emphasise its subjective nature. This suggests that self-concept is formed at the individual phenomenological level and attempts to explore self-concept should acknowledge this; I therefore believed qualitative research would allow greater insight into the complexity of individual experiences.

2.2.1 Epistemology and Methodology

The methodology I selected would not only need to be compatible with the research area, but also with my own epistemology. At this time, I maintain a critical realist perspective (Bhaskar, 1975). This asserts that a 'real' world exists and is there to be discovered, but that individuals make their own interpretations of it. This mirrors symbolic-interactionism's view of self-concept as internalisation of individual subjective interpretations of an external 'real' experience.

In considering methodologies, I was aware of a number of qualitative methodologies potentially compatible with my area of study, including grounded theory, interpretative phenomenological analysis (IPA), narrative analysis and discourse analysis. (Reasons for my rejection of possible methodologies are considered later).

In exploring these, I believed IPA was compatible with my critical realist epistemological perspective. Larkin, Watts and Clifton (2006), in considering IPA, state that 'what is real is not dependent on us, but the exact meaning and nature of reality is' (p. 107). This emphasises a central tenet of IPA - the idea that something 'real' exists, but interpretations will determine the individual meaning attached to it and the personal 'reality' constructed. This appears largely compatible with critical realist ontological assertions of the world. Whilst a realist position asserts that, within research, the data collected ought to provide information about how things really are within the world, a critical realist

perspective acknowledges that researchers may not have direct access to 'reality' (Willig, 2008). This enables acceptance that there will be multiple, subjective views of an 'objective' reality.

Although IPA seeks to capture the quality and depth of individual experiences, it accepts the impossibility of gaining direct access to objective views of the world. According to Smith (2008), IPA is underpinned by an assumption that there is a chain of connection between people's talk and their thinking and emotional state; there is however, realisation that this chain of connection is complicated and that there is difficulty in fully accessing cognitions about experience. This is comparable to the critical realist perspective on the difficulties encountered in accessing 'reality' and its acceptance of fallibility and the transitive nature of knowledge (Scott, 2007). Critical realism supposes that, by engaging in research, we are discovering something about reality that already exists outside of our research actions – what is uncovered is not a construction of the research process itself. Through exploring the use of language we are given an insight into discovering individual cognitions and interpretations, with an acceptance that this information is not intended to be objective or infallible.

2.2.2 IPA

Johnson, Burrows and Williamson (2004) emphasise a need to be guided by pragmatic theory in ensuring 'the choice of approach should be based upon the goals of the research' (p. 364). I believed that developing further understanding of how dual learning environments impact on individual self-concept required greater idiographic focus in order to explore the underpinning phenomenological subjectivity. I therefore selected IPA as being appropriate to the research matter as it aims to explore the lived experience of individuals and how they make sense of, and draw meaning from, their world (Smith, Flowers & Larkin, 2009). The use of IPA would enable construction of a rich and detailed picture of the phenomenon (dual registration) being explored by drawing on an idiographic, case by case approach (Lyons, 2007); IPA focuses on individual subjective reports rather than the formulation of objective accounts (Flowers, Hart & Marriott, 1999). Smith (2004) regarded IPA as being 'committed to the detailed

exploration of personal experience' (p. 50) underpinned by a person-in-context perspective (Smith et al, 2009); this makes IPA a relevant methodology.

IPA has developed acceptability in areas such as clinical psychology (e.g. Pearce, Clare & Pistrang, 2002; Todd, Simpson & Murray, 2010). As Johnson et al (2004) highlight, an approach which focuses on meaning (such as IPA) can usefully go beyond studies which emphasise prevalence or cause. In addition, Smith, Michie, Stephenson and Quarrell (2002) support the notion of qualitative research methodology being useful when the research is concerned with 'a novel domain' (p. 132); given the paucity of research on dual registration, IPA offered an approach with which to begin exploration.

2.2.3 Comparison with other qualitative methods

Approaches such as grounded theory, discourse analysis and narrative analysis were considered but rejected as being incompatible with the aims and subject of the proposed research.

Although similarities between grounded theory and IPA are acknowledged (Willig, 2008), the aims of these two approaches are divergent; whilst grounded theory seeks to draw on a larger sample in order to generate theory from the data (Payne, 2007) and establish claims for a broader population, IPA provides an in-depth examination of a small sample and does not attempt to offer generalisable theory. In addition, grounded theory was devised to focus on social processes in comparison to IPA's individual psychological focus. Willig (2008) notes the suggestion that grounded theory is better suited to sociological research questions; it was therefore rejected as an appropriate method to explore self-concept.

Discourse analysis (e.g. Potter & Wetherall, 1994) is considered to be 'concerned with how particular versions of reality are constructed, negotiated and deployed in conversation' (Willig, 2008, p. 108). As an approach, it is therefore less concerned with understanding a psychological phenomenon such as self-concept but rather the process of how language may be used to construct and give rise to something. This approach would therefore not be

concerned with exploration of experience at the individual interpretive level; due to its social constructionist orientation it did not offer a perspective compatible with the research aims.

With regard to narrative analysis, despite sharing IPA's validity as an approach with a small sample size, I believed that the aim of the study went beyond examination of the content (e.g. Crossley, 2000) and structures (e.g. Gergen & Gergen, 1988) of individual 'stories.' Smith et al (2009) suggest that narrative perspectives are more 'explicitly constructionist endeavours' (p. 197) and that when people make sense of their lives, they are doing more than constructing this based on culturally constructed meanings; such approaches do not take sufficient account of what is occurring at the individual level of interpretation. Similar to discourse analysis, the social constructionist perspective central to narrative analysis did not appear compatible with theoretical perspectives of self-concept or the research aims.

2.2.4 The role of the researcher

IPA tacitly acknowledges the researcher as an active participant in the research process and that they discover the products of the research with participants who are the focus of study. The outcomes of IPA research are therefore the products of a 'double hermeneutic;' they are formed through the researcher making sense of an individual's attempt to make sense of their experiences. Due to the researcher's active role of interpretation in the process, IPA does not claim to produce an objective and 'true' account of experience; instead it acknowledges the 'co-construction between participant and analyst' (Osborn & Smith, 1998, p. 67). As Osborn and Smith (1998) acknowledge, the researcher's role in creating the research outcomes is evident from the moment they engage in the research process; this is evident through the influence of individual research interests and knowledge of previous theory and research on the questions being asked in interviews, through to the themes that are tended to and emphasised in analysis. Whilst, this may be regarded as a limitation of IPA, Brocki and Wearden (2006) acknowledge its acceptance as part of the IPA process but highlight a need for transparency in any research write-up.

2.2.5 Personal reflexivity

Crotty (1996) suggests it is not possible for qualitative researchers to be totally objective because this is not humanly possible; this must therefore be explicitly acknowledged. Willig (2008) highlights the importance of a personally reflexive stance when engaging with IPA. Whilst the researcher's interpretation of meaning is central to IPA, Willig suggests a need to acknowledge and make explicit how the researcher is positioned in relation to participants and how individual values, beliefs and past experiences may impact on the researcher role and conceptual lens through which they view participant accounts. This need for personal reflexivity is further supported from a critical realist perspective which proposes that individual interpretation of something 'real' will be dependent upon individual history, culture and prior experience; I must therefore acknowledge the position I bring to this research.

I am currently in the final year of a doctorate in educational psychology. Previously, I have taught in both a mainstream primary school and a special school, where I was also a member of senior management. As a Trainee Educational Psychologist (TEP), I am professionally committed to the principle of inclusion and to supporting the diverse needs of children and young people I engage with. I believe adaptations should be made to create settings that best meet individual needs; I do however acknowledge the salience of my previous role within segregated, specialist provision in my own thinking on the subject. Prior to the completion of this study, I had no experience of dual registered pupils in any capacity.

As a teacher within a special school, I met parents for whom segregated provision represented a tension between meeting a high level of need versus possible stigmatisation. As a TEP, I frequently meet parents concerned about their child's needs in mainstream, but are reluctant to give up on the idea of inclusive education. In both situations, parents have commented that being able to have aspects of both settings might provide a 'best of both worlds' solution. I therefore bring to this research a perspective on inclusion and placement that has developed and shaped during my journey through both mainstream and special education and my current position as a TEP.

2.2.6 Validity of IPA approach with 'additional learning needs' sample

The need in IPA for 'rich data' in order to gain the in-depth exploration of experience desired, may lead to questioning the validity of this approach with children considered to have a high level of educational need.

