Sense of School Belonging among

Irish Primary School Children:

Relationships to Academic

Motivation and Self-concept.

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Submitted in partial fulfilment of the requirements of the Higher Diploma in Arts in Psychology (HDPSYAG) at DBS School of Arts, Dublin.

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May 2014

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Acknowledgements

I would like to firstly thank all the pupils at Divine Mercy S.N.S. for participating in this study, along with their principal, John Ring, and the Board of Management for graciously allowing access to the sample. I would also like to thank my supervisor, Garry Prentice, for his advice and guidance, along with Pauline Hyland for her kind words and support. Thank you to my friends and extended family for their encouragement, support and distraction, when necessary.

Finally, a special thanks needs to be extended to my parents, sister Maria, and fiancé Dave for their invaluable support and encouragement throughout my college experience. I could not have done it without them.
Abstract

The purpose of this study was to examine the relationship between sense of school belonging, academic motivation and self-concept among a sample of 236 Irish primary school children. This study was based on a cross-sectional, quantitative design. Relationships between the variables were measured using self-report questionnaires measuring students’ psychological sense of school membership, general self-concept, and patterns of adaptive learning and motivation. Analyses indicate that pupils high in school belonging were also high in self-concept. Positive correlations were found between both sense of school belonging and self-concept and mastery goal orientation. Negative associations were found between skepticism about the relevance of school for future success and both self-concept and sense of school belonging. Further research suggestions are included, along with limitations of the current study.
1. Introduction

“School motivation cannot be understood apart from the social fabric in which it is embedded.” (Weiner, 1990, p. 621)

1.1 General Introduction

Sense of school belonging is defined as “students’ sense of being accepted, valued, included and encouraged by others (teachers and peers) in the academic classroom setting and of feeling oneself to be an important part of the life and activity of the class” (Goodenow, 1993a, p. 25). The importance of students’ sense of belonging in school is not a new phenomenon in education. It has long been posited that schooling is a ‘social process’ in which learning occurs not in a vacuum, but through students’ interactions with others in the school environment. Educational research through the years has focused on collaborative learning as being an effective learning tool for all students, one that is maximised when a sense of community in school is present. (Dewey, 1958)

The findings of more recent motivational research, however, have delved deeper into the ‘social process’ of learning and have recognised the huge importance of belonging with regards to academic motivation and educational values and expectations. Deci, Vallerand, Pelletier and Ryan (1991) have suggested that when people, particularly children and adolescents, feel connected, related and an integral part of any group, they are more likely to internalise the values of that group. A positive sense of school belonging, then, can have great influence on the value that students’ place on the learning process and how motivated they will be towards academic goals. The overall aim of this study is to investigate whether sense
of school belonging can be considered a significant variable in the academic motivation and general self-concept of a sample of primary school children in 5th and 6th class.

1.2 The Belongingness Hypothesis

The relationship between the need for belonging and motivation has a long history in psychological research. Baumeister and Leary (1995), in an extensive review of the literature on belonging, determined that the need to belong can be described as a “fundamental human motivation” (p. 497). This hypothesis, viewing belonging and the desire for social connections as a basic psychological need, echoes Maslow’s (1954) theory of motivation. In his theory of the hierarchy of needs, Maslow posits that the sense of belonging and social acceptance is an important and basic psychological need and that meeting this need is a necessary precondition to the pursuit of higher needs. When applied to the educational setting, it would appear that until a student’s basic need for school belonging and social acceptance are met, they cannot be motivated towards higher needs such as the desire for knowledge, academic achievement, and so on. A sense of belonging in school, therefore, can influence the value that students attribute to academic work, a relationship that will be examined in this study.

In echo of this belonging hypothesis, Deci and colleagues (1991), in their Self-Determination theory, state that ‘relatedness’ is one of three innate basic psychological needs inherent in human life, along with the needs for competence and autonomy. This sense of relatedness (or belonging) involves “developing secure and satisfying connections with others in one’s social milieu” (Deci et al, 1991, p. 327). It is stressed that motivation, along with performance and development, will be maximised within social contexts in which these three innate psychological needs are met. With regards to the educational realm, Deci and
colleagues emphasise the importance of developing needs for relatedness, competence and autonomy within the school community in order to promote in students genuine enthusiasm for learning, in which they are intrinsically motivated towards their academic goals and, subsequently, can internalise the values of their social environment.

1.3 Sense of School Belonging

General consensus has been reached among educational researchers regarding the need for belonging in school as an innate and basic psychological need of students. The power and influence of a perceived sense of school belonging has been validated through several studies, with research determining the significant and often predictive role it plays in a host of positive academic behaviours and outcomes. Positive sense of school belonging has been found to be significantly related to academic achievement and, more specifically, predictive of end of year grades. (Midgley, Felf-Laufer & Eccles 1989; Blum, 2005; Hagborg, 1994, 1998; Anderman and Anderman 1999; Roeser, Midgley & Urdan, 1996)

Studies have also found significant associations between perceived sense of belonging and classroom engagement and participation (Osterman, 2000; Goodenow & Grady 2003), time spent on homework (Hagborg, 1998), positive school affect (Roeser et al, 1996) and educational aspirations (Hagborg, 1998).

Further, sense of school belonging has been found to be a powerful predictor of academic self-efficacy and academic self-concept (Roeser et al, 1996; Ryan et al, 1994; Osterman, 2000) with these, in turn, being positively related to final grades, school success and achievement. (Battistich et al, 1995; Hagborg, 1994; Hay, Ashman & Van Kraayenoord, 1998; Guay, Marsh & Boivon, 2003, Marsh, 1992) In a more recent study examining students’ sense of relatedness as a factor in their academic engagement and
performance, Furrer and Skinner (2003) reported that children who reported a greater degree of relatedness in school also feel more confident, work harder, cope more adaptively, show more positive affect, and perform better in school (p. 149). Finn (1992), in a study investigating school belonging amongst students from groups demographically at-risk of school failure, found that some aspects of school belonging, in particular students’ perceptions of teacher support, predicted school participation and engagement. Finn concluded that a perceived sense of membership in an academic setting heavily influences students’ commitments to school and their acceptance of educational values.

It is not just academic behaviours and outcomes that are influenced by sense of belonging, however. In a large scale review of the data on belonging, Osterman (2000) reported that sense of belonging also played a pivotal role in students’ emotional functioning and psychological outcomes, such as general self-concept, self-esteem and self-efficacy. General self-concept and its relationship with sense of belonging is one aspect that will be explored further in this study.

While the above research shows the significant influence sense of belonging has on certain educational and psychological outcomes of students, nowhere has its influence been more vital than in the development of academic motivation, a relationship that forms the central focus of this study. “Feeling connected and important is not just a by-product of doing well in school; a sense of belonging or relatedness plays an integral role in children’s motivational development” (Furrer & Skinner, 2003, p. 160). Findings of research on belonging would suggest that students may derive much of their academic motivation from the perceived supportiveness of others within the school community, teachers and peers alike. According to Battistich and colleagues (1995), in a review of the application of self-determination theory to education, when students’ needs for belonging are met in the school environment, they are likely to feel respected, valued and cared about
and that they make a valuable contribution to the group. This combination of social support and the feeling of being valued, along with the perception that one is having a meaningful influence on the group, is what provides students with motivation, in particular intrinsic motivation.

Several studies have documented this important relationship between sense of belonging and academic motivation. Goodenow and Grady (1993) examined the influence of students’ subjective sense of belonging on school motivation among disadvantaged students, a group at high-risk statistically of school drop-out and low classroom motivation and engagement. They found that sense of belonging was significantly associated with several motivation-related measures, including expectancy for success, valuing schoolwork, general school motivation and self-reported effort. The study found that, regardless of student background and other factors, students who do have a high sense of belonging are more likely to be motivated and academically engaged than those whose sense of belonging is low.

In two follow-on studies, Goodenow (1993a & 1993b) further confirmed the positive relationship between sense of school belonging and motivation. The associations between adolescents’ sense of belonging and their expectancies, values, motivation, effort and achievement were examined and bore interesting results. Goodenow revealed that a sense of school membership was significantly related to expectancies for school success and educational values but not statistically associated with academic achievement. This led Goodenow to hypothesise that motivation might be mediating the relationship between sense of school belonging and academic effort and achievement. This hypothesis was echoed by Battistich and colleagues (1995) when they too found sense of school community to be unrelated to academic achievement, while being significantly correlated to measures of students’ intrinsic motivation. Solomon, Watson, Battistich, Schaps &
Delucchi (1992) also found a positive association between students’ perceptions of the classroom as a community, academic and interpersonal attitudes and motivations.

