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DURHAM UNIVERSITY

Building Schools of Character

The Development, Implementation, and
Evaluation of a School-Based Character
Education Programme Designed to Promote
Cooperative Learning and Reduce Anti-Social
Behaviour

By
Robert White

A Thesis Submitted for the degree of Doctor of Philosophy

School of Education

Durham University

2009

Abstract

Background The issue of *behaviour management*, particularly as it pertains to addressing anti-social behaviour and improving learning and life outcomes for children and adolescents in schools has become a primary topic of discussion among educational stakeholders. The current perception among educational stakeholders is that as schools and society in general continue to experience an increase in anti-social behaviour, general indiscipline is becoming the normal behavioural pattern within classrooms. This study considers the relationship between personality, behaviour, and educational outcomes rooted in a socio-cultural perspective that emphasizes the role of socially mediated learning in the development of prosocial behaviour, resilience, personality, and character adaptations that support positive life outcomes. With this in mind, the primary aim of this study focused on developing an understanding of personality, behaviour management, and pro-social development through a synthesis of psychological and educational research and theory within the framework of the socio-cultural perspectives to design a character education programme targeted at improving prosocial behaviour within schools. Therefore, the primary question of the study is: Can a holistic programme be designed, effectively implemented in schools, and facilitated by teaching staff to enhance pro-social development and decrease anti-social behaviour among school-aged children?

Methods A sequential approach was used to address the complexity of the phenomena under investigation. The cycle of enquiry developed for this investigation was based on a grounded theory perspective within an action research framework. The cycle of scientific research used for this study was an in-depth investigation that informed real-world field investigations, followed by the simultaneous collection of both quantitative and qualitative data from archival records, open-ended and semi-structured interviews, observations and surveys. This process achieved data saturation and allowed for the emergence of descriptive themes that were used to develop analytical themes so that each subsequent phase of enquiry was informed by the data.

Cycle of enquiry The first phase of the research design involved a systematic literature review that focused on the discovery and formulation of the theory underpinning the development of the educational innovation that became the central avenue of investigation. This phase was directed by asking the question; What is the relationship between personality, educational outcomes, and the ability to overcome adversity, and what role can a teacher-mediated cooperative-learning programme focusing on the development of social competence, cooperative communication, restorative processes, and inclusive practice play in supporting the development of beneficial character adaptations in children? To test the initial theories that arose from the literature review, the second phase of study involved a quasi-experiment that investigated the relationship between self-concept and social competence and how these could be influenced by mediated adventure-based learning (MABL) within an outdoor education framework. This quasi-experiment used a control-group, pre-test/post-test, mixed-methods design. The second quasi-

experiment investigated the role of Mediated Activity-Based Cooperative Learning (MABCL) on cooperative communication during activity-based group problem-solving challenges and task completion. Following a synthesis of the findings from the MABL and MABCL investigations and a further review of the literature, a multiple-component character education programme was designed. Following the design of the character education programme a pilot study was designed and conducted. Upon concluding the pilot study data analysis, a Random Control Trial (RCT) was designed and participant recruitment conducted. Of the 10 schools that volunteered to take part in the RCT, five were assigned to the control group and five to the experimental group. However, the RCT proved impossible to complete for a variety of reasons and therefore this investigation used a multiple case study design to conclude the cycle of research, with the five schools assigned to the experimental group becoming the cases of the study. Data collected from the multiple case studies were analysed to draw conclusions about the effectiveness of the character education programme.

Results Data collected in the final cycle of research, which included 5 schools participating in a multiple case study investigation showed that a character education programme designed within a sociocultural understanding of development can have a positive effect on teacher talk, pupil on and off task behaviour and antisocial behaviour. Both qualitative and quantitative data evidenced an increase in pupil on-task behaviour during lessons and an improvement in the teachers' ability to focus their time on content delivery during lessons. In addition, office referrals to senior staff for inappropriate behaviour showed a statistically significant decrease following the implementation of the character education programme.

Discussion Previous research into the impact of character-education programmes has yielded neither a clear guideline regarding what character education should provide nor discussed how a character-education programme can be effectively implemented school wide to promote pro-social development among school-aged children. The data collected in this study from school staff and pupil interviews, observations, and school records indicate that following the implementation of the designed character education programme, Building Schools of Character (BSC), in five primary schools, pupil behaviour and school climate improved. This study found that a socio-culturally framed behaviour-management programme facilitated through the delivery of mediated cooperative-learning activities and designed to enhance responsibility, respect, trustworthiness, fairness, caring, and honesty can have a positive impact on pupil behaviour and self-regulation. This finding, coupled with an understanding of the importance of self-regulation, suggests that future school-based behaviour-management programmes and socio-emotional learning initiatives should consider the role of mediated cooperative-learning activities in developing beneficial character adaptations that promote self-regulation and positive educational and life outcomes.

Dedication

To Wendee, a dedicated teacher, unerring friend, and loving wife;

Your support has made this possible.

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List of Abbreviations

BSC.....	Building Schools of Character
EAZ.....	Education Action Zone
FFM.....	Five Factor Model
MABL.....	Mediated Adventure Based Learning
MABCL.....	Mediated Activity-Based Cooperative Learning
MLE.....	Mediated Learning Experience
MCLE.....	Mediated Cooperative Learning Experiences
MSCS.....	Multiple Self Concept Scale
RCT.....	Random Control Trial
RJ.....	Restorative Justice
SEN.....	Special Educational Needs
SENCo.....	Special Educational Needs Coordinator
SIP.....	School Improvement Plan
SPSS.....	Statistical Package for the Social Sciences
SSC.....	School Support Centre
ZAD.....	Zone of Actual Development
ZPD.....	Zone of Proximal Development

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Part I

Chapter 1: Introduction

“Discipline is not what you do to someone; it is what you do for someone.”

Lou Holtz, 2008

1.1 Study Overview

The issue of *behaviour management*, particularly as it pertains to addressing anti-social behaviour and improving learning and life outcomes for children and adolescents in schools, has become a primary topic of discussion among educational stakeholders (Arthur, 2005). Of the two perspectives from which human behaviour has traditionally been viewed—the *contextualized* and *decontextualized* perspectives—the majority of psychological research has been guided by the decontextualized perspective. Likewise, the field of education has adopted a decontextualized perspective of human action, conceptualizing behaviour within an individualistic perspective while addressing one issue of concern at a time. However, this decontextualized and individualistic phrasing of human action is insufficient for gaining understanding of effective strategies for improving learner engagement (e.g., on-task behaviour during learning activities) and pro-social development (e.g., social competence and cooperative problem-solving and conflict resolution) within the school environment.

For the most part, personality, its interaction within the social context, and the impact of experiences on personality are not considered in this perspective, as it views personality as that which “belongs inherently” (Valsiner, 1986:1) to the person. As Valsiner (1986:1) argued, if researchers step beyond this perspective and allow a relationship of personality with the social context, the relationship is usually seen as a “one sided causal influence rather than a bidirectional process of interdependence.” This study considers the relationship between personality, behaviour, and educational/life

outcomes rooted in a socio-cultural perspective that emphasizes the role of socially mediated learning in the development of behaviour, resilience, personality, and character.

1.2 Study Aims

The primary aim of this study, in the first instance, was to develop an understanding of personality, character adaptation, behaviour management, and pro-social development through a synthesis of psychological and educational research and theory within the framework of the socio-cultural perspectives of Vygotsky, Wertsch, Bakhtin, and Valsiner. After constructing an understanding of personality, character adaptation, behaviour management and pro-social development from a sociocultural perspective I undertook the development of a behaviour-management strategy that could be delivered by school staff. A strategy that embraces the microgenetic, mesogenetic, and ontogenetic aspects of character development and determines how these aspects can be influenced by teacher-facilitated cooperative learning experiences designed to enhance pro-social development and improve educational and life outcomes through the development of character adaptations that enhance resiliency.

