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#### UNIVERSITY OF SOUTHAMPTON

FACULTY OF SOCIAL AND HUMAN SCIENCES

School of Psychology

Below the Surface of Sense of Community within Schools: An Exploration of Young People's Sense of Community, Personality, and Achievement Motivation in Relation to Educational Outcomes and Well-being

by

**Edward Sayer** 

Thesis in partial fulfillment of the requirements for degree of Doctor of Educational Psychology

June 2012

#### UNIVERSITY OF SOUTHAMPTON

#### ABSTRACT

#### FACULTY OF SOCIAL AND HUMAN SCIENCES

#### Psychology

#### Doctor of Educational Pychology

#### BELOW THE SURFACE OF SENSE OF COMMUNITY WITHIN SCHOOLS: AN EXPLORATION OF YOUNG PEOPLE'S SENSE OF COMMUNITY, PERSONALITY, AND ACHIEVEMENT MOTIVATION IN RELATION TO EDUCATIONAL OUTCOMES AND WELL-BEING

#### by Edward Sayer

Contemporary psychology has linked humans' societal nature to the need to feel part of a community. McMillan and Chavis (1986) conceptualised a sense of community (SoC), upon four factors: 1) membership; 2) influence; 3) integration and fulfilment of need; and, 4) shared emotional connection. SoC has been explored in a variety of contexts identifying distinct correlated outcome-variables. For adults and young people alike, a strong SoC is positively related to outcomes in personal performance, health, and well-being.

Recently, consideration has focused on schools as key 'educational communities' where pupils develop a SoC and learn the rules of society. Key educational legislation within the UK emphasises the importance placed upon developing community cohesion within schools. Within educational settings SoC has been shown to relate strongly with this aim, as well as correspond with positive outcomes in both pupil performance and well-being. However, research has lacked focus upon the mechanisms involved in developing a positive SoC within young people. This has meant that schools, as moral agents in facilitating young people's formation of SoC, are yet ill informed as to how they can help in this process.

This study accessed the experiences of 777 pupils in the South of England  $(M_{age}=13.34\text{ years}, \%_{Male}=52)$  of their schools as communities. Ratings of pupil's SoC were explored in relation to educational outcomes (Attainment, Attendance, Academic Self-concept) and measures of well-being (Self-Esteem, Life-satisfaction, Loneliness). Additional attention was paid to the hypothesised role of achievement motivation as an

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underlying mechanism between SoC and outcomes. Further, individual's levels of Narcissism were explored as a potential personality level moderator. Correlation analyses indicated strong links between increased levels of SoC within school and multiple positive outcomes. Conditional processing models showed achievement motivation, notably via Mastery-Approach goals, to mediate all relationships, with Narcissism having a limited moderating effect.

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### **Declaration of Authorship**

I, Edward Sayer

declare that the thesis entitled

### An Exploration of Young People's Sense of Community, Personality and Achievement Motivation in Relation to Educational Outcomes and Well-being

and the work presented in the thesis are both my own, and have been generated by me as the result of my own original research. I confirm that:

- this work was done wholly or mainly while in candidature for a research degree at this University;
- where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
- where I have consulted the published work of others, this is always clearly attributed;
- where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
- I have acknowledged all main sources of help;
- where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
- none of this work has been published before submission,

Signed: .....

Date:....

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# Abbreviations

AGQ-R	Achievement Goal Questionnaire-Revised
ANOVA	Analysis of Variance
BCA-CI	Bias Corrected and Accelerated Confidence Interval
BMSLSS	Brief Multi-dimensional Students Life Satisfaction Scale
DfE	Department for Education
DfES	Department for Education and Skills
EPS	Educational Psychology Service
ERHC	Equality
GCSE	General Certificate of Secondary Education
LA	Local Authority
Μ	Mean
M <sub>age</sub>	Mean Age
MALS	Myself-As-Learner Scale
M.AP	Mastery-Approach Goal Construct
M.AV	Mastery-Avoidance Goal Construct
MMM	Multiple-Mediation-Model
MMMM	Moderated-Multiple-Mediation-Model
Ν	Number
NC	National Curriculum
NPI	Narcissistic Personality Inventory
NS	Non-significant
P.AP	Performance-Approach Goal Construct
P.AV	Performance-Avoidance Goal Construct
SCI(-II/-SV)	Sense of Community Scale, (Second Edition /School Version)
SD	Standard Deviation
SE	Standard Error
SEN	Special Educational Needs
SoC	Psychological Sense of Community
SPSS	Statistical Package for the Social Sciences
UCLALS	UCLA loneliness scale
UK	United Kingdom
%	Percentage

# Chapter 1: Literature Review

#### What Role Does 'Community' Play in the UK Education System?

#### **1.1 Humans as Social Creatures**

In the modern world, it is a challenge to conceive an element of our everyday behaviour that excludes the actual or imagined presence, impact, or judgment of another person. As Read and Miller (1995) maintained, "Social interaction is central to our most positive and our most negative experiences as human beings" (p.140). The basic human drive for social connection can be seen in the world around us; in our extended family structures, our work and schooling practices, our leisure activities, and our construction of communities (Bastian & Haslam, 2010). This proposition is reflected within several core psychological theories, which hold the interactive nature of humans at their foundations, namely: 1) Vygotsky's principles of scaffolding in the processes of learning (1978); 2) the importance of the carer-child relationship in Bowlby's theory of attachment (1969); and 3) the social and emotional aspects of self-actualisation in Maslow's hierarchy of needs (1962). It may therefore be contended that human-beings are social creatures, forming and depending upon complex relationships. It is these social relationships that are operationalised within 'communities' and 'wider-society'.

The importance of community to individuals' experience of life has been the focus of a wealth of research and conceptual thinking. Theorists have described the concept of community as a fundamental and far-reaching social variable and contemplated its nature for hundreds of years across all areas of the social sciences (Bell & Newby, 1972; Nisbet, 1966). Within the field of psychology, much research has centred on understanding the conceptual construction, purpose, and impact of community involvement upon individuals' behaviour, attitudes, and feelings. This review aims to reflect upon the origins of 'community' before exploring its psychological conceptualisation in modern society. Subsequently, this paper will critically review research evidence of the impact of community membership on multiple outcomes for individuals and question whether such evidence is context specific. Consideration will then be given to the role of schools as social institutions in developing young people's 'sense of community' (SoC), with explicit regard paid to the political aspects of national educational policies and practices. Finally, three specific limitations to the current knowledge base regarding the profile, impact, and formation of

pupils' SoC within schools will be discussed, namely; 1) the sole reliance upon simple correlational research design; 2) the consideration of SoC solely from a group-level perspective; and 3) a lack of exploration into why and how varying levels of SoC are correlated with positive and negative outcomes. Such points highlight important questions for future research aimed to improve educational experiences and outcomes for pupils within UK schools.

#### 1.2 'Community': Origins and Evolution

The notion of 'community' originates from the Pleistocene era when our huntergatherer ancestors began to settle in permanent locations and live in close proximity to one another (Barkow, Cosmides, & Tooby, 1992; Barret, Dunbar, & Lycet, 2002). Such 'group living' led to the formation of interpersonal relationships and development of commonly held values ('social-norms') within social institutions (Hassinger & Pinkerton, 1986). These interactive elements, alongside basic needs (such as access to food, water, and safety) were the foundations upon which the first communities were constructed in order to support their members' survival in a harsh world. This pragmatic conceptualisation of community, constructed of mutually supportive members, emphasises the common appreciation that groups can achieve more together than individuals can alone (Schuler, 1996).

Understanding what is meant by 'community' is complex. For example, Hillery (1955) identified 94 definitions with 19 different characteristics being used in psychological research alone. Summarising his findings, Hillery (1955) stressed that the only common element was that 'people' remained at the centre of these explanations. To clarify how this paper defines community, a brief exploration of various explanations will follow, building to the construction of a 'psychological sense of community'.

The most widely held definition of community distinguishes between two distinct types, namely where communities emerge between individuals with a natural tie (e.g., location/family), and communities that form between individuals with common views or goals (e.g., workplaces/social groups) (Battish, Solomon, Kim, Watson, & Schaps, 1995; Sayer, Stringer, Beaven, & Hermena, in prep; Buckner, 1988; Chipeur & Pretty; 1999; Thomas, 2009; Wright, 2004). Such categories make it clear that the term community means more than just a collection of individuals thrown together. The origins of this definition can be related to the early work of sociologist Ferdinand

Tönnies, who divided groups into 'Gemeinschaft' (community) and 'Gesellschaft' (society). Tönnies (1957), instrumental in establishing the study of community as a discipline, discussed the notion that these social groups differ, not only in terms of location, but also by the type of 'will' or 'drive' exhibited by members. Tönnies (1957) reasoned that 'Gemeinschaft' reflected a shared natural and underlying 'essential will' linked with familial ties of kinship, where tradition and custom guided actions. In contrast, he presented 'Gesellschaft' as formed from 'arbitrary will' (i.e., with a purpose or goal) where membership was chosen as a way to achieve a desired outcome and discussion governed rational decision making. Following these early conceptualisations, Gusfield (1975) categorised community as referring to groups with a 'relational' and/or 'territorial' basis. Here, the 'relational' dimension refers to the quality and character of the relationships between group members. Attempts to categorise communities exclusively in terms of the 'territorial' element may fail as proximity and location alone do not develop groups, as the interpersonal and 'relational' dimensions are vital (Wright, 2004). Interestingly, recent studies have noted that in modern society many forms of social interaction are technologically engendered, meaning that relationships may be independent of face-to-face contact, achieving such relational-contact solely 'on-line' (Thomas, 2009; Wright, 2004).

Subsequent advances have stipulated that the 'reason' behind group formation represents the difference between accidental and intentional communities (Foster, 2004). Foster (2004) maintains that intentional communities (reflecting Gesellschaft) are characterised by underlying social, political, and/or religious ideals that guide members' actions. That these seminal definitions emphasise choice, desire, and function in relation to the expressions of our societal nature is noteworthy, specifically in questioning the role that ideological individualism (i.e., using membership for personal gain) plays within the forming and functioning of groups. However, the implied connection between being part of a community or wider society and behaviour being driven by certain goals will be explored in more detail in subsequent sections. Such questions are particularly pertinent in settings such as schools, where the pursuit of personal and communal goals forms a daily balancing act.

Interestingly, prior to publications by Gusfield (1975), the possibility of manifold membership in multiple communities had not received overt focus. Gusfield's (1975) findings helped to facilitate a more explicit understanding that the categories were not mutually exclusive and that a person could be a member of more than one

community at the same time (e.g., being part of a family and a local group). Day (2006) contends that individuals are embracing such flexibility in today's post-modern communities, seeking multiple memberships, and are actively creating new networks and organisations in a search for a sense of belonging. Yet, as Peterson (2009) denotes, such fluidity may falsely imply an ease of access to community membership. Conversely, as Calderwood (2000) affirms, the role played by clear boundaries to depict in-group and out-group membership has led to the notion of 'community' becoming synonymous with the concepts of inclusion and exclusion.

More recent developments in the field of social and community psychology have posited a third definition referring to a 'sense of community', described as "...a state of communion, togetherness, and mutual concern" (Schuler, 1996, p.2). This marks a distinct move away from descriptive categorical terms, to focus on the experience and feelings involved in the process of being part of a community. Empirical research has begun to explore this definition, questioning the potential impact that a psychological 'sense of community' ('SoC') may have on the outcomes of individuals within groups. Excitingly, such research has raised the question of how a collection of individuals function and evolve into successful, socially cohesive groups. In sum, the notion of community has evolved from theoretical to psychological conceptualisation, which, based upon empirical research evidence, has the potential to serve multiple functions, including; 1) evaluating the success or failure of social cohesion within groups, 2) exploring what outcomes and antecedents SoC is correlated to, and 3) applying such knowledge to actively promote positive community development and maintenance.

#### 1.3 A Framework for Understanding 'SoC'

Many psychologists have attempted to define what a 'SoC' entails. Early researchers purported a sense of interdependence between an individual and the wider membership group to be fundamental (Sarason, 1974). This reflected the belief that an individual's SoC played a central role in how they defined themselves and created a sense of identity or personal meaning. Subsequent theorists and researchers referenced additional feelings of attachment and satisfaction to both group members and location (Buckner, 1988; Glynn, 1981; Riger & Lavrakras, 1981). In a review of attempts to qualify the concept of a SoC, Pretty and Chavis (1999) highlighted that all frameworks/explanations captured a sense of 'togetherness', understood to ultimately relate to the notional goal of 'social cohesion'. Further, as others have summarised,

SoC may be considered as comprising feelings and practices that members of successful groups or 'healthy communities' demonstrate (Calderwood, 2000; Obst & White, 2005). Developing a clear understanding of these elements may, in turn, help us consider how we can maintain cohesive groups, as stated by Hill: "If we can learn what aspects of communities foster a strong psychological sense of community, we can learn to increase those aspects, perhaps we will not have to concern ourselves with specific problems and the interventions to deal with them" (1996, p.437).

A key source for social cohesion and self-definition, SoC has become the focus of concentrated theoretical and empirical research, placing it as a central tenet of contemporary social and community psychology (Sarason, 1974; Townley & Kloos, 2009; Wright, 2004). Building on the work of Sarason (1974), McMillan and Chavis' (1986) exploration of the psychological framework of community is widely considered to be the most comprehensive, robust, and influential to date (Frederickson & Baxter, 2009; Peterson, Speer, & Hughey, 2006; Wright, 2004). Following an in-depth analysis of existing work into group cohesion, McMillan and Chavis (1986) proposed that SoC can be understood as "a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together" (p. 9). The authors expounded a fourfactor framework for SoC that comprised; 1) Membership, 2) Influence, 3) Integration and Fulfilment of Needs, and 4) Shared Emotional Connection. Next, to ensure potential links between SoC and other concepts discussed in subsequent sections are clear, a brief exploration of each of these aspects is provided. .

#### 1.3.1 Membership

McMillan and Chavis' (1986) notion of membership is structured around several core attributes. The first of these, boundaries, refers to features that distinguished between in-group members and those external to it (referred to as 'deviants'). However, our appreciation of the role of boundaries remains incomplete if we only focus upon their negative impact on deviants, (through rejection and isolation) and do not consider the positive benefits such distinctions provide (McMillan & Chavis, 1986). For the authors, 'boundaries' (created by use of dress, rituals and/or language) provide the social distance needed to protect intimate social connections, reducing the need to actively consider who can or cannot be trusted or depended upon. This key function relates to the second attribute of membership, 'emotional safety'. Broadly signifying

security for members to show and share needs and feelings, emotional safety is seen as essential in facilitating group intimacy. Group membership has also been shown to provide additional types of security, for example physical safety (i.e., in gangs or sports teams) and economic safety (i.e., being part of a bank or business partnership) where group size and strength are important features (Calabrese & Noboa, 1995; Doolittle & MacDonald, 1978; Riger, LeBailly, & Gordon, 1981).

The third and fourth attributes of a 'sense of belonging and identification' and 'personal investment' jointly emphasise the contribution of group membership to a person's sense of self. For McMillan and Chavis (1986), identifying oneself as part of the group, or positively stating that 'this is my group', leads individuals to feel strongly that they fit with and are accepted by others. Further, the investment of time and effort to become part of the group is emphasised to make it more meaningful. Such assertions, relating to the cognitive dissonance theory, suggest that investing oneself promotes an emotional connection that strengthens group cohesiveness and adds value to membership.

A 'common symbol system' is the final attribute of the membership component, where objects become symbolic due to the meaning or value given to them by the users (White, 1949). Appreciating the role symbol systems have within the group is essential to understanding the community itself (McMillan, 1996; McMillan & Chavis, 1986). Building on assertion that common symbols are the primary aspect of social worlds (Nisbet & Perrin, 1977), McMillan and Chavis (1986) highlight that they are used, alongside social conventions (such as language, dress, and rituals), to promote social integration and maintenance in modern heterogeneous community groups, through a process of cognitive dissonance that relates to the other attributes mentioned above.

Additionally, in an update, McMillan (1996) highlighted the important role the spark of friendship plays in developing a spirit of community membership. This may be seen to emphasise the interactional nature of building a sense of belonging and identification and the reliance upon the presence of others to appreciate, value and label our personal investment through a process of positive feedback, central to the formation of friendships.

#### 1.3.2 Influence

The notion of bi-directional 'influence' is the second component of McMillan and Chavis' (1986) conceptualisation of SoC. This involves individuals being attracted

to membership by holding a level of sway over the group's actions, whilst the community's cohesiveness is maintained by individuals being subject to the group's wider power/influence. Thus, members are personally investing in the process of creating and conforming to the group norms (McMillan, 2011). Yet, as emphasised by McMillan and Chavis (1986), the need for modern communities to appreciate and value individual difference has translated into the protection of a level of personal choice within groups, balancing personal needs/desires and those of the wider-group. This relates to the subsequent importance placed upon 'trust' as a central feature of 'influence' (McMillan, 1996).

Further, this model highlights the importance shared responsibility plays in promoting community cohesion by maintaining power within the group (around clearly agreed principles) rather than through the 'authority' or 'power' of a lead person (McMillan, 1996; Peterson, 2009). In sum, the component of 'influence' can best be understood as a transactional balancing act between conformity and cohesiveness, where the exchange of direct and indirect social power is used concurrently to ensure the development of a shared 'world view' and create group norms (McMillan, 1996).

#### **1.3.3 Integration and Fulfilment of Needs**

McMillan and Chavis (1986) contend that, in part, community membership is motivated by the aim of meeting one's needs, which is best achieved through utilising the skills of the collective. As noted by Wright (2004), the term 'needs' does not solely refer to our basic human requirements (i.e., shelter, safety, and sustenance), but equally can comprise our wants and desires. Therefore, when working towards shared goals, members' efforts may be considered reciprocally beneficial. This represents a way in which group membership and active participation can be rewarding, one reason why individuals are initially attracted to communities (Obst & White, 2005). For McMillan and Chavis (1986), such rewards are essential in creating a positive sense of togetherness between the individual and wider group. This process of 'social bonding', referred to by others as 'person-environment fit' (Rappaport, 1977), creates a sense of collective status and mutual mattering where individuals are able to demonstrate and develop their own competencies, whilst forming an interdependence on other members' skills. Ergo, members receive positive reinforcement from being part of the community through valued in-group 'status', bi-directional appreciation of 'competence', and 'success' in achieving the group's and their own goals. McMillan and Chavis (1986)

declare that when all members of a cohesive group experience these rewards, a sense of similarity and shared values is created. McMillan (1996) expanded on this position, asserting that such feelings facilitate an ethos of consensual trading, with an economy centred round social value. This mechanism enables members to negotiate and prioritise goals through a complementary trading system that supports a forward process of group evolution. Thus goals, desires, skills and values of all members are shared and integrated into the community through transformative (i.e., teaching/learning) and generative (i.e., sharing/passing on responsibility over time) trading (McMillan, 2011). As best summarised by McMillan and Chavis (1986), these features help to create a strong community which unites members and simultaneously enables all members' needs to be met.

#### **1.3.4 Shared Emotional Connection**

McMillan and Chavis (1986) reasoned that, as individuals interact and share experiences, a joint history is built. However, it is not necessary for members to have been present throughout all of the group's historic events, rather be privy to them and share in their telling/re-living and passing on. Contact with other members and knowledge of these key events is crucial to the development of the 'story of the community' (McMillan & Chavis, 1986). The authors hold that variation in such events (i.e., frequency, duration, and quality) impact directly upon individuals' formation of SoC. For example, SoC is likely to increase if a person experiences several positive shared encounters with community members. Moreover, contact that is unsatisfactory in terms of outcome (i.e., harmful towards them or lacking closure) or fleeting in frequency may have an adverse impact upon the individual's perspective towards both the group and the other members, decreasing their SoC (Peterson, 2009). This also alludes to the paradoxical effects of honour and humiliation in front of community members upon an individual's SoC, where rewards and praise are seen to promote cohesion and embarrassment relates to discontent (McMillan & Chavis, 1986). Further, the significance of the shared experience, both in terms of the personal investment members have made (e.g. time, physical and/or emotional effort) and the importance or value placed upon the incident (either actual or symbolic), directly impacts the level of influence it may have on members' development of a spiritual bond. Building upon the authors' original declaration that very strong bonds can be developed by a community encountering a crisis (where the perspective upon and experience of the event itself,

though negative, is equally shared by in-group members), McMillan (1996) stressed that shared contact which holds a sense of drama is key in developing a 'community spirit'. These momentous episodes become symbolised in rituals over time and form traditions which group members prioritise and commemorate.

#### 1.4 Operationalising SoC

McMillan and Chavis (1986) assert that these four interrelated factors are essential in creating and maintaining cohesive groups. Further, applicable to both territorial and relational communities, the dynamic model is not limited to a sole referent (Obst & White, 2004). To test the theoretical foundations of SoC, gain insight into its correlates, and utilise this information to promote social cohesion, valid and reliable measurement tools are needed. Such quantitative tools follow the principle of 'cue utilisation', observing the behaviours/qualities associated with a particular phenomenon, rather than directly accessing/consider them as a physical thing/fixed state (Wright, 2004). This enables similarities/differences of opinion between people of diverse backgrounds to be explored, within a shared holistic understanding of the identified concept (e.g., SoC).

Since its conception, research has flourished within the area of SoC. Much work has explored its theoretical conceptualisation within a variety of contexts, via the 'sense of community index' (SCI) 12-item self-report questionnaire. Perkins, Florin, Rich, Wandersman, and Chavis (1990) constructed the SCI to operationalise McMillan and Chavis' (1986) model. However, despite the SCI's popularity, it has been widely critiqued (Chipuer & Pretty, 1999; Peterson et al., 2006; Sayer et al., in prep; Wright, 2004). Specifically, weaknesses reported include the use of negative items, context specific wording and low reliability of subscale scores. Additionally, the SCI is criticised for accessing SoC from a collective rather than individual perspective (van Uchelen, 2000). Confirmatory factor analyses have also failed to adequately fit sample data to the four-factor psychological framework (Long & Perkins, 2003; Obst, & White, 2004). Despite these issues appearing based within the measure's construction, rather than the underlying conceptualisation, use of the SCI as a single factor measure has nevertheless been recommended (Peterson et al., 2006). Based on the criticisms above, Chavis, Lee, and Acosta (2008) revised and restructured the index around McMillan and Chavis' (1986) conceptualisation, forming the SCI-II. This differed by an extension to 24 items (comprising four six-item subscales), the introduction of a four-point

continuous rating scale, and removal of situation-specific script, leading to improved overall reliability ( $\alpha = .91$ ) and reliability of subscales ( $\alpha = .61$  to .79; Chavis et al., 2008).