Of particular relevance to this study was Anderman’s (2003) research examining the relationship between sense of belonging and students’ perceptions of the task goal orientation of their classes. Students’ perceptions of the instructional context of their classes and motivational beliefs were found to be significantly associated with their sense of school belonging. More specifically, students who perceived their classes as task or mastery-oriented, that is, where the focus is on the process of learning and the inherent value of the task rather than on grades or performance, reported higher levels of belonging in school. Students’ sense of belonging was higher when they viewed their learning tasks as interesting, important and useful. Anderman stated that students will feel less alienated from school environments that emphasise personal effort, improvement and mastery. Also of relevance to the study at hand, was Solomon and colleagues’ (Solomon, Battistich, Watson, Schaps & Lewis, 2000) findings of the Child Development Project, designed to enhance students’ sense of community in school. Their results reported a significant relationship between sense of community and liking for school, achievement motivation and intrinsic academic motivation. Achievement motivation can contribute to adaptive patterns of learning and its significance relating to students’ sense of school belonging will be further measured in this study.

1.4 Negative Effects of Low Sense of School Belonging

Not only does perceived sense of belonging in school play a role in a host of positive outcomes and behaviours, but it has also been found to mediate and play a preventative role against negative educational and social outcomes. Blum (2005), for example, in a review of
the National Longitudinal Study of Adolescent Health, found that, independent of how they were performing academically, students who felt connected or had a high degree of belonging in school were significantly less likely to engage in negative and maladaptive behaviours. It was reported that students with a sense of ‘connectedness’ are less likely to skip school, be involved in fighting or bullying behaviour, use drugs or other illegal substances, demonstrate violent or deviant behaviour, exhibit emotional distress, experience suicide or suicidal thoughts, or become pregnant. Highlighting the stark contrast between those with high sense of belonging and those lacking in school belonging, Furrer and Skinner (2003) established that students who feel that they belong reported higher enjoyment, happiness and interest when engaging in learning activities, whereas students with low sense of belonging reported greater anxiety, boredom, frustration and sadness while engaging in academic tasks. These feelings directly affect student motivation and performance.

As mentioned previously, the idea that students need to feel a sense of community or a connection with school is not a new one. Finn, in 1989, proposed an identification-participation model of education in order to prevent possible negative educational outcomes and, ultimately, withdrawal from school among at risk students. In this model, he stated that, unless students identify even slightly with their school environment; participate in school activities, feel that they are a real part of the school, and believe themselves to be respected and valued by others in the school environment, then they may embark on a deleterious path of problem behaviour, leading eventually to withdrawal from school before graduation. It is clear from the research discussed that a positive sense of belonging among students should be considered a high priority among educators, as without this need being met, focus on educational outcomes, such as performance and grades, would seem to be a potentially fruitless pursuit for a large majority of students.
1.5 Goal-Orientation Theory of Academic Motivation

Unlike previous theories in the realm of academic motivation; that generally view students’ motivation at school as a single entity, which, when measured, can provide an overall picture of how motivated students are towards academic goals and achievement; more recent research has focused on goal orientation theory, which is generally concerned with the “quality of motivation rather than the absolute amount of motivation.” (Anderman, Urdan & Roesser, 2003, p. 3) According to Kaplan and colleagues, this theory, also referred to as achievement goal theory, “provides a comprehensive conceptualisation of the relations between learning environments and students’ motivation, emotional well-being, and performance” (Kaplan, Middleton, Urdan & Midgley, 2002, p. 21). Goal orientation theory posits the existence of several different types of academic goals that children adopt in educational settings. It is concerned with what motivates students in academic settings, rather than simply how motivated they are. Students’ different goal orientations provide insight into whether children’s patterns of learning at school are adaptive or maladaptive, and this has become an increasingly important topic in educational research. (Roeser et al, 1996, p. 408)

According to Anderman and Anderman (1999), two members of a group of researchers at the heart of goal orientation theory, students are referred to as either mastery oriented (also known as task oriented) or performance oriented (also referred to as ability oriented or ego oriented). Students are described as mastery oriented when they are primarily interested in mastering a specific task. Focus is on understanding the task at hand and developing competence and self-improvement. Students who are mastery oriented inherently value and enjoy the process of learning. Parallels have been drawn between mastery goal orientation and intrinsic academic motivation and it is easy to see why. Like those who are mastery oriented, self-determination theory describes those who are intrinsically motivated as engaging in academic behaviour because of interest, enjoyment or inherent satisfaction,
rather than for external reasons, such as praise or rewards. (Deci & Ryan, 2000) Students who are motivated by mastery goals are described as engaging in adaptive patterns of learning as these goals are generally associated with a positive constellation of outcomes such as attributing failure to a lack of effort, persisting in difficult situations, choosing moderately challenging tasks, having relatively positive feelings about school and schoolwork, using deep cognitive processing strategies, using more self-regulating strategies, and being more intrinsically motivated than when low in mastery goal orientation. (Anderman et al, 2003, p. 6) In classrooms that emphasise improvement, effort and learning for intrinsic reasons, students are more likely to adopt personal mastery goals and engage in adaptive patterns of learning. (Anderman & Anderman, 1999)

In contrast, students are described as performance oriented when their primary concern is the demonstration of their competency relative to others. Similar to extrinsic motivation, when students are motivated by performance goals, they engage in behaviour for reasons that are external to the self and that involve social comparison. According to Anderman, Urdan and Roeser (2003, p. 6), when performance-oriented, students have been shown to be more likely to attribute failure to their ability, choose less challenging tasks, use more surface and less deep processing learning strategies, tend to give up when faced with difficulties and have more negative affect towards school than when mastery oriented. These negative outcomes are the reason that researchers conclude that performance goal orientation may be a maladaptive pattern of learning. In classrooms where teachers emphasise grades, achievements, the outperforming of others and ability differences between students, students are more likely to adopt performance goals and demonstrate maladaptive patterns of learning. (Anderman & Anderman, 1999)

Current research has further distinguished between approach and avoidance performance orientations, with research of achievement goals now generally including three
types of goals: mastery, performance-approach and performance-avoidance. (Anderman et al, 2003, p. 4) Performance-approach goal orientation is indicative of a student who wishes to outperform others and demonstrate their ability, whereas performance-avoidance goal orientation is indicative of a student whose main goal is to avoid appearing ‘stupid’ or incompetent, in particular when compared to others. These three achievement goal orientations and their relationships with other variables will be examined in this study.

Research examining the relationship between students’ goal orientation and sense of school belonging has generally focused on how students’ achievement goal orientation changed over time during the transition from middle school to high school. Anderman and Midgley (1997), for example, reported that students’ sense of belonging seemed to decline during the transition. Students’ perceived a greater emphasis on performance goals in their middle school environments in contrast to their elementary school environments, which they perceived as more oriented to mastery goals. Anderman and Anderman (1999) also examined changes in students’ perceived sense of school belonging and goal orientations during the transition to middle school. They proposed that students’ sense of school belonging in their new middle school environment should explain changes in achievement goal orientation. Results found that students’ sense of belonging in school was predictive of an increased mastery goal orientation and modestly associated with a decrease in ability goal orientation. According to the authors, students who felt that they were accepted and a real part of their new middle school were more likely to pursue academic tasks for the purpose of personal understanding, increased competence and inherent satisfaction. In contrast, students who reported lower senses of school belonging in their new school were more likely to pursue academic tasks with the aim of either demonstrating their competence or avoiding the appearance of incompetence.
Self-Concept: Implications for Education

Self-concept is considered a critical factor in both the social and emotional development of children. It is defined as “a person’s understanding of who he or she is, in relation to self-esteem, appearance, personality and various traits” (Berger, 2011, p. 266). Self-concept can be viewed as a hierarchical multifaceted construct with global self-concept at the top, and subcategories underneath, including social, academic, emotional, physical and athletic perceptions of self (Parker, 2010). Years of research has documented the significance of students’ appraisals of themselves with regards to their general well-being and success in school. Upon reviewing the research literature on self-concept in children and education, self-concept has been found to be positively related to school success and achievement (Hay, Ashman & Van Kraayenoord, 1998; Guay, Marsh & Boivon, 2003; Marsh, 1992), with higher self-concept groups showing greater percentages of task-oriented behaviours and motivations in class (Shiffler, Lynch-Sauer & Nadelman, 1977). Interestingly, Finn (1989), in a study of students at-risk of withdrawal and their identification with school, suggests that students’ sense of belonging at school may potentially play a mediating role in this relationship between self-concept and academic achievement. He posits that a positive sense of school belonging may impact on levels of self-concept, which, in turn, influence academic achievement.