The specific aims of this study were the following:

1. To demarcate the space that personality occupies in educational and life outcomes;
2. To explore the relationship between personality and a behaviour-management strategy oriented toward promoting pro-social development through character adaptations;
3. To develop and evaluate teacher-mediated cooperative-learning activities that may enhance the development of a socio-cultural approach to behaviour management and pro-social development within schools.

1.3 Study Questions

Based on the aims of the study, the primary question investigated was the following:

Can a holistic programme be designed and implemented in schools, facilitated by teaching staff to enhance pro-social development and decrease anti-social behaviour among school-aged children?

As the study progressed in terms of programme definition, the main question was further restructured to encompass the following two questions:

1. Does the holistic character-education programme developed for the study, implemented within schools, and facilitated by teachers effectively improve teaching and learning within the classroom?
2. Does the holistic character-education programme developed for the study, implemented within schools, and facilitated by teachers effectively decrease anti-social behaviour in the classroom and across the school setting?

1.4 Study Structure

This study is organized to progress from an outline of a socio-cultural perspective focusing on the individual to the development of a whole-school approach aimed at promoting pro-social development and decreasing anti-social behaviour. Initially, a socio-cultural perspective is considered in relation to personality development, behaviour management, and pro-social development, supported by mediated learning facilitated within culturally constructed environments, specifically schools in this investigation. This discussion is followed by consideration of a whole-school approach focused on improving school-wide and in-class behaviour management, learner engagement, and teacher talk within a constructivist framework. This approach was then evaluated following implementation of the programme in five state-supported schools.

1.5 Planning for Change

The first part of this study provides an outline of the theoretical aspect of the phenomena under investigation (Chapter 1), a review of literature (Chapter 2) and the development of the interventions investigated (Chapter 3). The second part discusses the methodology employed (Chapter 4), followed by discussion of the findings of two investigations (Chapters 5 and 6) conducted to understand the phenomena under investigation and effectively inform change through a grounded theory approach based on emerging descriptive and analytical themes. These descriptive and analytical themes are further examined to readdress the main question before being applied to inform the development of the final programme, which is evaluated in the final section of the study.

Chapter 1 provides an overview of the study and discusses the socio-cultural perspective to provide an understanding of the dynamic role that “the social” plays in the ontology of individuals and a theoretical basis for the educational innovation under investigation. Chapter 2 and 3 provide a multiple-phase review and synthesis of the literature that addresses the main question of this study by reviewing the role of personality in educational and life outcomes from a socio-cultural perspective, situating character education within a historical framework. The multiple stages of the literature review reflect the holistic cycle of research (i.e., building an understanding, planning change, implementing change, and evaluating change) incorporated into the study.

The primary focus of the first stage of engagement with the literature (Chapter 2) is to identify the role of personality in educational and life outcomes to plan change for the application of socio-cultural and activity theory to character education. The findings of this review are then discussed in Chapter 3 to further develop an understanding of the emerging themes on the development of a school-wide intervention designed to address behavioural and learning concerns. The review focused upon addressing recent

proclamations (Arthur, 2005) to address anti-social behaviour, as well as calls from governments to place character education back on the agenda of educational policy.

Chapter 4 discusses the selection of the methods and research design employed within the study and throughout the various cycles of research. The rationale for the choice of methods is discussed in relation to the study questions and primary aims of the investigation. The cycle of research aimed to engage fully with the findings from each stage of the investigation to provide a clear depiction of the mechanisms behind the findings of the study. With this in mind, a sequential approach was employed to achieve the following:

1. Fully investigate the phenomena under study and develop themes associated within school behaviour management and learner engagement;
2. Inform the development of a school-wide behaviour-support programme designed to promote pro-social development among school-aged children;
3. Evaluate the programme following implementation.

After Chapter 4 describes the ways in which the methods were chosen to meet these desired outcomes, Chapters 5 and 6 describes the rationale leading to the development of teacher-mediated cooperative-learning experiences designed to develop a further understanding of the themes that emerged from the review of literature.

Specifically, these chapters discuss the development of two action-research projects designed to provide further understanding of the role that mediated cooperative learning may play in the development of self-concept, social competence, and cooperation. These two research projects were used to develop a whole-school approach to positive behavioural support, and the themes that emerged from them were considered in relation to the literature to develop an holistic character-education programme designed to be delivered by teachers in schools to promote pro-social development and decrease anti-

social behaviour among school-aged children: the Building Schools of Character (BSC) Programme. Both qualitative and quantitative data sets were collected and analyzed to build a broader understanding of how Mediated Activity-Based Cooperative Learning (MABCL) might be designed and implemented to increase pro-social behaviour, learner engagement, and school-wide positive behavioural support.

1.6 Implementing and Evaluating Change

Building on the data gathered from both the investigations conducted and comparison of both primary and secondary data, descriptive and analytical themes were identified and used to gain a further understanding of the role that personality, character adaptations, resilience, social competence, a cooperative disposition, and Mediated Cooperative-Learning Experiences (MCLEs) might play in developing pro-social standards of conduct. Through the constant comparison of data gathered from the two investigations, analytical themes as well as an understanding of the implications of a holistic intervention emerged, permitting the commencement of programme implementation and evaluation. By engaging fully with the findings through a continued engagement with the data, the BSC Programme was developed (White, R. & Warfa, N. in press).

Chapter 7 engages with the third investigation of this study, a single-case pilot study using a mixed-methods longitudinal design within a pre-test post-test paradigm. The pilot study was conducted to field test the efficacy of the BSC Programme before a larger scale investigation was undertaken. Chapter 8 presents the findings from the primary investigation of this study, which, following the failure to conduct a 10-school randomized controlled trial consisted of a multiple case-study investigation of the BSC Programme at five schools. Chapter 8 assesses the data from all stages of this investigation before discussing the role that mediated cooperative learning might play in

developing a school-wide approach to positive behavioural support focused on improving pupil behaviour, learner engagement, teacher talk, and school climate. It then proceeds to discuss the role of schools in the development of resilience underpinned by social competence and a cooperative disposition to support the development of in-person characteristics that support beneficial educational/life outcomes. Chapter 9 concludes the study by discussing the limitations of the study and the implications for future research and educational policy change. The discussion then proceeds to consider the practical implications in relationship to the application of a socio-cultural approach to designing mediated cooperative learning experiences for social and emotional learning to enhance self-regulated pro-social behaviour and pro-sociality among school-aged children.

Chapter 2: Literature Review

The current perception among educational stakeholders is that as schools and society in general continue to experience an increase in anti-social behaviour, general indiscipline is becoming the normal behavioural pattern within classrooms (ICM Research, 2005). This concern, coupled with the current confusion and uncertainty regarding pro-sociality, ethics, values, and the role of social institutions, particularly schools, in facilitating the process by which children and adolescents acquire pro-social and ethical sensibilities, gave rise to this investigation.

Before a clear and defined way forward can be determined, a coherent understanding of the role of school-wide pro-social character education in pupil behaviour must be placed within a perspective that takes into account the pluralistic nature of modern society. It is important to note that these concerns are not new; every society and every generation decides, either explicitly or implicitly, what values it will attempt to teach the next generation and how it will raise its young (Dewey, 1932). According to Berkowitz (2003) however, what does appear new is the sense of angst and urgency that currently accompanies these inter-related philosophical, psychological, and educational questions and concerns, which has led to a reactionary approach to anti-social behaviour implemented on a piecemeal basis.