In considering this issue, I draw attention to the work of William Labov (e.g. 1969), a prominent researcher of linguistics who sought to rebuke the deficit ideas dominant in socio-linguistics in the 1960s. Prior to Labov, a view existed that dialects such as African American Vernacular English (AAVE) represented deficient language use (e.g. Bereiter & Engelmann, 1966; Bernstein, 1971). The presence of syntactical structures, contractions and presentation of answers to questions in incomplete sentences, were considered as signs of linguistic incompetence; this was referred to as a restricted language code, contrasted with the elaborated codes of more 'proficient' English speakers (Bernstein, 1971). Through examination of structures and content of AAVE, Labov (1969) challenged the dominant deficit theory of language (Hamans, 2006) and concluded that it contained differences not inferiorities when compared to other forms of spoken English. Labov demonstrated that language which appears restricted on the surface is still logical and conveys complex ideas, successfully communicating the full force of opinion.

Suggestion exists within Bernstein's (1971) work that any 'cognitive deficit' results in restricted language codes; thus individuals experiencing additional learning needs would be assumed to have deficient language. However, in keeping with Labov's rejection of a deficient view, Flores, Tefft-Cousin and Diaz (1991) question the validity of making links between measures of cognitive assessment and deficient assumptions about language and further highlight the assumption that judgements of language proficiency can be comparatively ordered. They emphasise instead the need for a more liberal assumption of children as proficient language users who bring many experiences into the classroom and to reject any debilitating myths of deficits that 'render people voiceless and powerless' (Flores et al, 1991, p. 377). As Cuskelly (2005) highlights, for too long a pathological view has focused on what is wrong, deviant or deficient in individuals and has determined the who, what and how of research.

I therefore suggest that, in rejecting a deficit stance on language use and accepting Labov's (1969) view of difference not deviance and deficiency, alongside Flores et al's (1991) progressive assumptions of competence, there is no valid reason to reject IPA as an appropriate method for this study.

2.3 Designing the research method

2.3.1 Sample size

As an idiographic approach to research, Smith et al (2009) recommend that between four and ten interviews is appropriate for a professional doctorate; large data sets might result in the loss of 'potentially subtle inflections of meaning' (Collins & Nicolson, 2002, p. 626). Given that dual registration is not prevalent in the area in which I am located, the sample available for inclusion was likely to be relatively small. This guided me towards a target number of between six – eight participants.

The following criteria were used to identify potential participants. The young person would:

- Attend each of the two settings for a minimum of one day per week or equivalent e.g. two half day sessions;
- Be able to verbally express their experiences i.e. young people reliant on the use of Makaton signing or an alternative augmentative communication (AAC) device as primary means of communication were excluded.

I was placed in contact with the Head teacher of a special school who considered dual registration to be highly valuable in providing children with access to specialist teaching and resources, whilst enabling inclusion in their local mainstream school. Initial discussion highlighted that only ten students met the criteria for inclusion; this represented a viable sample for the research project. In discussion with my supervisor, it was agreed that, as the research did not aim to provide generalisable outcomes, but sought to generate thought on dual placement and self-concept, it could validly be based within one single school.

2.3.2 Semi-structured interviews

Smith and Osborn (2003) regard semi-structured interviews as the exemplary method for IPA as they allow depth of exploration. In developing an interview

framework, a number of over-arching themes of potential interest were identified. These included:

- Relationships within settings;
- Type / range of work engaged with;
- Perceived positive / negative aspects of a setting.

The interview framework was shaped by theoretical constructs identified through my engagement with the literature. As Brocki and Wearden (2006) identify, the researcher's role is consequently not passive but active from the outset – even before the analysis and interpretation process.

Whilst I was aware of a need to pilot and refine questions that may be used, this raised an issue in using students from the participating school. I was concerned that parents may be reluctant to give consent when resulting participation would not be directly included within the study. Piloting was therefore carried out by drawing on these themes and questions with two students with Statements of Special Educational Needs placed within two separate mainstream settings I support in my role as a TEP. These students were selected on the basis of opportunistic sampling. On both occasions I used the identified themes to inform questions being asked about the individual's experiences at school; this was done with the individual students in preparation for a Statutory Annual Review. This consequently gave the interviews clear purpose and ensured that additional parental consent was not required.

One issue I considered was the need to be more directive in the questions being asked than IPA would appear to recommend. I speculated that broad questions such as 'Tell me about your experiences at X School' may be difficult for students to interpret and respond to, consequently not leading to the richness of data that IPA seeks. I decided that in order to better access the experiences of these students, it may be necessary to be more direct in the questions being asked e.g. 'Can you tell me about the people in this school?' Given Smith and Eatough's (2007) assertion that IPA is not considered to be a prescriptive approach but as a set of flexible guidelines which can be adapted in light of individual research aims, I believed that as long as the possible impact

of framing questions in this way was acknowledged, this would not adversely affect the research outcomes.

2.3.3 Interview process

Based on a situational hypothesis which suggests that the immediate environment in which an interview is taking place would hold greatest salience to a student at a given time, I proposed to interview students in both settings. Consequently, each student would be interviewed twice with the intention that they would only be asked to talk / reflect on the context in which they were situated at that time.

Based on the assertion that the success of semi-structured interviewing depends on the rapport established between researcher and interviewee (Kvale, 1996), it was agreed to meet all students prior to participation. I therefore visited the specialist provision to introduce myself and to explain that I would come to talk to them at both schools attended. It was hoped that this introduction would reduce any anxieties and encourage participants to be more open and co-operative in interviews.

Interviews were planned to be completed firstly in the specialist setting for all participants, followed by the mainstream setting; parents were informed of all arrangements. As outlined in the information provided to parents, all interviews would be conducted on a 1:1 basis and recorded on a digital audio-recorder.

2.4 Ethical considerations

When engaging in any research, there are a number of ethical issues to be considered; this is arguably particularly true for research with young people, especially those considered to be vulnerable or powerless (e.g. Cuskelly, 2005; David, Tonkin, Powell & Anderson, 2005). Elmes, Kantowitz and Roediger (1995) note that ethical considerations should include:

- Informed consent;
- No participant deception;
- Right to withdraw;
- Debriefing; and
- Confidentiality

In addressing these issues, ethical approval was sought, and granted, through my supervising department as required by Newcastle University procedures.

As my research required a sample of young people attending specialist provision and had identified additional learning needs, the issue of informed consent was integral to planning. Ethical issues in research with vulnerable young people have received significant focus (Munro, Holmes & Ward, 2005; Thomas & O’Kane, 1998). Alongside parental consent, I believed the issue of student consent was also important; Munro et al (2005) highlight the importance of including young people themselves in decisions regarding participation. In the information provided to parents, they were therefore asked to explain the research to their son / daughter and gain consent that they were happy to talk about their experiences. Parents were asked to indicate on the consent form that this had occurred.

In order to address issues of informed consent and raising awareness of the right to withdraw, parents of potential participants were provided with written information about the aims and structure of the research. This explained the steps that would be taken to ensure anonymity and confidentiality. It was not

anticipated that the interview process would cause any undue stress for the young people participating. Duncombe and Jessop (2002) highlight that fully informed consent is almost impossible as participants have no knowledge of the exact questions and extent to which they may be asked to make personal revelations; I, however, believe I approached the issue of informed consent with as much clarity and transparency as possible.

2.4.1 'Hidden' ethical issues

As Willig (2008) highlights, these are simply the formal ethical rules embedded in the research process; research is laden with hidden ethical issues not addressed through these procedural rules. Brinkmann and Kvale (2008) further advise that qualitative research and the human interactions required are saturated in additional ethical issues.

The issue of power underpins many hidden ethical issues within the research dynamic. David et al (2005) note the importance of an equitable power relationship, but that this can be problematic in research with children due to the disparity in power and status between adults and children; the power adults are seen to 'possess' is a cultural and social construction. Within an interview context, issues of acquiescence to those perceived to have a higher social status or authority (Heal & Sigelman, 1995) is of obvious relevance. In introducing myself to the young people participating, I worked on a first name basis to reduce formalities of power. What is unclear, however, is as an outsider to their school system what they perceived my position to be and how this may have impacted on any perception of authority I brought to the relationship and consequently, the responses given.

Despite the perceived importance of rapport within the interview context, the ethics of 'doing rapport' and 'faking friendship' (Duncombe & Jessop, 2002, p. 108) have been queried. O'Connell-Davidson and Layder (1994) suggest that we make conscious decisions to manage our appearance, behaviour and self-presentation to create conditions for building rapport and trust. Duncombe and Jessop (2002) claim that there is need to be reflexively aware that we engage in developing rapport as human beings but use the information gained as research

practitioners; this, they claim, highlights the presence of hidden power in the research relationship and may be considered deceptive. I was therefore mindful of needing to create an environment which encouraged collaboration but which was not intentionally disingenuous.