Goodenow (1993b) emphasises the importance of school belonging and the potential influence it can have on self-concept, in particular among early adolescents, stating that students’ need for school belonging, social support from and acceptance from peers “takes on special prominence during early adolescence as young people begin to seriously consider who they are and wish to be, with whom they belong, and where they intend to invest their energies and stake their futures” (p. 81). If adolescents do not feel supported and accepted in this time of exploration of their personal identity, separate from their parents and family, their
self-concept can suffer. This was echoed by Ryan, Stiller and Lynch (1994, as cited in Ireson & Hallam, 2005) who found that pupils’ self-esteem, self-efficacy and self-concept were influenced by relationships with peers. In one of the only British studies of its kind, Ireson and Hallam (2005) examined associations between pupils liking for school, their experiences in lessons and their self-concepts. They reported a strong significant relationship between liking for school and general self-concept. Anderman (2002), in an analysis of the data of the National Longitudinal Survey of Adolescent Health, also reported a significant relationship between sense of belonging and self-concept, as well as a positive association between self-concept and optimism for future success, which links with the skepticism about the relevance of school for future success measure investigated in this study.

In research examining the relationship between achievement goals (specifically task, performance-approach and performance-avoid goals), self-concept and gender, Pajares and colleagues (Pajares, Britner & Valiante, 2000) found that both task goals and performance-approach goals were associated positively with self-concept, whereas a negative association was found between self-concept and performance-avoid goals. This would suggest that those students who are motivated by tasks that are either inherently enjoyable or interesting, or which provide opportunities to demonstrate their competence, have higher levels of self-concept than students who are motivated solely to avoid appearing ‘stupid’ or less competent than their peers.

Anderman and Maehr’s (1994) review of motivation in the middle grades would appear to offer support for this hypothesis. They state that children develop their self-concepts based on information they receive from social comparisons with other children, especially as they move into adolescence. Performance goals are based on comparisons of competence which could impact on students’ self-concept. Anderman and Maehr go into more detail about the potential impact self-concept could have on motivational behaviour of
children, in particular early adolescents in a time where they tend to struggle with their identity. They posit that an individual’s self-concept can be made up of ‘possible selves’ representing what individuals would like to become, could become, or are afraid of becoming and that these selves serve as a link between cognition and motivation. These possible selves can have a powerful influence on students’ academic and motivational behaviour and the goals that they are oriented to. (2004, p. 292) For example, students may be influenced to be oriented towards performance-avoid goals if their possible self is afraid of appearing incompetent. The potential relationship between self-concept and both school belonging and students’ motivational behaviour will be examined in this study.

1.6 Gender, Ethnicity and Expectancies for Success

Research regarding gender and ethnicity differences with regards to school belonging and motivational behaviour has provided the reasoning for the inclusion of the exploration of these potential differences in this study. Upon reviewing the research, gender differences between boys and girls in their subjective sense of school belonging have been widely reported, with boys consistently reporting lower levels of belonging than girls. (Goodenow, 1993a, 1993b; Goodenow & Grady, 1993; Furrer & Skinner, 2003) Of particular relevance to this study were findings from the Growing Up in Ireland Study, involving perceptions of school belonging collected from 9 year old primary school children throughout the country. (ESRI, 2012) In an analysis of the survey’s data, McCoy, Smyth & Banks (2012) emphasised that, even though the majority of Irish primary school children are engaged at, and generally like, school, the gender differences in this regard are worrying; with boys significantly more likely to report that they never like school, never look forward to school and never like their teacher. While 6% of girls reported that they never look forward to school, this was the case
for one in six boys. (McCoy et al, 2012) According to the authors, while these results do not contradict similar research internationally, they raise significant concerns over boys’ engagement with the school experience, stating that this low sense of belonging among boys may have a potentially detrimental impact on their educational development and performance in the long term.

Gender differences in motivational behaviours and goal orientations were also found, with girls generally more academically motivated than their male counterparts. (Goodenow & Grady, 1993; Sanchez et al, 2005; Eccles, Wigfield, Harold & Blumenfeld, 1993) Roeser, Midgley and Urdan (1996), in a large scale review of studies on achievement goal orientations, reported that boys are generally more oriented to performance goals and less oriented to mastery or task goals than girls. In support of this, in a study examining the relationship between achievement goals, motivation constructs and gender, Pajares and colleagues (2000) also found that girls were found to have stronger task goals than boys. Sense of school belonging has also been found to be lower in foreign-born and minority ethnic groups (Goodenow & Grady, 2003; Sanchez et al, 2005), and, as the sample in this study consists of a large percentage of foreign-born children of varying ethnicities, differences across nationalities will be explored.

Students’ expectancies for the future and their perceptions about the relevance of school for future success will also be measured in this study. Higher levels of sense of belonging in school have been found to be positively associated with greater optimism about the future and expectancies for success. (Anderman, 2002; Goodenow & Grady 1993; Goodenow, 1993a; Goodenow, 1993b) As mentioned previously, when individuals feel that they belong and are a part of a group, they are more likely to take on the values of that group and internalise them. Therefore, it has been suggested that students who feel that they belong in school will internalise the educational values promoted in their classroom environment,
and, as a result, report higher feelings of optimism and expectancies for future success. Students who report lower sense of belonging in school are more likely to have high levels of skepticism about the relevance of school for future success. (Anderman & Maehr, 1994) Optimism for future success was also found to be related positively to self-concept among adolescents. (Anderman, 2002) Minority ethnic groups have been found to report lower expectancies for success than majority groups. (Sanchez et al, 2005)

1.7 The Irish Context

The research literature on school belonging and academic engagement in Ireland is mainly based on two studies of school engagement; an international study on fifteen year olds conducted by PISA for the OECD (Willms, 2003), and Growing Up in Ireland, a national longitudinal study of the lives of nine year olds in Ireland (ESRI, 2012). Little other research could be found relating to the area in Ireland. Analyses of the PISA study on school engagement among secondary school students indicated that, while Ireland’s overall sense of school belonging did not differ significantly from the OECD average, this average found that one-in-four students have a low sense of school belonging and all schools in nearly every country have a prevalence of low sense of school belonging of at least 15%. (Willms, 2003)

In relation to Irish primary school students, the picture is somewhat more positive, with the vast majority of children reporting high levels of engagement in school. In an analysis of the Growing Up in Ireland study’s data, McCoy and colleagues measured children’s affective engagement at school and how it varied across different variables such as social background, immigrant status and gender, along with others of less relevance to this study. Their results demonstrated broadly high levels of engagement and belonging
among Irish primary school children, with 93% stating they like school, 89% reporting that they look forward to school, and 94% indicating that they like their teacher. (McCoy, Smyth & Banks, 2012)

1.8 Purpose of the Study

Research specifically exploring the relationship between sense of school belonging, academic motivation and self-concept is sparse, in particular among Irish primary school children, of which no related studies could be found. Therefore, the purpose of this investigation is to examine the thus far unstudied relationships between these variables, while controlling for background factors such as gender and ethnicity, as both boys and foreign-born children have been found more likely than other groups to have low sense of school belonging and academic motivation. (Goodenow 1993a; Willms, 2003; Eccles et al, 1993; Sanchez et al, 2005; Goodenow & Grady, 1993) While no relationship has been found between gender or minority ethnicities and self-concept in previous studies, (Vandergriff & Rust, 1985; Marcic & Kobal, 2011) both have been shown to be significantly related to low sense of school belonging and motivation. I would be interested to see, as students with high degrees of sense of school belonging have been found to have a stronger sense of identity (Osterman, 2000) and more positive self-concept (Hagborg, 1994), whether there will be any gender or ethnic differences in this regard.

1.9 Hypotheses

H1. Sense of school belonging will be significantly associated with adaptive patterns of academic motivation.
H2. There will be a significant positive relationship between sense of school belonging and general self-concept.

H3. There will be a negative significant relationship between sense of school belonging and maladaptive patterns of academic motivation.

H4. There will be a significant relationship between general self-concept and adaptive patterns of academic motivation.

H5. There will be a negative significant relationship between general self-concept and maladaptive patterns of academic motivation.

H6. There will be statistically significant differences in levels of school belonging between boys and girls.

H7. There will be no statistically significant differences in levels of general self-concept between boys and girls.

H8. There will be statistically significant gender differences in academic motivation, with girls more likely to be mastery-oriented and boys more likely to be performance-approach oriented.

H9. There will be statistically significant differences in school belonging between nationalities.

H10. There will be a negative significant relationship between sense of school belonging and skepticism about the relevance of school for future success.
2. Methods

2.1 Participants

The sample consisted of 236 children, 105 males and 131 females. The children were in 5th class (n = 120) and 6th class (n = 116) in Divine Mercy S.N.S, an urban, Catholic primary school in Lucan, West Co. Dublin. The students in the school came from a wide range of backgrounds and nationalities. The area surrounding the school would be considered disadvantaged, with a large amount of social housing and families on rent allowance, however, the school has lost its official DEIS status. Participants ranged in age from 11 to 13, with a mean age of 11.14. 107 children identified themselves as ‘African’, 77 as ‘Irish’, 27 as ‘Eastern European’, 20 as ‘Asian’, 3 as ‘Traveller’ and 2 as ‘Other’.