2.1 Literature Review

The aim of this literature review was to synthesize the current knowledge to develop a unified theory of character education (i.e., social, emotional, and cognitive learning that promotes pro-social development) to bridge the gap between educational practice and the socio-cultural understanding of human development. The aim of the first stage of this review was to address the following grounding themes:

1. To identify the scope of behavioural concerns within the school-age population.

2. To understand the prevalence of mental illness within the school-age population and discuss from a sociocultural perspective the bi-directional influence between school outcomes and pupils' mental health, pro-social development, and educational outcomes.
3. To provide a narrative synthesis of psychological and educational theory in relationship to character education.
4. To inform the development of a school-wide initiative to address the social, emotional, and cognitive well-being of school-age children.
5. To consider the design of an educational programme based on a synthesis of the current knowledge regarding the role of character in learning and development.
6. To consider how schools may be best situated to meet the mental health needs of all children through socio-culturally informed teaching practices.

The two main review questions leading the review were:

What is the relationship between personality, educational outcomes, and the ability to overcome adversity, and what role can a teacher-mediated cooperative-learning programme focusing on the development of social competence, cooperative communication, restorative processes, and inclusive practice play in supporting the development of beneficial character adaptations in children?

The questions were further refined during the second stage of the in-depth iterative review to the following:

1. What impact do personality and temperament have on social, emotional, and cognitive well-being?
2. What is the impact of resiliency on children's educational and social outcomes?

In order to achieve all the aims of the review, it was considered necessary to address the following further questions:

1. How can personality and socio-cultural research inform character-education pedagogy?
2. What underpins the development and maintenance of resiliency?
3. Can a programme be designed and implemented by teachers in schools to enhance pro-social development beyond moral codes and social convention, decrease anti-social behaviour, and improve teaching and learning in schools, and, if so, what form would this programme take?
4. Can schools serve as protective factors in the development of emotional well-being and good mental health?

2.1.1 Chapter overview. As a grounded theory approach (see Strauss & Corbin, 1990) was determined the most effective means of addressing the main question of this study, it was considered that the most practical way forward in the first instance was to conduct an iterative literature review. The main goal of the literature review being to build an understanding of the role personality traits play in educational and life outcomes. This chapter presents a synthesis of the evaluation of the historical roots and current knowledge in relationship to personality and its connection to educational and life outcomes. This synthesis considers the connection between the current understanding of the Big Five Factor Model (FFM) of personality and how this understanding can be successfully integrated within a classroom through the implementation and delivery of character education programming to enhance pro-social development, learner engagement, and school ethics. In addition, the concept of resiliency, which research shows to be an important aspect in developing the ability to overcome adversity and achieve success in school, family, work, and life, is discussed to provide the basis for

understanding the importance of learning experiences that aim to develop social competence and a cooperative disposition.

2.1.2 Problem background. Increasing concern regarding disruptive behaviour, under achievement, disengagement, and mental health issues among school-aged children has led to the resurgence of governmental rhetoric calling for the implementation of character education (Arthur, 2005). In addition, the growing prevalence of mental illness among school-age children has led to a proliferation of initiatives in schools varying considerably in range and focus (Gott, 2003).

There has been growing discussion regarding what can be done to address inappropriate behaviour and re-establish social cohesion within schools and the broader community. Such concern is not groundless; in one study, ICM Research (2005) found that 85% of teachers with more than 15 years of experience reported that disruptive and anti-social behaviour is progressively worsening and that 60% of all teachers reported a behaviour crisis within UK schools today. Mayer and Leone (1999) found that school personnel spend more time and resources on punitive and reactive measures aimed at inhibiting aggression, violence, and ongoing disruptive behaviour than on positive or preventative strategies.

Although these issues are not new, they have become more urgent since the Labour Government published its first White Paper on Education, *Excellence in Schools* (DfEE, 1997). This paper argued that schools should take the responsibility to teach children to “appreciate and understand a moral code on which civilized society is based” (DfEE, 1997: p.10) and “develop a strength of character and attitudes to life and work.” However, no clear definition or explicit guidelines were given for schools regarding the teaching of a “moral code” or what this “code” entails within a pluralistic society. Furthermore, in the current Government’s more recent report, *Values, Aims and Purposes*

of the *National Curriculum for England* (DfEE, 1999: p.10-11), it is stated that the “development of children's social responsibility, community involvement, development of effective relationships, knowledge and understanding of society... [and] respect for others” is the foundation of learning. Therefore, local authorities, administrators, teachers, and other stakeholders must recognize the need to support a range of strategies to meet the needs of children and young people.

A recent United Nations (UN) report (2007) found that the United Kingdom is placed at the bottom of a quality of life survey for young people when compared to 21 of the most-developed nations, implying that initiatives to improve life outcomes for children in the United Kingdom are not meeting needs. Furthermore, Merrell et al. (2007) reported a no change in the developmental levels of children despite the introduction of several Early Years initiatives, suggesting that the developmental needs of children are not being met by recent educational initiatives and that the focus of these initiatives may be wrongly placed.

In addition, the OECD report *Education at a Glance* (2007) indicates that the United Kingdom is falling behind other nations in academic uptake and achievement. Moreover, the UN Children's Fund (2007) concluded that British children have the worst relationships with their family and peers, suffer from greater poverty, and indulge in more binge drinking and unsafe sex than children in other wealthy nations. These findings, along with other social concerns, have resulted in the Archbishop of Canterbury declaring that the United Kingdom has become “a broken society” (2007).

As can be seen from the above evidence, inappropriate behaviour within UK schools is neither a new concern nor one that has been effectively addressed. Following continued governmental rhetoric, Arthur (2005) declared that character education is back on the agenda in British education policy, as the Government has stated that “a strength of

character” or “moral code” must be taught in schools (DfEE, 1997). However, Arthur (2005) found that without a clear understanding or evidence-based guidance, many schools in the United Kingdom are now teaching a “moral code” to pupils through developing initiatives that promote a series of behavioural outcomes taught in a behaviourist fashion. In addition, as highlighted by Vincent (1999a) in the United States, many character education programmes have also adopted teaching a moral code (i.e., rules and regulations based on “thou shall not...”) and use rewards and sanctions to teach children what to think and what rules to follow for the sake of compliance.

Arthur (2005) argues that the uncertainty in the United Kingdom regarding how character education should be implemented in schools is due to lack of understanding of what “character education” means. According to Hanh (1998) and Haydon et al. (2009), “Character Education and Citizenship Education aim to make a difference to the values or behaviour of children.” Although there is no common unified theoretical base (McLaughlin & Halstead, 1999), the majority of models focus on “encouraging certain types of behaviour” to address the growing concern or perception of a continued decline of moral standards in society (Lickona, 1991; Berkowitz, 2003; Vincent, 1999b; Cameron, 2008). A point of debate between proponents and opponents of character education regards whose values and what behaviour is acceptable and by whom. Addressing this concern, a central theme of the literature review is deciding whose values should be used to determine what behaviours are acceptable and by whom (Berkowitz, 2003; Lickona, 1991; Kristjánsson, 2006; Vincent, 1999a, 1999b, 1999c). Placing character education within the framework of pro-social development to enhance the construction of a resilient character able to engage in socially competent and cooperative decision-making, problem-solving, and conflict resolution is also discussed in detail.

There is not only no satisfactory definition of character education but no synthesis of psychological or educational research under a unified theory or practice to guide the development of an appropriate character education initiative to meet the social, emotional, and cognitive needs of children. Therefore, the aim of this literature review is to develop an understanding of what constitutes the “strength of character” that supports protective life outcomes, as well as an understanding of the nature of a character-education programme that facilitates this strength of character within modern pluralistic societies.