A final hidden issue is the question of beneficence i.e. how / is the research intended to benefit the young people? Both Tayler, Farrell, Tennent and Patterson (2005) and MacNaughton and Smith (2005) suggest that ethically there should be a benefit to participants in supporting the research through engagement; Tayler et al (2005) suggest this is part of fulfilling the principle of participant respect. Whilst this issue may be more readily answered in studies exploring interventions, this is more difficult to answer in qualitative studies. MacNaughton and Smith (2005) suggest that when we use children's voice in research, there should be a commitment to use this in a transformational way to challenge truths that already exist. I suggest that as the researcher I could not make false promises to individual participants that the completed research would change their experiences. There is, however, the hope that in sharing the information gained, it can be used by the schools involved to better inform understanding of the experiences of these dual registered pupils and support reflection on their practices; the benefit may therefore be indirect rather than directly through participation.

2.5 Conclusion

This document has allowed me to map the progress and process in moving from the systemic review towards my empirical research project exploring the experiences of dual registered pupils. This research is unique both in the methodological approach it uses to explore self-concept through IPA, signifying a departure from nomothetic approaches, and in its step into the unknown domain of dual registration. In engaging in in-depth exploration of a small sample of students it is hoped to discover their experiences and the relevance of attending two different learning environments in shaping individual self-concept. It is emphasised that IPA does not seek to make claims about the external world itself, and does not aim to provide generalisable theory. The study conducted does not therefore claim to offer a view on the 'best' environment for young people with a high level of educational needs; the results presented within the following write-up should not be interpreted as such.

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PART 3:

WHAT ARE THE EXPERIENCES OF DUAL REGISTERED STUDENTS AND WHAT IMPACT DO THESE HAVE ON SELF-CONCEPT?

Abstract

Dual registration offers opportunity for students with special educational needs (SEN) to be flexibly placed in both mainstream and specialist schools. Whilst such provision may allow for better meeting of individual needs, the practice of negotiating two contrasting environments may have implications for individual self-concept. Self-concept theory emphasises the relevance of social environments in self-concept formation and shaping; dual registered students are therefore theoretically integrating and internalising two contrasting experiences and sets of messages.

This study draws on Interpretative Phenomenological Analysis (IPA) to explore the experiences of six dual registered students in the North East of England. The findings suggest that internalisation of messages received about the self is central to their self-concept formation, and that they engage in complex processes of self-concept enhancement and protection. In doing so, many participants demonstrate preference for the experiences of the special school setting, suggesting that it has greater congruence with maintaining positive views of the self across both academic and social domains. This study concludes that dual registration may create possible tensions between anticipated positive outcomes of inclusion and adverse impact of experiences on self-concept, but that awareness is needed of practices within the school environment that mediate and shape self-concept.

3.1 Introduction

3.1.1 Dual Registration

Whilst inclusion of children with special educational needs (SEN) may represent pursuit of an 'ideological purity' (Norwich, 2002, p. 438), it has been a central, yet debatable, issue of educational policy (Schmidt & Cagran, 2008).

The inclusion agenda may assume meeting students' needs within one environment, rejecting segregated specialist provision. However, while specialist provision exists, placement decisions create a 'dilemma of difference' (Norwich, 2002) – dilemmas of potentially stigmatizing individuals as 'different' balanced against meeting individual needs. Attending both mainstream and specialist provision through dual registration may offer a pragmatic solution and opportunity to match aspects of contrasting settings to individual needs. Although not widespread in use, this approach may offer the flexibility of provision recommended by the House of Commons Education and Skills Committee (2006) and enable placement within the most appropriate educational setting(s). I suggest dual registration also serves as reminder that the Coalition Government's call to 'remove bias towards inclusion' (HMG, 2010, p. 29) need not be an all or nothing approach.

However, the practice of negotiating and integrating messages from two contrasting environments may have implications for individual self-concept and for developing coherent sense of self.

3.1.2 Self-concept

The importance of self-concept and developing an understanding of who we are and how we fit into the world is a central tenet of humanistic psychology and postulated as essential to individual functioning (Damon, 1983; Epstein, 1973). Due to proposals that self-concept guides and bounds aspects such as motivation, behaviour and is central to learning processes in school (see e.g. Marsh & Hattie, 1996; Shavelson & Bolus, 1982), it is integrally relevant to educational psychology.

3.1.3 Definitions and structure of self-concept

Whilst numerous definitions exist within self-concept literature, there has typically been a shift away from historical conceptions as a single unitary construct (Borislow, 1962), that remains stable and consistent over time (Piers, 1984). Although debate remains over self-concept formation and structure, it is more generally accepted to be multi-dimensional (Byrne & Shavelson, 1986; Marsh, 2005), dynamic and fluid over time (Markus & Wurf, 1987; Rogers, 1951) and differentiable from other 'self' constructs (Strein, 1993).

Consequently a definition which acknowledges these multiple factors is Purkey's (1988) proposal of self-concept as *'the totality of a complex, organised and dynamic system of learned beliefs, attitudes and opinions that each person holds to be true about his or her personal existence'* (p.1).

Whilst contrasting views exist on the formative process of self-concept, influenced by sociological and psychological theory, these generally accept that subjective perceptions from the external world maintain and shape internal self-concept (Burns, 1979). The symbolic-interactionist perspective (Cooley, 1902; Mead, 1934) proposes that the perceived views of others i.e. 'the looking-glass self' (Cooley, 1902; Franks & Gecas, 1990) causally determine self-concept. In contrast, social comparison theory (Festinger, 1954) suggests individual comparisons between own attributes, beliefs and attainments and those of the immediate reference group provide the subjective basis for shaping self-concept. The emphasis on subjective-evaluative processes highlights that in understanding self-concept the individual's subjective view of the world is more important than objective reality.

3.1.4 Self-concept and the social / school environment

Self-concept is dynamically constructed and developed through interaction with the environment and those within it, involving internal reconciliation and evaluation of multiple messages. As Shavelson, Hubner and Stanton (1976) accord, an individual's self-concept is 'formed through his experience with his environment... and by environmental reinforcements and significant others' (p. 411). This securely nests self-concept within social contexts such as the school,

and postulates the integral role of significant others such as teachers and peers (e.g. Burnett, 1999; Craven, Marsh & Debus, 1991; Demaray, Malecki, Rueger, Brown & Summers, 2009). It is this clear relationship between environment and self-concept which has greatest relevance for dual registered pupils.

Through reviewing the literature in this area (see Part 1), I have highlighted that research into this area over the last 30 years has largely focused on the impact of practices such as ability grouping on self-concept, particularly academic self-concept (e.g. Ireson & Hallam, 2009; Liu & Wang, 2008). Furthermore, studies are typically characterised by nomothetic methodologies searching for general, universal principles, commonly using self-report measures. Whilst offering a large-scale approach to exploring self-concept, linear measures appear simplistic assessments of a complex and dynamic construct.

3.1.5 Self-concept and 'learning difficulties'

Despite a range of studies examining the self-concept of students with SEN, results have been mixed and contradictory. A number of studies have explored the self-concept of students within the special school population, including students with hearing impairments (e.g. Obrzut, Maddock & Lee, 1999), Down's Syndrome (e.g. Cuskelly & de Jong, 1996), and 'learning difficulties' (e.g. Crabtree and Rutland, 2001; Kelly & Norwich, 2004, Moller, Streblow & Pohlmann, 2009). Whilst segregated placement may be assumed to result in stigmatization (Norwich, 2008) and negative self-concept, the literature generally suggests students with 'learning difficulties' placed in mainstream settings demonstrate relatively lower academic self-concept than those in separate specialist provision (e.g. Chapman, 1988; Moller et al, 2009). These findings are explained as being consistent with social comparison theory and suggest educational inclusion may result in a degree of psychological disintegration (Obrzut et al, 1999). However, findings of positive self-concept despite external negative views (e.g. Jahoda, Markova & Cattermole, 1988; Norwich, 1997), and results demonstrating differential differences across domains of self-concept highlight a currently inconclusive relationship between

experiences of inclusion / segregation and self-concept. The question of dual registered students, however, remains unexplored.

3.1.6 Study aims

In considering the impact of the social environment on self-concept, the question of how messages from two environments can be reconciled and the resulting impact on individual self-concept is raised. Schmidt and Cagran (2008) postulate different social environments influence individual self-concept in differing ways. Two contrasting environments offer two sets of experiences and two distinct frames of reference.

In this study I therefore aim to explore the experiences of dual registered students and how these impact on self-concept. The emphasis placed by theoretical perspectives on self-concept formation highlights its subjective nature as a construct. In contrast to the nomothetic focus of many previous self-concept studies and the use of linear scale measurement, I propose an idiographic focus drawing on Interpretative Phenomenological Analysis (IPA) (Smith and Osborn, 2003; Smith, Flowers & Larkin, 2009) in order to explore the lived experiences of individuals and the phenomenological subjectivity underpinning self-concept. Furthermore, due to the paucity of research into dual registration at this time, I propose that in light of growing interest in self-advocacy and pupil voice, providing supportive opportunities for these students to express their experiences is a valuable starting point.