The school was chosen using opportunistic sampling, as the author worked in the school as a Learning Support teacher. No student being taught by the author participated in the study. All 5th and 6th class pupils, excluding those with special educational needs or those with limited understanding of English, were invited to take part in the study. Permission to access the sample was obtained from the school principal and Board of Management, while permission slips signed by a parent were also a requirement of participation. No incentive was offered to the participants and both children and parents were informed that participation was voluntary.

2.2 Design

A quantitative, cross-sectional correlational design which is descriptive in nature was used in this study. The independent variable (IV) was sense of school belonging and the dependent variables (DV) were general self-concept, mastery goal orientation, performance-
approach goal orientation, performance-avoid goal orientation, skepticism about the relevance of school for future success, gender and nationality.

2.3 Materials

The materials used in this study consisted of several anonymous pen and paper self-report questionnaires. Included was a short survey eliciting demographic information regarding the participants’ age, class, gender and nationality. The study also used standardised instruments, consisting of the Psychological Sense of School Membership (PSSM) scale (Goodenow, 1993b), the General Self subscale from the Self-Description Questionnaire 1 (SDQ1) (Marsh 1990), and the following four subscales from the Patterns of Adaptive Learning Survey (PALS) (Midgley, Maehr, Hruda, Anderman, Anderman, Freeman, Gheen, Kaplan, Kumar, Middleton, Nelson, Roeser & Urdan, 2000); (i) Mastery Goal Orientation, (ii) Performance-Approach Goal Orientation, (iii) Performance-Avoid Goal Orientation and (iv) Skepticism About the Relevance of School for Future Success.

Psychological Sense of School Membership Scale (PSSM)

The PSSM measures participants’ perceptions of belonging and psychological engagement in school. This scale consists of 18 items, 5 of which are reverse coded. The scale consists of items involving perceived liking, personal acceptance and inclusion (e.g. “Most teachers at this school are interested in me.”, “I feel like a real part of this school”) as well as items involving respect and encouragement for participation (e.g. “People here notice when I am good at something”, “Other students in this school take my opinions seriously.”). Responses are in a 5-point Likert scale format, ranging from 1 = Not at all true to 5 =
Completely true. Participants’ scores were summed into a total score to generate an index of school belonging, with possible total scores ranging from 18 to 90. High scores indicated higher sense of school belonging. Sanchez, Colon and Esparza (2005) reported that internal consistency reliability for this scale was good (Cronbach’s $\alpha = .87$) with Goodenow’s (1993) research revealing good construct validity of the scale.

*Self-Description Questionnaire 1 (SDQ1)*

The SDQ1 was designed to measure multiple dimensions of self-concept for pre-adolescents. The subscale used in this study, General Self, was designed to measure a global perception of self. This subscale includes 10 items, 2 of which are reverse coded. The scale consists of items reflecting the child’s perception of himself or herself as an effective, capable individual, proud of and satisfied with the way he or she is (e.g. “In general, I like being the way I am”, “Overall, I have a lot to be proud of”). Responses are in a 5-point Likert Scale format ranging from 1 = Not at all true to 5 = Completely true. Participants’ scores were summed into a total score to represent general self-concept, with possible scores ranging from 10 to 50. The higher the score, the higher the level of self-concept. Several studies have demonstrated high levels of validity and reliability for this instrument. (Marsh 1990) Cronbach’s $\alpha$ was .68 for the General Self subscale.

*Patterns of Adaptive Learning Survey (PALS)*

The Patterns of Adaptive Learning survey was designed using goal orientation theory to examine the relation between the learning environment and students’ motivation affect and behaviour. Student scales address personal achievement goal orientations and achievement-
related beliefs, attitudes and strategies. Each of the following subscales used in this study contained responses in 5-point Likert scale format ranging from 1 = Not at all true to 5 = Completely true. Several studies have confirmed the internal consistency, stability and construct validity of the scales. (Midgley, Kaplan, Middleton, Maehr, Urdan, Anderman, Anderman & Roeser, 1998)

(i)  **Mastery Goal Orientation**

This subscale assesses to what extent a student is oriented towards competence and mastery in an achievement setting (e.g. “An important reason why I do my work is because I like to learn new things”). It consists of 6 items with no reverse coding necessary. Participants’ scores are averaged to find their level of mastery goal orientation. Students scoring highly on this instrument are focused on learning as an end in itself and attention is on the task at hand. Cronbach’s $\alpha$ for this subscale was .86.

(ii)  **Performance-Approach Goal Orientation**

This subscale assesses to what extent a student is motivated to demonstrate their competence in an achievement setting (e.g. Doing better than other students in class is important to me”). It consists of 5 items with no reverse scoring necessary. Participants’ scores are averaged to find their level of performance-approach goal orientation. When oriented towards performance-approach, attention is on the self rather than the task at hand. Cronbach’s $\alpha$ for this subscale was .86.

(iii)  **Performance-Avoid Goal Orientation**

This subscale assesses to what extent a student is motivated in an achievement setting to avoid demonstrating their incompetence (e.g. “The reason I do my work
is so others won’t think I’m dumb”). It consists of 6 items with no reverse scoring necessary. Participants’ scores are averaged to find their level of performance-avoid goal orientation. When oriented towards performance-avoid, attention is on the self and the avoidance of appearing incompetent. A performance-avoid orientation has been associated with maladaptive patterns of learning. Cronbach’s α for this subscale is .75.

(iv) **Skepticism About the Relevance of School for Future Success**

This subscale refers to students’ beliefs that doing well in school will not help them achieve success in the future (e.g. Even if I do well in school, it will not help me have the kind of life I want when I grow up). This scale consists of 6 items with no reverse coding necessary. Participants’ scores are averaged to find their level of skepticism. Higher scores on this scale indicate low levels of academic motivation. Cronbach’s α for this subscale is .83.

### 2.4 Procedure

Ethical clearance for this study was granted by the Dublin Business School Psychology Department Board of Ethics. Accompanying the author’s proposal sent to the Ethics Board was a Statutory Declaration for working with children. Written consent providing access to the sample was granted by the principal and Board of Management of Divine Mercy S.N.S. An information slip and permission slip was sent home with each child eligible to take part in the study. The author gave a brief description of the purpose of the study to each class, explaining that its aim was to find out how the children thought about themselves, their school, their classwork, their expectations for the future and how much they
felt they belong in the school community. The children were informed that this was an anonymous study and that no-one but themselves would know what they responded. They were also advised that there were no right or wrong answers. Finally, they were told that it was a voluntary study and they were asked to read the information sheet with their parents and decide together whether they would like to participate.

After all permission slips were collected, appointments were made with class teachers for a suitable time that the author could come into the class to administer the questionnaire. Before the questionnaires were given out, each child was given a separate instructions sheet reminding them that the study was voluntary and anonymous. Included on this sheet, which children were told to keep for themselves, was the author’s email address and contact details for Childline, in the event that anything in the survey upset them. They were given an example of the possible responses on a Likert scale and reminded that they should only choose one answer. If they made a mistake, they were informed that they could turn their tick into an ‘X’ and tick the correct answer. The author orally went through sample questions and explained how the children could respond using the Likert scale. Sample questions included negative statements such as “I don’t like ice-cream” so the children were clear on how to correctly answer these.

Children were invited to ask any questions and once it was clear that each child understood what to do, the author began the survey by reading aloud each statement and possible responses and providing the children adequate time to answer. The questionnaire took approximately 25 minutes to complete. After collection of the completed surveys, the children were informed that they would be debriefed about the results of the study once they were collated. Copies of the information sheet, instruction sheet and full questionnaire are included in the appendices.
2.5 Data Analysis

The data analysis of this study was conducted using IBM SPSS Statistics Version 21 for Windows.
3. Results

Descriptive Statistics

The sample consisted of 236 children, 105 males and 131 females. The children were in 5th class (n = 120) and 6th class (n = 116) in Divine Mercy S.N.S, an urban, Catholic primary school in Lucan, West Co. Dublin. The students in the school came from a wide range of backgrounds and nationalities. The area surrounding the school would be considered disadvantaged, with a large amount of social housing and families on rent allowance, however, the school has lost its official DEIS status. Participants ranged in age from 11 to 13, with a mean age of 11.14. As shown in Figure 1, 107 children identified themselves as ‘African’, 77 as ‘Irish’, 27 as ‘Eastern European’, 20 as ‘Asian’, 3 as ‘Traveller’ and 2 as ‘Other’.

![Bar chart showing the nationality of respondents](image)

Fig 1: Bar chart showing the nationality of respondents
The following table provides an overview of scores for children on the psychological sense of membership scale (PSSM) of school belonging and their levels of general self-concept. The average score for children on the PSSM was 58.86 (SD = 7.99) out of a possible total score of 90. Levels of general self-concept of the children averaged out at a score of 35.6 (SD = 5.34) out of a total score of 50. These results show that the majority of children in the study had moderate to high levels of both sense of school belonging and general self-concept.