2.2 Literature Review Methodology

The sources examined in this review were identified through searching electronic databases. It should be noted that due to the over arching grounded theory nature of this study and the iterative aims of the review, along with the large amount of available sources (e.g., a full text search of the words in Table 2.1 produced 479,779 articles), a fully exhaustive review proved impossible within the limitations of a self-funded research project conducted by one researcher. Despite this limitation, a title search review followed by an exhaustive review of the abstracts provided a sufficient number of sources to provide a grounded understanding of the research position and full awareness of the aims of this review to allow for knowledge to be moved forward in the development of a school-wide initiative to improve the pro-social development of children through teacher-mediated cooperative learning.

Due to the great number of articles returned in a full-text search, an iterative keyword search using the referenced academic databases (table 2.1) was conducted, which led to a systematic mapping of the research literature. A second set of criteria was then applied at the in-depth review stage to focus further on literature that engaged with the social and emotional well-being outcomes of school-aged children.

Table 2.1

Databases and Key Words Used in Title Search

Key word title search							
Database	Character + Education	Adventure + Education	School + Emotional + Learning	Cooperative + Education	Moral + Education	Resilience	Personality + Education
Blackwell Synergy	15	138	3	227	128	205	2
Sage On-Line	25	823	3	941	44	47	12
ECO	52	83	14	29	235	152	13
Article First	318	124	29	725	604	477	59
ERIC	346	1275	16	573	778	142	78
PsycFIRST	34	33	10	26	59	139	12

In order to effectively synthesize the relevant literature, each article was critically evaluated and then grouped according to its relevance to the following six emerging themes, which are based on the overarching aim of developing a holistic understanding of the association between the development of resiliency and school outcomes:

- Resilience in children and its implication for education;
- Social competence and social well-being;
- Cooperative temperament and emotional well-being;
- Personality and its implications for character education;
- Behaviour and patterns of self-regulation;
- Schools as protective factors in life outcomes.

After a title keyword search led to the identification of 9,048 articles as potentially relevant, it was deemed necessary to conduct a combined keyword title search followed by abstract and full-text scans. In this manner 498 articles most appropriate for the final critical review and synthesis were identified.

2.3 Critical Evaluation and Synthesis of the Literature

In the United States, there appears to be no unified definition of *character education* among educational stakeholders, while in the United Kingdom there appears to be no evidence of this term being applied to the school setting by educational stakeholders. However as stated above, Arthur (2005) found that character education is back on the agenda of British educational policy, as the UK Government is advocating the teaching of virtue in schools in order to produce citizens of good character. However, Arthur warns that character education, which is consistently linked to citizenship, moral education, and values education, is fragmented in the United Kingdom, and school staff as well as other educational stakeholders have no unified understanding of the impact that such undefined programming can have on the well-being of school-aged children. It is this uncertainty and fragmentation of theory that leaves many schools adopting the teaching of rules and regulations (e.g., a “moral code”) or social conventions to pupils in a behaviouristic fashion to obtain control for the sake of compliance. This authoritarian style of control, referred to as *behaviour management*, can arguably undermine the development of resiliency, self-regulation, and autonomy (Kohn, 1999).

Despite the absence of a modern theoretical basis (see Leming, 1997; McLaughlin & Halstead, 1999), character, citizenship, moral, values, and social-emotional educational programmes that aim to improve the values and behaviour of children (Elias et al., 1997; Hahn, 1998; Hayden, 1997) have been implemented. Many advocates of models that aim to promote certain types of behaviour have encouraged their implementation due to the “moral crisis” of modern societies (Berkowitz, 2003; Lickona, 1991; Vincent, 1999c; Williams et al., 2005; Cameron, 2008). Unlike other curricula designed to facilitate the child’s ability to reason and solve problems (e.g., maths literacy and science education), the goal of many forms of character, citizenship, moral, and values education appears to

be to encourage children to appreciate and comply with rules and regulations established for control and management of their behaviour by others. This goal of telling children *what* to think differs sharply from that of traditional curricula designed to teach children *how* to think for themselves.

Clearly, the current conceptualization of classroom or school behaviour management does not consider the underlying drive for autonomy or self-actualization. However, aligning the development of character education with a perspective influenced by modern developmental, psychological, and educational theory and research may provide the required framework to construct character education programming designed to develop characteristics associated with pro-social decision making, problem-solving, and conflict resolution. This type of character education programming could facilitate the development of resiliency, self-regulation, and the support necessary for children to reach their full potential and achieve an autonomous ego.

2.4 Key Themes Emerging from the Literature

2.4.1 Historical perspectives on personality and character education. As previously discussed, the proponents of returning character education to the agendas of the US and the UK educational systems argue that there is a “moral crisis” threatening our societies that requires the teaching of values and “moral codes” within our schools. Such a call for the need for character education is not new; the development of the understanding of personality on learning, education, social integration, and mental health has been a concern for almost 100 years. The literature reviewed in this section develops a link between the demands of character education, goal orientation, and motivation by reference to Webb’s (1915a) character-derived unitary constructs and the Big Five Factor Model (FFM; Thurstone, 1934; Hofstee, De Raad, & Goldberg, 1992, 1993) of personality as first synthesized by Deary’s (1996) research. Although this review is by no

means exhaustive, it provides the groundwork for embedding the facilitated development of character traits based on the understanding of the role of personality in educational and life outcomes into the development of an expansive character-education programme.

Attempting to understand the role personality plays in learning and deciding whether character education within the facilitation of personality development and character adaptation can provoke not only confusion but consternation. Confusion is felt by those who keep personality psychology and education at arm's length, preferring to stick to the less controversial aspects of maths, literacy, and science training (e.g., cognitive constructivists), and consternation by those who argue education is not meant to be an enculturational process (see Kottak & Kozaitis, 2003).

Educational research has placed the relationship between education and personality as juxtaposed lines of inquiry close enough for comparison but always remaining separate. Eysenck (1990) argued that because an individual's temperament affects achievement-oriented behaviours, inherited temperament impacts educational achievement. However, Sockett (1980) contested that there is a "moral vacuum" in education, and therefore firmly placed responsibility for developing the moral aspects of personality on families, communities, and schools through character education. Moreover, Sockett (1988) argued that personality-affecting achievement and outcomes can be directly influenced and constructed by the environmental context (i.e., culturally constructed learning environments).

The early psychodynamic perspective on the development of personality, which considered personality the result of powerful inner forces not only responsible for shaping personality but also behaviour (see Freud, 1961), led to a focus on describing personality traits. Webb's (1915b) early work on character and intelligence provided an explicit framework for relating the moral and relational qualities of personality to educational

outcomes. To date, a robust study of this link has not been undertaken in studies associated with the revitalisation of character education. McCloy (1936) argued for the importance of moral qualities in reference to constructs such as honesty, cooperation, and integrity in his work on character education. In both McCloy's (1936) and Webb's (1915a; 1915b) studies, these constructs emerged as important themes in the factor analysis of traits.

Research during this first half of the 20th century investigated non-cognitive (i.e., social and emotional) factors and the importance of their relationship in predicting educational achievement and outcomes. This early work provided valuable insight into constructing a character education programme rooted in socio-emotional factors for promoting pro-social development to enhance social competence and cooperation and in turn decrease anti-social behaviour within school. Later in the 20th century, both Allport (1965) and Eysenck (1967) argued that human behaviour and personality can be viewed within a hierarchical organizational structure. Allport and Odbert (1936:26) described *traits*, defined as features or quantifiable measurements that are inherited and/or environmentally determined, as “generalized and personalized determining tendencies, which are consistent and stable modes of an individual's adjustment to his environment.” On the nature side of the debate, Eysenck (1970, 1990) emphasized the biological/inherited foundation of personality traits. Within trait theory and the research interests associated with non-cognitive factors influencing academic achievement, both Alexander (1935) and Wechsler (1943) highlighted the three temperamental traits of (a) drive, (b) persistence, and (c) interest, which they argued played a key role in certain types of achievement. Cronbach and Snow (1977) argued such factors are likely to contribute to success within the learning environments of formal education. Along this same line of inquiry, Messick (1979) identified background factors, coping styles, values,

motivations, and attitudes that may function as mediating factors in (a) facilitating or disrupting a child's learning, (b) moderating responses to teacher-guided instruction, or (c) moderating responses to the social demands of the learning environment.