3.2 Method

3.2.1 Sample

Contact was made with one specialist provision in the North East of England which supports dual registered students. Through discussion with the Head teacher, a sample of ten students was identified as meeting criteria for participation: dual registered, attending each provision for a minimum one day per week or equivalent e.g. two half day sessions, and considered to have adequate communication skills to talk about their experiences. Guided by Smith et al's (2009) writing on sample size in IPA studies, a sample of six - eight students was sought.

Information regarding the study and letters requesting parental consent were issued to parents through the school. This outlined issues of confidentiality, anonymity and consent; parents were asked to explain the research to their son / daughter and to gain their consent to participate, in addition to giving parental consent itself. Six letters of consent were returned. All students attended the same specialist provision, alongside the parentally preferred mainstream school in their area; two students attended the same mainstream school but were in different year groups. Students ranged from 7 years to 16 years (see participant information, Appendix A).

3.2.2 Data Generation

Interview Structure

As the preferred method of data collection for IPA is semi-structured interviews in order to produce rich data (Chapman & Smith, 2002; Smith et al, 2009), I constructed an interview framework of over-arching themes. Sample interview questions were piloted through my position as a Trainee Educational Psychologist with two students with Statements of Special Educational Needs indicating significant level of learning needs; this allowed consideration of wording and ease of understanding.

All participants were interviewed individually and interviews digitally audio-recorded. Based on a situational hypothesis that the immediate environment would be of greatest salience and relevance at any given time, with the exception of one student, students were interviewed initially in the specialist provision followed by the mainstream setting. Both interviews were conducted within a two week period. Due to the timing of interviews in the summer term, the mainstream placement for the Year 11 student had ended in order to accommodate examinations; it was therefore necessary to conduct both interviews in the specialist provision. Students were informed they could stop the interviews at any time.

3.2.3 Analysis

I transcribed all interviews verbatim with identities of pupils, staff and schools changed to allow anonymity. Transcripts were subjected to IPA in order to explore experiences and meaning making of all participants in an idiographic and systematic manner (Chapman, 2002; Smith et al, 2009; Smith & Osborn, 2003). The choice of IPA was consistent with the phenomenological approach and focus of the research question.

Transcripts were considered separately with analysis beginning with intensive reading and re-reading, followed by notation to indicate significant and recurring ideas and meanings. Initial annotations were made in one margin, considering my exploratory thoughts about the content, language use and more conceptual, interrogative comments (Smith et al. 2009). Notes were then revisited and transformed to produce a list of emergent themes (see interview extract presented in Appendix B). Preliminary themes for each interview were clustered to form subordinate themes, with each given a descriptive label. Cross-interview comparison was used to identify patterns of common themes, which were clustered into master themes representing shared higher-order qualities. Relevant extracts were drawn from each interview to match subordinate themes (see example, Appendix C). My role as the researcher in co-constructing the themes and analysis is an acknowledged element of IPA (see Smith et al, 2009).

Master theme	Subordinate themes
<i>Academic Self</i>	<i>Academic challenge and success</i>
	<i>Self view of ability</i>
	<i>Support and independence</i>
	<i>External messages</i>
<i>Social Self</i>	<i>Self and peers</i>
	<i>Relationships with teachers</i>
	<i>External messages</i>
<i>Dual registration and placement evaluations and emotions</i>	<i>Differences</i>
	<i>Losses of dual registration</i>
	<i>Placement evaluations and preferences</i>

Table 3.1: Master themes and component subordinate themes

Throughout this write-up, in quotations, ellipsis points (...) indicate omitted material and material within square brackets is provided for clarification. For anonymity, the special school setting is represented by 'Oakdale'; all other school names indicate mainstream settings.

3.3 Findings

In exploring the master and sub-ordinate themes, I suggest a relational link between themes (Figure 3.1). As findings presented below indicate, the experiences impacting on individual perceptions of academic and social self appear to contribute to the salience of educational environments and individual evaluations of placements.

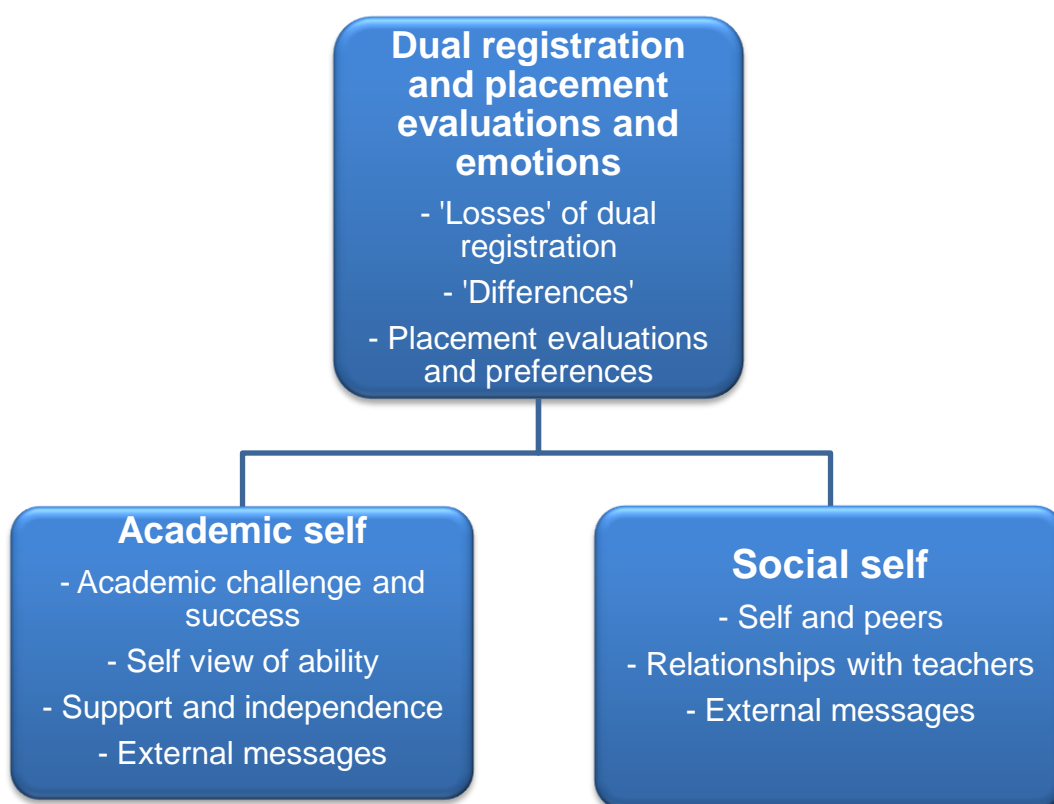


Figure 3.1: Structure of master themes and sub-ordinate theme clusters

3.3.1 Academic self

The impact of practices and experiences within settings on academic self-concept, or the 'self as a learner' was evident throughout all interviews.

Academic challenge and success

The challenges and successes of work in both settings were central to all accounts. As demonstrated by comments throughout this section, the word "hard" was a common linguistic feature in all accounts. This use of language suggests work as consistently requiring effort and unable to be broken down.

There was, however, a common thread about Oakdale suggesting somewhere success was experienced.

“I learn the most lessons like Maths or History at Oakdale... I like some Maths and being happy here... There’s all kind of things and I like to learn about Maths and History and stuff”. (Carol)

Despite its challenges, participants did not reject work in Oakdale.

“It’s hard but I like doing the work”. (Sam)

Such comments suggest work was like a surmountable barrier that was possible to overcome with positive feelings achieved in success. Both Sam and Anna identify that everyone considers the work to be hard within the special setting; it therefore appears that recognising shared experience of challenge can normalise the feelings created.

In contrast, the challenge of work in the mainstream setting feels, for four participants (Anna, Carol, Sarah and Emma), overwhelming and results in rejection of subjects and experiences, as well as active comparison between settings.

“I don’t like Science and Music... Science is hard but the exam’s so hard, but I feel kind of ‘fused and I don’t like it... I like Science at Oakdale and I can do it”. (Sarah)

“I feel good. I like here [Oakdale], not being too difficult, not being too hard to think... I can do my work and it’s not too hard to think”. (Carol)

Sarah’s account demonstrates internal comparisons between settings and the disparity in engagement created by the challenge between settings. For Carol, the level of challenge in mainstream was a barrier and suppressed thinking; consequently, Oakdale provided relief and thinking space. Only Sam and Gemma felt able to engage positively with mainstream work, thereby highlighting possible existence of positive academic self-concept in this context.