However, the SCI-II is not the only operationalisation of SoC in the literature. For example, measurement tools have been developed by Davidson and Cotter (1993), Royal and Rossi (1996), Chiessi, Cicognani, and Sonn (2010), and Cicognani, Albanesi, and Zani, (2006). Drawing directly from McMillan and Chavis' (1986) four-factor model, these form attempts to access a SoC across different contexts and culturalgroups.

Considering the potential overlap in the literature between SoC and proximal constructs, it seems pertinent to note that multiple measures exist which explore attitudes towards distinct aspects of community such as interpersonal relationships and belonging in children as young as four (e.g., Social Cognitive Mapping, Cairns, & Cairns, 1994; The Belonging Scale, Frederickson et al., 2007; The Four Field Map, Sturgess et al., 2001). 'Belongingness' is the most widely discussed of these, referring to "a feeling that one is respected and valued as a member of one's school community" (Rostosky, Owens, Zimmerman & Riggle, 2003, p.742). Significantly, it has been clarified elsewhere that such constructs are not interchangeable with SoC and may only represent single aspects (i.e., membership) of its wider conceptualisation (Sayer, et al., in prep). Furthermore, exploring distinct elements in isolation lays focus upon withinchild features, thus failing to consider the broader, systemic factors accessible through adoption of SoC as the meta-conceptual lens for considering the impact of community experience (Pooley et al., 2008). Additionally, Frederickson and Baxter (2009) report that tools exploring these micro-social constructs have independently distinct aims and although they can be mapped onto larger theoretical frameworks these do not form the foundations of the measures. For example, holding McMillan and Chavis' (1986) definition of relational community at its heart, 'The Sense of School Community Scale (Primary)' forms a valid tool to access the views of 8-11 year olds ( $\alpha = .91$ ; Battistich, et al., 1995). However, its three subscales of classroom supportiveness, school supportiveness and classroom autonomy, show the measure to only focus upon the role of supportive interpersonal relationships and the opportunity to participate in decisionmaking (Frederickson & Baxter, 2009). As such, it is unclear how fully these subscales map onto the theoretical framework outlined by McMillan and Chavis (1986). Such analyses lead to conclusions that based upon strong conceptual foundations and ease of

use across contexts, the SCI-II has remains the most widely used measure of its construct within the social sciences (Chavis et al., 2008; Chipuer, & Pretty, 1999; Peterson et al., 2006).

#### 1.5 Evaluating the Impact of SoC

Feeling a SoC has been identified as an extra-individual phenomenon of significant interest to the field of contemporary psychology (Peterson et al., 2006). Following consideration of the conceptual history and operationalisation of SoC, evaluation of how the theory has been explored and applied in research is needed to gain a clear appreciation of the significance of this construct. This section will focus on the research findings surrounding the impact of a strong or weak SoC (as outlined by McMillan & Chavis, 1986; McMillan, 1996) upon outcome-variables and across contexts.

Early research reported clear links between feeling a strong SoC and positive outcomes. For example, higher levels of SoC have been found to be positively related to levels of participation in community life (Davidson & Cotter, 1986; Wandersman & Giamartino, 1980), feelings of making a purposeful contribution to the wider group (Bachrach & Zautra, 1985), improved interpersonal relationships (Ahlbrandt & Cunningham, 1979), and feelings of safety (Doolittle & McDonald, 1978). Contemporary studies, building upon the firm foundations of these findings, also recognise the positive impact of SoC. For example, Herrero and Gracia (2007) reported that developing a strong SoC forms a dynamic resource positively linked to stress management and well-being. This expands upon the wider literature, where SoC has been found to correlate positively (at a moderate to strong magnitude) with a variety of measures of subjective well-being, including affective states, life-satisfaction, selfesteem, and perceived social support (Davidson & Cotter, 1993; Prezza et al., 2001; Pretty, Andrews, & Collet, 1994). Conversely, feelings of loneliness, isolation, and alienation have been reported to be characteristic of those lacking a SoC (Davidson & Cotter, 1986).

Additionally, research has explored the applicability of SoC across contexts or types of community. It has been contended that communities should be understood as settings that can foster interdependence, mutual commitment, and provide reciprocal support, holding the notion of helping as the core element (Barrera, 2000; Herrero & Gracia, 2007). Contemporary literature shows much exploration of SoC in a variety of

contexts, from local neighbourhoods (e.g., Obst, Smith, & Zinkiewicz, 2001; Perkins, & Long, 2002) and social groups (e.g., Prezza, Amici, Roberti, & Tedeschi, 2001; Sonn & Fisher, 1996), to workplaces and corporate organisations (e.g., Chipeur & Pretty, 1999; Hughey, Speer, & Peterson, 1999). The expanse of research conducted within these areas evidences the durable nature of McMillan and Chavis' (1986) conceptualisation (Fisher, Sonn, & Bishop, 2002).

One specific area that is receiving an increasing amount of focus is that of educational contexts (e.g. Osterman, 2000; Pooley, Breen, Pike, Cohen, & Drew, 2008; Rovai, 2002; Traill & Stringer, 2009). Herein, SoC within 'educational contexts' will become the focus of this review. First the moral and political roles of schools as communities will be explored. Thereafter, research evidence into the impact developing a SoC within school has upon pupils' social and academic learning experiences are outlined.

#### 1.6 SoC in Education: A Political Rhetoric

That cohesive communities can promote positive outcomes for its members has long been accepted (McMillan & Chavis, 1986; Sarason, 1974). However, less focus has been applied to the question of how this occurs, either in terms of the process of teaching and learning community values and norms, or the decisions behind the overarching messages that shape members' experiences. The concept of SoC does not belong solely to theoretical and applied academics. Many researchers have highlighted how SoC is used as a social tool for policy development and political rhetoric (Evans, 2011; Ratcliffe & Newman, 2011). In such public and powerful fields, the practical application of SoC theory has become central to many governmental support programmes throughout the developed world (Pretty, Bishop, Fisher, & Sonn, 2007). Fundamental to this position is the idea of 'social coalition' or 'social cohesion'. Holden (2011) upholds that this 'problematic concept' requires all in-group members' active engagement in both community creation and maintenance. Further, paying consideration to the diverse and heterogeneous nature of modern society in the UK, Holden (2011) classifies cohesion as "...the 'social effect' of integration and the sense of togetherness that is created when people engage in the same activities or when they share a sense of common purpose" (p.4). This definition can clearly be seen to relate to McMillan and Chavis' (1986) model of SoC and the subsequent emphasis derived from the research evidence above. Such messages, promoting the importance of a SoC in

achieving positive intra- and inter-group relations, are particularly pertinent in the current political atmosphere in the UK, where the popular media speaks of civil unrest within a 'Broken Britain' and the current coalition government calls for individual citizens to join to become one mutually supportive 'Big Society' (Evans, 2011; Ratcliffe & Newman, 2011). Within the UK, the active management of state education at both national and individual school levels is widely dictated by government policy and legislation. These directives originate from values and beliefs of the elected government's (i.e., the policy maker's) perspective, yet have a direct impact upon young people's feelings and developing attitudes through their educational experiences. As such it is important to consider the trends of such guiding doctrines over time and highlight the underlying political messages/perspectives shaping the schooling system in the UK. Herein, a short discussion will highlight the main areas of national policy for consideration in relation to the notion of 'schools as communities'.

As Heater (1990) reports, the notion of 'civic instruction', where people were taught their 'social duties' (to avoid violence, respect the law and government) is long established. For example, beliefs that the state actively attempts to shape an individual's attitudes and behaviours was presented in the writings of the political theorist Thomas Hobbes as early as 1651 (Olser, 2011). It is felt by many that formal state led schools have become the vehicle for this process. This places education as the social context within which wider valued social outcomes of justice, diversity and equality are acquired (Cunningham & Mitchell, 1990; Osler, 2011). In illustration, consider schools as small scale representations of the wider state, with multiple social units (e.g., year groups/classes/teams), an imbalance of power between the authority figures (i.e., teachers) and the wider populous (i.e., pupils), the existence of a common value system to which members are held accountable (e.g., behaviour policies with expectations and rules), and a workforce striving towards an endpoint where valuable social assets are created to the long-term benefit of both the individual and the wider group (i.e., knowledgeable, skilled and motivated students with meaningful qualifications, who understand and embrace wider social values). Thus, it may be contended that a positive educational system that embraces all members as valued and active participants, can help develop an individual's appreciation of key underlying principles of wider society whilst also teaching appropriate democratic mechanisms by which the status quo may be challenged and society supported to evolve. This builds upon assertions that individual pupil's personal ethic codes are directly influenced by

the wider standards of the community in which they exist (Shapiro & Stefkovich, 2001). As such, the social element of education can be understood as a 'community affair', where schools are considered 'communities of practice' in which pupils develop a sense of personal and social identity and staff members take on an important role of facilitating 'space' for young people to learn about, and begin to make a positive contribution to, society (Evans, 2007; Hassinger & Pinkerton, 1986; Pretty, 2002). From this standpoint, several writers have highlighted the 'moral role of schools' in supporting pupils' development as citizens, and note that this has formed a core part of their overall education, requiring all members of the 'learning community' to actively work together (Furman, 2004; Peterson, 2009).

These themes link to multiple aspects of McMillan and Chavis' (1986) model of SoC, such as notions of shared goals, bi-directional influence, the importance of active engagement and the centrality of quality contact, and interaction in the shared experiences needed to develop a sense of value and belonging. Further, this process has been argued to promote a collaborative or communal perspective, in which a sense of collegiality outweighs individual purpose and needs (Furman, 2004; Shapiro & Stefkovich, 2001). Moreover, as underscored by Furman (2002), it is vital to perceive the construction and maintenance of cohesive communities as a continual dynamic process rather than thinking of community as a distinct entity or specific end-state to be aimed for. This position draws attention to the need, emphasised by McMillan and Chavis (1986), for healthy cohesive communities to find a balance between the drives of an individual's desires and the wider group's shared goals in order to be mutually rewarding and stable overtime. Such interpretations link back to earlier mention of the different aspects of 'community' and 'society' outlined by Tönnies (1957), alongside the notion of 'intentional communities' raised by Foster (2004).

The promotion of community cohesion as a central part of young people's educational experience has assumed a pre-eminent role over the past decade in the UK's political arena (Ratcliffe & Newman, 2011). Closely relating to duties enshrined in the 2010 Equality Act (as outlined by EHRC, 2011), such strategies are understood to have the overarching goal of substantially narrowing the differential gaps (in terms of achievement, attainment, social economic status, and well-being) experienced with multicultural Britain. Principal to this has been an interest in the potential impact of developing a SoC within schools upon positive outcomes for pupils, seen to be reflected in developments in contemporary educational policy. The former UK Labour

government's decade long development of the '*Every Child Matters*' (DfES, 2004) approach to promoting the well-being of young people placed community at the centre of its national framework for change. The five aims and outcomes (for young people to remain 'safe and healthy [both physically and emotionally], achieve economic well-being, make a positive contribution and enjoy and achieve' within local and national contexts) can be seen to evidence the importance placed upon SoC. Specifically, connections between SoC and well-being in terms of mental health and self-perceived physical health have been published, alongside the influence of belonging upon motivation to contribute and achieve (Goodenow & Grady, 1993; Hagerty, Williams, Coyne & Early, 2004; Shields, 2008). Moreover, as stressed by Warnock (2005) and following the '*SEN Code of Practice*' (DfES, 2001), the overarching 'Inclusion Agenda' within the UK is dependent upon the notions of community, inter- and intra-personal value and feelings of belonging to promote effective learning and well-being for all pupils. Such a stance clearly reflects an appreciation of SoC's vital role in the balance between social inclusion and exclusion (Calderwood, 2000).

The integration of 'Citizenship' into the national curriculum may be considered one of the clearest reflections of the current importance placed upon pupils' sense of community within UK schools. With chief elements identified as political literacy, alongside social and moral responsibility, Citizenship can be seen as the most palpable example of politically motivated civic instruction in the UK (Osler, 2011). In a recent report, Keating, Kerr, Lopes, Featherstone and Benton (2009) outlined that Citizenship Education (CE) is well embedded within secondary education curriculum and wider school processes. Furthermore, the report highlights that through such mediums, greater emphasis is being placed upon promoting the acceptance of diversity within contemporary education.

However, some theorists have questioned whether a tension may exist between the potentially competing goals of developing pupil performance and developing a SoC within schools (Martin & Dowson, 2009; Shouse, 1996). Recent changes to the framework by which schools and teaching staff are evaluated have placed an increased focus upon outcomes and removed the inspectorate's role in explicitly reporting on schools' contribution to community cohesion (D*f*E, 2011; Ofsted, 2012). The current guidelines, enacted in January 2012, place a greater emphasis upon pupil achievement (in terms of exam results in comparison to peers nationally, and in relation to the progress they have made over time), teacher proficiency, pupil behaviour, and school

leadership. Coupled with a lack of mention (or recognition) of the role young people play in shaping modern communities and forming the 'Big Society' of tomorrow in documents published to date, such a step may be seen as a concerning move away from valuing social education as a communal process towards a more authoritarian state (Evans, 2011). However, the DfE (2011) emphasise that pupils' 'spiritual, moral, social and cultural development' remains a subcategory by which schools are evaluated (with specific note of the need to ensure equality of access and provision for all members of the school community). Further, despite indicating a possible downgrading of the degree of focus CE is granted in the UK, the statutory duty of schools to promote social cohesion (in place since 2007) remains (DfE, 2011).

It is clear from the evidence outlined above that the UK education system has a valuable role to play in shaping the social understandings and experiences of young people, supporting them to develop a positive SoC within their schools and more widely beyond the classroom walls. However, following the uprisings of social unrest in 2011seen in the rioting of many young people originating in Tottenham and spreading around UK cities, it may be reasonable to state that several members of contemporary society do not currently feel a strong SoC with the UK. Through their actions, these individuals have exhibited a sense of deficit in all four elements of healthy communities as outlined by McMillan and Chavis (1986), namely; 1) a lack of 'membership' of a group in which they identify themselves positively to belong, feel emotionally safe within, and are personally invested in; 2) a lack of 'influence', where trust and responsibility inform a balanced bi-directional exchange for the mutual benefit of the individual and wider group; 3) a lack of 'integration and fulfilment of needs', impacting upon their active engagement in community life and associated rewarding experiences; and 4) a lack of shared emotional connection, missing the quality contact and formation of spiritual bonds needed to develop the 'story of the community'.

#### 1.7 Developing Schools As Communities: Applying SoC in Practice

The preceding sections have evidenced the political importance placed upon creating socially cohesive communities within the UK and posited schools as the social context in which these values are taught. Next, consideration is given to how schools are understood as communities and what impact developing a SoC has upon learners' educational experience.

Schools may be depicted as comprising a group of teachers and learners within a shared social space with common values and goals (Hill, 1996; Rovai & Lucking, 2000). The creation of a climate that is conducive to the aims of developing and sharing knowledge (i.e., 'learning'; dependent on an effective and valued process of social interaction between members), is of central importance to the transformation of these factors into the formation of successful 'learning communities' (Abbott & Ryan, 2000; Thomas, 2009). The development of such 'learning communities' has been heralded as a key factor in promoting educational success and fostering SoC within schools (Rasmussen & Skinner, 1997). Further, research evidence has shown that schools are considered to be central community facilities (Witten, McCreanor, & Kearns, 2007). In a survey of parental opinion conducted in New Zealand the authors found that schools played several vital roles in communicating social values/expectations and maintaining the cohesion of community at large. This was seen to be achieved through three distinct roles, namely; 1) as a source of community knowledge, 2) as a common meeting ground, and 3) as a point from which networks of support and friendship developed. These conclusions can be seen to link with the notions of social bonding (relating to knowledge and contact with other members of the group) and physical rootedness (reflecting length of existing and expected group membership) referred to in the work of Riger and Lavrakas (1981). In may therefore be contended that schools, as social institutions, have an important role to play in forming and maintaining constructive territorial and relational communities and that this may be related to positive outcomes. However, such research has originated from an organisational perspective and has focused upon the experiences of the adults (i.e., teachers and parents) involved in the educational process. Though valid, this only provides the viewpoint of a marginalised section of school communities. To gain a true understanding of the manner in which schools are experienced as communities (ergo influencing members' SoC) the view of the majority stake holder consumers of education, the pupils, need to be appraised.

Studies within educational contexts have explored the relationship between the concept of SoC and social experience, integration and course completion within college, tertiary, and virtual settings (Berger, 1997; DeNeui, 2003; McCarthy, Pretty, & Catalano, 1990; Rovai, 2002; Royal & Rossi, 1996; Wright, 2004). Much of this work has focused upon the experiences of older adolescents and within elective educational settings (e.g., colleges or universities). More recently, attention has begun to focus on

children's experience of schools as communities in compulsory educational settings, i.e., between the ages of five to sixteen (Pooley, et al., 2008; Traill & Stringer, 2009).

Utilising a qualitative thematic content analysis research method, children's definitions of SoC within school were found to reference interaction between people, locations for shared activities, and functionality, alongside the notions of safety, cooperation, and influence (N = 46,  $M_{age} = 10.8$  years,  $\mathcal{H}_{Male} = 46$ , Pooley et al., 2008). This can clearly be seen to echo aspects of McMillan and Chavis' (1986) conceptualisation. Further, research by Osterman (2000), alongside that by Traill and Stringer (2009), has shown that young people do experience their schools as communities as defined by McMillan and Chavis. Osterman's (2000) review paper on students' need for belonging in the school community suggested that pupils' experiences within school are highly important to their development of a SoC, having a knock-on influence upon multiple aspects of their behaviour within school and attitudes towards education. Osterman (2000) concluded that pupils' feelings of acceptance and value (reflecting distinct aspects of their SoC) were directly related to their levels of engagement and school completion, elements long understood as essential to scholastic success (Astin, 1993). However, Osterman's (2000) work focused on drawing understandings from a variety of related research, rather than empirically exploring the connection between these elements in a controlled manner.

Additional researchers have also contended that fostering a SoC within schools has beneficial impacts upon young people's engagement in learning and emotional wellbeing (Frederickson & Baxter, 2009; Chiessi et al., 2010). For example, McKinney, McKinney, Franiuk, and Schweiter (2006) found that pupils' attitudes towards school and learning, alongside their actual exam performance, were positively related to increased levels of SoC within schools. More recently, these results have been reproduced by Wighting, Nisbet and Spaulding (2009), who found a positive association between SoC and academic achievement for American pupils. This can be seen to link with reports that socially accepted and valued pupils tend to be more academically competent when compared to those who experience peer rejection (Osterman, 2000). This echoes previous findings that school community members' SoC is positively related to reduced feelings of stress and instances of conflict, due to clearer understandings of the expectations placed upon them and their own responsibility and ability to meet these (Royal & Rossi, 1996).

Researchers have also begun to highlight correlations between proximal constructs, such as feeling a sense of belonging within school, and levels of active engagement (reflecting an individual's motivation to learn) as a possible route via which academic achievement may be influenced (Battish et al., 1995; Frederickson & Baxter, 2009; Osterman, 2000). Contemporary neuro-scientific research has also suggested that feeling a strong sense of connection to an institution promotes emotional and physical well-being in the face of adversity via deep set neuro-chemical reward systems (Resnick, 2005). The reverse experience of feeling a sense of social rejection/exclusion has been linked to emotional problems, poor mental health, increases in anti-social behaviour, truancy, disengagement from learning and underachievement (Baumeister & Leary, 1995; Haight, Wojcicki, Schuldt, & Ferrara, 2001). Following McMillan and Chavis' (1986) framework, excluded individuals may not feel valued members of the community, lack influence, be at risk of experiencing no shared emotional experiences/connections and have needs left unmet. Findings suggesting a negative correlation between SoC and school absence (reflecting a lack of 'commitment to the community' - an essential element of McMillan and Chavis' membership component of SoC) supports this conceptualisation (Lounsbury, Loveland & Gibson, 2003).

#### 1.8 The Positive Impact of SoC within Education: A Universal Experience?

The research evidence outlined above clearly indicates that young people do experience educational settings as communities and provides evidence of positive correlations between higher SoC and positive outcomes, both in terms of pupil performance and their emotional well-being. However, these studies have not yet explored key questions, such as whether experiences are universal across all pupils within specific settings, what factors may impact on variations in the formation of a strong SoC, or, what role the process of education itself plays in young people's developing SoC.

Together with research into the correlates of feeling a SoC within schools, contemporary studies have begun to focus upon whether a member's level of SoC varies as a function of demographic variables such as age and gender, or by the type of school that they attend. For example, in a study of pupils aged between 11-16years from a state secondary school in the south of England (N=537,  $\%_{Male}=49$ ), Traill and Stringer (2009, unpublished) explored pupils' sense of community using an adapted version of the SCI-II (Chavis et al., 2008 - using the word 'school' instead of 'community'). The

study found an unexpected pattern of a generally reduced sense of community (both as a total score and across the four factors/subscales) as school age increased. Differences were also reported between genders, with boys scoring lower on the majority of scales across year groups. In an exploration of primary school pupil's SoC in the same locality (using an adapted version of SCI-II with age-appropriate rewording of items), Sayer et al., (in prep.) found a similar effect for gender, but only partial evidence of an impact of age, with older pupils scoring higher on one factor relating to fulfilment of needs (N= 452,  $M_{age} = 10.92$ ,  $\mathscr{M}_{Male} = 51$ ). Interpreting these findings, Sayer et al., (in prep.) suggest that boys may feel less connection with schools or the value of education in comparison to girls. Such assertions draw from research evidence suggesting that in general within the UK boys underperform in comparison to girls and tend to develop a self-image in relation to aspects external to academia (Collins, 2000; Salisbury, Rees, & Gorad, 1999; Tinklin, 2003). Furthermore, regarding the differences seen in SoC due to pupil age, Sayer et al., (in prep.) contend that the scores may reflect the current level of salience that the school context holds for its members. For example, within the primary study the older pupils represented those who had experienced the longest possible time within their learning community, but were also approaching a period of transition (where existing bonds may be tested). Such situations could be argued to promote pupils' desires to consolidate friendships before changing school, whilst remaining particularly mindful of their 'shared emotional connection' with peers and to the school itself. Thus, significant times of transition and social change may influence young people's attitudes, behaviours, and levels of attachment to school (Lucey & Raey, 2000). This represents an important gap in the current knowledge base. Future research, utilising longitudinal designs that monitors pupil's SoC over time and transitions, and tracks related outcome-variables, is needed to address this. The reverse trend of decreasing SoC with age seen by Traill & Stringer (2009) may be contended to indicate that an increasing involvement and identification in multiple wider communities outside of the school context, combined with an increasing sense of independence, weakens their attachment to their school community (Sayer et al., in prep.; Erikson, 1968; Pereira & Pooley, 2007).