Building on Messick's (1979) work, the 1980s saw a revitalized interest in trait research that ultimately led to the development of the FFM of personality (Goldberg, 1981; 1990). The FFM framework in turn led to a renewal of interest in research on performance-related personality traits (Costa & McCrae, 1992, 1993, 1995; Costa et al, 1999; John, 1990; Loehlin et al, 1998; McCrae & Costa, 1985, 1990, 1994, 1996, 2003). Borrowing from Costa and McCrae's (1985, 1992) research, the five factors in the FFM framework are *openness*, *extroversion*, *agreeableness*, *conscientiousness*, *emotional stability*, and *intellect/autonomy*, all of which encompass a broad range of aspects associated with behaviour. These aspects as described by Peabody and Goldberg (1989) represent (a) power and expression of energy; (b) love, acceptance, and peacefulness; (c) task-oriented behaviour; (d) affect and emotional control; and (e) imagination, intellect, and autonomy.

The FFM is of interest because it captures basic dispositional and temperamental factors that help conceptualize personality traits and displayed characteristics relevant to learning in the educational context. When using the FFM to inform character education within a multicultural setting, it is important to consider the universality of the factors and whether they are replicable across cultures. Several studies suggest that the FFM provides a near universal perspective on the nature of human behaviour at the basic and abstract level. Within their systematic review of cross-cultural research, Saucier, Hampson, and Goldberg (2000) found that extroversion, agreeableness, and conscientiousness can be found in most language groups, but neuroticism and openness to new experiences may be less universal.

Although the review of Saucier et al. (2000) suggests variations in how different cultures view the basis of human behaviour, their findings may be more related to language restraints than differences in behaviour. To understand this more fully, it is necessary to consider that the FFM has been replicated in a number of different languages. Several studies have supported the FFM in non-English languages, including Japanese (Bond, Nakazato, & Shiraishi, 1975), German (Borkenau & Ostendorf, 1992), Hebrew (Birenbaum & Montag, 1986), and Spanish (Benet-Martinez & John, 1998). However, these studies have limited generalizability because they relied on measures translated from English. More recent studies that used indigenous trait terms have had mixed results. For example, studies of Germans (Angleitner & Ostendorf, 1989) and Filipinos (Church & Katigbak, 1989) using indigenous terms supported the FFM, but studies of Chinese (Yang & Bond, 1992) supported only two of the five factors. However, De Raad et al. (1992) found a growing body of evidence that people from diverse linguistic and cultural backgrounds view individual differences in personality traits in similar ways. Specifically, De Raad and Van Hock. (1994) found that at least three of the factors, and often all five factors, are frequently found across cultural and linguistic groups. More recently, using an international English language scale, Thompson (2008) demonstrated that the FFM structure is represented across several cultures.

The five factors in the FFM were derived from factor analysis of a large number of self-reports and peer reports on personality-relevant adjectives that reduced many variables into a single factor. Factor analysis, first developed nearly one hundred years ago by Charles Spearman, is a statistical method used to describe variability among observed variables in terms of fewer unobserved variables called *factors*. The disadvantages of this type of analysis are that (a) it relies on a heuristic way of thinking

about a topic such that there can be more than one interpretation of the data (b) it cannot identify causality and (c) it is completely reliant on the data collected (Darlington et al. 1973). The primary advantage of this approach is that it allows for both objective and subjective attributes to be employed in the analysis to identify hidden constructs that may not be evident in direct analysis, providing a means of isolating the underlying factors that explain the data. With this in mind, it is important to understand that the factors are dimensions along a continuum, with most people falling between the extremes.

Many longitudinal studies correlating test scores over time and cross-sectional studies comparing personality levels across different age groups have found a high degree of stability in personality traits during adulthood. More recent studies have indicated that this stability begins in young adulthood after the age of 20 (Soldz & Vaillant, 1999).

Recent meta-analyses of previous studies that indicate that change occurs in all five traits at various points in the lifespan provides evidence for a maturational effect associated with the five traits (McCrae & Costa, 1990,1996; McCrae & John, 1992). In general, levels of agreeableness and conscientiousness tend increase with time, whereas extraversion, neuroticism, and openness tend to decrease (Srivastava, John, Gosling,& Potter, 2003). These findings aid the understanding regarding how educational interventions may enhance the development of pro-social characteristics prior to the onset of early adulthood, when traits become more entrenched and resistant to environmental influences.

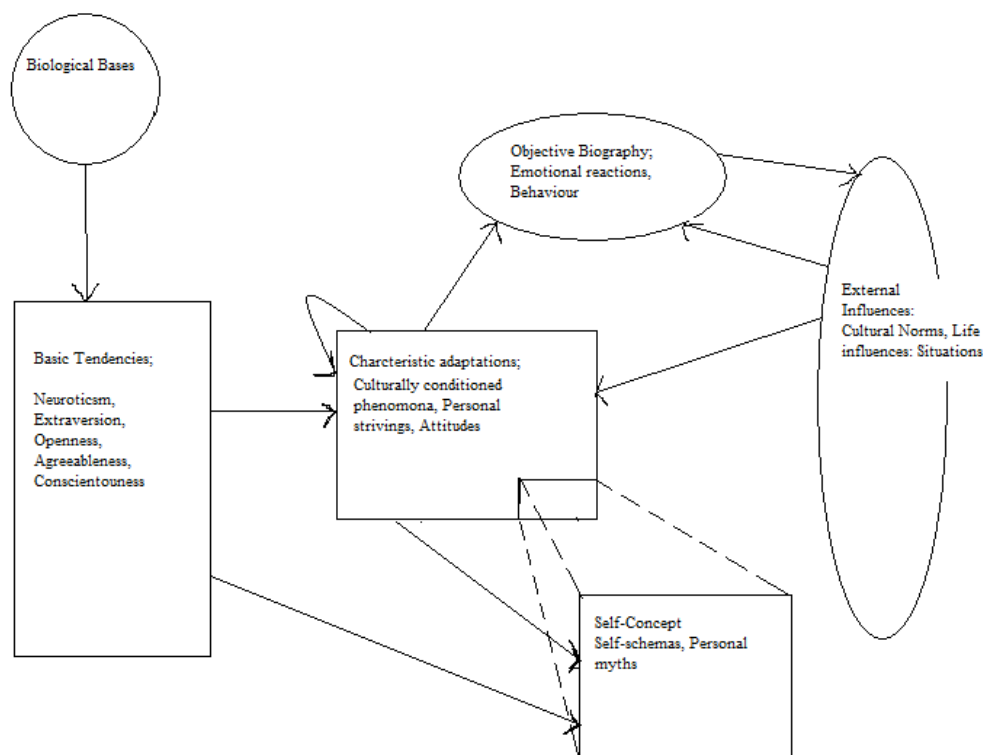
The twin studies of Jang et al. (1996) suggest that all five factors are affected by both heredity and environmental influences in roughly equal proportion. An analysis of the available studies conducted by Bouchard and McGue (2003) found the following

levels of heritability for the FFM traits: openness 57%, extraversion 54%, conscientiousness 49%, neuroticism 48%, and agreeableness 42%. These findings highlight that although traits have a genetic basis, the environment plays a significant role in the final distribution of characteristics. Therefore, because personality traits are susceptible to environmental influences during childhood, characteristic adaptations can be learned through mediated activities designed to enhance pro-social development.