“When it’s like easy hard then I just have to work my best but em, when it’s hard hard then Mrs M has to say ‘I can help you Sam’”. (Sam)

Self view of ability

Within Oakdale, participants demonstrate positive self-appraisals of skills and abilities which often enabled them to overcome work challenges.

“I can do hard work like Maths and you know like adding, taking away... Sometimes I have to think hard and then I can do it... I can do the hard works’”. (Sam)

All participants identified own strengths and skills across subject areas in each setting, indicating positive domain specific self-concept. However, only Sarah (quoted above in ‘*Academic Success and Challenge*’) and Emma demonstrated comparison of ability across settings.

“Emma good at Maths at Western School’”. (Emma)

This suggests differing evaluations of ability in different contexts, possibly relating to individual perceptions of work-challenges in each context. It is notable, that whilst strengths were readily identified, there were few identified weaknesses; only Carol identified herself as lacking skill when she stated in relation to PE in mainstream session, ‘*I can’t do it.*’ I suggest this may be a self-engendered view, possibly through internal comparison of skills across both contexts, rather than the result of external messages or social comparison.

External Messages

The centrality of messages received from others about achievement and individual abilities to succeed and engage with work was integral throughout accounts.

“[Staff say] work hard. They say ‘Well done, good work’”. (Anna)

External messages build a self-view as competent and capable of success and mediate barriers of challenge. Messages are offered through both verbal

reinforcement of success and concrete reinforcement like stickers. These messages were mentioned more frequently in accounts of experiences within Oakdale; only Sam, Anna and Sarah provided accounts of receiving positive messages in mainstream.

“Sam you are very good and a star! You did good work”! (Sam, recounting teacher’s words)

All participants demonstrated internalisation of positive views received, and saw them as true and characteristic of themselves.

“Megan [member of staff] says I’m clever (pause) I am! I eh, am clever in Literacy and em, Science”. (Gemma, special school experiences)

Only Carol reported receiving negative messages from staff, which she attributed to task difficulty rather than representative of her.

“[S]ometimes say I’m lazy...when I don’t do my work... I can’t do Maths. It’s difficult”. (Carol, mainstream experience)

I suggest that in making sense of competing messages and protecting self-concept, positive comments were internally attributed and lack of messages / pervasively negative messages were externally attributed i.e. located within the teacher or the task.

Support vs Independence

The presence and acceptability of adult support differed between settings. In mainstream, support was targeted to individuals, in contrast to Oakdale where there are feelings of shared need for support; this increases acceptability of support and was evident in half of participant accounts (Anna, Gemma, Emma).

“[Everyone] [a]sk for ‘Help please”. (Anna)

Having help is not only ‘normal’ but can lead to positive affect, possibly through helping to overcome and reject any negativity of academic challenge.

“I, uh do my work because the teachers help to do, um everything and it’s good”. (Carol)

For Carol, Sam and Gemma the presence of adult support creates internal conflict between need for support and desire to be more independent. This is presented in accounts of mainstream experiences for Sam and Carol; only Gemma demonstrates a desire to assert independence in Oakdale.

“Sometimes [can’t do the work]. Like the writing and sometimes Maths... just ask Joanna or someone like for some help. But eh, I like just working by myself”. (Gemma)

Accepting support is necessary, but conflicts with her preference to demonstrate independent competence; a desire to achieve success with the work ultimately wins and she engages with support. This internal conflict, created by challenging work, is also evident for Sam and Carol; for them the overwhelming challenge of mainstream work is a barrier to independent success.

“I don’t like having to sit with the TA. I like em, to do, to do my work but it’s hard”. (Carol)

Summary

Participants demonstrate varied views of self, with appraisal of skills and abilities in specific domains and across contexts evident throughout accounts. They demonstrate contrasting views on work-challenges, and the use of support between contexts; experiences in mainstream appear to more generally act as a threat to the self through the level of challenge created, resulting in rejections of experiences and negative messages in order to preserve a positive self-view.

3.3.2 Social self

This theme focused on peer and staff relationships and interactions within a setting, and how these shape views of the social self.

Self and peers

The importance of peers in creating a sense of belonging is evident in accounts from both settings; friends are a vital source of support, emotionally and socially.

“I like playing with my friends at Oakdale... They look after me... and make me smile when I am sad”. (Gemma).

Linguistically, comments relating to experiences in Oakdale demonstrate greater belonging and integration of social relationships into a sense of self, evidenced through use of ‘we’ and ‘us.’ All participants talked about shared experience, suggesting a ‘family’ where ‘everyone is in it together.’

“I got friends in my class (pause) well, em, need a bigger table in the classroom and then we can all sit round it and em, all do the work”. (Sarah)

Within mainstream experiences, a more separate ‘I’, with the absence of friends, or limited friendships, was evident in most accounts; only Gemma suggested secure relationships in both settings. Anna and Emma commented specifically on lack of friendships, with Anna contrasting her experiences of social relationships and acceptance between settings:

“No friends [At Acorn High School]... Not many friends. I like my friends at Oakdale... Lots of friends...they look after Anna”. (Anna)

Mainstream accounts note experiences of social and physical isolation. Anna indicated experience of being taught in isolation from peers, and Carol was trying to make sense of being excluded from peer interactions.

“Sometimes I say, eh, will you play with me and they say no... I like to play like at Oakdale I play on the yard... [here] I don’t really play”. (Carol)

These contrasting experiences highlight differences of social inclusion / exclusion between settings. Consequently, three participants demonstrate inter-setting comparisons and suggest closer friendships within Oakdale.

"I like better with my friends at Oakdale School". (Sarah)

Although less explicit, Sam and Sarah suggest an absence of close peer relationships in mainstream.

"Well my friends' names and em, em, um, I don't know (pause) I em, I forget". (Sarah)

Within Oakdale there appears to be internalisation of the importance of friendship, with peer interactions offering positive messages about the self as a friend, resulting in greater positive social self-concept.

"[I'm a] good friend. I look after Jacob and em, make happy". (Gemma)

Interaction creates a sense of the self as someone who is socially valued and able to give and receive social and emotional support.

Relationships with teachers

There is dynamic difference in the relationships with teachers across both settings. For some participants, relationships with teachers and wider staff create enjoyment and are integral to positive feeling of self. Interactions with Oakdale staff communicated messages that create feelings of value and worth.

*"People are nice to Anna [at Oakdale]. Pleased to see here (pause.)
They say pleased to see Anna". (Anna)*

Within all accounts of Oakdale, the teachers' presence is integral to accounts of classroom life and the positive feelings generated. For Sam, Emma and Anna, teachers were specifically identified as a factor contributing to happiness, as summed up in Anna's comment:

"I just like it [at Oakdale]. I like Chris[the teacher]". (Anna)

For Sarah, the equality of the staff-student relationships is important.

“We can all sit together and em, that’s good... I like to sit with my friends and with the teachers”. (Sarah).

This suggests relationships of equality and support rather than control and authority; I believe such relationships are likely to be conducive to exchanging positive external messages and shaping positive self-concept.

In contrast, mainstream accounts focused mainly on relations with support staff, with teachers notably absent throughout accounts. Only Sam and Gemma refer to a teacher by name, suggesting to me more distant relationships with teachers. In contrast to frequent mention of her Oakdale teacher by name, Anna comments of her mainstream school:

“The teachers (pause) I dunno names”.

For Sam and Sarah there appears a blurring of boundaries between teachers and friends within mainstream.

“My teacher friends miss me in Greenwood and then my teacher friends uh, there’s Miss B, Miss R, Miss H and Mr N.” (Sarah)

Whilst this might imply a positive relationship, I suggest transferring friendship to teachers occurs in the absence of peer relationships; identifying teachers as friends may be a protective mechanism to maintain a sense of self as socially valued rather than rejected and isolated.

Summary

All participants demonstrate a positive social self within Oakdale, with a sense of group equality and belonging. However, there is limited evidence that mainstream experiences of feeling excluded and rejected by peers leads to a negative self-view. I suggest that preferences for the social experiences of Oakdale are indication that experiences there are more congruent with a positive self-view. Throughout accounts, the positive external messages received show signs of internalisation and acceptance in shaping self-concept.

3.3.3 Evaluations of dual registration and placements

This final theme considers how individuals make sense of the overall experiences of dual registration and what preferences for specific settings may mean for self-concept.

Differences

Dual registration creates a difference between self and other pupils, which appears to be embraced by three participants (Sam, Gemma and Emma) as positive. Whilst Carol and Sarah demonstrate greater ambivalence, Anna rejects her mainstream experience as a consequence of the social isolation that she feels.