Intriguingly, comparable research conducted by Chiessi et al., (2010), found an equally significant effect of gender upon young people's SoC, but in the opposite direction (i.e., boys scoring higher than girls). The study, comprising Italian high school pupils aged 15-18 years (N= 661,  $%_{Male}$ = 47), explored SoC levels for members

of three different types of school (broadly categorised by the authors as 'academic', 'technical' and 'vocational' institutes). Utilising a cultural-context specific assessment tool based upon the theoretical foundations outlined by McMillan and Chavis (1986), the study found no differences between age groups, but did find differences between pupils' SoC within different types of school. When discussing the findings it was hypothesised that wider cultural values, beliefs, and expectations (including those associated with age and gender) may play an important role in shaping young people's experiences within and feelings towards the communities of which they are members (Chiessi et al., 2010). This perspective draws from evidence that an individual's attitudes towards, understandings of, and experiences within, a specific community is influential over the choice to participate and invest in that group (Mannarini & Fedi, 2009; Pereira & Pooley, 2007).

Existing research into SoC has established the potential positive impact of developing a strong SoC and its applicability across social domains. However, it has been limited in its range of focus and only highlights potential links between the concept of SoC and these outcome variables. Also, although widely comparable across contexts, existing research has not been able to establish the direction of influence within these relationships. To date, no research has focused upon the question of 'how' SoC is related to these outcome variables (i.e., the mechanisms by which these concepts are connected). As emphasised above, not only can McMillan and Chavis' model of SoC be applied to multiple contexts, including schools, but individuals can also experience a SoC across different contexts simultaneously. It may therefore be contended that, depending upon overarching cultural values, salience, and events experienced, individuals' level of SoC will vary as a function of the current community in which they identify themselves. Such a standpoint implies that it is important for educational institutions not only to be aware of the social climate in which young people are developing (Osterman, 2000), but to also "...appreciate that this needs to be managed actively rather than left to chance" (Frederickson & Baxter, 2009, p.1).

### **1.9 Developing Healthy Communities: Summary and Future Directions for SoC** Research

This review has evidenced that the societal nature of humans forms part of every element of our daily lives. Beginning as a tool by which to survive an unforgiving world, the development of communities has become a way by which we understand

ourselves and function in modern society. Central to this is a notion of a psychological SoC, which hinges on the dynamic concepts of interrelatedness and belongingness for group members. The research evidence explored above clearly outlines the importance that the concept of SoC has upon both group and individual variables in areas of professional and personal success or failure, alongside physical health and well-being. Such positive outcomes have been shown to apply across contexts. Specifically within educational settings, SoC has been shown to positively correlate with attainment, engagement in learning, and pupil's emotional well-being. Conversely, SoC has been shown to be negatively correlated with school delinquency, underachievement, and pupils' stress-levels. Focusing upon schools as sites of civic instruction, the important role adults play in facilitating the social education of pupils has been underscored and value placed upon young people's active involvement in shaping the communities in which they exist. Further, taking note of the focus paid to developing social cohesion from a political perspective, educational legislation has been shown as a means by which wider community values and beliefs are communicated to young people within UK schools. With such a social and political backdrop, combined with the research evidence into the positive correlations of a strong SoC within schools, it seems clear that the concept of community plays a central role within the British education system. Further, the review indicates that, as educationalists, we have a moral duty to value and actively embrace our moral role in promoting and facilitating a continued commitment to the processes involved in developing cohesive communities, thereby developing the adults who will populate the society of tomorrow.

Tellingly, this review additionally highlights some distinct gaps in the research base and our current comprehension of SoC. These gaps need to be addressed before consideration is paid to how cohesive communities can be actively promoted, effectively created, and maintained successfully.

Firstly, the research evidence accrued thus far has been correlational in nature with no clear understanding of the direction or causal nature of the relationships. Therefore, although links have been established between holding a strong SoC and multiple positive outcomes, or a weak SoC relating to negative outcomes, we remain unclear of the direction of influence (i.e., does feeling depressed lead to feeling more negative about your social group, or does having a negative experience within your community cause you to feel more depressed?). It is noteworthy that our current understandings are drawn from analyses of group level data (i.e., results are averaged

across the research population). Understandably, such an approach is necessary to establish and test correlations between concepts within specific communities. However, by classifying participants under one term (e.g., they share the same community identity), this method may blur individual differences and misguidedly lead to false assumptions that all members of the community feel and/or behave the same way or should be considered solely as a community group, rather than individuals that collectively form into a community. McMillan and Chavis (1986) emphasise that cohesive groups depend upon mutual acceptance and celebration of the diverse nature of individuals. Their emphasis upon a need for a balance between communal and individual drives and desires, coupled with assertions that SoC is experienced at an individual level within communities (Peterson, et al., 2006; van Uchelen, 2000) suggests that research exploring the impact of individual difference upon the established correlations is an important step forward. Although some studies have considered demographic differences such as age, gender and location/type of setting (Chiessi et al., 2010; Traill & Stringer, 2009), few have yet focused upon person level variables. An exception to this is the work of Lounsbury et al., (2003), who found variations in SoC were related to the big-5 model of personality, comprising extraversion, agreeableness, conscientiousness, openness, and neuroticism (N=1001,  $\%_{Male}=47$ ). Although they did not explore the potential impact of these variables upon outcomes other than members' SoC, Lounsbury, et al., (2003) findings suggested that differences within these traits explained up to 25% of variance in SoC. This may form a firm foundation from which future research investigating individual differences can build.

This line of enquiry also highlights a second area requiring further research attention, namely the need to consider that individuals will often concurrently exist in multiple communities. An extensive search of the published literature found no reports comparing the experiences and developed SoC of the same individuals across multiple communities with which they personally identify (e.g., family, school, and sports team). However, despite the lack of professional focus to date, this remains an important question for educational settings to consider. Within the UK, schools often comprise various levels of micro-community within the wider school population. For example, a pupil may be identified to be part of a specific class or tutor-group, which forms part of a house and/or year group structure, which extends to form the whole school level community. It can be indirectly inferred from the research evidence above that an individual's SoC may vary as a function of the degree of valence and salience felt

towards their current community (McMillan, 2011). Interestingly, research into this area, which could explore whether a person's SoC is stable across these multiple contexts, may also question what role group size may have upon developing a strong SoC and related positive outcomes. Existing research reports that smaller groups are shown to relate to higher cohesion and positive learning progress, whereas larger groups are reported to have a negative impact, relating to disengagement in learning, truancy and the creation of positive learning communities within schools (Royal & Rossi, 1996).

Finally, it may be asserted that the current level of knowledge gained from the SoC research literature is limited to understanding which elements are encompassed in cohesive communities and what outcomes are related to these elements. However, no real understanding has yet been developed as to how these variables connect or how positive relationships are cultivated. This is a distinctly different question from exploring when these relationships fluctuate, rather considering why the elements are linked and by what mechanisms they join. It is important to emphasise that gaining an understanding of such underlying pathways is critical to informing effective proactive educational practice which facilitates the development and maintenance of cohesive communities within the British education system.

Following extensive research attention over the past century, the notion of community is as important today as it was to our hunter-gatherer ancestors as they first formed relational and territorial groups. In the current context, community plays a vital role in supporting pupils within the UK education system to learn, achieve, and enjoy in both academic and social fields. Developing a clear understanding of the mechanisms by which SoC is related to positive outcomes for young people, alongside what other factors may influence this, forms the key next step for theoretical and applied psychologists alike. This understanding will inform strategies enabling those within schools to effectively conduct their moral duty in shaping pupils' learning experiences to promote the formation and maintenance of healthy socially cohesive communities and the positive citizens of tomorrow's society.

## Chapter 2: Empirical Paper An Exploration of Mechanisms Underlying Sense of Community within UK Schools

#### 2.1 The Importance of a Psychological Sense of 'Community'

Over the past century our need to feel that we belong to a larger group has assumed a position of paramount importance within the field of social psychology (Bell & Newby, 1972; Nisbet, 1966; Peterson, 2009; Thomas, 2009). This is based around the premise that humans, as social-beings, have become inter-reliant in their struggle to survive and succeed in modern society (Barrera, 2000; Bastian & Haslam, 2010; Herrero & Gracia, 2007; Read & Miller, 1995). The significance placed on this innate urge to form close, meaningful bonds with others infiltrates all aspects of our lives. For example, our thoughts, opinions, and actions are governed, or at least directly influenced, by the presence (actual or imagined) of others. Moreover, our desire for interdependent relationships forms a central component of many seminal theories of human behaviour (e.g., Maslow's 'Hierarchy of Human Needs', 1969; Bandura's 'Social Learning Theory', 1977). Our formation of 'communities' operationalises this drive for interactive social connection. Communities can be divided into two main categories; 'relational' (i.e., formed of like-minded people with shared views/goals/emotional connections), or 'territorial' (i.e., individuals in a shared location) (Gusfield, 1975; Wright, 2004). With 'people' remaining at the centre of such definitions, it is clear that social interaction between members is a vital aspect to an individual's experiences of the community as a whole (Hillery, 1955; Sarason, 1974; Wright, 2004).

Since the 1970s research into the concept of community has moved away from sociological discourse into experimental psychology. Sarason (1974), a pioneer of modern social psychology, proclaimed that understanding why and how people formed groups was central to our ability to create and maintain healthy communities. Healthy communities may be considered those which reflect positive levels of social cohesion, manage periods of challenge/stress in a united manner, and experience low levels of turbulence (Calderwood, 2000; Obst & White, 2005). Other theorists have contended that considering one's experiences within a community is an important element of self-definition (Peterson, 2009; Townley & Kloos, 2009). These feelings and experiences,

centring round belonging, togetherness, and mutual concern, have become known as a psychological sense of community (SoC). It has been proposed that SoC is not just an idealistic concept, but a relevant tool to examine why groups succeed or fail (Thomas, 2009).

Building on Sarason's (1974) assertions, McMillan and Chavis (1986) developed a four-factor model of SoC, comprising; 1) membership (investment of oneself, right to belong/be included), 2) influence (bi-directionally between group members/whole community), 3) integration and fulfilment of needs (reinforcement of own contribution towards shared goals/value via positive feedback/attention/rewards/status), and 4) shared emotional connection (joint involvement, empathy, and identification with a powerful/meaningful experience). A detailed account of each of these components is provided in chapter 1, section 1.3. This robust framework has stood up to wide critique and remains the leading conceptualisation of SoC (Saver et al., in prep; Obst & White, 2004; Peterson et al., 2006; Thomas, 2009; Wright, 2004). Thought to be dynamic in nature (i.e., all values are interconnected, interactively impact upon one-another, and are in constant flux), McMillan and Chavis' (1986) model has informed SoC research into multiple correlated outcome-variables and has been applied across referents, cultures, ages, and settings (Fisher, Sonn, & Bishop, 2002). For example, the model has provided theoretical foundations for research into individuals' SoC within neighbourhood communities, (in the UK, Italy and America: Doolittle & MacDonald, 1978; Obst, et al., 2001; Perkins, & Long, 2002; Pressa, et al., 2001; Puddifoot, 1994; Riger et al., 1981; Shields, 2008; ), places of work and social groups (Chipeur & Pretty, 1999; Hughey, et al., 1999; Sonn & Fisher, 1996), and sites of education (Saver et al., in prep; Chiessi & Cicognani, 2010; Pooley et al., 2008, Rovai, 2002; Thomas, 2009; Traill & Sringer, 2009; Wright, 2004). Herein, this study will focus upon schools as communities.

#### 2.2 The Importance of SoC and a role for Schools

Key research findings have widely suggested that a strong SoC is correlated with positive outcomes, such as physical health (Resnick, 2005; Seeman, 1996; Uchino, 2006) mental health, including well-being (e.g., life-satisfaction, self-esteem, reduced loneliness, positive affective states, reduced personal stress and perceived social support: Davidson & Cotter, 1991; Herrero & Gracia, 2007; Pressa, et al., 2001; Pretty

et al., 1994), commitment to and engagement in community life (Davidson & Cotter, 1986; Wandersman & Giamartino, 1980), feelings of personal value and improved quality of social interactions (Ahlbrandt & Cunningham, 1979; Bachrach & Zautra, 1985), and an increased sense of safety (Doolittle & McDonald, 1978). In parallel, research has shown that a deficit in individuals' SoC correlates with negative outcomes, such as feelings of loneliness, isolation, and alienation (Davidson & Cotter, 1986; Frederickson & Baxter, 2009).

Similar findings have been shown to transfer into learning environments (Berger, 1997; DeNeui, 2003; McCarthy, Pretty, & Catalano, 1990; Osterman, 2000; Rovai, 2002; Wright, 2004). Specifically, research into the impact of developing a strong SoC within educational institutions has shown positive links with reduced levels of delinquency (Payne, Gottfredson, & Gottfredson, 2003), reduced issues of conflict (Royal & Rossi, 1996), extended engagement in learning (Osterman, 2000; Royal & Rossi, 1996), and positive exam performance/academic attainment (McKinney et al., 2006; Whiting et al., 2009). Conversely, a strong research base has established connections between feeling or being excluded from schools (the conceptual opposite of a strong SoC within schools) and negative outcomes, including increases in anti-social behaviour, truancy and underachievement (Baumeister & Leary, 1995). Following McMillan and Chavis' (1986) framework, excluded individuals may feel unvalued members of the community, lack influence, experience no shared emotional events/connections, and have their needs unmet. Lounsbury, Loveland, and Gibson's (2003) findings suggesting a negative correlation between SoC and school absence (reflecting membership through 'commitment to the community') supports this conceptualisation. Further research has suggested that students' SoC scores may vary by gender and age, with girls and younger pupils typically scoring higher (Sayer et al., in prep; Traill & Stringer, 2009). However, the pattern of these results and direction of this relationship has been found to vary by context and cultural setting (Chiessi et al., 2010, Cicognani et al., 2006).

The wide base of correlational evidence highlights why SoC has become such an important area of interest. In school contexts, these findings substantiate the significant role that SoC may play on multiple aspects of pupils' educational experience. It has been argued that schools, as sites of civil instruction, have a key role in shaping pupils' social experience, development of emotional well-being, and academic progress (Evans,

2011; Heater, 1990; Ratcliffe & Newman, 2011; Shapiro & Stefkovich, 2001). Emphasis upon the value of developing social cohesion (a corresponding effect of a strong SoC) may be seen through key educational policy, such as the 'Every Child Matters' paradigm (DfES, 2004), the Inclusion agenda (Warnock, 2005), and the integration of Citizenship as a core part of the national curriculum (Keating et al., 2009).

The evidence above contends that developing a strong SoC within schools leads to improved academic, social and emotional outcomes for pupils. Further, political rhetoric in core policy suggests that schools understand that "this needs to be managed actively rather than left to chance" (Frederickson & Baxter, 2009, p.1). Thus, as emphasised by Hill (1996), by working proactively to develop inclusion, the problems of exclusion may be subsumed. However, the breadth and depth of existing research establishing links between SoC, educational outcomes (attainment, attendance) and well-being (life-satisfaction, self-esteem), is limited, particularly within the UK. Much research has been cross-sectional in nature, solely focusing upon surface level correlations, paying little attention to individual-difference variables influencing the relationships. As a result we are currently unable to infer the direction of effect between these variables, and are yet to develop the knowledge of how they jointly operate. Additionally, much evidence is based on parental opinion, or that of students at the tertiary level. Thus, the views of the clients of the UK education system (i.e., the pupils themselves) have not been adequately accessed. Developing knowledge of mechanisms that underlie the relationships between SoC and correlated outcomes by directly accessing pupil's views/experiences may facilitate schools to make active changes, therefore promoting improved experiences and outcomes for young people at both individual and whole community levels.

#### 2.3 Below the Surface Level: Motivation to Achieve in Schools

Existing research evidence shows that pupils' with higher SoC achieve better educational outcomes and show higher levels of well-being. However, why these links exist and how schools can use them to create socially cohesive learning communities and actively support pupils to enjoy and achieve remains unclear (Matusov, 1999; Peterson, 2009). As the first investigation into this area, this study questions whether

variation in the corresponding construct of achievement motivation may function as an underlying mechanism between SoC and outcome-variables.

Motivation has been defined as the combination of desires, values, and interests that energises and directs our behaviour towards desired end states (Elliot, Gable, & Mapes, 2006). Considered to be an ever-present feature of our lives, 'achievement motivation' (the purposeful investment of effort to achieve a specific goal) helps to explain why we choose to behave in certain ways (Elliot, 2006; Elliot & Church, 1997). Murayama and Elliot (2009) reported that these decisions are influenced by environmental and individual factors (i.e., how we view, are impacted by, or respond to external stimuli). Further, it has been emphasised that young people's perceptions of these interactive elements, known as the 'psychological environment', are presumed to be critical to achievement motivation processes (Ames, 1992; Maehr & Midgely, 1991; Murayama & Elliot, 2009). This paper contends that SoC may be reciprocally related to achievement motivation via pupil's appraisal of their psychological environment. Thus, pupils who feel positive about their school environment may feel increased motivation to invest personally in its maintenance, leading them to place a higher value upon it in a circular fashion.

Elliot and Friedman (2007) posit a dichotomy of achievement motivation comprising domains of approach- and avoidance-motivation. The authors elucidate that this relates to our evaluations of our own competence towards (or ability to cope with) various stimuli within specific achievement contexts (where 'stimuli' refers to both tangible and imagined representations of objects, events, and/or possibilities). A positive evaluation of stimuli leads to approach-motivation (i.e., the drive to attain measureable success, the need to achieve), whereas, a negative evaluation of stimuli results in avoidance-motivation (i.e., the drive to prevent, or 'fear' of experiencing, measureable failure). Achievement motivation not only relates to views or reactions towards new stimuli, but also encompasses appraisals of existing experiences (Elliot & Friedman, 2007). Thus, our evaluations of stimuli may guide behaviour that maintains positive situations, or changes/escapes negative situations. Importantly, research has suggested that individual's achievement motivation may vary across context and situation (Mischel & Shoda, 1995). Therefore, the approach-avoidance paradigm may be understood as an individual's perception of the valence of particular stimuli in relation to their capacity to handle the inherent challenge it presents, within specific

achievement contexts. This judgement directly impacts upon an individual's selfregulation of their own behaviour (i.e., the decisions of when and how to, or not to, act).

#### 2.4 SoC, Achievement Goals, and Outcomes for Pupils

Within the study of achievement motivation, the notion of goal concepts has preoccupied research and theoretical developments since the 1970s (Elliot & Murayama, 2008; Elliot, Murayama, & Pekrun, 2011). Goal concepts are concrete representations of more abstract motivational dispositions that can explain variance in achievement behaviour (Elliot & Church, 1997; Urdan, 2004). As such, the term 'goal' may be defined as the aim one is purposefully committed to, serving as a guide for future behaviour (Dweck & Elliot, 1983; Elliot, 1999; Elliot & Fryer, 2008). Several formulations, of increasing complexity, have been developed regarding the structure of achievement goals. The 'dichotomous achievement goal model', based upon fundamental work conducted during the 1980s (Ames, 1984; Dweck, 1986; Maehr & Nicholls, 1980; Nicholls, 1984), established that goals could be understood as differing on the basis of competence. The two types of goals were identified as 'mastery-goals' (the drive to develop competence, strongly related to 'intrinsic-motivation', i.e., "...enjoyment of and interest in an activity for its own sake...", Murayama & Elliot, 2009, p.435) and 'performance-goals' (the drive to demonstrate competence, or 'perform'). Both goal types were considered to represent forms of approach motivation, with no consideration given to the role that avoidance motivation might play. Development of a trichotomous model contended that performance goals should be divided upon the underlying approach-avoidance dimension (Elliot & Harackeiwicz, 1996). Elliot (1999) further posited a 2 x 2 framework, where the mastery goal construct was also bifurcated into facets of approach and avoidance motivation, creating the four-factor 'Hierarchical Model of Approach-Avoidance Motivation', used herein. Accordingly, the hierarchical model (Figure 1) comprises a definition of competence ('Mastery' evaluated against task & self, vs. 'Performance' evaluated against others) and a judgement of the valence of competence (Approach vs. Avoidance). Thus, each goal concepts is understood to have a distinct pattern of antecedents (evaluation of competence vs. threat of stimuli) and consequences (evaluation of the basis of competence vs. action to be taken to address stimuli). The combination of these factors creates four categorisations of achievement goals, namely; 1) Mastery-Approach

(focused on attaining task-based or interpersonal competence), 2) Performance-Approach (focused on attaining normative competence), 3) Mastery-Avoidance (focused on avoiding task-based or interpersonal incompetence), and 3) Performance-Avoidance (focused on avoiding normative incompetence).

Within schools as achievement contexts, considerable research has explored the impact that goal adoption has upon student's successful performance and engagement (Pekrun, Elliot, & Maier, 2009). Such studies have provided evidence of discernible patterns between types of goal and potential outcomes, particularly for performancebased goals. Where goal categories are analysed as simultaneous predictors adoption of performance-approach goals have been shown to predict positive outcomes such as exam performance (Elliot & Church, 2003; Urdan, 2004), whereas performanceavoidance goals have been shown to negatively relate to performance on assessed tasks (Church, Elliot, & Gable, 2001; Elliot & McGregor, 2001). Pekrun et al., (2009) report that utilisation of mastery goals have been found to predict positive attainment and engagement, particularly in younger students (i.e., within compulsory education rather than higher/tertiary educational settings), most noticeably in conceptual learning tasks over rote-learning. Further to standardised assessment of performance, consideration of 'academic self-concept' (i.e., self judgement of competence and worth within academicfields) represents a second important outcome variable within achievement settings (Marsh, 1990; Murayama & Elliot, 2009; Pajares, Britner, & Valiante, 2000; Pajares & Cheong, 2003). The small degree of research exploring achievement goals and academic self-concept has shown mastery and performance-approach goals as positive predictors, whereas adoption of performance-avoidance goals has been found to be a negative predictor.