A number of meta-analyses have confirmed the predictive value of the FFM factors across a wide range of behaviours. When Saulsman and Page (2004) examined the relationships between the FFM personality dimensions and each of the 10 personality disorder categories in the *Diagnostic and Statistical Manual of Mental Disorders-IV* (DSM-IV: APA, 2000) across 15 independent samples, they found that each disorder displayed a unique and predictable five-factor profile. Specifically, they found that the most prominent and consistent personality predictors underlying the disorders were positive associations with neuroticism and negative associations with agreeableness (Saulsman & Page, 2004). Based on this finding, learning initiatives that focus on enhancing emotional stability and agreeableness may prove beneficial when developing a framework for meeting the personal, social, and emotional needs of children within the educational setting.

Figure 2.1 depicts Costa and McCrae's (1998) depiction of the biological basis of personality. Costa and McCrae asserted that the factor theory traits are expressions of human genetics that remain uninfluenced by the environment; that the maturational effect is mainly intrinsic; and that social experience (i.e. nurture) has little effect on the changing personality. However, as highlighted above, more recent research has suggested that childhood personality is influenced by environmental influences in more powerful ways than first asserted by early FFM research (Jang et al., 1996).

Considering these more recent findings in relation to Costa and McCrae's (1998) graphical representation, it can be suggested that the dynamic processes indicated in Figure 2.1 are the spaces most open to environmental influences or, more specifically to this study, the avenues for mediated educational interventions designed to influence personality change through characteristic adaptations that promote pro-social development.



Note: arrows represent the dynamic processes which indicate how the environment influences features of a person but leaves the basic traits unchanged.

Figure 2.1. A representation of the FFM of personality (Costa & McCrae, 1998).

2.4.2 Linking personality and character education. The FFM has been criticized not only because of its lack of reliability across cultures but also—and even more so—because of its lack of attention to personality change. As Brody (1988) explained, a way of accounting for change is required within a comprehensive theory of personality. This is particularly true when applying a theory in the investigation of the

relationship between psychological knowledge and educational strategies to promote learner engagement, social competency, and emotional well-being. Therefore, if one views learning as a general processing of information that leads to lasting change (Lindsay & Norman, 1972, 1977) and education as a transformational process that transmits knowledge (Pring, 2004), then it is possible to suggest that the educational context is best situated to transfer, introduce, and adapt cultural and social values.

The concepts that arise from this perspective in relationship to safeguarding that which makes us most human has been and continues to be morality, character, values, accomplishment, and prosperity. As the literature confirms, education in general, and psychology in particular, has espoused this understanding virtually without exception over the past 100 years (see Dewey, 1910, 1991:13; Ragsdale, 1932; Vygotsky, 1978; Bruner, 1960; Cronbach & Snow, 1977; Sacks, 1997; Vincent, 1999a, 1999b; Slavin, 2002). As Dewey (1910) argued, the “natural and native impulses of the young do not agree with the life customs of the group into which they are born; consequently they have to be directed or guided”, or ,as argued here, *enculturated* into the beliefs and values of their family, community, and society. Ragsdale (1932) conceptualized personality in the context of moral education, furthering Dewey’s claim that education acts as a tool of enculturation.

Throughout his theory of the *zone of proximal development* (ZPD), Vygotsky (1978) asserted that at each point of development at the microgenetic level, children choose among multiple trajectories, some positive and some negative. Only through pro-social support will the positive be manifested and the negative curbed or restrained throughout the overall life course of development, which Vygotsky (1987) termed *ontogenetic development*. Vygotsky’s perspective went beyond the perception of a linear or fixed developmental pathway and argued for the importance of support in reaching

one's full potential. This provided an understanding that development was neither fixed nor stagnant (Pennington, 2002).

Bruner (1960) continued this application of psychological understanding to educational practice by emphasizing that “schools must contribute to the social and emotional development of the child if they are to fill the function of education for life in a democratic community and the development of a fruitful family life” (p. 9). Ausubel (1968) argued for the consideration of personality traits that have been shown to influence value assimilation. Following Cronbach’s (1977) earlier work concerning the formation of character, Gage and Berlinger (1991) identified hundreds of traits relevant to teaching, placing honesty at the head of their expansive list. As Vygotsky (1978) first espoused, learning should be recognized to be the major vehicle underpinning and driving child development. Moreover, as argued by the majority of researchers, the identification of traits as predictors of achievement, especially traits with dynamic connotations, emphasizes the possibility of change (Entwistle, 1981; Schmeck, 1988). Therefore, it can be argued that based on the perspective that no trajectory is set or develops in a linear manner and that learning through mediated experiences precedes and facilitates development, education and learning is central in the reaching of the full potential and positive social enculturation of children into the socially complex nature of classrooms, schools, communities and societies. In other words, a child’s character can be developed through learning experiences.

It is argued here that the FFM can provide a framework for understanding the characteristic adaptations that should be promoted within character education. The socio-cultural understanding that learning precedes development provides a sound footing for the pedagogy of a character education programme designed to encourage the character adaptations that support pro-social development. In particular, programming that

promotes “strength of character” will enhance educational and life outcomes for all children and lead to cooperative social cohesion within the school setting.

The majority of proponents of character education believe in the possibility of developing moral agency within individuals, and in turn moral agency within societies. They argue that mediated learning through the explicit education and learning of characteristics such as respect, responsibility, trustworthiness, fairness, honesty, and kindness can provide individuals with the capacity for choice through the development of resiliency, self-regulation, and autonomy. These characteristics can in turn influence change associated with the expression of the personality traits of conscientiousness, agreeableness, and openness to new experiences, as depicted within the FFM of personality.

Cronbach (1977) argued that one focus of educational psychology should be *personal agency* or *autonomy*, often classified as self-regulation, independence, or self-efficacy. When exploring the literature, it becomes evident why the majority of personality constructs in relationship to learning and education are underpinned by the need for autonomy and the drive to reach self-actualization, as the drive for autonomy is a component of the personality trait approach to understanding the development of character. However, even though it can be argued that pro-social behaviour, academic achievement, and character formation are the products of both cognitive and non-cognitive factors, the overarching drive in educational research has become almost exclusively cognitive (Wittrock, 1986). Most of the little research conducted outside a cognitive development focus has been conducted within the framework of a restrictive set of non-cognitive factors. Therefore, there is currently no unified view of the relevance of personality factors in respect to whether and (if so) how they play a role in learning and education, as well as how educators can facilitate the development of character.

2.4.3 Role of personality in learning and education. If education is defined as a purposeful activity that facilitates the construction of knowledge focused on transformation, attachment, achievement, accomplishment, and success in school, family, community, and society, then developing learning opportunities that lead the development of pro-social personality traits is an important issue. Therefore, a review of the current understanding of personality traits provides a sound foundation for informing character education practice within schools to meet the UK's Every Child Matters: Change for Children (DfES, 2004) educational mandate, which was instituted to promote the well-being of children and young people from birth to age 19. This mandate considers character education an approach for meeting the social, emotional, and cognitive needs of the developing child by facilitating programming that supports the mental well-being, autonomous drive for independence, and self-actualization of the individual in support of developing a just and civil society (Goldstein, 1939, 1963; Maslow, 1954, 1971; Lester et al., 1985).