“They don’t go to 2 schools. Just David and me allowed. They not allowed. [I’m allowed] because of that the hard works. Because I can do the hard works... Not them, me...I different... It’s cause I go to Oakdale and Western School... Only me goes to Oakdale”. (Sam)

Dual registration makes participants feel unique. Sam suggests that ‘permission’ is required to be dual registered; this has consequently been internalised as a positive message about his own ability. In addition, the existence of criteria-based permission suggests a perspective of dual registration as something of worth, to which access should be restricted.

‘Losses’ of dual registration

Attending mainstream results in experiences of loss; for some (Sam and Gemma) there is a feeling of losing out on lessons, whilst for Anna there is a loss in peer and staff interactions. This suggests that ‘trade-off’ is created in being dual registered, creating a tension and negative emotions for individuals.

“[I miss] Chris and my friends... Sad. Miss my friends”. (Anna)

Emotions and preferences of placement

The overall evaluation of attending two schools demonstrates contrasting experiences and differing emotional evaluations for participants.

"[At Oakdale] a lot happy... [at Acorn High] only a little bit happy". (Anna)

"I don't like it [at Birch School]. Em, I want to be at Oakdale because I want to work here, not Birch School". (Carol)

"Like 2 schools. The Oakdale, the Western School". (Emma)

Three participants (Sam, Gemma, Emma), offer positive evaluations and feelings of happiness in both settings. However, although Emma voices enjoyment of both settings, her frequent mentions of Oakdale and relationship with the teacher there, even when giving an account of experiences in mainstream, may indicate a contrast between what is voiced and implied in her account; there may therefore be greater security and preference for the special school environment. Anna, Carol and Sarah however, explicitly indicate preference for Oakdale, suggesting the setting most congruent with positive self-concept.

Summary

The experience of being dual registered offers a dichotomy of views between the positivity of being unique, to the lost opportunities and interactions created. Overall, the majority of participants repeat preference for the experiences offered by Oakdale; for many, this environment has greater salience.

3.4 Discussion

In this study I aimed to explore the experiences of a small sample of dual registered students. Findings highlight that no single experience sums up experiences of dual registration; multiple factors interact between and across settings, with some inter-individual commonalities.

3.4.1 The impact of specialist setting

Accounts presented suggest participants engage in individual comparison within an internal frame of reference i.e. making internal self-comparison of skills across domains (Marsh, 1990; Moller et al, 2009). Inter-context comparisons are evident, resulting in contrasting perceptions of strengths between settings; accounts suggest participants typically experience more positive academic and social self-concept in the special setting. Even perceived “hard” work seemed acceptable in the special setting. In contrast with possible hopes of mainstream inclusion, participants experience feelings of isolation and social rejection, consistent with Tracey and Marsh’s (2000) findings on ‘academically disadvantaged’ children in regular classrooms. The presence of more positive self-concepts in special schools is consistent with previous findings (e.g. Crabtree, 2002; Norwich, 1997), as well as congruent with Santich and Kavanagh’s (1997) and Stinson, Whitmore and Kluwin’s (1996) assertion that mainstream schooling may have negative consequences for self-concept and emotional security.

Participant experiences in mainstream suggest difficulties in determining their place within their peer group; a finding previously also reported for ‘gifted’ students (Zeidner & Schleyer, 1999). Irrespective of ‘ability’ label, positive self-concept appears to be associated with a feeling of belonging within a group and perceived shared experiences; within this study this was typically associated with special school placement.

3.4.2 Frames of reference

Dual registered pupils experience two frames of reference. Findings suggest that for most participants one setting has greater salience and therefore greater relevance to self-concept; this was typically the specialist setting and does not appear to be explained simply by the proportion of time participants spent in that setting. Environmental salience may be the result of individuals interpreting experiences (academically and socially) on the basis of what is most significant to them (Mboya, 1996); importance is likely to be placed on the environment of greatest congruence with positive self-worth and self-view of competence. Furthermore, environmental salience may be similar to Crocker and Major's (1989) finding of comparing oneself with an 'in-group' rather than the 'out-group' in order to protect and enhance self-concept.

Marsh, Chessor, Craven and Roche (1995) suggest social comparison with the immediate reference group only impacts on academic self-concept; however, this study suggests participants engaged in limited social comparison in either setting, but made inter-school comparisons of experiences. The presence of a more positive self-concept in the specialist setting implies a complex process of self-concept construction and not simply a process of direct comparison with the immediate reference group. It is possible that within the special school an ethos exists, emphasising recognition of similarity and shared need and discouraging social comparisons from occurring. This may be similar to Ireson and Hallam's (2001) assertion that school ethos can mediate the impact of practices such as ability grouping, and Trautwein, Ludtke, Koller and Baumert's (2006) findings on ego-protective environments.

It is acknowledged, however, that social comparison may not be more evident due to a level of meta-reflection and relativistic comparison that participants were unable to engage in.

3.4.3 'The looking-glass self' and self-concept protection

The importance of external messages received is evident throughout accounts. However, the internalisation of positive views and rejection of negative comparisons and messages suggests individuals do not simply internalise

others' attributions and language (Davis & Watson, 2001). By demonstrating selection in messages being internalised, participants appear to demonstrate complex processes of self-concept construction and protection, and shows an internally mediating model of external messages, congruent with Jahoda et al (1988), Norwich (1997) and Kelly & Norwich (2004). Participant accounts also suggest that the attribution of messages, and experiences of success or challenge, to internal / external factors may also play a role in shaping self-concept, consistent with Demaray et al (2009). As Norwich (1997) suggests, evidence of differential internalisation of external views rejects a purely social constructionist framework of self-concept which regards individuals as passive. For these participants, self-concept is not simply 'the looking-glass self'.

3.4.4 Teacher support and social relationships

Chapman (1988) concluded that understanding self-concept for 'learning disabled' students went beyond simply considering placement; practices and relationships within environments are integral. Participants highlighted the importance of messages received from others, and their particular relevance to academic self-concept. The highlighted relationship between teacher behaviour and student self-concept is consistent with previous research e.g. the importance of feedback provided about competence and ability (e.g. Blöte, 1995; Schunk, Pintich & Meece, 2002); academic teacher support (Simpson, 1981), and teachers' positive regard and emotional support (Cheung & Lau, 1985; Liu & Wang, 2008). Burnett (1999) further highlighted positive statements to be more influential than negative / absent statements in shaping and protecting self-concept; this may explain the centrality of positive messages in participant experiences. In addition, Maieano, Ninot, Bruant and Benattar's (2002) assertion that higher self-concept in special schools was associated with increased positive support from teachers in comparison to mainstream, is also relevant. This suggests the existence of inter-environment differences in feedback and may further account for the centrality of positive teacher comments and salience of experiences in the special setting. Participants' shared importance of perceived social support from peers is congruent with

Demaray et al (2009), and Rothman and Cosden (1995) who explored this for students with learning difficulties.

It therefore seems clear that self-concept is nested in social contexts and mediated by interpersonal influences; the strength and positivity of relationships within an environment are directly relevant to self-concept. This highlights a potentially valuable role for educational psychologists (EPs) in raising awareness of factors relevant to positive self-concept, particularly for mainstream settings.

3.4.5 Implications for practice

Whilst this research does not claim that the experiences of these young people are generalisable to a wider population of dual registered pupils, I propose that it has value in highlighting issues to be considered in developing and evaluating future practice.

In agreement with Fox and Norwich (1992), I suggest that this study demonstrates the importance of privileging pupil voice to understand individual experiences. Rather than assuming that dual registration might offer the 'best of both worlds' and offer a balance between the right to mainstream education (Lindsay, 2007) and the specialist practice of the special school, this study emphasises a greater need to explore the actual experiences of the young people themselves. Whilst previous studies have evaluated the impact of inclusive practice from alternative perspectives, for example, parental accounts (e.g. Leyser & Kirk, 2004), or by examining any effect of inclusion on the attainment of the wider school (e.g. Florian, Rouse, Black-Hawkins & Jull, 2004), it is imperative that evaluation takes into account the first-hand accounts and perspectives of the students. Moreover, as the richness of information gained through this study demonstrates, we must reject deficient views that potentially leave young people with additional needs 'voiceless' (Flores, Tefft-Cousin & Diaz, 1991, p. 377); instead, their experiences must guide future research to develop understanding of dual registration.

This study further highlights a number of key issues for EP practice. Young people are not in a position of power to readily make their voice heard (Hobbs, Todd & Taylor, 2000); I believe EPs can play a valuable role in raising this issue within educational practice. Furthermore, as professionals integrally involved in informing decision making on placements, I suggest that we need to be engaging in further research to enhance understanding of the impact of dual registration on areas such as self-concept; we must ensure that we do not simply endorse a practice that appears to remove the 'dilemma' of placement decisions (Norwich, 2002). Whilst parental preference is obviously central to current decision-making regarding placement, EPs are also well placed to help parents explore some of the issues that dual registration raises and the importance of the educational environment on well-being and self.