Table 1: Descriptive Statistics of School Belonging and General Self-Concept Measures

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSSM</td>
<td>58.86</td>
<td>7.99</td>
</tr>
<tr>
<td>General Self-concept</td>
<td>35.6</td>
<td>5.34</td>
</tr>
</tbody>
</table>

One specific question asked in the Psychological Sense of School Membership Scale related to the extent children felt like a real part of their school. Figure 2 below illustrates the results. The bar chart demonstrates that 179 children (75.9% of respondents) reported that it was ‘Mostly true’ or ‘Completely true’ that they felt like a real part of their school. In contrast, the bar chart also depicts that only 7 out of the 236 respondents (3%) did not feel like a real part of their school.
Table 2 provides an overview of scores relating to the academic motivation of the children who participated in the study. Children scored an average of 20.54 on Mastery goal orientation measure (SD = 4.55) out of a total score of 30, indicating that a majority of children are intrinsically motivated by the task and the process of learning rather than external influences. Participants scored an average of 13.77 on Performance-Approach Goal Orientation measure (SD = 5.02) out of a possible total of 25, suggesting that approximately half of the time, the majority of those questioned are motivated by performance-related outcomes rather than the task itself. With regards to the Performance-Avoid Goal Orientation measure, the average score was 14.84 (SD = 6.28) out of a total of 30, again suggesting that just under half of the time the majority of participants were motivated to do their work in order to avoid the demonstration of incompetence, a maladaptive learning pattern. Children scored 9.23 on average regarding their skepticism about the relevance of school for future
success out of a possible total of 30. These results indicate that a large majority of students questioned believe in the relevance of education for their future success.

*Table 2: Descriptive Statistics of Patterns of Adaptive Learning Measure*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mastery Goal Orientation</td>
<td>20.54</td>
<td>4.55</td>
</tr>
<tr>
<td>Performance-Approach Goal Orientation</td>
<td>13.77</td>
<td>5.02</td>
</tr>
<tr>
<td>Performance-Avoid Goal Orientation</td>
<td>14.84</td>
<td>6.28</td>
</tr>
<tr>
<td>Skepticism About the Relevance of School for Future Success</td>
<td>9.23</td>
<td>4.64</td>
</tr>
</tbody>
</table>

*Inferential Statistics:*

A series of Pearson’s r correlations, independent t-tests and one-way ANOVA tests were conducted to examine the study’s main hypotheses.

**H1. Sense of school belonging will be significantly associated with adaptive patterns of academic motivation**

A Pearson correlation coefficient found that there was a moderate positive significant relationship between psychological sense of school membership (M = 58.86, SD = 7.99) and mastery goal orientation (M = 20.54, SD = 4.55) (r (234) = 0.44, p < .001) Therefore the null hypothesis is rejected. This relationship can account for 19.36% of variation of scores. These
results would suggest that students with a high level of school belonging are more oriented to mastery goals.

**H2. There will be a significant positive relationship between sense of school belonging and general self-concept.**

A Pearson correlation coefficient found that there was a strong positive significant relationship between a psychological sense of school membership (M = 58.86, SD = 7.99) and general self-concept (M = 35.6, SD = 5.34) (r (234) = 0.53, p <.001) Therefore the null hypothesis is rejected. This relationship can account for 28.09% of variation of scores.

**H3. There will be a negative significant relationship between sense of school belonging and maladaptive patterns of academic motivation.**

A Pearson correlation coefficient found that there was no significant relationship between psychological sense of school membership (M = 58.86, SD = 7.99) and performance-approach goal orientation (M = 13.76, SD = 5.02). (r (234) = -.018, p = .779). A Pearson correlation coefficient found that there was no significant relationship between psychological sense of school membership (M = 58.86, SD = 7.99) and performance-avoid goal orientation (M = 14.84, SD = 6.28). (r (234) = -.035, p = .59)
H4. There will be a significant relationship between general self-concept and adaptive patterns of academic motivation.

A Pearson correlation coefficient found that there was a moderate positive significant relationship between general self-concept (M = 35.6, SD = 5.34) and mastery goal orientation (M = 20.54, SD = 4.55). (r (234) = .39, p < .001) Therefore the null hypothesis is rejected. This relationship can account for 15.21% of variation of scores. These results suggest that students high in self-concept are more likely to be oriented towards task or mastery goals.

H5. There will be a negative significant relationship between general self-concept and maladaptive patterns of academic motivation.

A Pearson correlation coefficient found that there was no significant relationship between general self-concept (M = 35.6, SD = 5.34) and performance-approach goal orientation (M = 13.76, SD = 5.02). (r (234) = .067, p = .30) A Pearson correlation coefficient found that there was no significant relationship between general self-concept (M = 35.6, SD = 5.34) and performance-avoid goal orientation (M = 14.84, SD = 6.28). (r (234) = .049, p = .46)

H6. There will be statistically significant differences in levels of school belonging between boys and girls.

An independent samples t-test found that there was no statistically significant difference between males (M = 58.51, SD = 8.00) and females (M = 59.14, SD = 8.00) in levels of psychological sense of school membership. (t (234) = -.60, p = .55, CI (95%) -2.69 - 1.43) Therefore the null hypothesis can be accepted.
Table 3: Independent Samples T-test table showing differences between males and females in school belonging, general self-concept and measures of academic motivation

<table>
<thead>
<tr>
<th>Variable</th>
<th>Groups</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>School belonging</td>
<td>Males</td>
<td>58.51</td>
<td>8.00</td>
<td>-.60</td>
<td>234</td>
<td>.55</td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>59.15</td>
<td>8.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-concept</td>
<td>Males</td>
<td>35.43</td>
<td>4.88</td>
<td>-.45</td>
<td>234</td>
<td>.66</td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>35.74</td>
<td>5.69</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mastery Goal Orientation</td>
<td>Males</td>
<td>20.61</td>
<td>4.58</td>
<td>.20</td>
<td>234</td>
<td>.84</td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>20.49</td>
<td>4.55</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance-Approach Goal Orientation</td>
<td>Males</td>
<td>14.48</td>
<td>4.88</td>
<td>2.00</td>
<td>234</td>
<td>.045*</td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>13.18</td>
<td>5.07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance-Avoid Goal Orientation</td>
<td>Males</td>
<td>15.11</td>
<td>6.49</td>
<td>.60</td>
<td>234</td>
<td>.55</td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>14.62</td>
<td>6.12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skepticism About the Relevance of School for Future Success</td>
<td>Males</td>
<td>9.46</td>
<td>4.75</td>
<td>.67</td>
<td>234</td>
<td>.51</td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>9.05</td>
<td>4.57</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p significant at .05 level.

**H7. There will be no statistically significant differences in levels of general self-concept between boys and girls**

An independent samples t-test found that there was no statistically significant difference between males (M = 35.43, SD = 4.88) and females (M = 35.74, SD = 5.69) in levels of general self-concept. (t(234) = -.445, p = .66, CI (95%) -1.69 - 1.07)
**H8. There will be statistically significant gender differences in academic motivation, with girls more likely to be mastery-oriented and boys more likely to be performance-approach oriented.**

Males (M = 14.48, SD = 4.88) were found to have higher levels of performance-approach goal orientation than females. (M = 13.18, SD = 5.07) The 95% confidence limit shows that the population mean differences of the variables lies somewhere between .03 and 2.59. An independent samples t-test found that there was a statistically significant difference between levels of performance-approach goal orientation of males and females. (t(234)= 2.00, p = .045) No significant gender differences were found in mastery goal orientation between males and females.

**H9. There will be statistically significant differences in school belonging between nationalities.**

A one way analysis of variance showed that there was a significant difference between nationalities in terms of their psychological sense of school membership. (f = (5, 230) = 3.15, p = .009) More specifically, Tukey HSD post hoc analysis highlighted that Irish children had significantly higher levels of school belonging (M = 60.95, SD = 6.58, p = .014) than African children (M = 57.08, SD = 8.53, p =.014)

**H10. There will be a negative significant relationship between sense of school belonging and skepticism about the relevance of school for future success.**

A Pearson correlation coefficient found that there was a weak negative significant relationship between psychological sense of school membership (M = 58.86, SD = 7.99) and
skepticism about the relevance of school for future success (M = 9.23, SD = 4.64). (r (234) = -.13, p = .04) Therefore the null hypothesis is rejected. This relationship can account for 1.69% of variation of scores. These results suggest that those higher in school belonging are less likely to question the relevance of school for future success.

Other relevant findings:

A Pearson correlation coefficient also found that there was a weak negative significant relationship between general self-concept (M = 35.6, SD = 5.34) and skepticism about the relevance of school for future success (M = 9.23, SD = 4.64). (r (234) = -.25, p < .001) This relationship can account for 6.25% of variation of scores. This would suggest that students scoring high in self-concept are less likely to be sceptical about the relevance of school for their future success.