While Spearman (1904) searched for a *general* or *g factor* underlying all traits, Galton (1907) sought to identify the non-cognitive factors that contribute to success in learning within the culturally constructed environments of formal educational settings. Based on their findings, Webb (1915a) argued that personality was constructed of two factors: *intelligence* and *character*. Defining character as “the sum of all personal qualities which are not distinctly intellectual” (Webb, 1915a: 2), Webb went on to produce a rating scale for an extensive list of mental qualities consisting of both cognitive and non-cognitive attributes.

Finding support for Spearman's *g factor*, Webb argued for the existence of a second factor prominent on the character side of mental activity, which he labelled the *wide generality* or *w factor*. Webb (1915b:60) described the *w factor* as “persistence of

motives” or “will”, which he conceptualized as the deliberate volition of the individual that results from the consistency of the individual’s actions. After analysing Webb’s conception of the *w* factor, Spearman (1927:354) wrote, “We are compelled, then, to fall back upon the same double explanation of studiousness as before; a satisfaction in study derived from success of it, this success being due to superior ‘*g*’, and the tendency to take pains in the present for the sake of gains in the future, this tendency being bestowed by ‘*w*’.” Spearman (1927; 359) proposed that the terms *purposive consistency* and *self-control* be used in place of *w*. Upon re-analysis of Webb’s (1915a) data, Garnett (1919) proposed a third factor that he labelled *cleverness* or *c*, which he defined as quickness of mind.

Following this research, the 1930s saw an increase in studies associated with non-cognitive factors related to school success. Arguing that most tasks demanded more than brilliance and that success through ability alone is not the rule but the exception, Ryans (1938; 1939) contended that Webb's *w* factor eventually became *persistence*, which could be more generally recognized as a measure of motivation that is a key aspect in school success (1939:175). Ryans (1939) found a correlation of 0.38 and 0.48 with persistence and academic test scores, and pointed out that other studies have found a correlation between 0.38 and 0.80 in relationship to the rating of one’s persistence and one’s academic test scores. As a correlation is a single number used to describe the degree of relationship between two variables the above numbers indicate a significant relationship between persistence and academic test scores.

Lavin (1965:100) documented the importance of persistence in his writings on personality traits and its relationship to impulse control, arguing that persistence (i.e., impulse control), along with flexibility and agreeableness, is directly related to test anxiety, studiousness, and motivation to achieve. In contrast, after conducting a review

of literature, Eysenck (1970) concluded that persistence is a relatively unitary construct, which holds a valued position within cultures; although he went on to argue that persistence predicts success in life to a significant extent (p. 79). His argument was supported by Duckworth and Seligman (2005), who found that self-regulation is more salient than IQ in predicting educational outcomes.

2.4.4 Character education and personality factors. Research into the early constructs of Spearman's (1904) *g* and Webb's (1915b) *w* have been supplanted by research into temperament. As the FFM gained acceptance (Goldberg, 1990), research into persistence or *w* became overshadowed by research into extroversion and neuroticism. However, such research may be related. Wang (1932) argued that a substantial correlation existed between persistence and both extroversion and neuroticism. McCloy (1936) identified five common character trait clusters within two different datasets that have direct educational relevance, which he termed *conscientiousness*, *dominance-aggression*, *self-esteem*, *respect*, and *originality*. After completing a meta-analysis of the existing data, Wolfe (1942) concluded that among 50 different factors, only seven have been clearly identified in three or more well constructed studies: (a) *w* or will/persistence (Webb, 1915a), (b) *c* or cleverness (Garnett, 1919), (c) *s* or shyness (Guilford & Guilford, 1934, 1936), (d) dominance, (e) *f* or flow of mental activity, (f) *d* or depression, and (g) hypersensitivity.

In the following years, researchers focused on extroversion and neuroticism (i.e., emotional stability) as key factors associated with personality and temperament (Eysenck, 1947, 1952; Costa & McCrae, 1976, 1985; Zuckerman, Kuhlman, & Camac, 1988). As research into extroversion and neuroticism increased, a number of studies investigated their relationship within the educational context and their predictive value in academic achievement (see Bendig, 1957; 1958; 1960; Bendig & Sprague, 1954; Lynn, 1957;

Grooms & Endler, 1960; Eysenck & Cookson, 1969; Eysenck & Eysenck, 1969). In 1970, Eysenck recorded the correlation of persistence with a lack of neuroticism. In relationship to extroversion and its predictive value, several researchers attempted to measure extroversion in contrast to introversion (see Guilford & Braly, 1930; Cattell, 1933, 1965; Eysenck et al., 1985; Thurstone, 1934) finding that after the age of 11 a lean toward an increase in introversion was beneficial in educational outcomes.

As this review of literature highlights, the relationship between personality, learning, and education has a long history, and many of the findings can be linked to what is now known as the FFM of personality. The FFM provides a comprehensive account of traits that fully cover the domain of personality and underscores the importance of recognizing the role that personality plays in predicting educational outcomes. The model is a primary result of the psycholexical approach to personality, which aims at providing a clear depiction of “all aspects of human personality which are or have been of importance, interest or utility” (Cattell, 1943:483). De Raal and Van Hock (1994) argued that even though the psycholexical approach is not primarily focused on the specific areas of interest, such as learning and education, the factors of openness to new experiences, conscientiousness, extroversion, and agreeableness are related to successful learning and academic outcomes. This relationship is supported by the fact that when aspects of traits associated with temperament, character, and intelligence are combined with an understanding of the constructs of personality, they assume a predictive nature in relationship to school, work, family, and life outcomes. Therefore, outcomes associated with positive relationship to school work, family and life are underscored by achievement, the development of an autonomous ego, self-control, and self-actualization.

Educators continue to struggle with the definition of character in the design of moral, values, character, citizenship, personal, social health, and social-emotional

education. The FFM provides a system for establishing the development of positive traits or characteristics, generally considered to be those traits that promote the “strength of character” best situated to overcome the challenges and setbacks of life to excel in school, work, and family. Development of this strength of character leads to development of one of the primary protective factors associated with overcoming risks, stress, and adversity: resilience.

2.4.5 Resilience. This section discusses the research exploring why some children overcome risk factors associated with poor outcomes (e.g., social marginalization, exclusion, school failure, or maladaptive personality disorders) and why others do not. Defining *resilience* as the capacity to overcome obstacles, achieve, and prosper despite adverse life situations and experiences, the value of resiliency and its importance when working with children and providing programming associated with learning and education is discussed.

As discussed in the previous section, much research has focused on the factors and personality traits that lead to the development of psychopathologies or maladaptive social strategies. By understanding why some children do well despite adversity, educators and mental health providers can develop initiatives and strategies to facilitate the development of character that can overcome the adversities associated with modern society. Therefore, understanding resiliency and the personality traits associated with developing resiliency as an organizing concept is important in working with children and adolescents, particularly when developing character education and behaviour-management pedagogy embedded in an instructional discourse to promote the development of in-person regulatory discourse (i.e., self regulation semiotically mediated at the intramental level).

Fonagy and Target (1994) defined the resilient child as one who bounces back after experiencing and enduring adversity and continues to function reasonably well

despite ongoing exposure to risk factors, concluding that “resilience is normal development under difficult circumstances” (Fonagy and Target, 1994: 233). Not only are inborn qualities important in understanding why some children display resiliency but also the social experiences that the child encounters and how these experiences are processed. As school experiences may be more susceptible to professional influences than family influences, schools have the potential to become protective spheres of influence in children’s lives (Fonagy et al, 2002).