Finally, for school based practitioners, this research has begun to highlight that there is a need to better understand the practices and factors within each educational setting that potentially impacts on the shaping of positive self-concept. Whilst this research should not be interpreted as being prescriptive in pin-pointing specific practices, it does emphasise areas of practice for consideration. Engaging with dual registration simply as the product of placement decision making is insufficient; head teachers, teachers and support staff need to have greater awareness of the integral role that they play in shaping a young person's view of themselves through the messages they give and the practices they draw on.

3.4.6 Limitations and further research

I believe this study's originality is its focus on dual registered pupils and the use of IPA to explore individual experiences. However, as the basis of this study is individual response to semi-structured interview, I acknowledge potential issues of acquiescence, repeatedly offering 'don't know' answers or misinterpretation of questions (Burns, 1982; Lewis, 1992). This may have impacted on the accounts presented and subsequent analysis. Additionally, as acknowledged in previous IPA studies e.g. Swift, Ashcroft, Tadd, Campbell and Dieppe (2002), I note that, through the use of a semi-structured interview framework, I may have

shaped analysis of the data even before it was generated. However, this is accepted in IPA as integral to my researcher role and does not invalidate findings.

As with all IPA studies, generalisation to wider groups of dual registered pupils should be extremely cautious. It is hoped this study will raise interest in this area and allow for exploration of other mediating factors that were beyond the scope of this study. These may include the impact of factors in the home, examination of any association between the proportion of the week spent in a setting and self-concept, and any long-term impact on self-concept of dual registration. In considering issues of dual registration, and more widely inclusion, we are exploring practices embedded within a changing social and political context; future research may therefore be impacted by changes at wider levels.

3.5 Conclusion

I hope this research has generated a richness of data to attract further exploration to this area. The experiences presented highlight that these dual registered pupils face a challenge in locating and understanding themselves in the social structures of two different environments; their ability to do this positively is impacted by practices and relationships within an environment. Possible tensions between anticipated positive outcomes of inclusion and adverse impact of experiences on self-concept is highlighted; despite possible assumptions, the special school setting did not necessarily have deleterious effects on self-concept. Where practices within an environment may not be conducive to shaping positive self-concept, individuals were likely to engage in processes to enhance self-concept, including one environment developing greater salience than another.

Positive self-concept may be viewed as a psychological marker of adjustment – of the individual to the environment and the environment to individual needs. As Schmidt and Cagran (2008) emphasise, for inclusion to be effective, teachers (and professionals such as EPs) need to be aware of self-concept; this is arguably true for practices of dual registration. If EPs are to support the practice of dual registration I suggest a need to be mindful of self-concept and a need to raise awareness of the impact of environments and factors mediating self-concept within these.

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Appendix A

Relevant participant information

Name	Year Group (Age)	Dual registration split
Sam	5 (9 yrs)	4 days special, 1 day mainstream
Emma	3 (8 yrs)	1½ days special, 3½ days mainstream
Gemma	7 (12 yrs)	3½ days special, 1½ days mainstream
Carol	7 (12 yrs)	2½ days special, 2½ days mainstream
Sarah	9 (14 yrs)	2 days special, 3 days mainstream
Anna	11 (16 yrs)	4 days special, 1 day mainstream

Appendix B

Interview extract from Sarah, Oakdale interview

R	OK. And that is the lesson you think that you do best?		
S	Well yeah and I like it. I watch em, TV and em, do the lesson and em	+ve sc? Association between doing well and liking it. Own reflection on being able to do lesson – implies succeeding and being able to do it	Feelings of achievement and positive self Awareness of own skill Being able to succeed in lesson
R	Are there lessons that you think you don't do very well?		
S	Um, em, maybe Maths but eh . . . I still like it too and doing add sums and eh, that	Positive emotion despite some difficulty – suggests some security in self, overcoming difficulty	Self not impacted by challenge
R	OK. So how do you feel about Oakdale?		
S	Oakdale is em, I like it here. But I like my friends and my teachers.	+ve feelings in segregated settings. Importance of friends and teachers	Positive evaluation of setting Importance of peer relations Importance of staff relations
R	You like your friends and your teachers here? Why do you like the teachers?		
S	Em, I Cath and I like Alison and Laura		
R	OK. Why do you like them?		

S	Well the teachers say 'Hello' and they ask me about the weekend and what I like	Feelings of being acknowledged and respect for views and interaction	Being acknowledged by staff Being valued and respected
R	Um hm		
S	I come in the morning and then, I dunno . . .	Does relationship start right at beginning of day?	
R	OK.		
S	I like it when . . . I like it when the teachers sit and talk to me	Relationships and engagement with teachers – sharing experiences	Being valued by staff
R	And when do they do that?		
S	Em . . Sometimes when I'm working or in the morning eh, and maybe at snack	Not always? – sometimes? Interactions occurring at regular parts of day	Positive interactions with staff
R	At snack?		
S	Well maybe no, just my friends sit next to me	Social times being with friends	Social times with friends
R	Would you tell me more about your friends?		
S	Well yeah. I've got friends in my class.	Friendships within class -feeling of being secure within class	Friendships within class
R	Uh huh		
S	Well em, need a bigger em, table in the classroom and then we can all sit round it and em, do the work	Importance of being together integral part of working. Sitting round a table – like a family sharing time together.	Collaborative and shared experience of learning Importance of relationships
R	OK. Do you all sit at one table?		

S	Yeah. So we can all sit together and em, that's good	Reinforcement of 'we' – no separation Being together- everyone in the group is important	Togetherness with peers
R	Em . . . why is that good?		
S	Well . . . em . . . I like to sit with my friends and with the teachers.	Importance of group – not individuation Equal relationships with peers and staff	Importance of being in group
R	OK. Can I ask Sarah are there any things at Oakdale that make you feel good?		
S	Yeah.	Readily says yes – positivity must be forefront	
R	Can you tell me what it is?		
S	Eh, Cath says 'Sarah, you are very good at Maths.'	Academic ability External view expressed by others – importance of positive recognition of others	Positive messages about ability
R	Anything else?		
S	Em, 'Sarah you are very nice and helpful.'	External messages about personal characteristics – creates a positive self	Positive messages about characteristics
R	And how does that make you feel?	Checking	
S	Em . . . feel happy.	Suggestion of positive self concept.	Positive impact of teacher

		External messages result in positive feelings	comments
R	OK. And do they say that to everyone?		
S	Just some people. Only good people.	Comparison to other people – this must mean that she is one of the ‘good’ people – positive view of self as good – recognition that not everyone is the same?	Positive self view Comparison of self and peers
R	Can you tell me if there are other things that you are good at?		
S	Em . . I good at Maths PE	Identifies strengths in domain specific areas	Positive evaluation of abilities
R	Uh huh		
S	Em . . well, but em, all the children like PE	Contrast in language between being ‘good’ at something and ‘liking it’ – is one dependent on the other. Does everyone experience success in PE?	
R	Uh huh		
S	Including R	Why is she set apart? Does she not like other subject areas? – Is there something about PE that makes it positive for all?	
R	OK. Em, is there anything at Oakdale you are		

	not good at?		
S	Em . . . it's hard about Maths and sums	Mixed messages about Maths? – had identified self as good at maths – says hard, but doesn't actually say I'm no good at it	Challenge raised question about ability
R	Maths?		
S	Actually yes.	Only one single area identified as being hard. 'Actually' almost as if rejecting an expectation that there should be more	
R	Uh huh		
S	Em, Some people maybe find English hard and eh, R doesn't like PE.	Aware of differences and individual abilities between peers	Differences in abilities with peers
R	OK. So, can you tell me about anything else that happens at school that makes you feel good?		
S	Yeah. Like helping at snack.	Taking responsibility and helping – suggests having the skills to be able to 'help'	Responsibility creates positive self
R	Tell me about helping at snack.		
S	Um, I learning about some jobs, and Cath	Opportunities for learning occur	Being respected by staff

	says about 'Sarah will you do snack?'	throughout the day. Being asked – being valued and respected	Having skills and responsibilities
R	Uh huh		
S	And then . . . I dunno	Uncertainty - or hesitation to talk more?	
R	And so what do you do if you've got to do snack?		
S	Em, I ask to Carol and Carol wants the apple, or the orange, or bananas and grapes	Description of role	
R	What is it like having jobs to do?		
S	Yeah I like it	Likes taking responsibility – creates positivity	Enjoying responsibility
R	Yeah? Why do you like having jobs to do?		
S	Em, I like do the dish washer on my own. I don't have jobs at, at Greenwood.	Making comparisons between schools – no jobs at other school so perhaps feels less responsible?	Greater responsibility in special setting
R	You don't have jobs there?		
S	Um, just here.	Contrast of settings - brings attention back to this setting	
R	At Oakdale are you able to do many things on your own?		
S	Yeah.	Again readily responds in the positive – there is no hesitation in	Able to be independent

		this	
R	What sorts of things do you get to do on your own?		
S	Um . . . well . . . um I learn about things . . . and I do the jobs and like getting the register and em . . .	Being independent in learning. Doing jobs is important - does success in jobs raise independence and positive feelings about the self	Being independent
R	Uh huh		
S	But I get help with Maths and em . . . I dunno	Contrast of being independent against needing to get help. There doesn't seem any negativity about this though	Independence vs need for help