Further, a one-way analysis of variance showed that there was a significant difference between nationalities in terms of skepticism about the relevance of school for future success. (F (5, 230) = 3.22, p = .008) More specifically, Tukey HSD post hoc analysis highlighted that Traveller children had significantly higher levels of skepticism about the relevance of school for future success (M = 19.17, SD = 8.09) than Irish children (M = 9.4, SD = 4.43, p = .004), Asian children (M = 8.26, SD = 5.49, p = .002), African children (M = 8.95, SD = 4.34, p = .002) and Eastern European children (M = 9.38, SD = 4.54, p = .006).
Finally, a one way analysis of variance showed that there was a significant difference between nationalities in terms of performance-approach goal orientation. ($f = (5, 230) = 3.63$, $p = .004$) More specifically, Tukey HSD post hoc analysis highlighted that African children had significantly higher levels of performance-approach goal orientation ($M = 14.94$, $SD = 5.15$, $p = .003$) than Irish children ($M = 12.2$, $SD = 4.5$, $p = .003$)

Figure 2: Means plot showing differences in levels of skepticism about the relevance of school for future success among nationalities.
4. Discussion

4.1 Aim of research

The overall aim of this research was to investigate the relationship between students’ sense of school belonging, patterns of academic motivation and general self-concept. The study also aimed to explore gender and nationality differences across the variables. While a review of the literature found that there was a plethora of international research addressing specific associations between these variables, none explicitly examined all three. As well as this, the relationships between sense of belonging, academic motivation and self-concept, had, as of yet, been unexplored in the Irish context. The findings of this study will be discussed in reference to the ten hypotheses proposed at the beginning of the study, with parallels and distinctions being drawn against previous research in the field. Limitations of the study will also be discussed, along with recommendations for future research. Finally, strengths of the study will be explored.

4.2 Summary of findings

The sample displayed reasonably high degrees of school belonging, with the majority of students scoring moderately to highly on the psychological sense of school membership scale. 76% of the students who participated reported that they felt like ‘a real part’ of their school while, on the other end of the spectrum, only 7 out of the 236 total respondents (3%) reported that they did not feel like they belonged in their school. These results, demonstrating that a large majority of students feel a strong sense of belonging at school, tie in with research conducted on a national level among 9 year old primary school students. The Growing Up in Ireland survey (ESRI, 2012) found that the majority of students had high sense of belonging
and school engagement, with 93% stating that they like school, 89% reporting that they look forward to school, and 94% indicating that they like their teachers.

In the international context, however, the levels of low sense of belonging reported in this study fall well below the OECD average. Findings from the PISA study on school engagement (Willms, 2003), found that, across OECD countries, on average, one in four students have a low sense of belonging at school, compared to just 3% in this study sample. One reason for this discrepancy may be that the OECD average represents a study of secondary school-age children, rather than primary school students. International research on sense of belonging has long documented the decline in students’ sense of belonging as they transition from elementary school to middle school and high school, with levels of belonging generally higher in younger children. (Anderman and Midgley, 1997; Anderman & Anderman, 1999) 71% of the students surveyed also reported moderate to high levels of general self-concept. As well as this, students scored an average of 20.54 on the mastery goal orientation scale, indicating that approximately 68% of students are motivated by mastery or task goals. These students are intrinsically motivated by the task at hand and engage in learning activities for the purpose of self-improvement and the inherent satisfaction they get from their work.

**H1. Sense of school belonging will be significantly associated with adaptive patterns of academic motivation**

Sense of school belonging was found to be significantly associated with mastery goal orientation, an adaptive pattern of academic motivation. Students reporting higher levels of sense of school belonging were significantly more likely to be oriented towards mastery goals in the academic setting. This result echoes previous research in the field, with Anderman and
Anderman (1999) finding students’ sense of belonging to be predictive of increased mastery goal orientation. Research conducted by Anderman in 2003 also supported this hypothesis, finding that students’ sense of school belonging was higher when they viewed their classes as mastery-oriented. Solomon and colleagues (2002) also reported positive relationships between students’ sense of belonging and adaptive patterns of achievement motivation. It appears that when students feel that they belong, are respected and accepted at school, they are more likely to pursue academic tasks for intrinsic reasons such as personal understanding, self-improvement, interest, and inherent enjoyment.

**H2. There will be a significant positive relationship between sense of school belonging and general self-concept.**

As predicted, a strong positive relationship was found between sense of school belonging and students’ general self-concept, with students who reported being high in belonging more likely to be high in self-concept. These views support previous research into self-concept and school belonging. For example, Osterman (2000), in a large scale review of the literature on belonging, concluded that sense of belonging at school played a pivotal role in students’ emotional functioning and the development of their self-concept. Anderman (2002) also found a significant association between sense of belonging and self-concept among adolescents. Certain aspects linked to school belonging were also found to influence students’ self-concept, with Ryan, Stiller and Lynch (2004, as cited in Ireson & Hallam, 2005) finding that pupils’ self-concept was positively influenced by their relationships with peers, and Ireson and Hallam (2005) reporting a strong significant relationship between students’ liking for school and their general self-concept.
H3. There will be a negative significant relationship between sense of school belonging and maladaptive patterns of academic motivation.

No significant relationship was found between sense of school belonging and maladaptive patterns of academic motivation, in particular performance-approach goal orientation and performance-avoid orientation. The null hypothesis can be accepted.

H4. There will be a significant relationship between general self-concept and adaptive patterns of academic motivation.

In support of the hypothesis, a positive significant relationship was found between self-concept and the measure of adaptive academic motivation used in the study; mastery goal orientation. Students who reported high levels of self-concept were significantly more likely to be oriented towards mastery goals and to engage in task-oriented behaviour during academic activities. This builds upon previous research by Shiffler, Lynch and Nadelman (1977) who found that higher self-concept groups in their sample demonstrated greater percentages of task oriented behaviours in class. Also in support of the hypothesis, Pajares and colleagues (2000) found task goals to be positively associated with self-concept among students.

H5. There will be a negative significant relationship between general self-concept and maladaptive patterns of academic motivation.

It was hypothesised that those reporting lower levels of self-concept would be more likely to be oriented towards maladaptive learning behaviours, such as performance-approach and performance-avoid. Despite research evidence finding negative associations between
maladaptive performance goal orientations and self-concept (Pajares et al, 2000), however, no significant relationship between these variables could be found in this study. The null hypothesis can be accepted on this occasion.

**H6. There will be statistically significant differences in levels of school belonging between boys and girls.**

Interestingly, no statistically significant differences could be found in levels of school belonging between boys and girls in this sample. This finding was unexpected as it contradicts an abundance of research in the field, both nationally and internationally, which demonstrates that boys are consistently more likely than girls to report low sense of school belonging. (Goodenow, 1993a; Goodenow and Grady, 1993; Furrer & Skinner, 2003; Goodenow, 1993b; McCoy et al, 2012)

**H7. There will be no statistically significant differences in levels of general self-concept between boys and girls.**

Confirming results of previous research in the area, no significant differences were found between boys and girls with regards to levels of self-concept as expected. (Vandergriff & Rust, 1985; Marcic & Kobal, 2011)
H8. There will be statistically significant gender differences in academic motivation, with girls more likely to be mastery oriented and boys more likely to be performance-approach oriented.

This hypothesis was partly supported by the results of this study. In contrast to previous findings from goal orientation theory research, which reported that girls were generally stronger in mastery or task goal orientation than boys (Roeser et al, 1996; Pajares et al, 2000), no significant gender differences could be found in this regard, with both boys and girls scoring relatively similarly on the mastery approach measure. With regards to performance-approach goal orientation, however, consistent with previous research reporting that boys were generally more performance approach oriented than girls (Roeser et al, 1996), a significant gender difference in performance approach was also found in this study. Males demonstrated significantly higher levels of performance approach behaviour than females in the sample. This would suggest that boys in this sample are more concerned with the appearance of competence, rather than for the inherent satisfaction of competence and learning.

H9. There will be statistically significant differences in school belonging between nationalities.

In support of this hypothesis, findings from this study demonstrate that Irish children were significantly more likely to report higher levels of sense of belonging than African children. No other statistically significant differences between nationalities were found. While research has reported that ethnic minority groups are more likely to report low sense of school belonging in comparison with majority groups in schools (Sanchez et al, 2005), what is interesting about the finding of this study is that, even though African children were more
likely to report lower levels of belonging than Irish children, they were, in fact, the majority
group in this sample, which included 107 African children compared to 77 Irish children.
Other minority ethnic groups such as Traveller children, Eastern European children and
Asian children did not differ significantly with regards to levels of belonging.