As well as relating to performance/achievement based outcomes, adoption of particular types of goal has been linked to emotional well-being. Most research conducted into the links between achievement goals and emotions has suggested that, in general, embracing approach goals is beneficial to personal affect, whereas a tendency towards performance goals has been reported as detrimental to this experience (Pekrun, Elliot, & Maier, 2009). This pattern of results has been mirrored in studies exploring the relationship between individuals' self-esteem (both as an antecedent and outcome) and goal adoption (Heimpel, Elliot, & Wood, 2006). Further studies have suggested that goal adoption may also vary due to personality differences. For example, Heimpel

et al., (2006) have shown the trait of neuroticism to correlate with avoidance temperaments, and the reverse trait of extraversion to correlate with approach temperaments.

The current evidence-base provides clear indications of the important role achievement motivation, operationalized through goal concepts, plays in driving our behaviour, in relation to multiple outcome-variables, similar to those connected to SoC above. Further, it has been contended that links between the two concepts can be seen. This adds credence to this studies consideration of Achievement Goal Concepts as a potential mediating variable. Adoption of mastery goals has been linked to a pattern of motivation that welcomes challenge, persists in the face of failure and leads to enhanced task enjoyment, whereas reliance on performance goals reflects a helpless pattern of motivation, encompassing a preference for easy tasks, lack of effort in challenging situations and decreased enjoyment (Elliot & Harackeiwicz, 1996). Further, an overreliance upon avoidance motivation has been contended to lead to lower competence and well-being (Elliot & Friedman, 2007). Considering the value placed upon investing effort and communal benefit over displays of individual ability/prowess, this paper contends that higher levels of SoC will relate to mastery goals and approach motivation.

However, the majority of analyses into motivation in schools as achievement contexts have been based upon outdated models of achievement goals. Additionally, as with SoC research, such findings are based upon stand alone cross-sectional methods, rather than longitudinal or more complex designs which integrate multiple causal elements. This means that the impact of achievement goal adoption on affective experience must currently be considered both as context specific and potentially varying at a personalogical level (Heimpel et al., 2006; Pekrun et al., 2009).

#### 2.5 Below the Surface Level: Individual Differences

In addition to adding an understanding to the literature of how SoC and achievement goals are connected, this study also aims to explore whether such links are affected by additional individual factors. This follows Hayes' (2012) assertion that analyses are incomplete unless they address both questions of 'how' and 'when' connections between variables exist.

Following McMillan and Chavis' (1986) definition, the majority of research has focused upon SoC as an attribute, outcome, or correlate of community environments

(Lounsbury et al., 2003). This is supported by evidence that a stronger SoC, in terms of area of inhabitancy, long-term membership and interpersonal ties, correlates positively with the value individuals place upon the community and their experience within it (Puddifoot, 1994). Such evidence has suggested that community level factors can exert considerable influence on individuals (Jensen, 2007). Conceivably, such influences may be bidirectional, meaning that the reverse trend may also operate. This poses the question of whether our perceptions towards and experience within communities (leading to our development of a SoC) may vary as a function of individual difference variables or personality characteristics (Lounsbury & DeNeui, 1996).

In exploration of this hypothesis, Lounsbury, et al., (2003) found that SoC was significantly related to the 'big five' model of personality traits, (extraversion, agreeableness, conscientiousness, openness, and, neuroticism) within American high school and college students (N=1001,  $%_{Male}$  = 47). Consideration of the facets of these traits highlights discrete links to the distinct elements of McMillan and Chavis' (1986) model of SoC. For example, the frequent interactions and extensive relationships central to extraversion strongly echo the notion of 'shared emotional connection'. Moreover, links are visible through agreeableness (i.e., 'membership' dependent upon co-operation with others producing community cohesion); conscientiousness (i.e., 'integration and fulfilment of needs' via conforming to community norms/values); openness (i.e., to bidirectional 'influence' of others and group values); and, neuroticism (i.e., the need and value of emotional safety and security, linked with 'membership' and clear 'boundaries'). Lounsbury, et al., (2003) findings that these personality variables accounted for between 21-25% of SoC variance, leads to questions of whether SoC varies solely at a personological level.

Such contentions highlight the important point that communities are constructed of individual, and often diverse, members and should not only be considered entities in their own right. Therefore, if SoC plays a role in self-actualisation (Sarason, 1974), we must recognise that individual personality variables are playing a comparable role. This suggests that our experiences and perspectives within social contexts are formed from an interaction between the collective shared view and our own position. Thus, developing a SoC may depend on the degree to which we view things from an exocentric or ego-centric position. Considering the extremes of each of these stances, a potential continuum between community spirit and individualism becomes apparent.

#### 2.6 Potential Moderation: Community Spirit vs. Individualism

The loss of mutual concern resulting from the development of consumerism, an emphasis on individualism, and a focus on the sole achievement of person-centred goals, has been contended to characterise modern society (Tönnies, 1957, Schuler, 1996; Peterson, 2009). Further, as declared by Glynn (1981), this may show the "erosion of traditional social supports in our communities and the [negative] impact of this erosion on sense of community" (p.800). Within contemporary social psychology, it has been asserted that the younger generation are more self-centred, arrogant, appear disrespectful, and less interested in community values (Twenge, Konrath, Foster, Campbell, & Bushman, 2008). Such individuals may possess narcissistic attributes. A narcissistic personality reflects a highly inflated, often unrealistic self-view, with a lack of regard for others (Campbell & Foster, 2007). In a cross-temporal metaanalysis, Twenge et al. (2008) reported that levels of sub-clinical narcissism have risen considerably in American students, with a 30% increase between 1979 and 2006. The researchers suggested that this rise may be due to an ethos of praise without correction, referred to as 'the self-esteem movement', implemented in schools in the 1980s. Narcissistic individuals are driven by their own self-esteem, tend to favour status over membership, use social connections in a unidirectional manner to influence others/reinforce their inflated self-view, and invest little emotion into shared goals/experiences (Alicke & Sedikides, 2009; Morf, Horvath, & Torchetti, 2011; Sedikides, Gregg, Rudich, Kumashiro, & Rusbult, 2004). This directly contrasts those identified as having a strong SoC following McMillan and Chavis' (1986) framework. However, such personality traits do not necessarily lead to negative achievement or well-being outcomes. Sedikides et al., (2004) found that narcissism was correlated with good psychological health on measures of depression, loneliness, anxiety, neuroticism, and well-being. Individuals' levels of self-esteem fully accounted for these associations. It may be summarised that less reliant upon warmth and caring interpersonal relationships, narcissistic individuals see themselves as special/superior and are driven by success with little fear of failure (Campbell, Rudich, & Sedikides, 2002). Further, recent research into the motivational tendencies of narcissistic individuals has suggested that they favour opportunities to show their skills, opting for approach goals, and performance tasks (Foster & Trimm, 2008).

Considered as paradoxical to SoC, with a clear connection to education and well-being outcomes, alongside achievement motivation, the rise in narcissism in the younger generation makes this a personality variable worth exploring. This study contends that, Narcissism will act as a moderator to any mediated relationships found between SoC and outcome-variables, specifically via performance and approach goals.

#### 2.7 The Present Study

McMillan and Chavis' (1986) robust conceptual framework of SoC has received much attention over the past 25 years. SoC has been shown to be an important construct in considering how healthy, socially cohesive communities bring about positive outcomes for members. The decision to become, or remain, part of a community is motivated by our thoughts and experiences relating to four factors, including valued membership, reciprocal influence, the fulfilment of personal and communal needs, and shared emotional connection. It is clear that schools, as social institutions, are experienced as communities. Existing research evidence has shown that the degree to which individuals feel a SoC within educational settings impacts upon outcomes such as attainment, attendance, life-satisfaction and self-esteem. Such research has utilised simple cross-sectional correlational designs, with some exploration of variance by demographic characteristics, such as age, gender, and culture/location. Although a firm conceptual framework has been established, our current knowledge lacks the ability to 1) imply causational direction, 2) measure and analyse possible changes to, or the relative impact of, individuals' SoC levels over time and between contexts, 3) unpick potential underlying mechanisms/reasons for the links between SoC and the outcome variables. Evaluation of the guiding legislation has shown the notion of social cohesion to be a clear priority within the UK education system. Thus building a positive SoC within school populations constitutes a valued pursuit for educationalists, critical to promoting young people's development into active citizens and supporting their continued academic and social progression, enjoyment, and success.

To develop both our conceptual understanding of SoC and knowledge of how to apply this information to create and maintain healthy cohesive school communities, the current study will meet four key aims.

Following the definition outlined by McMillan and Chavis (1986), the current study will first clarify how pupils experience their schools as communities within a local context. This will be compared to existing research findings for the demographic variables of age and gender. Based upon existing research evidence, it is hypothesised that pupils' SoC will be higher in girls and decrease with age (Sayer et al., in prep; Chiessi et al., 2010; Cicognani et al., 2006; Traill & Stringer, 2009).

Second, the study will establish how pupils' SoC is related to key outcomes (comprising education: Academic Self-concept, Attainment, and Attendance, and wellbeing: Self-esteem, Life-satisfaction, and Loneliness). Based upon previous research (Davidson & Cotter, 1991; Heimpel et al., 2006; Lounsbury et al., 2003; Pressa et al., 2001; Pretty, Andrews & Collet, 1994; Wighting et al., 2008) it is hypothesised that higher levels of SoC will correlate with higher Attainment, Attendance, and Academic Self-concept (educational outcomes), higher Life-satisfaction and Self-esteem, alongside lower feelings of Loneliness (well-being indicators).

Third, following research upon the important influence achievement motivation has upon our actions (Becker & Luthar, 2002; Elliot, 2006; Urdan, 2004), this study will explore whether variations in achievement goals function as an underlying mediator between pupil's SoC, educational outcomes, and well-being. This is hypothesised as a mechanism which explains the relationship, with approach motivation (Mastery-Approach and Performance-Approach goals) leading to higher scores on the outcome variables.

Finally, exploring the influence of individual difference variables, this study questions whether variations in levels of subclinical narcissism are inversely related to SoC, exerting a moderating effect upon the both correlated outcome-variables and any mediating effect of achievement motivation. Following Campbell, et al., (2002), alongside Foster and Trimm (2004), it is hypothesised that higher levels of narcissism will impact via approach motivation and performance goals.

These hypotheses combine to form the proposed model displayed in Figure 2.

#### 2.8 Method

#### Sample and Participant Selection

Participants comprised secondary school students from a large South of England local authority (LA). Multiple schools were approached to ensure the sample was representative of the wider pupil population. Two state secondary schools formed the population base. Both schools were of a similar size ( $N\approx 1600$ ), had special educational needs (SEN) levels which reflected the national average, and below average numbers of free school meal pupils. Both were rated as 'good' in their most recent Ofsted inspections (Autumn 2010) with above 80% of pupils achieving 5A\*-C grades at GCSE (including Maths and English) in 2011. All members of years 8 and 9 (2<sup>nd</sup> and  $3^{rd}$  of 5 years) were approached (N = 1,214). These year groups were selected to avoid the influence of times of transition (i.e., transition from primary to secondary school, or transition from secondary school to college/work). These form major social change for pupils, having a significant impact on their attitudes, behaviours, and levels of attachment to school (Chiessi, et al., 2010; Lucey & Raey, 2000). Pupils who had recently joined the school (attending for less than a full term = approximately 12 weeks) were to be excluded from the study. No individuals met this condition and no further exclusion criteria were used.

Of the 1,214 pupils approached, 777 participated in the study ( $M_{age} = 13.34$ years, SD = .56). Participation was voluntary with no incentive offered to promote involvement. Only 12 participants formally opted out of the study. The remaining attrition level was primarily accredited to school based factors, such as pupil absence during data collection and non-completion or return of the questionnaire packs. However, the length of the questionnaire pack and limited time provided for its completion may also have affected participation levels. The final sample represented approximately 64% of the total target population. 52% of participants were male and 48% were female. 43% attended the first school, and 57% attended the second. 48% were in Year 8 and 52% were in Year 9. 87.4% of participants recorded their ethnicity as 'White-British', 2.8% as 'Any-other White background', 1.7% as 'White-Irish', 1 % as 'White and Black-Caribbean', and 1% as 'Any-other mixed background'. Remaining categories represented < 1% of the total population and 1.9% chose not to state their ethnicity. Only one participant identified themselves as having 'English as an

additional language'. Information drawn from school records identified that 1% of participants held a statement of SEN, 4% were receiving targeted additional support at the 'school action plus' level, with 13% receiving support at the initial 'school action' level. The remaining 82% had no identified SEN.

#### **Research Design**

The current research utilised a correlational design to explore the relationships between pupils' SoC and their educational outcomes (Attainment, Attendance and Academic Self-concept) and well-being (Self-esteem, Life-satisfaction, and Loneliness). The potential mediating effect of achievement motives as shown through Achievement Goal Concepts (Mastery-Approach, Mastery-Avoidance, Performance-Approach, and Performance-Avoidance) upon the relationships between SoC and outcome variables was also explored. Finally, Narcissism was explored as a potential moderator of the relationship between SoC and the outcome variables (educational outcomes and wellbeing) and between SoC and each of the mediating variables (achievement motives).

#### Measures

# The Sense of Community Index, Second Edition, School Version (SCI-II-SV)

Developed by Chavis et al., (2008), the SCI-II is a 24-item index measuring SoC. It contains four subscales (Membership, Influence, Integration and Fulfilment of Needs, and Shared Emotional Connection) each comprising six items, providing both subscale and total SoC scores. Responses are made on a 4-point rating scale ranging from 1 = not at all to 4 = always. An example statement is "Members of this school care about each other" with more positive responses indicating stronger feelings of shared emotional connection and higher SoC. Traill and Stringer (2009) adapted the measure for use in secondary schools by replacing the word '*community*' with '*school*'. This study showed strong overall reliability of the scale ( $\alpha = .91$ ) and moderate reliability of the subscales ( $\alpha = .61$  to .79). This is similar to the original scale (Chavis et al., 2008) with a reported high overall reliability ( $\alpha = .94$ ) and that of subscales (.79 to .86). This study uses this education specific version as a uni-dimensional measure of pupils' SoC (following Chipeur & Pretty, 1999 amongst others). Mean total scores

(averaged across all 24 items) will be used for analyses. This will produce scores between 1 (representing low SoC) and 4 (representing high SoC).

#### The Narcissistic Personality Inventory (NPI)

The 40-item Raskin and Terry (1988) NPI scale comprises paired statements which the participant chooses between, scoring 1 point for a 'narcissistic' and 0 for a 'modest' response. Sample items are: "If I ruled the world it would be a much better place" [high-narcissistic response] versus "The thought of ruling the world frightens the hell out of me" [low-narcissistic response]. The NPI is reported to show strong construct validity with sub-clinical populations (Campbell & Foster, 2007). Reliability scores in this study were found to be strong ( $\alpha = .84$ ). In the current study, the summed total scores place individuals on a continuum between 0 and 40, with higher scores indicating higher levels of narcissism.

#### **Achievement Motives and Goal Setting**

#### Achievement Goal Questionnaire-Revised (AGQ-R)

This 12-item self-report measure, developed by Elliot and Murayama (2008), measures the four achievement goals; Mastery-Approach, Mastery-Avoidance, Performance-Approach, and Performance-Avoidance. Participants were asked to respond to a series of statements in relation to their learning goals (such as "My goal is to avoid performing poorly compared to others") on a scale ranging from 1 = strongly *disagree*, to 5 = strongly agree. Three items load onto each goal category. Due to a fault in the questionnaire pack, the Performance-Approach subscale consisted of only 2 items. In this study the subscales were found to demonstrate moderate to good internal consistency (Chronbach's  $\alpha = .73$  Mastery-Approach, .76 Mastery-Avoidance, .69 Performance-Avoidance, and Pearson's r = .62 Performance-Approach). These scores are slightly lower than those originally reported by Elliot and Murayama (2008; ranging from  $\alpha = .84$  to .94). For analyses mean total scores for each achievement goal subscale (averaged across items) will be used, producing scores between 1 (showing low tendency towards that style of goal) and 5 (showing high tendency towards the style of goal).

#### **Educational outcomes**

#### Attainment

Following Seth-Smith et al., (2010), Attainment was assessed using a single average score derived from formal assessments of participants' national curriculum (NC) scores in areas of English and Maths. NC levels are the standards against which young people's attainments are compared locally and nationally. There are eight levels, each sub-divided into three parts, giving a total range of 24 points (e.g., from 1C to 1B to 1A to 2C...continuing until level 8A). In this study, NC levels formally assessed at the end of the previous academic term were transformed into a continuous data scale ranging between 1 and 24, (where '1' represented the lowest possible score '1C 'and '24' represented the highest possible score '8A'). Participants in this study are in key stage 3 (generally between years 7 and 9 of state secondary education). The Department for Education (DfE, 2011) highlight national expectations are that pupils entering key stage 3 (at the start of year 7) should be achieving at NC level 3 and 4 in both English and Maths, with the aim of making 2 full levels of progress by the time they begin key stage 4. The current study will use mean total scores (averaged across Maths and English data), ranging between 1 (representing low attainment) and 24 (indicating high attainment).

#### Attendance

Records of pupils' presence during the autumn term (September-December 2011) were used to measure attendance levels. This was based upon pupils being in school for both morning and afternoon registration, as required by law. Such data creates a single percentage present score, which is expected to be high (85-90% and above). These stand alone percentage scores will be used for subsequent analyses.

#### Academic Self-concept

Pupils' personal-ratings of their Academic self-concept were gathered using the Academic subscale of the third edition of the Self-Description Questionnaire (Marsh & O'Neill, 1984). Comprising 10 items (e.g., "I am good at most academic subjects"), participants were asked to respond on a scale ranging from 1 = definitely false, to 8 = definitely true. This sample found the measure to be highly consistent ( $\alpha = .88$ ),

comparable with scores achieved by the measures' authors ( $\alpha = .89$ ) based upon students in late adolescence (Marsh & O'Neill, 1984). The current study will utilize mean total scores, averaged across the 10 items, to indicate individuals' ratings of selfworth and perceptions of ability within academia. This will produce scores between 1 (representing low Academic Self-concept) and 8 (representing high Academic Selfconcept).

#### Well-being

Due to the lack of clarity surrounding a clear conceptual framework for wellbeing, no single appropriate measure was found. Following others (Davidson & Cotter, 1993; Pretty et al., 1994; Prezza et al., 2001), distinct measures of Self-esteem, Lifesatisfaction and Loneliness (outlined below) were used in this study to reflect an individual's well-being.

#### Brief multi-dimensional students' life satisfaction scale (BMSLSS)

Comprising five items (e.g., "I would describe my satisfaction with friendships as...") along a 7-point rating scale ranging from 1 = terrible to 7 = delighted, the BMSLSS assesses life-satisfaction in domains of family, friends, school, living environment, and self. An optional sixth item reflecting global life satisfaction also exists. In this study the BMSLSS was found to have internal consistency ( $\alpha = .83$ ) with domain specific scores correlating strongly with the single item global life satisfaction scores (r = .79, p < 0.01). This reflects reliability scores reported previously on a similar adolescent sample (Seligson, Huebner, & Valois, 2003). Following Seligson, Huebner, and Valois' (2006) recommendations, this study used a mean total score (generated from an average across the first five items of the BMSLSS) as an indicator of a student's life-satisfaction. This produces scores between 1 and 7 with higher scores indicate greater satisfaction with life.

#### UCLA loneliness scale (version 3; UCLALS)

Developed by Russell (1996), this scale comprises 11 negatively worded (lonely) and 9 positively worded (non-lonely) statements (e.g., "How often do you feel left out?") rated on a 4-point rating scale ranging from 1 = never to 4 = always. Once non-lonely items are reverse-coded, a total score is generated as a sum of all items,

providing an indication of individuals' levels of loneliness. Data from this study showed the UCLALS to have very strong levels of internal consistency ( $\alpha = .91$ ). This corresponds well with Russell's reports of strong internal consistency ( $\alpha = .89$  to  $\alpha =$ .94). In the current study mean total scores were utilized, where the summed total score was averaged by the number of items, creating a score between 1 (indicating a lower level of loneliness) and 4 (indicating higher levels of loneliness).

#### Myself-as-learner scale

Constructed by Burden (1998), the Myself-As-Learner Scale (MALS) is a 20-item measure of self-esteem of pupils aged 9-16years. The measure consists of statements (e.g., "I know how to solve the problems that I meet") on a 5-point rating scale ranging from 1 = strongly disagree to 5 = definitely agree. This study found MALS to have strong internal consistency ( $\alpha = .88$ ), comparable to that originally reported by Burden. Mean total scores (averaged across the 20 items) will be utilised as an indicator of pupil's self-esteem. This produces a score between 1 (indicating low Self-esteem) and 5 (indicating high Self-esteem).

#### Procedure

Approval and sponsorship for this study was gained from The University of Southampton's ethics committee and research governance office (Study-ID:711, RGO:8218). Further support in identifying, approaching, and accessing potential schools was provided by the LA's Educational Psychology Service (EPS). Following previous work into SoC within schools conducted in the same LA (Traill & Stringer, 2009; Sayer et al., in prep), several schools had registered interest in contributing to future research projects with the EPS. Contact was made with Headteachers of these schools inviting involvement. Five state secondary schools were approached and three requested further information. This was provided in the form of an 'Introductory Information for Schools' sheet (Appendix A), supported by follow-up telephone and email correspondence. Thereafter two schools committed to the project. As the study involved no form of deception, intervention, or direct interaction between the research team and the participants, the use of opt-out consent was deemed ethically appropriate. This approach was also chosen to promote the maximum sample size possible. Both

Headteachers provided written agreement to take responsibility for any parental concerns regarding this approach (see example letter in Appendix B).

Upon receipt of these agreements, parent/participant letters were sent to the guardians of all Year 8 and 9 pupils outlining the nature of the research, detailing data protection and ethical procedures, and requesting opt-out consent for their child's participation (Appendices C & D). A response period of 10 working days was given. The schools collated requests for non-participation. Prior to data collection, potential participants and school staff received a short presentation introducing the research topic (Appendix E). At the data collection point, pupils were given a written introduction to the project and asked to give their informed assent to participate (Appendix F). They received a written debrief statement (Appendix G) following completion of the questionnaire pack (Appendix H).

Data collection sessions were conducted within school in classes of approximately 30 pupils. All pupils were given up to one hour to complete the pack, with support offered for issues of comprehension by the main researcher (if present) or a member of school teaching staff. Alongside the introductory talk (Appendix E), written guidance was provided for staff detailing the procedure for data collection, including some key points of explanation and clarifications of language used in the individual measures (Appendix I). In School 1, participants completed the questionnaires during two 30-minute tutor group sessions on consecutive days. Participants from School 2 completed the questionnaires in a single 1-hour Personal, Social and Health Education lesson. These differences were related to timetabling challenges within the individual schools.