Appendix C

Subordinate theme – Academic challenge and success

Sam 1: page 1	You have to work . . . I do lots of things. Hard work. Maths, Science. Like that. They're hard work.
Sam 1: page 2	There's just lots of things you have to do
Sam 1: page 3	I like the teachers and my friends and doing my work! Everyone has to work and has to learn . . . you have to do, em, hard work . . . But it's OK because when it's hard they say 'It's OK Sam, you can do it.'
Sam 1: page 4	But when you can't do your work she says 'Don't worry work hard' and when you do your work she says, 'Well done Sam.'
Sam 1: page 5	[I am happy] because, em, I do hard work . . . I can do hard work like Maths . . . Sometimes I have to think hard and then I can do it.
Sam 1: page 10	When I do hard work and the Nicola says 'Well done.' [I learn] how you spell and do hard works You have do, em, you have do lots of things. You can do, em, doing the letter for the em, for the Zulus.
Sam 2: page 1	You do hard work . . . lots and lots and lots . . . [like] Maths, English. And I don't know more hard works here. It's not hard and hard and hard. It's just like that bit [demonstrates with fingers] . . . It is like that work [demonstrates again]. Just middle hard.
Sam 2: page 2	Lots and lots of things is hard but Mrs M helps and (teacher name) says 'Your work hard Sam and try your best.' When it's like easy hard then I just have to work my best but em, when it's hard hard then Mrs M has to say 'I can help you Sam. Will I get some counters?' And then it's OK. [Mrs M] she do the hard work . . . and she help with computers
Sam 2: page 3	And then I get all the hard works done and am allowed to play

	It's em, PE. Sometimes not hard work – you like you beat something . . . Not hard.
Sam 2: page 6	Yes everyone does the hard work . . . They has hard work, and do it and maybe say to (teacher name) and she help them.
Sam 2: page 8	[The work] it's hard but I like doing work.
Sam 2: page 10	<i>What makes you feel good at Western School?</i> Em, doing my work and doing PE.
Anna 1: page 3	I did good work. Dawn gave me a sticker and said 'Good work.' [I don't like] homework . . . Write about Treasure Island. It's hard. . . always. Don't want to do it. The writing [is hard] . . . They help Anna do the writing. Chris do the writing. . . Everyone think it's hard.
Anna 1: page 9	I feel happy when i do my work. Chris help Anna [with hard work]. Then I do the writing.
Anna 2: page 1	[I like] cooking . . . just cook, all day
Anna 2: page 6	[the writing is] hard . . . [makes me] bit sad. It's hard.
Anna 2: page 7	[Other children do] different work. Writing . . . It's hard.
Anna 2: page 13	I work hard at Oakdale
Carol 1: page 6	[Work is] hard . . . We do, eh, we do homework from Oakdale. Do homework . . . It's difficult . Because em, all the questions on the paper and also a em, um, picture.
Carol 1: page 7	[work in class is] easy . . . like, too easy. But maybe sometimes it's hard. We do things like write about eh, write about the jail and sometimes it's hard. Sometimes it [work] can be easy . . . sometimes it's easy and I feel, yeah. happy, I feel happy . . . Because I like doing my work. In the classroom, em, some parent come in classrooms to see my work and that's good.
Carol 1: page 9 - 10	I like History better and it's good and I like to do more of it. Because I don't like it at Birch school. It's different . . . I don't like History . . . It's hard and I don't understand and the teacher say I'm not listening.

	I learn the most lessons like Maths or History at Oakdale [] em, what else [] I got Maths here, I learn Maths at Birch school as well. . . . [Maths at Birch is] same but sometimes we do it different here. I like Maths here because it is dead difficult because it's too difficult at Birch school. . . [makes me] sad and I don't want to do it. I like Maths at Oakdale.
Carol 1: page 10	I like some Maths and being happy here . . . There's all kinds of things and I like to learn about Maths and History and stuff
Carol 1: page 11	I have to do that and then Alison says that it's good work and I work hard . . . Alison like everyone to do work
Carol 1: page 13	I feel good, I like here, not being too difficult, not being too hard to think . . . I can do my work and it's not too hard to think
Carol 2: page 1	I like more time doing ICT . . . because I em, like it and em, like it more
Carol 2: page 2	[Maths] It's hard and I don't like to do it. And um, I do homework all the time, like writing and maths and all kinds I like design tech . . . I like making the things and cooking and stuff.
Carol 2: page 3	I don't like PE . I don't like [] writing . . . It's just PE actually . . . I no want to go and do rounders
Carol 2: page 4	I don't like doing PE because it makes me tired and I can't do it
Carol 2: page 6	I don't like PE because em, I don't like Maths eh, I like different work . . . sometimes maybe design tech
Carol 2: page 7	. . . the work is hard. I don't like to do it. It's difficult I like to em, to do, to do my work but it's hard.
Carol 2: page 8	Yeah . . . like the food tech, design tech and kinds of things . . . [they are] my favourite best lessons . . . I do better than Maths lesson
Carol 2: page 9	[When work is hard I feel] sad, because I don't like work . . . I don't like hard work. I do my work in em, work like food tech. I can't work Maths.

	It's difficult.
Carol 2: page 11	[TAs say] do, do, do your work
Sarah 1: page 2	I learn about Maths . . . I learn about some add sums and some shapes and do work with em, money and that . . . I like learning Maths and I like doing it right
Sarah 1: page 5	She show me how to do it and show me do this bit first and add this and then I try it
Sarah 1: page 6	[talking about subjects that are difficult] . . maybe Maths but eh, I still like it too and doing add sums and eh, that
Sarah 1: page 9	It's hard about Maths and sums
Sarah 2: page 2	[I enjoy] PE . . . I'm quite good at it.
Sarah 2: page 3	I actually I like my Maths . . . I like working with Miss G
Sarah 2: page 4	I do sums at Oakdale but em, maybe the numbers are different . . . at Oakdale Catherine says like add 40 and 40 . . . so, em, maybe different . . . [the work is] maybe hard. So are there times that you find the work hard? Eh, yeah, sometimes in Maths
Sarah 2: page 5	I don't want to do Maths, it's hard . . [I feel] unhappy . . . maybe 'cause it's hard and I don't know it
Sarah 2: page 6	I don't like Science and Music . . . Science is hard but the exams so hard, but I feel kind of 'fused . . . and I don't like it . . . I feel it's hard I like Science at Oakdale and I can do it and sometimes maybe Cath can eh, help me and do it
Sarah 2: page 7	I'd change some lessons. And then I do, Art, cooking and cleaning . . . Because em, I like cooking and art and em, I'm good at art
Sarah 2: page 11	I think it's OK [at Greenwood] and I do my work
Sarah 2: page 16	[Greenwood is good for] maybe my work . . . [Oakdale is] good for my work and my friends I don't like Maths here
Gemma 1: page 1	I like PE at Oakdale
Gemma 1: page 9	[I'm] happy. I like doing my work. I like em, [] PE and

	working with the whiteboard. Like in History we em, watch video and dancing and we went on trip like you know to the jail . . . Learn about the jail
Gemma 1: page 10	Sometimes [can't do work]. Like the writing and sometimes Maths
Gemma 2: page 2	[I like] everything – PSHE, Science, Music, Art and eh, PE
Gemma 2: page 6	[PSHE] it's boring and em, it's hard. [I] like Science and Art
Gemma 2: page 7	[The work is] easy
Gemma 2: page 13	Good thing [don't get homework]. I don't like homework. [Comparison of work in settings] Different lessons, maybe bit same . . . Easy Oakdale, easy here.
Emma 1: page 3	I do work time . . . Help with reading, Maths and swimming
Emma 1: page 4 - 5	Do hard work. Jane do hard work . . . write name, date . . . hard work <i>What is hard?</i> English. I like Maths . . . Maths [hard] at Oakdale . . . Hard work.
Emma 1: page 5	Emma good at Maths Western School
Emma 1: page 7	[Emma like] classroom, like work
Emma 2: page 4	Hard [work] . . all hard work
Emma 2: page 5	Like doing writing . . . write names and letters on the paper Like Maths and writing and PE and playtime . . . Time to work with Mrs T