**H10. There will be a negative significant relationship between sense of school belonging and skepticism about the relevance of school for future success.**

As expected, sense of school belonging was found to be negatively associated with
skepticism about the relevance of school for future success, with students high in sense of
belonging much less likely to report feelings of skepticism about the relevance of education
to their future. Previous research in the area supports this finding. (Anderman 2002;
Goodenow and Grady 1993; Anderman & Maehr, 1994),

**Other important findings**

While performing data analysis on the variables examined in the study, other
important, statistically significant findings came to light. Firstly, self-concept was found to be
negatively associated with skepticism about the relevance of school for future success. This
strikes some resemblance to previous research conducted by Anderman (2002) who found
that students’ optimism about the future was positively related to their general self-concept.
Based on these findings, it would appear that students high in belonging at school are more
likely to harbour feelings of optimism about the future and are more likely to believe in the
value of education with regards to achieving future success. Secondly, significant differences
in motivational behaviour were highlighted between Irish and African children. It was found
that African children were significantly more likely to be oriented towards performance-
approach goals than Irish children. That is, African children seemed to show more concern
regarding the demonstration of their competence and the comparison of their academic
performance relative to others, than Irish children, who scored significantly lower in this
measure.

Finally, an interesting result was discovered when examining differences in
nationalities regarding skepticism about the relevance of school for future success. Traveller
children were found to have significantly higher levels of skepticism than every other
nationality group questioned in the survey. This is not particularly surprising, however, due to
Travellers’ position as minority ethnic group in Irish society and their traditional and cultural
attitudes towards the value of education. These findings support previous research conducted
in the area, with ethnic minority groups reported as having significantly lower levels of
expectancies for success than majority groups (Sanchez et al, 2005) and Travellers being
identified as the group most at risk in the education system. (Cemlyn & Clark, 2005)

4.3 Limitations and implications for future research

This study is not without its limitations. Firstly, while the sample size would not be
considered to be small, it was drawn from just one primary school with children coming from
similar socio-economic backgrounds. In order for the findings of this study to be
generalizable to Irish primary school children, a variety of primary schools from around the
country would have been better to represent a more valid picture of the findings among Irish
children. Building on this, some of the nationalities examined in the study had very small
numbers in comparison with others. For example, only three Traveller children participated in
contrast to 107 African children, which may have skewed the results. Future research should
aim to have more balance between the groups.
A further limitation of this study was the fact that it did not include academic achievement as a possible variable as it has shown in previous research to be linked to each of the other variables included. Unfortunately, due to time restrictions, this was not possible, as standardised testing in English and Maths does not take place in schools until June. Therefore, the inclusion of academic achievement was beyond the scope of this study. Research has shown that students’ sense of belonging, self-concept and adaptive patterns of academic motivation decline over time, in particular during the transition from elementary school to middle school. (Anderman & Midgley, 1997; Anderman & Anderman, 1999) A longitudinal aspect to this study would have provided interesting results from an Irish context, if the same group of children were examined in 6th class of primary school and then in 1st year of secondary school. Unfortunately, due to time restraints, longitudinal investigations were not possible in this study, but should be considered for future research.

Upon reflection, if the author was to conduct this study again, 5th class students would not be included in the sample as they may be too young. It appears that some students found the Likert Scale confusing and had difficulties understanding questions that were worded negatively and required reverse scoring. Perhaps if the Likert scale was reduced to just three items, it may have been more accessible to the younger cohort of the sample. Another potential weakness of the study was regarding the questionnaire. As the questionnaire was completed during class time, with both the class teacher and classmates present, it is unclear whether this may have influenced children’s responses. In addition, even though the fact that the survey was anonymous was stressed on several occasions, the fact that the researcher was a teacher in the sample school and was familiar to the children, may have caused some bias among children, influencing them to respond based on how they perceived the teacher to want or expect them to. Finally, as this was a self-report questionnaire, it only captured the
children’s attitudes to the questions. Their responses may not match their actual behaviour in the actual classroom setting.

4.4 Strengths of the study

Despite the limitations of the study, several strengths should be noted. This study focused on the relationship between students’ sense of belonging, self-concept and patterns of academic motivation. The research fills a gap in the literature both nationally and internationally as the relationships between the three variables combined were previously unexamined. There were several significant findings, in particular, sense of school belonging was found to be positively associated with both self-concept and mastery goal orientation. Self-concept and sense of school belonging were also found to be negatively associated with skepticism about the relevance of school for future success. This study is also strong with regards to its methodology, as it employed the use of three consistently valid and reliable questionnaires. With regards to the sample, the distribution of gender, with 105 males and 131 females responding, allowed valid comparisons to be made between genders with regards to the study’s main measures.

4.5 Conclusion

To conclude, the overall aim of this study was to investigate the relationship between Irish primary school students’ sense of school belonging, self-concept and academic motivation. The research demonstrates that there are significant associations between students’ perceived sense of belonging and their levels of self-concept. Mastery goal orientation was found to be positively related to both sense of belonging and self-concept, while a negative relationship was found between these variables and skepticism about the
relevance of school for future success. In contradiction of the previous research in the field, no gender differences were found between boys’ and girls’ sense of school belonging. Findings regarding differences among nationalities related to Irish children reporting significantly higher levels of school belonging than African children, and Traveller children significantly more likely to be skeptical about the relevance of school for their future success. Strengths and limitations of this study have been discussed and it is hoped that the findings of this study will be built upon in the future with these in mind.
References:


Appendices

Appendix 1: Information Sheet for Parents

INFORMATION SHEET FOR PARENTS

My name is Anna English and I am a teacher in Divine Mercy S.N.S. I am completing a postgraduate degree in psychology in Dublin Business School and, as part of my final year, it is required that I conduct a research project. In my research I am interested in finding out about how children think about themselves, their attitudes towards their classwork, expectations for their future, and how much they feel like they belong in Divine Mercy S.N.S. I am working with Dr Garry Prentice, whose contact details are included below.

What happens if my child takes part? I will be visiting your child’s class during class time, at a time arranged with the principal and class teacher. I will ask all participating children in the class to fill in a standard questionnaire designed for children to examine the topics mentioned above. I will explain the questionnaire in detail to the children and let them ask any questions. If you decide your child will not take part your child will be present in the classroom but will not fill in the questionnaire. They will be asked to read quietly while the others take part.

What will happen to the results of the study? The information from the children’s questionnaire responses will tell us how children think about themselves, their class work, expectations for the future and how much they feel they belong in the school community. The results from this research will be written into a thesis, a copy of which will be provided to the school. However, at no point will any children be identifiable.

How will my child’s information be protected? The children’s answers will remain confidential. When doing the questionnaires, each child will be reminded not to write their name anywhere on the form. The questionnaires and consent forms will be stored separately and all the data will be destroyed after 7 years.

Voluntary Participation: It is up to you and your child to decide whether your child is going to take part or not. Participation is completely voluntary. Your child is free to withdraw at any time while filling in the questionnaire. I will remind the children of this when I meet them. Unfortunately, once the questionnaires have been completed and handed up, it is not possible to withdraw as your child’s questionnaire will not be identifiable.

Important: The consent form! There is a consent form attached to this information sheet. Every child participating on the day must have a consent form which you have signed. Please note that research practice guidelines do not allow me to make any exceptions, and verbal permission cannot replace the signed consent form. It is important to remember to return the signed form to school as without it your child will not be allowed to take part.

Further Information: This research is being conducted to assist researchers with finding out about children’s views of themselves and their school lives. We very much hope that you will agree to let your child take part in the research. If you require any assistance or have any questions about the research study, please feel free to contact me.

Thank you very much for supporting this research study. Please keep this information for your records.

Anna English, email:
Dr Garry Prentice, supervisor, email:
Appendix 2: Permission Slip

I give consent for my child, _______________________________ to take part in this research study.

Signed: __________________________

Class: __________________________

Teacher: __________________________

Date: __________________________
Appendix 3: Information sheet for children

In this questionnaire, you will be asked to think about your school, your class work, your expectations for the future, and yourself in general. Each statement will be followed by five options ranging from “Not at all True” to “Completely True”. Tick one answer that best suits how you feel about the statement. If you make a mistake, put an X in the box and just tick the correct box.

Some points to remember:

1. There are no right or wrong answers: just tick whichever statement best suits how you feel.
2. Do not put your name on this questionnaire.
3. No one but you will know your answers to these questions, not even your teacher or Ms. English
4. You do not have to take part in this survey. Read a book quietly if you are not completing it.

Ms. English would like to thank you very much for taking part in this survey. If anything in this survey has upset you, or if you have any questions, please feel free to approach Ms. English at any time or email on.