Four versions of the questionnaire pack were developed that varied the order in which the measures were presented. In all versions demographic data was obtained first, followed by SoC, then either Achievement Motivation (mediator) or Narcissism (moderator). Scores on the outcome-variables were gathered last. The order in which outcome-measures were presented was also rotated across versions. Additionally, items within each measure were randomised. Within groups of pupils completing the questionnaires simultaneously a selection containing all versions was distributed. Together, these steps were taken to protect against responder bias and were aimed at discouraging pupils from comparing or copying answers. Due to dependence upon school facilities and timetabling needs, paper and pencil versions of the packs were

used. A comparable proportion of participations completed each version (A = 27.4%, B = 28.4%, C = 22.9%, and D = 21.2%). Following pupil participation in the study, schools provided demographic details, alongside attainment and attendance scores using the additional pupil information form (Appendix J).

#### 2.9 Results

#### **Data Cleaning**

Ouantitative research data were entered into the statistical computer programme SPSS (version 18). Reverse coded items (MALS, SDQAC, and UCLALS) were recoded, duplicate questions removed, and mean total or summed total scores calculated (as detailed in the methods section for each measure) for use in all subsequent analyses. Following Field (2004), distribution of data was checked based upon standardised scores, known as Z-scores. Z-scores represent the number of standard deviations (SD) any given score is from the mean (represented by 0). Scores for each measure were checked for skew and kurtosis as signs of homogeneity of variance. Due to the sample size, scores were considered acceptable if between  $\pm 2.58$  SD from the mean (Field, 2004). Further, Z-scores were utilised to identify outliers which may be causing such issues. Scores were considered outliers if greater than  $\pm 3.29$  SD from the mean (Field, 2004). To retain the extremity of the score but control for its deviance, any identified outlier was replaced with a score equal to  $\pm 3.29$  SD from the mean (Field, 2004). In total, 32 outliers were replaced. Any missing data were excluded on a pair-wise basis (meaning participants were not excluded from all analyses, only those for which data was incomplete). This enabled the maximum possible sample size for the analyses. Following data cleaning, all variables except Attendance were shown to be normally distributed. Descriptive statistics for each measure are presented in Table 1.

#### Variance between Pupils' SoC within School

To address the first hypothesis, separate one-way ANOVAs were used to test mean-level differences of SoC scores by gender and school year group. A significant main effect of year group on SoC was found, F(1,774) = 26.12, p < 0.001, with younger pupils providing higher scores (M = .19, SD = .98). There was no main effect of gender on SoC, F(1, 775) = .90,  $p^{ns} = .34$ ).<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> As displayed in Appendix K, additional one-way ANOVAs showed scores on variables of SoC, F(1, 775) = 39.16, p < 0.001, Academic Self-concept, F(1,710) = 39.16, p < 0.05, and, Attainment, F(1,762) = 39.16, p < 0.001, to differ by school. However, subsequent analyses indicated that correlation patterns between the key variables were similar across both schools, alongside the sample as a whole. Thus, in accordance with the current study's aim of exploring the underlying links between these relationships, it was decided to maintain the sample population as a whole.

#### **Correlations Between Key Variables**

Correlation analyses where used to test the second hypothesis and explore the relationships between SoC and the outcome-variables (Education: Academic Self-concept, Attainment, Attendance; and Well-being: Self-esteem, Life-satisfaction, Loneliness), alongside the four Achievement Goal Concepts (mediators), and Narcissism (moderator). Bivarite correlations are shown in Table 2. Following Field (2004), the strength of correlations was considered as small ( $\pm$  0.1), moderate ( $\pm$  0.3), or large ( $\pm$  0.5).

Results suggest that higher SoC scores are positively correlated with pupils' Academic Self-concept, Self-esteem, and Life-satisfaction. Conversely, SoC scores were negatively correlated with feelings of Attainment, Loneliness, and levels of Narcissism. Attendance was shown not to significantly correlate with SoC.

SoC was also positively correlated with all four Achievement Goal Concepts. These were also seen to correlate positively with Academic Self-concept, Attainment, Self-esteem and Life-satisfaction. Further, they appeared to be negatively correlated with scores of Loneliness (although Mastery-Performance was not significant). Only Performance-Avoidance was seen to significantly correlate with Attendance. As highlighted by Preacher and Hayes (2008), these connections are essential to their proposed position as mediators in the relationship between SoC and the multiple outcome variables included (hypotheses 3).

Analyses suggested that Narcissism was positively correlated with Academic Self-concept, Attainment and Self-esteem, as well as negatively correlated with feelings of Loneliness. Narcissism was not significantly correlated with Attendance or Lifesatisfaction. Additionally, Narcissism was only found to correlate with performance based goals, namely Performance-Approach and Performance-Avoidance, at a level just below significance.

#### Achievement Motivation: A Mediating-Mechanism?

Using the INDIRECT macro for SPSS (Preacher & Hayes, 2008), Multiple-Mediation-Modelling (MMM) analyses, involving bootstrapping, were utilised to explore the hypothesised mediating influence of achievement motivation (as expressed through Achievement Goal Constructs: Mastery-Approach, Mastery-Avoidance,

Performance-Approach, and Performance-Avoidance) upon the relationships between SoC and outcomes in areas of education and well-being.

Bootstrapping, which does not assume data to be normally distributed or require it to be transformed, is a re-sampling procedure which generates an empirical approximation of the sampling distributions of the indirect effect(s) (Hayes, 2009; Preacher & Hayes, 2006). In this study the data set was re-sampled 1,000 times, creating a total effect (not controlling for the presence of mediators), a direct effect (analysing the same relationship whilst controlling for the mediators), and indirect effects (considering each mediator in parallel, rather than as a sequential linear series) of SoC upon given outcome-variables. The ability of MMMs to consider multiplemediators as a group or in individual-competition is a distinct advantage of this approach, yielding superior results to multivariate product-of-coefficient strategies which leave room for error (Hayes, 2009; Williams, 2004).

Point-estimate scores (standardised  $\beta$ , based upon initial Z-scores) and biascorrected and accelerated confidence intervals (BCA-CIs) were calculated for the mediators as a set and independently to deal with issues of type I error due to skew (Hayes, 2009; Preacher & Hayes, 2008). Comparison between total and direct effect depicts whether full mediation (the direct effect is no longer significant when the mediators are included in the model), partial mediation (the direct effect remains significant, but reduced), or no mediation is present. The difference between the total and direct effect is equal to the total indirect effect where all the mediators are considered as a set (Preacher & Hayes, 2008).

BCA-CIs where zero is not crossed suggests significant mediation is present (Hayes, 2009). When considering multiple-mediators, specific indirect effect tests highlight the unique contribution of each to the conditional pathway analysis. If mediation is shared, the same CI criteria are used in contrast tests to establish whether one mediator is stronger than the other. This method of analysis (which provides 95% BCA-CIs, equal to a significance score of p < .05) was repeated for all six outcome variables, shown in Figures 3-8.

#### Academic Self-concept

As shown in Figure 3, the total effect of SoC upon Academic Self-concept was significant. The direct effect was also significant, but with a smaller effect size. This

suggests partial mediation is present. As shown in Table 3, when considered in combination, Achievement Goal Concepts were seen to mediate the link between SoC and Academic Self-Concept. Exploration of specific indirect effect(s) showed both Mastery-Approach and Performance-Approach to be significant mediators. Contrast tests showed both mediators to hold equal influence.

#### Attainment

The total effect of SoC upon Attainment was found to be significant (Figure 4). The direct effect between SoC and Attainment was also significant to a higher level and greater effect size. This pattern of change suggests that suppression is present, rather than mediation. Suppression occurs when the introduction of an extra predictor (here meaning Achievement Goal Concepts) improves the predictive strength of a particular variable within the calculation (Paulhus, Robins, Trzesniewski, & Tracy, 2004). This is conceptualised as boosting validity by removing/suppressing criterion-irrelevant variance from the equation, thus making the predictor variable more efficient (Paulhus et al., 2004). As seen in Table 4, if considered as a set, Achievement Goal Concepts were seen to significantly suppress the relationship between SoC and Attainment. Exploration of the individual indirect effect(s) showed that all Achievement Goal Concepts were significant suppressors. Contrast tests showed BCA-CI passing through 0 in all cases, suggesting that each variable exerts a different amount of influence upon the direct relationship. Indication of the order of strength of each mediator is therefore taken from the bootstrapped point estimate scores, which (when taken to three decimal places) show Mastery-Approach to be the strongest suppressor, followed by Performance-Approach, Performance-Avoidance, and Mastery-Avoidance respectively.

#### Attendance

As depicted in Figure 5, neither the total (p < .44) nor the direct (p < .68) effect of SoC upon Attendance were shown to be significant. However, following Hayes (2009), it may be possible for individual mediators to unearth a significant relationship. Analyses suggested that whether taken as a set, or as individual mediators, Achievement Goal Concepts did not mediate the relationship between SoC and School Attendance (Table 5).

#### Self-esteem

The total effect of SoC upon Self-esteem was found to be significant (Figure 6). The direct effect was also significant, but accounted for less variance, suggesting partial mediation. As a whole, Achievement Goal Concepts were found to significantly mediate the relationship between SoC and Self-esteem (Table 6). Specific indirect effect(s) tests showed Mastery-Approach, Performance-Approach, and Performance-Avoidance to be significant mediators. Contrast tests showed Mastery-Approach to be an equal predictor to Performance-Approach and to Performance-Avoidance. Further, the contrast test showed an uneven influence between Performance-Approach and Performance-Avoidance, with original point estimate scores indicating that Performance-Approach was the stronger mediator.

#### Life-satisfaction

As shown in Figure 7, the total effect found between SoC and Life-satisfaction was significant. The direct effect was equally significant, but with a smaller effect size, suggesting partial mediation. As shown in Table 7, as a group Achievement Goal Concepts were found to significantly mediate the relationship between SoC and pupils' Life-satisfaction. Exploration of the individual indirect effect(s) showed Mastery-Approach and Performance-Approach to be significant mediators. Further, contrast analyses showed both Goal Concepts to equally mediate the link between SoC and Lifesatisfaction.

#### Loneliness

As shown in Figure 8, the total effect of SoC upon Loneliness was significant. The direct effect was equally significant, but accounted for less variance, indicating partial moderation. Table 8 shows that, when taken as a set, Achievement Goal Concepts did mediate the effect of SoC on Loneliness. Examination of the specific indirect effect(s) showed that only Mastery-Approach was a significant mediator.

#### Individualism vs. Collegiality: Moderated-Mediation?

Conditional process modelling (Hayes 2012: Preacher & Hayes, in press) describes a regression based analytical approach which can simultaneously explore hypothesised multiple-mediators and multiple-moderators of established correlational

relationships. Using the PROCESS macro for SPSS (Hayes, 2012 - Model 8) the effect of Narcissism on the Multiple-Mediation-Models already reported was explored, thus creating a Moderated-Multiple-Mediation-Model (Figure 9). Tests of the interaction between SoC and Narcissism at the direct and indirect levels of the model (i.e., between SoC and the outcome variable, or between SoC and each of the mediators) indicates whether moderation is present. Further analysis of the BCA-CI (using the same criteria as with MMMs) indicates whether this significantly alters the impact of the specific indirect effect upon the outcome variable.

As shown in Figure 9 and Table 9, Narcissism was not seen to moderate the direct effect of SoC upon any outcome variable. However, Narcissism was seen to influence the pathway between SoC and Performance-Avoidance goals across the outcomes variables. All other analyses showed that Narcissism did not significantly moderate any other pathway for any outcome variable.

Table 10 depicts the results from subsequent exploration of the conditional indirect effects of SoC (along the Performance-Avoidance pathway) for all outcomevariables, when Narcissism is included as a moderator. Specific analyses using BCA-CI indicated that when considering the full mediated pathway from SoC, via Performance-Avoidance, to outcomes of Academic Self-concept, Attendance, Self-esteem, Lifesatisfaction and Loneliness, levels of Narcissism did not function as a moderator. However, for the outcome of Attainment, Narcissism was seen to act as a moderator. Specifically, results suggest that increasing levels of Narcissism reduce the effect that SoC has upon Attainment, via Performance-Avoidance goals. This effect was seen to be non-significant in the highest percentile of Narcissism.

Additional calculations of conditional direct effects or conditional indirect effects via alternative pathways are not presented, as Narcissism's effect as a moderator has already been shown to be non-significant.

#### 2.10 Discussion

#### **Interpretation of Results**

Utilising McMillan and Chavis' (1986) robust framework, this study explored how pupils within one UK LA experienced their schools as communities and developed a SoC. Directly accessing pupils' views and experiences, this study was able to investigate whether SoC scores differed by age or gender (hypothesis 1), and how SoC related to multiple outcome-variables, namely education: Academic Self-concept, Attainment, Attendance; and well-being: Self-esteem, Life-satisfaction, Loneliness (hypothesis 2).

Results indicated SoC levels differed by age, with younger pupils scoring higher. Gender was seen to have no significant influence over pupils' SoC. These findings provide partial support for the first hypothesis that SoC would differ by demographic variables. The current impact of age upon SoC directly mirrors results seen elsewhere in UK samples using variations of the SCI-II (Sayer et al., in prep; Traill & Stringer, 2009). Conversely, the non-significant impact of gender runs contrary to other UK samples, but links to studies conducted in mainland Europe (Chiessi et al., 2010; Cicognani et al., 2006). As individuals are members of multiple concurrent communities, all contributing to the process of self-definition, it may be contended that the relative importance of one of these at a given point may cause a person's SoC to fluctuate. Sayer et al., (in prep.) contend that, particularly in early adolescence (reflecting the current sample), engagement and interest in groups outside of school (e.g., friendship groups/sports teams), combined with an increasing level of independence, may be responsible for reducing the saliency of the school community to pupils, thus leading to reduced levels of SoC. Whilst additionally controlling for the influence of times of transition (highlighted by Lucey & Raey, 2000), current findings can be interpreted as lending weight to such assertions. Describing similar discrepancy for the impact of gender in Italian studies as seen here, Chiessi et al., (2010) suggested that differences seen in pupils' SoC may be due to variations in overarching cultural values. Building upon the role that relative saliency plays in multi-community identity, current results may indicate that beliefs and values shared at smaller group levels (i.e., within a school) may counter general trends (e.g., boys' lower SoC seen in the UK due to less importance placed upon schools in their self-definition).

Providing significant support for the second hypotheses, current results showed SoC to correlate well with the outcome-variables explored (positively to Academic Selfconcept, Self-esteem and Life-satisfaction; negatively to Attainment and Loneliness; non-significantly to Attendance). Such connections clearly relate well to existing research, with the addition of Academic Self-concept as a previously unexplored outcome-variable (Bachrach & Zautra, 1985; Baumeister & Leary, 1995; Davidson & Cotter, 1991 DeNeui, 2003; McCarthy, et al., 1990). Further, current data addresses the missing focus upon experiences of pupils within compulsory education in the UK. However, that Attainment was seen to be negatively correlated with SoC and Attendance unrelated appears counter-intuitive and disparate to existing research evidence (Lounsbury, et al., 2003; McKinney et al., 2006; Payne, et al., 2003; Whiting et al., 2009). One explanation may be that in comparison to findings in selective educational settings (e.g., college/university) the compulsory nature of schools removes SoC connection with attendance (i.e., whether a pupil has a strong or weak SoC, they are still required to attend by law). Assessing SoC levels in school truants in comparison to those with high attendance may be an interesting way of exploring this. Further, the negative correlation between SoC and Attainment may reflect tensions between a focus on building cohesive communities and the success of the UK education system being results driven, for both pupils and teachers (Martin & Dowson, 2009). However, as mentioned above, positive links between SoC and Academic Self-concept (an addition to the current literature - indicating experiencing schools as communities increases feelings of academic-competence and value) may suggest current results are more likely to be due to the use of an inappropriate measure of Attainment.

Representing the first steps in developing a deeper understanding of these correlational links, this study proposed achievement motivation as an underlying mechanism (hypothesis 3). Excluding Attendance, results indicated support for this hypothesis, showing achievement motivation (and Mastery-Approach goals in all cases) to play a significant role in the relationship between SoC and all outcome-variables. These findings lend support to existing research evidence (Church et al., 2001; Elliot & McGregor, 2001; Heimpel et al., 2006; Murayama & Elliot, 2009). Directly complementing existing research, the positive link between SoC and Academic Self-concept operated via Mastery-Approach and Performance-Approach goals. Despite the well documented negative impact of avoidance-motives and reliance upon performance-

based goals upon Attainment, current findings suggesting that all goal types (including approach- and mastery-based goals) act as suppressors between SoC and Attainment runs counter to existing understanding. As raised above, it may be pertinent to consider these results as based in error of measurement, rather than draw conclusions without theoretical validity. However, it remains important that future research explores these anomalies in detail. Results suggested that Mastery-Approach and Performance-Approach goals mediated the positive relationship between SoC and both Life-satisfaction and Self-esteem. This pattern makes clear logical sense as both concepts of well-being are based upon positive/successful experiences and a lack of negative judgements/failure. Further, the negative correlation between SoC and Loneliness was found to operate via Mastery-Approach goals. Thus feeling a valued and supported part of a wider learning community (i.e., high SoC) can help to reduce feelings of Loneliness by focusing upon developing competence and encouraging pupils' to face challenges without the fear of negative judgements.

Finally, extending research into SoC and individual differences, this study considered the impact of the personality trait of Narcissism as an additional predictor variable (hypothesis 4). The correlations reported between Narcissism and the outcome variables fit well with wider research evidence (Alicke & Sedikides, 2009; Morf et al., 2011; Sedikides, et al., 2004). However, the limited connection seen between Narcissism and achievement motivation (via performance goals) provides mixed support to understandings from contemporary literature that suggests Narcissists tend to be both performance and approach oriented, keen to succeed and having little fear of failure (Campbell, et al., 2002; Foster & Riley, 2008).

Results from explorations of the potential role of Narcissism as a moderator revealed small effect sizes, which evidenced Narcissism to solely impact upon the pathway between SoC and Performance-Avoidance goals. This provides limited support for its hypothesised moderating role. However, Performance-Avoidance (reflecting a fear of failure) as the location of influence runs counter to predictions based in existing evidence that Narcissists are approach orientated and seek opportunities to demonstrate their skills through performance tasks (Campbell et al., 2002; Foster & Trimm, 2004). It may be contended that, when considering a model that includes, various outcomes, Narcissism, SoC and achievement motives, the stimuli by which achievement goals are defined may be citizenship (i.e., community based in both

valence and competence). Therefore, a narcissistic individual, wishing to ensure their inflated sense of self-importance and prowess remains intact (as validated by the responses of others), may opt for Performance-Avoidance goals, which successfully evidence their limited social skills base, without opportunity for social failure and loss of face. However, due to the lack of clear findings, no firm conclusions can be drawn.

#### **Implications for Practice**

The findings from the current study have critical importance to both theoretical and applied domains of contemporary psychology. The results underscore the important role SoC plays in young people's educational experience, specifically upon their positive opinions regarding their own learning capacity (Academic Self-concept), their positive self-regard/ beliefs their own personal-value (Self-esteem), their feelings of inclusion/exclusion (Loneliness), and their overall happiness (Life-satisfaction). Linked with its importance within political rhetoric guiding the UK education system, this research evidence contends that it is essential that educationalists embrace the concept of SoC and take an active role in shaping young people's social experience of schools as communities. Exploration of the underlying mechanisms between SoC and outcomevariables, indicating achievement motivation as a mediator, provides schools with a point of active intervention (to the benefit of both SoC and outcome-variables). Although different patterns of achievement goal influence were found between outcome-variables (suggesting the requirement of a distinctly different intervention dependent upon the outcome wished to be improved), Mastery-Approach goals was a consistent pathway throughout the reported models. By promoting the adoption of such goal constructs, teachers, parents and psychologists alike can help to promote pupils to progress, enjoy, and achieve in both social and academic domains. Support from theoretical and applied psychologists will therefore be essential for schools to develop an enhanced understanding of the processes involved in promoting mastery learning and approach motivation, particularly in consideration of how this interacts with the fourfactors of SoC (membership, influence, integration and fulfilment of need, and shared emotional connection). Furthermore, the results highlight the importance to consider the potential roles individual difference variables may play in influencing the link between SoC and outcome-variables, ensuring that the diversity of socially cohesive communities is not lost. Finally, as a dynamic process, rather than a state or product,

the interactive relationships between SoC, achievement goals and outcome-variables must be considered to vary over time and context. Importantly, the current research contends that this is dependent upon both the quality and salience of young people's experiences within schools as communities. Therefore it is necessary for consideration of how to support young people to become positive learners and citizens to become a constant in all aspects of the education system within the UK.

#### **Limitations and Future Directions**

The current study makes several significant additions to the wider research literature regarding SoC. However, several limitations are noteworthy, which may inform future research directions. Firstly, the anomaly of a negative association between SoC and Attainment prevents the positive impact of developing schools as communities upon pupil performance to be fully evidenced. It may be contended that the teacher assessed NC levels used involved a lack of standardisation. Further, as the quantitative difference between sub- and whole-level descriptors may vary, their suitability to be considered as continuous interval data may also be contested. Secondly, although the use of Multiple-Mediation-Models enable direction of influence to be implied, the current complex correlation design does not give a definitive answer as to whether increases in SoC lead to positive outcomes or vice-versa. Additionally, though appreciation has been developed of individuals' multiple community membership, no research has focused upon this area. The current sample, considered as a whole, was drawn from 2 schools. However, with sufficient focus, analyses could equally explore differences between school locations, or between communities within the wider school, by divided down into distinct houses or form groups. Further, if multiple schools were involved in such research, the potential impact of location, size and school ethos could be explored in more detail. As such, future research utilising longitudinal design to explore variations in pupils' SoC across time and context, whilst tracking its impact on outcome-variables (specifically using robust measures of educational attainment) may wish to address important research questions such as 'what makes a community salient to members?', 'does community size effect how members feel towards it?', 'do individual's experiences of their multiple communities differ from each other?', or 'how do communities within communities (i.e., house systems, sports

teams, or form groups within the whole school population) impact upon young people's SoC?'.

# 2.11 Tables

#### Table 1

#### Descriptive Statistics among the Key Variables

	N	Mean	S.D	Skew	Kurtosis	Outliers
1. Sense of Community	777	2.56	0.44	0.09	-0.13	0
्र 2. Mastery-Approach	759	3.92	0.71	-0.46	0.05	1
0 3. Mastery-Avoidance	764	3.26	1.07	-0.29	-0.69	0
<ul> <li>3. Mastery-Avoidance</li> <li>4. Performance-Approach</li> <li>5. Performance-Avoidance</li> </ul>	757	3.84	0.84	-0.60	0.42	7
5. Performance-Avoidance	763	3.65	0.90	-0.49	-0.07	0
6. Narcissism	775	13.10	6.57	0.56	-0.08	0
7. Academic Self-concept	712	5.24	1.14	0.10	0.07	0
8. Attainment	764	14.72	2.35	-0.27	-0.20	3
9. Attendance	774	95.46	6.05	-3.53	21.61	14
10. Self-esteem	748	3.28	0.55	0.14	0.01	0
11. Life-satisfaction	701	5.12	1.03	-0.62	0.32	5
12. Loneliness	706	2.26	0.61	0.54	-0.08	2

Note: 'N' represents total number of pupils who completed appropriate sections of questionnaire. Numbers based upon fully cleaned data. Cases excluded on a pair-wise basis. Mean scores represent mean total scores averaged across items for Sense of Community, Achievement Goals, Academic Self-concept, Attainment, Self-esteem, Life-satisfaction, and Loneliness. Mean scores represent summed total scores for Narcissism and a percentage present score for Attainment.

#### Table 2

#### Bivariate Correlations among the Key Variables

	1	2	3	4	5	6	7	8	9	10	11	12
1. Sense of Community	-	.30***	.13***	.22***	.18***	15***	.29***	09**	.05	.22***	.37***	25***
<u>्र</u> 2. Mastery Approach		-	.32***	.56***	.49***	.00	.42***	.24***	.06	.39***	.28***	20***
<ol> <li>Mastery Approach</li> <li>Mastery Avoidance</li> <li>Mastery Avoidance</li> <li>Performance Approach</li> <li>Performance Avoidance</li> </ol>			-	.27***	.49***	04	.16***	.22***	.02	.13***	.06	05
4. Performance Approach				-	.50***	.07†	.33***	.25***	.02	.33***	.24***	15***
Yerformance Avoidance					-	.07†	.27***	.29***	.08**	.29***	.13***	.11***
6. Narcissism						-	.18***	.08**	.06	.28***	01	17***
7. Academic Self-concept							-	.33***	.15***	.70***	.47***	30***
8. Attainment								-	.11***	.27***	.08**	02
9. Attendance									-	.15***	.14***	05
10. Self-esteem										-	59***	26***
11. Life-satisfaction											-	59***
12. Loneliness												-

*Note:* Due to their asymmetrical nature, analyses involving 'attendance' were calculated using Spearman's rho (two-tailed). All other scores were calculated using Pearson's r (two-tailed). Cases were excluded on a pair-wise basis, with sample size ranging between 681 and 777.  $\dagger = p < .05$ , \*\* = p < .01, \*\*\* = p < .001

# Table 3

			Bootstrapping	95% BCA-CI
		Point-Estimate	Lower	Upper
Indirect Effects	M.AP	.08	.05	.12
	M.AV	.00	01	.01
	P.AP	.03	.00	.05
	P.AV	.01	01	.03
	TOTAL	.11	.08	.15
Contrasts	M.AP vs. P.AP	.06	.02	.11

# Indirect Effects(s) of SoC upon Academic Self-Concept

			Bootstrapping	95% BCA-CI
		Point-Estimate	Lower	Upper
Indirect Effects	M.AP	.031	.01	.06
	M.AV	.014	.00	.03
	P.AP	.028	.01	.06
	P.AV	.027	.01	.05
	TOTAL	.10	.07	.14
Contrasts	M.AP vs. M.AV	.02	01	.05
	M.AP vs. P.AP	.00	04	.04
	M.AP vs. P.AV	.00	03	.04
	M.AV vs. P.AP	01	04	.01
	M.AV vs. P.AV	01	04	.01
	P.AP vs. P.AV	.00	03	.03

Indirect Effect(s) of SoC upon Attainment

*Note.* M.AP = Mastery-Approach; M.AV = Mastery-Avoidance; P.AP = Performance-Approach; P.AV = Performance-Avoidance. Point-Estimates of specific indirect effects shown to 3dp to show ordering of individual influence upon outcome variable.

			Bootstrapping	95% BCA-CI
		Point-Estimate	Lower	Upper
Indirect Effects	M.AP	.01	02	.04
	M.AV	01	02	.00
	P.AP	00	02	.02
	P.AV	.01	01	.03
	TOTAL	.01	01	.04

# *Indirect Effect(s) of SoC upon Attendance*

			Bootstrapping	95% BCA-CI
		Point-Estimate	Lower	Upper
Indirect Effects	M.AP	.07	.05	.11
	M.AV	00	02	.00
	P.AP	.03	.01	.05
	P.AV	.02	.00	.04
	TOTAL	.11	.08	.15
Contrasts	M.AP vs. P.AP	.05	.02	.10
	M.AP vs. P.AV	.05	06	01
	P.AP vs. P.AV	.01	02	.05

*Indirect Effect(s) of SoC upon Self-esteem* 

# Table 7

			Bootstrapping 95% BCA-C		
		Point-Estimate	Lower	Upper	
Indirect Effects	M.AP	.04	.02	.08	
	M.AV	00	01	.01	
	P.AP	.03	.01	.05	
	P.AV	01	03	.00	
	TOTAL	.60	.03	.09	
Contrasts	M.AP vs. P.AP	.06	.03	.10	

# Indirect Effect(s) of SoC upon Life-satisfaction

# Indirect Effect(s) of SoC upon Loneliness

			Bootstrapping 95% BCA-	
		Point-Estimate	Lower	Upper
Indirect Effects	M.AP	03	07	01
	M.AV	.00	01	.02
	P.AP	01	03	.01
	P.AV	00	02	.02
	TOTAL	04	07	02

	Conditional Pathway	Point-Estimate	SE	t	р
Academic Self-concept	DIRECT	.04	.03	1.47	.14
	M.AP	01	.03	-0.35	.73
	M.AV	05	.03	-1.53	.13
	P.AP	02	.03	-0.69	.49
	P.AV	09	.03	-2.76	.01
Attainment	DIRECT	.03	.03	0.93	.35
	M.AP	02	.03	-0.46	.65
	M.AV	05	.03	-1.52	.13
	P.AP	02	.03	-0.57	.57
	P.AV	09	.03	-2.82	.01
Attendance	DIRECT	02	.03	-0.48	.63
	M.AP	02	.03	-0.48	.63
	M.AV	05	.03	-1.62	.11
	P.AP	02	.03	-0.59	.56
	P.AV	09	.03	-2.84	.01
Self-esteem	DIRECT	.02	.03	0.60	.56
	M.AP	02	.03	-0.47	.64
	M.AV	05	.03	-1.54	.12
	P.AP	02	.03	-0.67	.51

Direct and Indirect effects of Narcissism as a Moderator upon the Conditional Pathways between SoC and all Outcome-variables

	P.AV	10	.03	-2.85	.01
Life-satisfaction	DIRECT	00	.03	-0.00	.99
	M.AP	01	.03	-0.34	.74
	M.AV	05	.04	-1.51	.13
	P.AP	03	.04	-0.84	.40
	P.AV	09	.03	-2.61	.01
Loneliness	DIRECT	.04	.03	1.06	.29
	M.AP	02	.03	-0.55	.59
	M.AV	05	.04	-1.32	.19
	P.AP	00	.04	-0.12	.90
	P.AV	07	.04	-2.03	.04

*Note. SE* = Standard Error.

#### Table 10

Conditional Indirect Effect of SoC along the Performance-Avoidance pathway upon all Outcome-variables at Percentile Values of Narcissism as a Potential Moderator

					strapping BCA-CI
	Percentile	Point Estimate	Boot SE	Lower	Upper
Academic Self-	$10^{\text{th}}$	.00	.01	03	.03
concept	25 <sup>th</sup>	.00	.01	02	.03
	50 <sup>th</sup>	.00	.01	02	.02
	75 <sup>th</sup>	.00	.01	01	.02
	90 <sup>th</sup>	.00	.01	01	.02
Attainment	10 <sup>th</sup>	.05	.02	.02	.09
	25 <sup>th</sup>	.04	.01	.02	.07
	50 <sup>th</sup>	.03	.01	.01	.06
	75 <sup>th</sup>	.02	.01	.00	.04
	90 <sup>th</sup>	.01	.01	01	.04
Attendance	$10^{\text{th}}$	.01	.01	01	.04
	25 <sup>th</sup>	.01	.01	01	.03
	50 <sup>th</sup>	.01	.01	01	.03
	75 <sup>th</sup>	.01	.01	00	.02
	90 <sup>th</sup>	.00	.01	00	.02
Self-esteem	10 <sup>th</sup>	.02	.02	00	.06
	25 <sup>th</sup>	.02	.01	00	.05
	50 <sup>th</sup>	.02	.01	00	.04

	75 <sup>th</sup>	.01	.01	00	.03
	90 <sup>th</sup>	.01	.01	00	.03
Life-satisfaction	$10^{\text{th}}$	02	.01	05	.00
	25 <sup>th</sup>	02	.01	04	.00
	50 <sup>th</sup>	01	.01	04	.00
	75 <sup>th</sup>	01	.01	03	.00
	90 <sup>th</sup>	00	.01	03	.00
Loneliness	$10^{\text{th}}$	.01	.01	02	.04
	25 <sup>th</sup>	.01	.01	02	.03
	50 <sup>th</sup>	.01	.01	01	.03
	75 <sup>th</sup>	.00	.01	01	.02
	90 <sup>th</sup>	.00	.01	01	.02

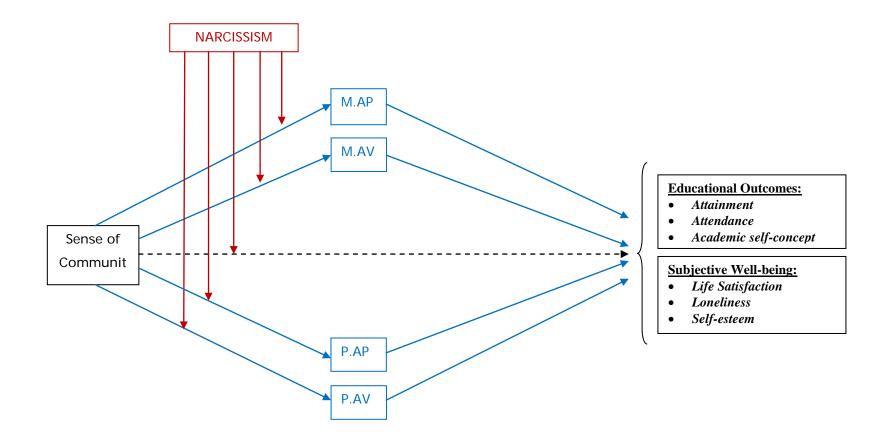
*Note. SE* = Standard Error.

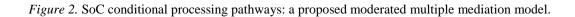
# 2.12 Figures

			Mastery	Performance
		1	Absolute (against task) Intrapersonal (against self)	Interpersonal (against others)
Valence of Competence	Avoidance	Negative (avoiding failure)	Mastery-Avoidance	Performance-Avoidance
	Approach	Positive (approaching success)	Mastery-Approach	Performance-Approach

# **Definition of Competence**

*Figure 1*. The hierarchical model of achievement motivaiton (based upon the 2 x 2 framework posited by Elliot, 1999).





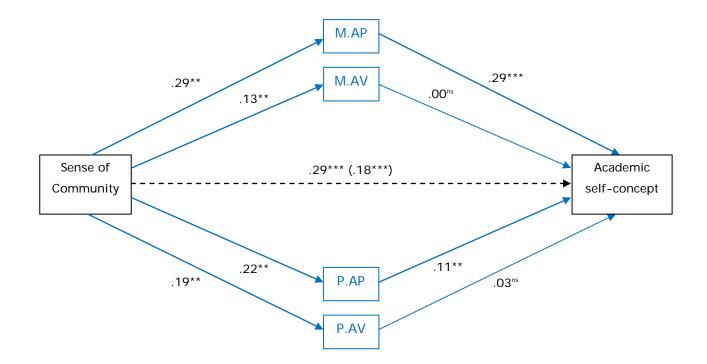


Figure 3. Multiple mediation model showing direct and indirect effect(s) of SoC upon academic self-concept.

*Note:* N = 706. M.AP = Mastery Approach; M.AV = Mastery Avoidance; P.AP = Performance Approach; P.AV = Performance Avoidance. The path coefficients are standardised regression coefficients ( $\beta$ ). The value in parentheses is the direct effect.  $\dagger = p < .10$ , \*p < .05, \*\*p < .01, \*\*\*p < .001. ns = non-significant.

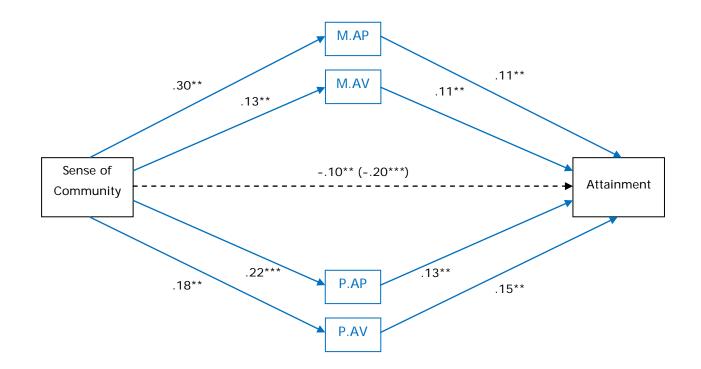


Figure 4. Multiple mediation model showing direct and indirect effect(s) of SoC upon attainment.

*Note:* N = 743. M.AP = Mastery Approach; M.AV = Mastery Avoidance; P.AP = Performance Approach; P.AV = Performance Avoidance. The path coefficients are standardised regression coefficients ( $\beta$ ). The value in parentheses is the direct effect.  $\dagger = p < .10$ , \*p < .05, \*\*p < .01, \*\*\*p < .001. ns = non-significant.

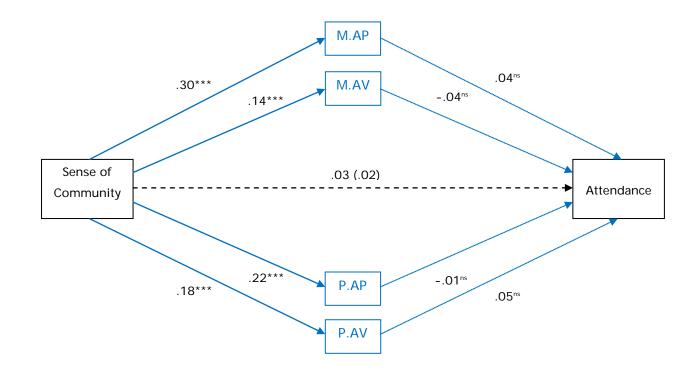


Figure 5. Multiple mediation model showing direct and indirect effect(s) of SoC upon attendance.

*Note:* N = 753. M.AP = Mastery Approach; M.AV = Mastery Avoidance; P.AP = Performance Approach; P.AV = Performance Avoidance. The path coefficients are standardised regression coefficients ( $\beta$ ). The value in parentheses is the direct effect.  $\dagger = p < .10$ , \*p < .05, \*\*p < .01, \*\*\*p < .001. ns = non-significant.

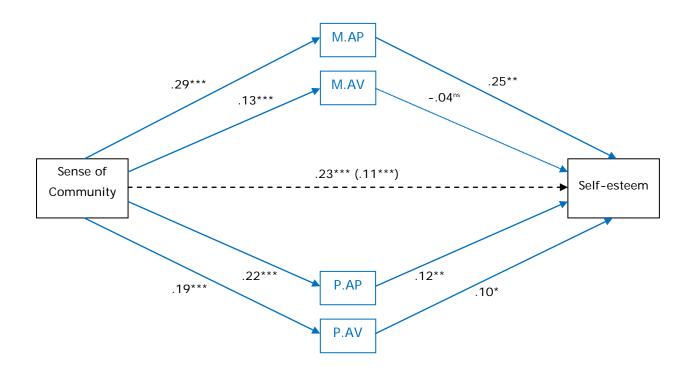


Figure 6. Multiple mediation model showing direct and indirect effect(s) of SoC upon self-esteem.

*Note:* N = 741. M.AP = Mastery Approach; M.AV = Mastery Avoidance; P.AP = Performance Approach; P.AV = Performance Avoidance. The path coefficients are standardised regression coefficients ( $\beta$ ). The value in parentheses is the direct effect.  $\dagger = p < .10$ , \*p < .05, \*\*p < .01, \*\*\*p < .001. ns = non-significant.

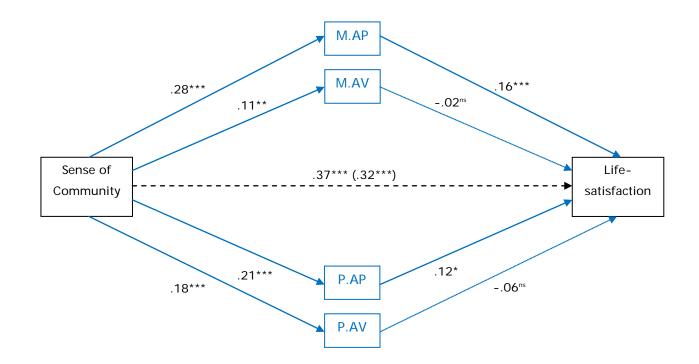


Figure 7. Multiple mediation model showing direct and indirect effect(s) of SoC upon life-satisfaction.

*Note:* N = 694. M.AP = Mastery Approach; M.AV = Mastery Avoidance; P.AP = Performance Approach; P.AV = Performance Avoidance. The path coefficients are standardised regression coefficients ( $\beta$ ). The value in parentheses is the direct effect.  $\dagger = p < .10$ , \*p < .05, \*\*p < .01, \*\*\*p < .001. ns = non-significant.

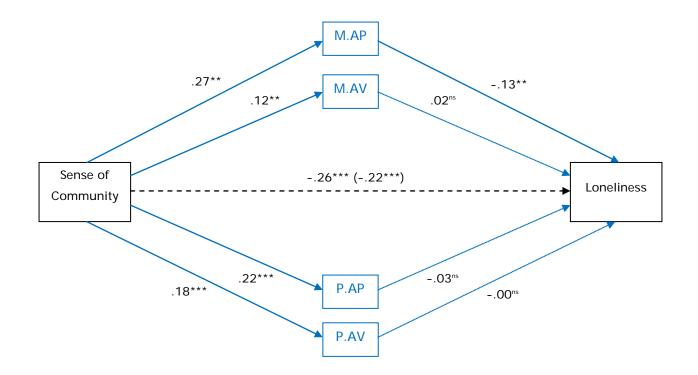


Figure 8. Multiple mediation model showing direct and indirect effect(s) of SoC upon loneliness.

*Note:* N = 699. M.AP = Mastery Approach; M.AV = Mastery Avoidance; P.AP = Performance Approach; P.AV = Performance Avoidance. The path coefficients are standardised regression coefficients ( $\beta$ ). The value in parentheses is the direct effect.  $\dagger = p < .10$ , \*p < .05, \*\*p < .01, \*\*\*p < .001. ns = non-significant.

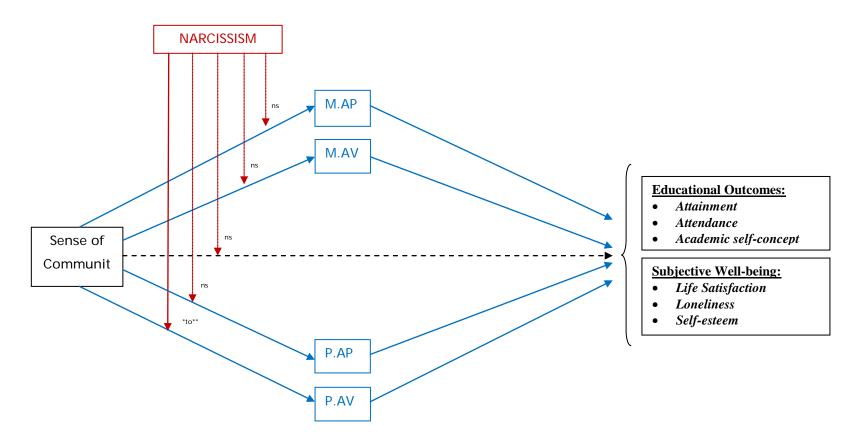


Figure 9. Conditional process model showing the moderating influence of Narcissism upon the direct and indirect effects of SoC and outcome variables.

*Note:*  $M.AP = Mastery Approach; M.AV = Mastery Avoidance; P.AP = Performance Approach; P.AV = Performance Avoidance. Moderation was found to be significant upon SoC <math>\rightarrow$  P.AV pathway for all variables (ranging \**p* <.05, \*\**p* <.01). Moderation upon all remaining pathways found to be non-significant (ns) across all variables.

# 2.13 Appendices

#### **Appendix A: Introductory Information for Schools**



# Southampton

# <u>An Exploration of Young People's Sense of Community, Personality and</u> <u>Achievement Motivation in Relation to Educational Outcomes and Well-being</u>

Researcher: Ed Sayer Study ID: 771 RGO: 8218

Research Supervisor:Dr Claire Hart (University of Southampton)Research Facilitator:Dr Phil Stringer (Hampshire Educational Psychology Service).

As part of my doctorate training as an educational psychologist I am conducting research into whether young people's experience of a sense of community within school is linked to personality and/or what motivates pupils to achieve. I also want to explore how these factors might be linked with educational outcomes (such as attainment and attendance levels) and well-being (such as self-esteem, anxiety and life-satisfaction). I would like your school to form an active part of this research, specifically focusing upon the views of pupils in Years 8 and 9.

#### What is a 'Sense of Community'?

Research conducted over the past 25 years has lead to the understanding of an individual's sense of community as a combination of four elements:

- How much they feel valued as a member of the group,
- How much the community meets their individual needs,
- How much influence they have over the community, and
- How much they feel an experience of a shared emotional connection with others in the community.

Having a strong sense of belonging to a community has been linked with positive outcomes in areas of pro-social behaviour, academic performance, physical health, and emotional wellbeing. The reverse experience of feeling social rejection has been linked with negative outcomes, including anti-social behaviour, poor mental health, truancy, and underachievement. Recent research, conducted by the University of Southampton and Hampshire Educational Psychology Service (HEPS) within local schools, combined with developments in Government policy (such as the '*Every Child Matters*' framework) have highlighted the important role schools play as communities in supporting young people's development and well-being.