Alternatively, if you have any concerns and would like to contact Childline, their contact number at any time of day is 1800 66 66 66 and their website (www.childline.ie) has a live chat service from 10am – 10pm every day.
Appendix 4: Questionnaire

Section One:

1. Gender: (please circle) 
   Male                          Female
2. Age:      _______________________
3. Class:     _______________________

Section Two:

Please tick the nationality which applies best to you: (You may tick more than one nationality if applicable)

1. Irish     □
2. Traveller □
3. Asian     □
4. African   □
5. Eastern European □
6. Other (please specify)     _______________________

Section Three:

Tick the answer box for each statement that is most true for you:

1. I feel like a real part of Divine Mercy S.N.S.
   □ Not at all true
   □ Slightly true
   □ Somewhat true
   □ Mostly true
   □ Completely true

2. People here notice when I’m good at something.
   □ Not at all true
   □ Slightly true
   □ Somewhat true
   □ Mostly true
   □ Completely true

3. It is hard for people like me to be accepted here.
   □ Not at all true
   □ Slightly true
   □ Somewhat true
   □ Mostly true
   □ Completely true

4. Other students at this school take my opinions seriously.
   □ Not at all true
   □ Slightly true
   □ Somewhat true
   □ Mostly true
   □ Completely true

5. Most teachers in Divine Mercy S.N.S. are interested in me.
   □ Not at all true
   □ Slightly true
   □ Somewhat true
   □ Mostly true
   □ Completely true

6. Sometimes I feel as if I don’t belong here.
   □ Not at all true
   □ Slightly true
   □ Somewhat true
   □ Mostly true
   □ Completely true

7. There’s at least one teacher or other adult at this school I can talk to if I have a problem.
   □ Not at all true
   □ Slightly true
   □ Somewhat true
   □ Mostly true
   □ Completely true

8. People at this school are friendly to me.
   □ Not at all true
   □ Slightly true
   □ Somewhat true
   □ Mostly true
   □ Completely true

9. Teachers here are not interested in people like me.
   □ Not at all true
   □ Slightly true
   □ Somewhat true
   □ Mostly true
   □ Completely true
10. I am included in lots of activities at Divine Mercy S.N.S.
☐ Not at all true
☐ Slightly true
☐ Somewhat true
☐ Mostly true
☐ Completely true

11. I am treated with as much respect as other students.
☐ Not at all true
☐ Slightly true
☐ Somewhat true
☐ Mostly true
☐ Completely true

12. I feel very different from most other students here.
☐ Not at all true
☐ Slightly true
☐ Somewhat true
☐ Mostly true
☐ Completely true

13. I can really be myself at this school.
☐ Not at all true
☐ Slightly true
☐ Somewhat true
☐ Mostly true
☐ Completely true

14. The teachers here respect me.
☐ Not at all true
☐ Slightly true
☐ Somewhat true
☐ Mostly true
☐ Completely true

15. People here know I can do good work.
☐ Not at all true
☐ Slightly true
☐ Somewhat true
☐ Mostly true
☐ Completely true

16. I wish I were in a different school.
☐ Not at all true
☐ Slightly true
☐ Somewhat true
☐ Mostly true
☐ Completely true

17. I feel proud of belonging to Divine Mercy S.N.S.
☐ Not at all true
☐ Slightly true
☐ Somewhat true
☐ Mostly true
☐ Completely true

18. Other students here like me the way I am.
☐ Not at all true
☐ Slightly true
☐ Somewhat true
☐ Mostly true
☐ Completely true
Section Four:

Tick the answer box for each statement that is most true for you:

1. I like class work that I’ll learn from even if I make a lot of mistakes.
   - [ ] Not at all true
   - [ ] Slightly true
   - [ ] Somewhat true
   - [ ] Mostly true
   - [ ] Completely true

2. An important reason why I do my class work is because I like to learn new things.
   - [ ] Not at all true
   - [ ] Slightly true
   - [ ] Somewhat true
   - [ ] Mostly true
   - [ ] Completely true

3. I like classwork best when it really makes me think.
   - [ ] Not at all true
   - [ ] Slightly true
   - [ ] Somewhat true
   - [ ] Mostly true
   - [ ] Completely true

4. An important reason why I do my work in class is because I want to get better at it.
   - [ ] Not at all true
   - [ ] Slightly true
   - [ ] Somewhat true
   - [ ] Mostly true
   - [ ] Completely true

5. An important reason I do my class work is because I enjoy it.
   - [ ] Not at all true
   - [ ] Slightly true
   - [ ] Somewhat true
   - [ ] Mostly true
   - [ ] Completely true

6. I do my class work because I am interested in it.
   - [ ] Not at all true
   - [ ] Slightly true
   - [ ] Somewhat true
   - [ ] Mostly true
   - [ ] Completely true

Section Five:

Tick the answer box for each statement that is most true for you:

1. I would feel really good if I were the only one who could answer the teacher’s questions in class.
   - [ ] Not at all true
   - [ ] Slightly true
   - [ ] Somewhat true
   - [ ] Mostly true
   - [ ] Completely true

2. I want to do better than other students in my class.
   - [ ] Not at all true
   - [ ] Slightly true
   - [ ] Somewhat true
   - [ ] Mostly true
   - [ ] Completely true
3. I would feel successful in class if I did better than most of the other students.

☐ Not at all true
☐ Slightly true
☐ Somewhat true
☐ Mostly true
☐ Completely true

4. I’d like to show my teacher that I’m smarter than the other students in my class.

☐ Not at all true
☐ Slightly true
☐ Somewhat true
☐ Mostly true
☐ Completely true

5. Doing better than other students in class is important to me.

☐ Not at all true
☐ Slightly true
☐ Somewhat true
☐ Mostly true
☐ Completely true

Section Six:

Tick the answer box for each statement that is most true for you:

1. It’s very important to me that I don’t look stupid in my class.

☐ Not at all true
☐ Slightly true
☐ Somewhat true
☐ Mostly true
☐ Completely true

2. An important reason I do my class work is so that I don’t embarrass myself.

☐ Not at all true
☐ Slightly true
☐ Somewhat true
☐ Mostly true
☐ Completely true

3. The reason I do my class work is so my teacher doesn’t think I know less than others.

☐ Not at all true
☐ Slightly true
☐ Somewhat true
☐ Mostly true
☐ Completely true

4. The reason I do my work is so others won’t think I’m dumb.

☐ Not at all true
☐ Slightly true
☐ Somewhat true
☐ Mostly true
☐ Completely true

5. One of my main goals is to avoid looking like I can’t do my work.

☐ Not at all true
☐ Slightly true
☐ Somewhat true
☐ Mostly true
☐ Completely true
6. One reason I would not participate in class is to avoid looking stupid.

☐ Not at all true
☐ Slightly true
☐ Somewhat true
☐ Mostly true
☐ Completely true

Section Seven:

Tick the answer box for each statement that is most true for you:

1. Even if I do well in school, it will not help me have the kind of life I want when I grow up.

☐ Not at all true
☐ Slightly true
☐ Somewhat true
☐ Mostly true
☐ Completely true

2. My chances of succeeding later in life don’t depend on doing well in school.

☐ Not at all true
☐ Slightly true
☐ Somewhat true
☐ Mostly true
☐ Completely true

3. Doing well in school doesn’t improve my chances of having a good life when I grow up.

☐ Not at all true
☐ Slightly true
☐ Somewhat true
☐ Mostly true
☐ Completely true

4. Getting good grades in school won’t guarantee that I will get a good job when I grow up.

☐ Not at all true
☐ Slightly true
☐ Somewhat true
☐ Mostly true
☐ Completely true

5. Even if I am successful in school, it won’t help me fulfil my dreams.

☐ Not at all true
☐ Slightly true
☐ Somewhat true
☐ Mostly true
☐ Completely true

6. Doing well in school won’t help me have a satisfying career when I grow up.

☐ Not at all true
☐ Slightly true
☐ Somewhat true
☐ Mostly true
☐ Completely true

Section Eight:

Tick the answer box for each statement that is most true for you:

1. I do lots of important things.

☐ Not at all true
☐ Slightly true
☐ Somewhat true
☐ Mostly true
☐ Completely true
2. Overall I am no good.
   □ Not at all true
   □ Slightly true
   □ Somewhat true
   □ Mostly true
   □ Completely true

3. In general, I like being the way I am.
   □ Not at all true
   □ Slightly true
   □ Somewhat true
   □ Mostly true
   □ Completely true

4. Overall, I have a lot to be proud of.
   □ Not at all true
   □ Slightly true
   □ Somewhat true
   □ Mostly true
   □ Completely true

5. I can’t do anything right.
   □ Not at all true
   □ Slightly true
   □ Somewhat true
   □ Mostly true
   □ Completely true

6. I can do things as well as most other people.
   □ Not at all true
   □ Slightly true
   □ Somewhat true
   □ Mostly true
   □ Completely true

7. Other people think I am a good person.
   □ Not at all true
   □ Slightly true
   □ Somewhat true
   □ Mostly true
   □ Completely true

8. A lot of things about me are good.
   □ Not at all true
   □ Slightly true
   □ Somewhat true
   □ Mostly true
   □ Completely true

9. I am as good as most other people.
   □ Not at all true
   □ Slightly true
   □ Somewhat true
   □ Mostly true
   □ Completely true

10. When I do something, I do it well.
    □ Not at all true
    □ Slightly true
    □ Somewhat true
    □ Mostly true
    □ Completely true

Thank you very much for taking part in this survey. 😊