The proposed research project aims to build upon existing literature by exploring the potential underlying mechanisms of this relationship, focusing directly upon the views and experiences of young people themselves.

#### What is involved for the pupils?

All assenting participants will receive a brief introduction about the aims of the study from the researchers and asked to individually complete a series of short questionnaire measures, lasting approximately 30/40 minutes. During all phases of the study, a representative from the

research team will be available to answer any questions from pupils or staff. Following the data collection pupils will be debriefed and thanked for their participation. Blank copies of the questionnaires will also be available to be left at the school office should any parent wish to see them.

#### How will permission for involvement be obtained?

As required by the ethical guidelines set out by the University of Southampton, a letter will be distributed to the parents of all potential participants requesting consent. As the research is considered to be non-invasive parental opt-out consent will be requested. Details of the proposed research and an outline of what is involved for participants will also be enclosed with this letter. Further, the parents' and young persons' right to opt-out or withdraw from the research at any point without penalty will be emphasised. The assent of each student will be requested during the brief introduction on the day of data collection.

Importantly, the proposed method of gaining opt-out consent relies on the agreement of the school's Headteacher/Senior Management Team received in writing.

#### Are there any risks involved in the research?

The proposed research is considered to be non-invasive, non-threatening, and does not involve any form of deception. Prior to the start of the study, the researchers will conduct a risk assessment to ensure any potential risks are minimised. Further, the proposed study is subject to ethical and research governance approval from the University of Southampton. Copies of these documents may be made available to schools upon request. The researcher also possesses an enhanced CRB check.

Participants will be fully debriefed following data collection and signposted to speak with staff members/parents/guardians, or to seek information and advice on relationships and health via 'Youthtube', Hampshire County Council's website for young people (<u>www3.hants.gov.uk/childrens-services/youthtube</u>), if they feel any concern regarding the study's subject material.

#### Will participation be confidential?

In accordance with the Data Protection Act all research and demographic data (such as age/year group, gender) gathered from participants will remain confidential. Further, pupils may be identified by school and own name in the preliminary stages of the research, but will subsequently be assigned a unique identifying code for later data analysis and reporting. Thus, all data provided by pupils will be anonymised and stored electronically on a password protected computer. Access to these files will only be granted to members of the research team (comprising the researcher, supervisor and facilitator).

#### What will the school get out of participation in the research?

Once all the data has been analysed the school will receive a copy of the research findings, which will also be made available to parents on request. Additionally, I would also like to report the findings and applicable outcomes of our research formally following completion of the project. Details of the manner in which this may take place are yet undecided.

The research does not aim to prescribe how schools utilise this data. However, it is hoped that the findings may help schools to identify ways in which they are currently providing a sense of community for the young people in their charge, how this is linked to other aspects of pupils' development, and inform discussions around further ways to support positive outcomes.

#### What is required from the school if we agree to be involved?

Schools agreeing to become involved in the proposed study will be asked to support the research by:

- Signing a template letter agreeing to the use of opt-out consent for research within their school (prepared by the research team and printed on school headed paper).
- Distributing the consent letters to parents of pupils in year 8 and 9 (prepared by the research team).
- Collating any requests for non-participation.
- Discussing and deciding upon preferred manner of data collection (*electronic or paper methods to be discussed with researcher*).
- Identify timetable slots and locations for data collection to be conducted by the researcher.
- Provide access to pupil attainment and attendance data (*to be discussed with researcher*).

#### What happens if I change my mind?

You may withdraw your consent for your school's involvement at any time without consequence. This option will also be extended to parents and young people.

#### Where can I get more information?

If you have any further questions regarding the proposed research project, or would like more information please contact the researcher by Email:

Researcher:Ed SayerEmail Address:eos1g09@soton.ac.uk

Alternatively, any concerns or issues can be directed to Dr Claire Hart (Research supervisor, University of Southampton – C.M.Hart@soton.ac.uk).

#### What happens if I am unhappy with any aspect of the research?

This research is to be conducted in accordance with ethical conditions as set out by the University of Southampton, in partnership with Hampshire Educational Psychology Service. In the unlikely case of concern or complaint regarding the researchers actions, please do not hesitate to contact the chair of the Southampton University Ethics Committee as detailed below:

Chair of the Ethics Committee, School of Psychology, University of Southampton, Southampton, Hampshire. SO17 1BJ Tel: (023) 8059 5578.

#### Thank you for taking the time to read this proposal.

#### **Ed Sayer** Trainee Educational Psychologist - University of Southampton

#### Appendix B: Headteacher Opt-out Consent Agreement Letter

# To be placed on school's headed

FAO: Chair of Ethics Board C/O: Dr C.Hart (Researcher Supervisor) University of Southampton School of Psychology Highfield Campus Southampton SO17 1BJ

Dear Sir / Madam,

Please accept this letter as confirmation that I agree to the use of parental opt out consent for the research study 'An Exploration of Young People's Sense of Community, Personality and Achievement Motivation in Relation to Educational Outcomes and Well-being' in my school. I understand that this research will be conducted by Ed Sayer, a trainee educational psychologist, as part of his doctorate course. I accept responsibility for any parental objections that may arise.

*Please initial the box(es) if you agree with the statement(s):* 

I have read and understood the parent information sheet and have had the opportunity to ask questions about the study.

Parents of children in this school have been sent information about this study and what it involves for them and their child.

I agree that my school can take part in this research project and for data to be collected for the purpose of this study.

I understand children's and parents' participation is voluntary and they may withdraw at any time without their legal rights being affected.

I am happy for this project to use opt-out consent and for parents to inform the school only if they do not want their child to take part.

I am happy to address any parent concerns regarding their child's participation in this project.

Name (please print) and Signature of Head teacher:....

Name of School: ..... Date: .....

#### Please return the completed form to Dr Claire Hart (Research Supervisor)

If you have questions about your rights as a participant in this research, or if you feel that you have been placed at risk, you may contact the Chair of the Ethics Committee, School of Psychology, University of Southampton, Southampton, SO17 1BJ. Phone: (023) 8059 5578.









**Appendix C: Parent and Participant Information Sheet** 





An Exploration of Young People's Sense of Community, Personality and Achievement Motivation in Relation to Educational Outcomes and Well-being

Researcher: Ed Sayer Study ID: 771 RGO: 8218

Please read this information carefully. If you <u>do not</u> want your child to take part, please sign the enclosed <u>opt-out</u> consent form. If you are <u>happy</u> for your child to participate <u>no further action</u> is required.

# What is the research about?

This research is about young people's sense of community within schools. An individual's 'sense of community' is made up of four elements:

- How much they feel valued as a member of the group,
- How much the community meets their individual needs,
- How much influence they have over the community, and
- How much they feel an experience of a shared emotional connection with others in the community.

Having a strong sense of belonging to a community is linked with pro-social behaviour, academic achievement, good physical health, and emotional well-being. The negative experience of feeling socially rejected is linked with anti-social behaviour, poor mental health, truancy, and underachievement. Schools play an important role in forming communities, supporting young people's development and well-being.

The proposed research project aims to explore the links between young people's sense of community, educational attainment, attendance, and well-being. It also aims to explore whether differences in personality and/or types of motivation impact upon this relationship.

# Why has my child been chosen?

This research is focusing directly upon the views and experiences of young people themselves. Your child's school has agreed to become involved in this research and would like all children in Years 8 and 9 to answer the questionnaires. However, your child is under no obligation to participate, and if you <u>do not</u> want your child to take part in the study, please sign and return the attached slip by <u>Friday 6<sup>th</sup> January 2012</u>.

# What will happen to my child if they take part?

Participating pupils will be given a brief introduction about the aims of the study from the researchers and asked to individually complete a series of short questionnaire measures, lasting approximately 30 minutes. The researchers will be present to answer any questions about the study as children complete the questionnaire.

Children will also be debriefed and thanked following their participation. Blank copies of the questionnaires will be left at the school office should you wish to see them. Once all the data has been analysed the school will receive a copy of the research findings, and this will be available to parents on request.

# Are there any risks involved?

Prior to the start of the study, the researchers will conduct a risk assessment to ensure any potential risks are minimised. The researcher also possesses an enhanced CRB check. Following the study all participants will be debriefed and signposted to speak with staff members/parents/guardians, or to seek information and advice on relationships and health via 'Youthtube', Hampshire County Council's website for young people (www3.hants.gov.uk/childrens-services/youthtube), if they feel any concern regarding the study's subject material.

# Will pupil's participation be confidential?

In accordance with the Data Protection Act, all of your child's data will remain confidential. Any data provided by your child will be anonymised and securely stored either electronically on a password protected computer, or in paper copy within a locked filing cabinet.

# What happens if I change my mind?

You may withdraw your consent at any time without consequence. Your child's assent will also be sought on the day of the study. They will be free to decide whether they would like to participate or not. If at any point during the study your child decides they do not wish to continue, pupils will be free to do so.

# What happens if something goes wrong?

In the unlikely case of concern or complaint, please contact the chair of the ethics committee as detailed below:

Chair of the Ethics Committee, School of Psychology, University of Southampton, Southampton, Hampshire. SO17 1BJ Tel: (023) 8059 5578.

# Where can I get more information?

If you would like more information please contact the researcher via email:

Researcher: Ed Sayer Email Address: eos1g09@soton.ac.uk

# Thank you for taking the time to read this information sheet.

Ed Sayer <u>Trainee Educational Psychologist</u> - University of Southampton

#### Appendix D: Parent or Guardian Opt-out Consent Letter





#### <u>An Exploration of Young People's Sense of Community, Personality and</u> <u>Achievement Motivation in Relation to Educational Outcomes and Well-being</u>

Dear Parent/Guardian,

I am a Trainee Educational Psychologists from the University of Southampton. I am conducting a research project within local schools as part of my professional training. This research aims to investigate whether young people's sense of community in school is linked to personality and/or what motivates pupils to achieve. It will also explore how these factors are linked with educational outcomes (such as attainment and attendance levels) and well-being (such as self-esteem, anxiety and life-satisfaction). I am hoping to recruit pupils in Years 8/9 and would like to ask your child to participate in this study.

Please read the enclosed '*Parent/Participant Information Sheet*' for more information on the aims of the study. If you <u>do not</u> want your child to participate in the study, please sign and return the opt-out consent form below to the school's reception by *[insert date 10 working days from time letter distributed]*. Please note that the Headteacher of your child's school has agreed to the use of opt-out consent for this research project. Any concerns regarding this should be directed to the school in the first instance.

Yours faithfully,

Ed Sayer, Trainee Educational Psychologist University of Southampton

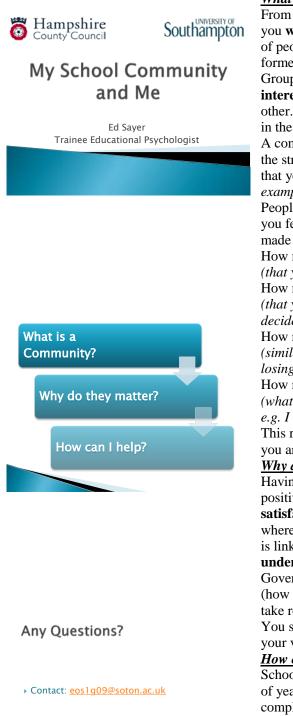
.....

I **do not** wish my child to participate in the research study 'An Exploration of Young People's Sense of Community, Personality Variables and Achievement Motivation in Relation to Educational Outcomes and Well-being'.

Name of pupil		Year Group	
Name (please p	rint) and Signature of Parent/Guard	an	
		Date	
If you have questions	s about your rights as a participant in this resear	ch (Study ID 711, RGC	D: 8218), or if you feel that

you have been placed at risk, you may contact the Chair of the Ethics Committee, School of Psychology, University of Southampton, Southampton, SO17 1BJ. Phone: (023) 8059 5578.

#### **Appendix E: Introduction to Research Project PowerPoint Slides and Notes**





#### What is a community?

From research with Local Junior School = where you **live**, where you **work**, or where you play and spend your **free time**. = group of people who **know** each other, shared **emotional experiences**, formed **teams**.

Group of people <u>NOT</u> a community **unless** they shared **similar interests**, worked towards the **same goal**, or **depended** on each other. Being part of a community is about **helping** other people in the group and promoting **happiness**.

A community can be as **big** as the whole world, or as **small** as the street you live in. The amazing thing about communities is that you can **belong to more than one at once**! *Give personal example (where live, where work, where spend free-time, etc).* People feel a different SoC for each of these. Your SoC is how you feel about being part of particular group or community. It is made up of four factors: (*examples from sports team*) How much you feel membership

(that you belong to the group, e.g. by having a team shirt) How much you feel influence

(that you can change or be changed by the group, e.g. helping decide the tactics for a match)

How much you feel a shared emotional connection (similar important experiences to the group e.g. winning or losing matches together)

How much you feel your needs are met

(what you want or need are provided by being part of the group, e.g. I have good coaches who help me to learn new skills) This research asks questions about just one of the communities you are members of; your school!

#### Why do communities matter?

Having a strong sense of community is linked with lots of positive outcomes (school performance, health, happiness, satisfaction with life, motivation, helping others, etc), whereas feeling that you miss out on being part of a community is linked with negative experiences (depression,

underachievement, exclusion, truancy, anger/agression). Government talks lots about communities – "social cohesion" (how we get along together in groups), "big society" (how we take responsibility for ourselves and each other)

You shape the communities you are part of = it is important that your views are listened too.

#### How can I help?

School has agreed to support the research by asking all members of year 8 and year 9 to participate in the project. This will be by completing a questionnaire pack in a Tutor/PSHE lesson over the next two weeks. Please give honest responses and don't leave sections unfinished.

Letters have been sent home giving parents the chance to 'optout' of the research – pupils will also be asked to complete a consent form before completing the research.

Participants will be given a 'pupil research code' meaning that no-one will be able to tell whose response is who =

**Annonymous/Confidential**, safely/securely stored by research team at University of Southampton.

#### **Appendix F: Young Person's Assent Form**





# **My School Community and Me**

My name is Ed Sayer and I am from the University of Southampton. I am a trainee educational psychologist in my final year of study and I am completing my research thesis. A research thesis is a large report investigating an unexplored area that could influence my role as an educational psychologist and impact upon the young people, families and school staff that I work with.

My research is looking at young peoples' sense of community within schools and how this links with personality and/or what motivates them to achieve. I also want to see how these factors may be linked with educational outcomes (attendance and achievement) and well-being (e.g., self-esteem, anxiety, life satisfaction). I need your help to do this project. You will be asked to complete a series of short questionnaires and the school will be asked to provide information on your current educational outcome scores. Your personal information will not be shared with anyone other than researchers involved in this project. This means that the results of this study will be strictly confidential.

Your participation in this study is voluntary and you may withdraw your participation at any time without penalty. Please complete the following questionnaire sections individually and take time to consider your answers carefully. You may ask the researcher for an explanation if you do not understand the meaning of any words. This is not a test. There are no right or wrong answers, so please try and answer the questions as truthfully as you can. Your responses will not be shown to anyone else.

If you feel you need to take a break, please feel free to pause for a couple of minutes. If you become upset as a result of this research you are free to stop participating or leave with a member of school staff if you wish. Further information and advice regarding health and relationships is available from 'Youthtube', Hampshire County Council's website for young people (www3.hants.gov.uk/childrens-services/youthtube).

# **ANY QUESTIONS?**

#### If you are happy to help us, then tick the boxes and sign your name to show that:

	You understand what you are meant to do?	
	You asked all the questions you want?	
	You understand it is okay to stop taking part at any time?	
Please	sign your name to show you are happy to take part:	
Nama	Class	

Name	••••••	Class	S
Signature		Date	

If you have questions about your rights as a participant in this research (Study ID 711, RGO: 8218), or if you feel that you have been placed at risk, you may contact the Chair of the Ethics Committee, School of Psychology, University of Southampton, Southampton, SO17 1BJ. Phone: (023) 8059 5578.

#### **Appendix G: Written Debriefing Statement**





#### An Exploration of Young People's Sense of Community, Personality and Achievement Motivation in Relation to Educational Outcomes and Well-being

Thank you for helping me with my research. The purpose of this study is to see whether students feel a sense of community in their school and whether this is linked with personality and/or what motivates students to achieve. I am also interested in how these factors might be linked with educational outcomes (such as attainment and attendance levels) and well-being (such as self-esteem, anxiety and life-satisfaction). The information you have provided will help our understanding of young peoples' experiences in school.

Your responses will remain confidential, which means that no one will know what answers you gave today apart from the researchers. The results of this study will not include your name or any other identifying characteristics. The research did not use deception. You may take a copy of this summary if you wish and may also request copies via email. Following completion of the project, we will provide your Head teacher with a copy of our findings.

If any part of this study has caused you to feel concerned please discuss this with your form tutor or head of year/house or with your parents/guardians. Alternatively, information and advice on health and relationships, alongside links to other organisations, is available from 'Youthtube', Hampshire County Council's website for young people (www3.hants.gov.uk/childrens-services/youthtube).

If you would like to talk to me about this study or have any questions please see me after the session of contact me via email: eos1g09@soton.ac.uk.

Thank you again for helping me with this research!

Ed Sayer Trainee Educational Psychologist University of Southampton	
Signature	Date
Name	

If you have questions about your rights as a participant in this research (Study ID 711, RGO: 8218), or if you feel that you have been placed at risk, you may contact\ the Chair of the Ethics Committee, School of Psychology, University of Southampton, Southampton, SO17 1BJ. Phone: (023) 8059 5578.

Appendix H: 'My School Community and Me' Questionnaire Pack (version A)



# **My School Community and Me**

# **Questionnaire Pack A**

- Please make sure you read instructions carefully and complete all of the questions in this pack.
- It is important that your answers are your own do not discuss them with your classmates.
- > Please give the first response that you think of.
- Once you have completed the consent form, please turn over to begin.

If you have questions about your rights as a participant in this research (Study ID: 771, RG0: 8218), or if you feel that you have been placed at risk, you may contact the Chair of the Ethics Committee, School of Psychology, University of Southampton, Southampton, SO17 1BJ.Phone: (023) 8059 5578.

# **My Basic Information**

## Please complete your personal details:

Year Group	
Pupil Research Code	

### Please indicate (tick) your ethnicity:

a) Black or Black British

Caribbean
African
Any other Black background within (a)

## b) White

British
Irish
Any other White background

## c) Asian or Asian British

Indian
Pakistani
Bangladeshi
Any other Asian background within (c)

White & Black Caribbean
White & Black African
White & Asian
White & Hispanic
Any other Mixed background

e) Other ethnic groups

Chinese
Japanese
Hispanic
Any other ethnic group
Do not state

# Please complete your date of birth:

Day	Month	Year
e.g. 06	October	1983

# Please indicate (tick) your gender:

Male	
Female	

# **My School Community**

A community is a group of people who might know each other, have shared experiences and even make up teams. A community can be as big as the whole world, or as small as the street you live in, as big as the school you attend or the team you play for. A group of people are not a community unless they share similar interests, depend upon each other or work together towards the same goal. Being part of a community is about helping other people and promoting happiness.

Also, you can belong to more than one community at once, for example one where you live, another where you study and one where you spend your social time. People feel a different sense of community for each of these groups. Your sense of community is how you feel about being part of particular group or community.

Today we're going to ask you some questions about your school community.

# How important is it to you to feel a sense of community with other people (pupils and staff) in the school? (*please tick*)

Prefer not to be part of this community	Not important at all	Not very important	Somewhat important	Important	Very important

# How well does each of the following statements represent how you <u>feel</u> about the school? (*please tick*)

	Not at all	Sometimes	Mostly	Always
I can trust people in this school				
Making an effort to fit into this school is important to me				
My views make a difference to what this school is like				
I care about what other people in this school think of me				
Being a member of this school is a part of my identitfy				

<b>Continued</b> How well does each of the following statements represent how you <u>feel</u> about the school? (please tick)				
	Not at all	Sometimes	Mostly	Always
If there is a problem in this school, people in the school can get it solved				
Most people in school know me				
I put a lot of time and effort into being part of this school				
I enjoy being with the people in this school				
This school has good leaders				
When I have a problem, I can talk about it with someone in school				
I value the same things as other people in this school				
It is very important to me to be a part of this school				
I think that this school has a positive future				
This school has been successful in getting the needs of its members met				
Being part of this school makes me feel good				
People in this school have similar needs, priorities, and goals				

<i>Continued</i> How well does each of the following statements represent how you <u>feel</u> about the school? (please tick)								
	Not at all	Sometimes	Mostly	Always				
Members of this school care about each other								
This school has symbols and expressions of membership, such as houses, logos and clothes that people can recognise								
I get important needs of mine met because I am part of this school								
People in this school have shared important events together, such as holidays, celebrations, or disasters								
I can recognise most of the people in this school								
Even when I leave this school, I still want to feel part of it								
This school can influence other schools								

# **My Learning Goals**

The statements below concern your learning goals. Please indicate (tick) how much you personally agree or disagree with each one.

	Strongly Disagree	←		$\rightarrow$	Strongly Agree
	1	2	3	4	5
I am striving to avoid performing worse than					
others					
My goal is to avoid learning less than is possible					
to learn					
My goal is to avoid performing poorly compared					
to others					

Continued The statements below concern your l	earning goals	s. Please indi	cate (tick) ho	w much you	personally
agree or disagree with each one.					
	Strongly Disagree			$\rightarrow$	Strongly Agree
	1	2	3	4	5
My aim is to avoid learning less than I possibly					
could					
I am striving to understand the content of my					
classes as thoroughly as possible					
My aim is to perform well relative to other					
students					
I am striving to do well compared to other					
students					
I am striving to avoid an incomplete					
understanding of the content of my lessons					
My aim is to avoid doing worse than other					
students					
My aim is to completely master the material					
presented in my classes					
My goal is to learn as much as possible					

# **My Temperament**

Please indicate (tick) how much you agree or disagree with each of the following statements.

		Strongly Disagree					→ Strongly Agree	
	1	2	3	4	5	6	7	
I react very strongly to bad experiences								
It is easy for me to imagine bad things that might happen								
to me								
When I want something, I feel a strong desire to go after								
it								
By nature, I am a very nervous person								
Thinking about the things I want really energizes me								
When I see an opportunity for something I like, I								
immediately get excited								

		r disagree with each of the following stat         Strongly         Disagree					→ Strongly Agree	
	1	2	3	4	5	6	7	
I feel anxiety and fear very deeply								
I'm always on the lookout for positive opportunities and experiences								
When it looks like something bad could happen, I have a strong urge to escape								
It doesn't take much to make me worry								
When good things happen to me, it affects me very strongly								
It doesn't take a lot to get me excited and motivated								

# **My Personality**

Read each pair of statements below and then choose the one that is closer to your own feelings and beliefs. Indicate your answer by ticking either the line "A" or "B" to the right of each item. Please do not skip any items.

	Tick
A) I have a natural talent for influencing people.	
<b>B</b> ) I am not good at influencing people.	
A) Modesty doesn't become me.	
<b>B</b> ) I am essentially a modest person	
A) I would do almost anything on a dare.	
<b>B</b> ) I tend to be a fairly cautious person.	
A) When people compliment me I sometimes get embarrassed.	
<b>B</b> ) I know that I am good because everybody keeps telling me so.	
A) The thought of ruling the world frightens the hell out of me.	
<b>B</b> ) If I ruled the world it would be a much better place.	
A) I can usually talk my way out of anything.	
<b>B</b> ) I try to accept the consequences of my behaviour.	
A) I prefer to blend in with the crowd.	
<b>B</b> ) I like to be the centre of attention.	

<i>Continued</i> Read each pair of statements below and then choose the one that is closer feelings and beliefs. Indicate your answer by ticking either the letter "A" or "B" to the item. Please do not skip any items.	•
	Tick
A) I will be a success.	
<b>B</b> ) I am not too concerned about success.	
A) I am no better or no worse than most people.	
<b>B</b> ) I think I am a special person.	
A) I am not sure if I would make a good leader.	
<b>B</b> ) I see myself as a good leader.	
A) I am assertive.	
<b>B</b> ) I wish I were more assertive.	
A) I like having authority over people.	
<b>B</b> ) I don't mind following orders.	
A) I find it easy to manipulate people.	
<b>B</b> ) I don't like it when I find myself manipulating people.	
A) I insist upon getting the respect that is due me.	
<b>B</b> ) I usually get the respect that I deserve.	
A) I don't particularly like to show off my body.	
<b>B</b> ) I like to display my body.	
A) I can read people like a book.	
<b>B</b> ) People are sometimes hard to understand.	
A) If I feel competent I am willing to take responsibility for making decisions.	
<b>B</b> ) I like to take responsibility for making decisions.	
A) I just want to be reasonably happy.	
<b>B</b> ) I want to amount to something in the eyes of the world.	
A) My body is nothing special.	
<b>B</b> ) I like to look at my body.	
A) I try not to be a show off.	
<b>B</b> ) I am apt to show off if I get the chance.	
A) I always know what I am doing.	
<b>B</b> ) Sometimes I am not sure of what I am doing.	

item. Please do not skip any items.	Tick
A) I sometimes depend on people to get things done.	
<b>B</b> ) I rarely depend on anyone else to get things done.	
A) Sometimes I tell good stories.	
<b>B</b> ) Everybody likes to hear my stories.	
A) I expect a great deal from other people.	
<b>B</b> ) I like to do things for other people.	
A) I will never be satisfied until I get all that I deserve.	
<b>B</b> ) I take my satisfactions as they come.	
A) Compliments embarrass me.	
<b>B</b> ) I like to be complimented.	
A) I have a strong will to power.	
<b>B</b> ) Power for its own sake doesn't interest me.	
A) I don't very much care about new fads and fashions.	
<b>B</b> ) I like to start new fads and fashions.	
A) I like to look at myself in the mirror.	
<b>B</b> ) I am not particularly interested in looking at myself in the mirror.	
A) I really like to be the centre of attention.	
<b>B</b> ) It makes me uncomfortable to be the centre of attention.	
A) I can live my life in any way I want to.	
<b>B</b> ) People can't always live their lives in terms of what they want.	
A) Being an authority doesn't mean that much to me.	
<b>B</b> ) People always seem to recognize my authority.	
A) I would prefer to be a leader.	
<b>B</b> ) It makes little difference to me whether I am a leader or not.	
A) I am going to be a great person.	
<b>B</b> ) I hope I am going to be successful.	
A) People sometimes believe what I tell them.	
<b>B</b> ) I can make anybody believe anything I want them to.	

<i>Continued</i> Read each pair of statements below and then choose the one that is closer to feelings and beliefs. Indicate your answer by ticking either the letter "A" or "B" to the rigitem. Please do not skip any items.	
	Tick
A) I am a born leader.	
<b>B</b> ) Leadership is a quality that takes a long time to develop.	
A) I wish somebody would someday write my biography.	
<b>B</b> ) I don't like people to pry into my life for any reason.	
<b>A</b> ) I get upset when people don't notice how I look when I go out in public.	
<b>B</b> ) I don't mind blending into the crowd when I go out in public.	
A) I am more capable than other people.	
<b>B</b> ) There is a lot that I can learn from other people.	
A) I am much like everybody else.	
<b>B</b> ) I am an extraordinary person.	

# **Myself in General**

Please read the following statements and decide how much you agree or disagree with each according to your attitudes, beliefs, and experiences. People are different and we are interested in how you feel.

	Strongly Disagree				Stron Agi	
	1	2	3	4	5	6
I have a number of good qualities						
All in all, I am a failure						
I do not have much to be proud of						
From time to time, I am no good at all						
On the whole, I am satisfied with myself						

*Continued...* Please read the following statements and decide how much you agree or disagree with each according to your attitudes, beliefs, and experiences. People are different and we are interested in how you feel.

	Strongly Disagree				Strongly Agree		
	1	2	3	4	5	6	
I do not have much to be proud of							
From time to time, I am no good at all							
On the whole, I am satisfied with myself							
I wish I could have more respect for myself							
I am able to do things as well as most other people							
I'm a person of worth, at least on an equal basis with others							
I can take a positive attitude toward myself							
I am certainly useless at times							

# **Myself as a Learner**

The next 20 questions aim to find out how you see yourself when it comes to learning and school work. Some people see themselves as being very good at learning and doing hard work, but others don't. We want to know what you think about yourself.

	Strongly Disagree			$\rightarrow$	Strongly Agree
	1	2	3	4	5
I need lots of help with my work					
I'm good at doing tests					
When I get stuck with my work I can usually work out what to do next					
I know how to solve the problems that I meet					
I'm clever					

<i>Continued</i> The next 20 questions aim to find a learning and school work. Some people see the doing hard work, but others don't. We want to be	mselves a	as being v	ery good	at learni	ng and	
	Strongly Disagree			$\rightarrow$	Strongly Agree	
	1	2	3	4	5	
I usually think carefully about what I've got to do						
I get anxious when I have to do new work						
I like having difficult work to do						
I'm good at discussing things						
I know how to be a good learner						
I know the meaning of lots of words						
Learning is easy						
I think that probelm-solving is fun						
I'm not very good at solving problems						
Learning is difficult						
I like having problems to solve						
Thinking carefully about your work helps you to do it better						
I like using my brain						
I find a lot of schoolwork difficult						
When I'm given new work to do, I usually feel confident I can do it						

# My Life

This is a chance for you to consider how you think and feel about yourself within school. Please indicate how true (or false) each item is as a description of you. Respond to the items as you now feel even if you felt differently at some other time in your life.

	Defin fals	•	+			$\rightarrow$	Defin tru	•
	1	2	3	4	5	6	7	8
I enjoy doing work for most								
academic subjects								
I hate studying for many								
academic subjects								

**Continued...** This is a chance for you to consider how you think and feel about yourself within school. Please indicate how true (or false) each item is as a description of you. Respond to the items as you now feel even if you felt differently at some other time in your life.

items as you now feel even if y	Du jen al Defin			i oiner ii	me in yo	ur tije.	Defin	itoly
	fal	•				-	tru	•
	1	2	3	4	5	6	7	8
I have trouble with most	*	-	5	-		Ū	,	0
academic subjects								
I learn quickly in most								
academic subjects								
I like most academic								
subjects								
I could never achieve								
academic honours, even if I								
worked harder								
I am not particularly								
interested in most academic								
subjects								
I get good marks in most								
academic subjects								
I am good at most academic								
subjects								
I hate most academic								
subjects								

### These questions ask about your satisfaction with different areas of your life.

	←						$\rightarrow$
	Terrible	Unhappy	Mostly dissatisfied	Mixed	Mostly satisfied	Pleased	Delighted
I would describe							
my satisfaction							
with myself as							
I would describe							
my satisfaction							
with my family life							
as							
I would describe							
my satisfaction							
with friendships							
as							
I would describe							
my satisfaction							
with my school							
experience as							

Continued These	questions as	sk about your	r satisfaction w	ith different are	eas of your	life.	
	Terrible	Unhappy	Mostly dissatisfied	Mixed	Mostly satisfied	Pleased	Delighte d
I would describe							
my satisfaction							
with my overall life							
as							
I would describe							
my satisfaction							
with where I live							
as							

# Please rate each statement according to how you feel about your life.

	Strongly Disagree				Strongly Agree		
	1	2	3	4	5	6	7
I react very strongly to bad experiences							
If I could live my life over, I would change almost nothing							
The conditions of my life are excellent							
So far I have gotten the important things I want in life							
I am satisfied with my life							

# **My Thoughts and Emotions**

# How often do you feel . . .

	< Never	Rarely	Sometimes	Frequently	Very Often
you are 'in tune' with people around you?					
you lack companionship?					
there is no one you can turn to?					

Continued How often do you feel	-				
	Never	Rarely	Sometimes	Frequently	Very Often
alone?					
part of a group of friends?					
you have a lot in common with the people around you?					
you are no longer close to anyone?					
your interests and ideas are not shared by those around you?					
outgoing and friendly?					
close to people?					
left out?					
your relationships with others are not meaningful?					
no one really knows you well?					
isolated from others?					
you can find companionship when you want it?					
there are people who really understand you?					
shy?					
people are around you but not with you?					
there are people you can talk to?					
there are people you can turn to?					

# Please rate each of the following statements according to how you have felt during the <u>PAST FEW DAYS</u>.

	Strong Disagr	Strongly Disagree					ngly ree
	1	2	3	4	5	6	7
I am bothered by things							
I do not feel like eating, my appetite is poor							

<i>Continued</i> Please rate each of the following statement DAYS.	ts accord	ing to he	ow you ł	nave felt	during t	the <u>PAS</u>	<u>Г FEW</u>
	Stron Disag		←			→ Stro Ag	ngly ree
	1	2	3	4	5	6	7
I feel that I can not shake off the blues, even with help from my family or friends							
I feel that I am just as good as other people							
I have trouble keeping my mind on what I am doing							
I feel depressed							
I feel that everything I do is an effort							
I feel hopeful about the future							
I think my life is a failure							
I feel fearful							
My sleep is restless							
I am happy							
I talk less than usual							
I feel lonely							
People are unfriendly							
I enjoy life							
I have crying spells							
I feel sad							
I feel that people dislike me							
I can't get "going"							

	Not at All				Extremely		
	1	2	3	4	5	6	7
Nervousness or shakiness inside							
Trembling							
Suddenly scared for no reason							
Feeling fearful							
Nausea or upset stomach							
Feeling tense or keyed up							

How much have you been bothered by the following during the <u>PAST FEW</u> <u>DAYS</u>?

# This is the <u>end</u> of the questionnaire pack.

Please let the researcher/your teacher know that you have finished without distracting other participants.



Thank you again for your help with this study!

# Appendix I: Staff Instructions And Guidance Sheet <u>Important Notes for Data Collection:</u>

Time (from start	Activity	Resource(s) Required
of lesson)		
0-5 minutes	Pass out and read through pupil consent form (tick three questions, name, sign and date – collect at end of session). N.B - <i>If</i> <i>parents/pupils have opted out an</i> <i>alternative location or silent</i> <i>activity may be provided by</i> <i>school staff.</i>	• Pupil consent form
5-10 minutes	Hand out and begin	Questionnaire pack
	questionnaire – check not all pupils have the same version (see top of second page, e.g. version A_Y/B_Yetc). Emphasise instructions on front of pack and ensure pupils complete research code (you should have a list for these). Allow pupils to complete at own pace and ask for help with understanding as needed. AND/OR read questionnaire booklet out loud to ensure access/understanding (key points of confusion highlighted below). Give any help needed to clarify understanding, but <u>do not</u> give leading answers. Some items are	• Pupil Research Code Sheet
	similar and or repeated!	
10-45 minutes (allow 10 minutes each for 'my school community', 'my personality' and my learning goals/my temperament sections - these require most clarifications)	<ol> <li>Read introduction to 'my school community' out loud. Give first question (How important) and explain response range (to tick). Introduce question 2 and explain four response options (= same for rest of this section).</li> <li>Read introduction to 'My personality' and explain response options (e.g. item one = either A or B, walk through first item with class)</li> </ol>	<ul><li>Questionnaire pack</li><li>Key points of explanation</li></ul>

	<ol> <li>Subsequent sections may be in different orders (depending on questionnaire pack version), but all statements follow the same response style – ranging from negative (e.g. strongly disagree/definitely false) to positive (strongly agree/definitely true).</li> <li>Provide explanations as needed (most likely to arise in 'my personality' and 'my learning goals' sections) from key points below.</li> </ol>	
45-50 minutes	Ask pupils to check that research code is correct and that they have answered all questions (no blank spaces). Collect 1 pile of consent forms and $2^{nd}$ pile of questionnaire packs. Hand out debrief form for pupils to keep – summaries what they've done in this session. Pupils take debrief form with them.	<ul><li>Questionnaire pack</li><li>Consent form</li><li>Debrief form</li></ul>
After session	Collate two piles (consent/questionnaires) for the researcher to collect (end of Jan latest)	<ul><li> Questionnaire pack</li><li> Consent form</li></ul>

# **Resources Needed**

• Pupil consent form	(from researcher)
• Pupil research code sheet	(from Grant/Lynne/Ginny)
• Questionnaire pack	(from researcher)
• Debrief form	(from researcher)

# **Key Exploration Points**

Some phrasing within the questionnaires may be hard to access for pupils – I do not have permission to change these and therefore have provided the following explanations/translations.

### <u>PTO</u>

#### **MY PERSONALITY**

Concept of **influence** = power to guide others actions (example of 'emotional blackmail' over girlfriend/boyfriend/mum/dad/siblings) – will they do what you suggest?

Concept of **modesty** = if you do something really good, are you likely to boast? Modest people don't boast. "Modesty doesn't become me" =I am not really a modest person.

Concept of **assertiveness** = how likely are you to get your opinion heard/desires met? Assertive people put their views over strongly, less assertive people tend to remain quiet/do what others desire.

Concept of **authority** = in terms of 'power'/responsibility over others – examples of parents over children, headteacher over staff members, team captain over players

Concept of **manipulation** = best explained in terms of control over others - e.g. like someone controlling a puppet to do as they want.

Series of questions relating to **body** – focus upon head up! Explain in terms of how confident/comfortable individuals are in their relative attractiveness (e.g. do they like other people looking towards them or not).

Concept of **competence** = explain in terms of how confident you feel in your skills (N.B - this item is asking whether the person only feels able to make decisions when they feel confident in their own ability in that subject).

I am **apt** to show off... = I am **likely** to...

I have a strong **will to power** = I desire having power/authority/control over others.

... care about new **fads**... = trends/fashion sense – are you a trend setter?

#### **MY LEARNING GOALS**

- 1. I am striving to avoid performing worse than others
  - = I am trying not to do worse than anyone else
- 2. My goal is to avoid learning less than is possible to learn
  - = I don't want to know everything I could about this subject
- 3. My goal is to avoid performing poorly compared to others
  - = I don't want to do badly compared to others
- 4. My aim is to avoid learning less than I possibly could
  - = I want to make sure I do not miss out on the chance to learn all that I can
- 5. I am striving to understand the content of my classes as thoroughly as possible

= I am trying to fully understand everything that I am taught

6. My aim is to perform well relative to other students

= I want to do well compared to others

7. I am striving to avoid an incomplete understanding of the content of my lessons

= I am trying to make sure I am not confused about what we have studied at the end of my lessons

8. My aim is to avoid doing worse than other students

= I want to make sure I don't do worse than others

- 9. My aim is to completely master the material presented in my classes
  - = I want to be able to completely understand and use everything I learn in class
- 10. My goal is to learn as much as possible

= I want to learn everything I can

# Many Thanks for your Help with this Research Project!



**Appendix J: Additional Pupil Information Form** 





# An Exploration of Young People's Sense of Community, Personality and Achievement Motivation in Relation to Educational Outcomes and Well-being

Pupil Code	DOB	Gender (m/f)	EAL (y/n)	SA (y/n)	SA+ (y/n)	SSEN (y/n)	Attainment (NC/GCSE Level)		Attendance (%)		
							Lit./Eng	Num./Maths	Pres.	Auth.	Unauth.
(e.g. Y1, Y2, etc- could also indicate houses)	08/12/05	F	Ν	Y	Ν	N	3с	С	76	20	4

### KEY

DOB:	Date of Birth	NC:	National Curriculum					
m/f:	Male / Female	Lit: Literacy						
y/n:	Yes / No	Num:	Numeracy					
EAL:	English as an Additional Language	Pres:	Percentage attendance present					
SA:	School Action	Auth:	Percentage attendance authorised absence					
SA+:	School Action Plus	Unauth:	Percentage attendance unauthorised absence					
SSEN:	Statement of Special Educational Needs		-					

If you have questions about your rights as a participant in this research (Study ID 711, RGO: 8218), or if you feel that you have been placed at risk, you may contact the Chair of the Ethics Committee, School of Psychology, University of Southampton, SO17 1BJ. Phone: (023) 8059 5578.

### **Appendix K: Additional Exploration of School Level Data**

#### Table A

1 v 1		~ ·								
		School 1	-		School 2	,				
	N	Mean	S.D	Ν	Mean	S.D	F			
1. Sense of Community		2.45	.45	442	2.64	.42	39.16***			
<u>्र</u> 2. Mastery-Approach	325	3.88	.73	434	3.95	.69	2.09			
$\overset{O}{{{}{}}}$ 3. Mastery-Avoidance	327	3.11	1.13	437	3.37	1.02	11.32***			
3. Mastery-Avoidance 4. Performance-Approach 5. Performance-Avoidance	323	3.83	.86	434	3.87	.80	.372			
S. Performance-Avoidance	327	3.59	.98	436	3.70	.84	2.61			
6. Narcissism	335	13.53	6.71	440	12.75	6.45	2.67			
7. Academic Self-concept	298	5.35	1.26	414	5.15	1.05	5.24*			
8. Attainment	328	15.12	2.37	436	14.41	2.28	17.55***			
9. Attendance		95.36	7.07	440	95.53	5.16	.15			
10. Self-esteem		3.30	.60	430	3.26	.50	.95			
11. Life-satisfaction		5.20	1.12	407	5.06	.93	3.19†			
12. Loneliness	303	2.24	.63	403	2.27	.59	.43			

*Note:* 'N' represents total number of pupils who completed appropriate sections of questionnaire. Numbers based upon fully cleaned data. Cases excluded on a pair-wise basis. Mean scores represent mean total scores averaged across items for Sense of Community, Achievement Goals, Academic Self-concept, Attainment, Self-esteem, Life-satisfaction, and Loneliness. Mean scores represent summed total scores for Narcissism and a percentage-present score for Attainment. *F* represents score produced through one-way ANOVA.  $\dagger = p < .05$ ,  $\ast = p < .01$ ,  $\ast \ast = p < .001$ 

### Table B

### Bivariate Correlations among the Key Variables for School 1

	1	2	3	4	5	6	7	8	9	10	11	12
1. Sense of Community	-	.28***	.13**	.23***	.22***	21***	.33***	02	.00	.23***	.41***	25***
<u>्र</u> 2. Mastery Approach		-	.27***	.57***	.49***	03	.43***	.28***	.11*	.44***	.29***	19***
<ul> <li>3. Mastery Approach</li> <li>3. Mastery Avoidance</li> <li>4. Performance Approach</li> <li>5. Performance Avoidance</li> </ul>			-	.25***	.47***	05	.18***	.24***	.03	.18***	.05	03
4. Performance Approach				-	.47***	.03	.32***	.27***	.00	.37***	.23***	07
YCPIC 5. Performance Avoidance					-	.05	.30***	.29***	.12*	.35***	.16**	11†
6. Narcissism						-	.11†	.09	.10†	.19***	05	10†
7. Academic Self-concept							-	.39***	.26***	.74***	.51***	33***
8. Attainment								-	.18***	.34***	.12**	01
9. Attendance									-	.20***	.15**	05
10. Self-esteem										-	.46***	23***
11. Life-satisfaction											-	61***

12. Loneliness

*Note:* Due to their asymmetrical nature, analyses involving 'attendance' were calculated using Spearman's rho (two-tailed). All other scores were calculated using Pearson's r (two-tailed). Cases were excluded on a pair-wise basis, with sample size ranging between 290 and 335.  $\dagger = p < .05$ , \*\* = p < .01, \*\*\* = p < .001

### Table C

#### Bivariate Correlations among the Key Variables for School 2

	1	2	3	4	5	6	7	8	9	10	11	12
1. Sense of Community	-	.30***	.08	.21***	.15***	07	.33***	.10*	.13***	.23***	.40***	29***
<u>ਤ</u> 2. Mastery Approach		-	.36***	.55***	.49***	.04	.42***	.22***	.02	.35***	.28***	22***
<ul> <li>3. Mastery Approach</li> <li>3. Mastery Avoidance</li> <li>4. Performance Approach</li> <li>5. Performance Avoidance</li> </ul>			-	.28***	.50***	01**	.16***	.26***	.01	.09†	.09†	07
4. Performance Approach				-	.51***	.10*	.34***	.25***	.03	.29***	.26***	21***
5. Performance Avoidance					-	.10*	.24***	.32***	.04	.24***	.11*	12*
6. Narcissism						-	.23***	.06	.02	.36***	.02	23***
7. Academic Self-concept							-	.26***	.06	.65***	.42***	28***
8. Attainment								-	.02	.20***	.03	.05
9. Attendance									-	.04	.05	.00
10. Self-esteem										-	.39***	28***
11. Life-satisfaction											-	58***
12. Loneliness												-

*Note:* Due to their asymmetrical nature, analyses involving 'attendance' were calculated using Spearman's rho (two-tailed). All other scores were calculated using Pearson's r (two-tailed). Cases were excluded on a pair-wise basis, with sample size ranging between 391 and 442.  $\dagger = p < .05$ , \*\* = p < .01, \*\*\* = p < .001

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