2.4.6 Impact of mounting risks on outcomes. Children face a considerable number of risk factors in their daily lives. Rutter (1990) argued that the accumulation of adversity or risks (e.g., abuse in combination with isolation, school disruption, and school/social exclusion) has the greatest negative impact on a child’s life trajectory. Sameroff et al. (1993) added that the accumulation of risk factors may reduce intellectual functioning over time. Although an inborn capacity for resiliency may help children cope with a few serious threats to their functioning, as the number of threats increases, their reserve of resiliency may begin to fail, leading them to experience progressively maladaptive behaviour or negative outcomes. Thus, if *prevention*, defined as the facilitated construction of both intrapersonal resiliency and interpersonal resiliency, becomes standard practice within schools before children are categorized as “at risk” or “statemented” with a disorder, and if schools are seen as a protective factors in children’s lives, both the inner strength of character can be bolstered and risks addressed before they accumulate.

Prevention is particularly important because, as Stattin and Magnusson (1996) found, serious social problems are likely to persist from childhood into adulthood. In a longitudinal study, Werner (1989) found that only one third of children living with poverty, parental mental illness, and family breakdown developed into competent, caring

adults, and Rutter (1985) found that 50% of children who experience severe stress or adversities go on to developmental illness. These difficulties appear to be linked to the extent of the individual's personal resources (i.e., resiliency and the ability to cope) and the number of risks in the individual's life. Although societies appear unable to remove individual risks associated with maladaptive development among children (e.g., parental mental illness, abuse, emotional and material neglect, divorce, and poverty), the development of initiatives to facilitate personal strengths (i.e., resiliency or "strength of character") may reduce the inability to cope, and in turn offset the development of accumulated risk factors associated with the development of childhood mental distress or later development of mental illness. As Stattin and Magnusson (1996) argued, reducing the accumulation of risks seems to reduce the risk of later problems. Even a small change in the individual's trait profile or functioning may lead to a more pro-social, adaptive, and resilient character.

Bowlby (1988) conceived of development as a pathway along which children progress as they grow and develop. The concept of *turning points*, which is prominent within the child development discourse (Clausen, 1975; 1991; 1995), emphasizes that the absence of set trajectories (Pennington, 2002; Pennington and Ozonoff, 1996; Vygotsky, 1978) is particularly beneficial in understanding the responsibility associated with providing the best educational programming for assisting in the development of the "strength of character" necessary for children's emotional and mental well-being. Of course, not all "wrong turns" or situations are as amenable to the same degree of change as others, and not all marginal change may have the same lasting impact. As research by Ferguson, Lynsky, and Howard (1996) suggests, because it is easier to achieve positive change when the level of adversity is slight or moderate, it is most effective to provide preventative programming before risk factors accumulate.

However, this does not mean that children who have already become entrenched in maladaptive behaviour should face further challenges to their well-being by being excluded from schools or marginalized by society. This point is particularly poignant when one considers that these children were likely functioning well or with limited challenges before the inability of society to meet their earlier personal needs led them to develop maladaptive behaviours. This slide toward increased disadvantage is often associated with an escalation in aggressive behaviour, and it is this increase in aggressive behaviour that is being observed within schools. An understanding of aggressive behaviour is therefore necessary to continue this discussion of ameliorating risk factors through the facilitated development of resiliency.

2.4.7 Anti-social and aggressive behaviour. Researchers have found that early childhood aggression and disruptive behaviours are major risk factors associated with social maladjustment and can be seen as being predictive of poor outcomes later in life (see Cowen, 1994; Walker et al., 1995; Rutter, 1997, Rutter et al, 1999). Further research (Loeber et al., 1986; Patterson et al, 1992; Hinshaw & Anderson, 1996) indicates that anti-social behaviour in its extreme forms (e.g., oppositional defiant disorder, conduct disorder, emotional behavioural disorder, and severe emotional disorder) tends to remain stable throughout childhood and adolescence. As Walker and Rankin (1983) pointed out, because disruptive acting-out behaviour is especially aversive to classroom teachers, this behaviour places students at serious risk of school sanctions, resulting in the added risk factor of entrenchment in the path of maladjustment. Coie et al. (1990) found that these children are also susceptible to the added burdens of rejection by their peers, poor academic and social functioning, emotional instability, inattention, and impulsivity, as well as truancy (Oswald & Suss, 1994).

However, not all children who display early aggressive or disruptive behaviours continue to display these behaviours in later years. McFadyen-Ketchum et al. (1996) found that only between 25 to 50% of children who display early anti-social behaviour continue this behaviour one to three years after initial disruptive patterns are documented. Interestingly, McFadyen-Ketchum et al. (1996) found that children rated negatively by their teachers in both behaviour and cognitive domains yet managed to remain popular with their peers were able to overcome negative early characteristics, inferring that social competence (i.e., the ability to maintain friendships among peers) may play a role in the ability to overcome early adversity.

2.4.8 Role of resilience in overcoming negative influences. As previously discussed, the ability to overcome adversity is often referred to as resilience. Zimmerman and Arunkumar (1994:4) describe resiliency as “those factors and processes that interrupt the trajectory from risk to problem behaviour or psychopathology and thereby resulting in adaptive outcomes even in the presence of challenging and threatening circumstances”. Garmezy (1983) categorized resiliency or protective factors into *in-person factors*, such as positive temperament and social competence, and *community factors*, such as positive relationships with significant adults and positive school environments. For the purposes of this research, in-person factors are referred to as aspects of intra-personal resiliency and community factors as aspects of interpersonal resiliency.

Hawkins et al. (1985) affirmed the importance of *bonding* (i.e., attachment and commitment) to family, school, and community as a protective factor in children’s lives. According to Bowlby (1988), the development of a “secure base” that encourages the exploration of the wider world best occurs through the development of secure attachments. Although it may be most desirable for young people to develop secure attachments with their primary attachment figures (e.g., parents, siblings, and

grandparents), this is not always possible. In the context of character education programmes, it is important to realize that secure attachments with secondary or even tertiary attachment figures (e.g., teachers, coaches, and mentors) may play a significant protective role in the lives of children. As Trinke and Batholomew (1997) pointed out, children can develop a hierarchy of attachment relationships, so even children who have secure attachments with their primary attachment figures may benefit further, especially in times of adversity, by developing a broad base (i.e., multiple positive relationships) of secure attachments. Indeed, as Werner and Smith (1992:209) stated, ‘the life stories of the resilient youngster now grown into adulthood teach us that competence, confidence and caring can flourish, even under adverse circumstances, *if* (this author’s emphasis) children encounter persons who provide them with the secure basis for the development of trust, autonomy and initiative.’

Wang et al. (1994) contended that success in school and other life accomplishments can offset a negative trajectory “brought about by early traits, conditions, and experience” (p. 46). Therefore, in determining why some children overcome adversity, attention may best be focused on intra-personal traits, particularly the three FFM traits of openness to new experience, conscientiousness, and agreeableness, as well as the school’s role in providing interpersonal support to develop strength of character. A considerable body of research also suggests that the abilities to resolve conflict and achieve academic success are key protective factors in a child's life (Hawkins & Lishner, 1987; Hawkins et al., 1985; Hawkins et al., 1991; Werner, 1982, 1987).

Lazyrus and Folkman (1984) identified *social support*, defined by Caplan (1974) as a range of significant interpersonal relationships that facilitates psychological and social functions, as a critical factor in enhancing an individual’s ability to cope with life

stresses. Schools and teachers are particularly well situated to fill gaps in these relationships, thereby facilitating the development of social competence and cooperative skills necessary to develop and maintain the ability to access social support. Within the literature addressing resilience, a major protective factor is attachment to and receipt of support from at least one significant adult (Garmezy, 1993; Garmezy et al, 1984; Rutter, 1985; Werner, 1989). Therefore, it appears that schools that develop a warm environment with authentically caring adults are well situated to provide support and a point of attachment that may act as a protective factor in the lives of children. This support can provide children with a strong sense of belonging, which they may lack elsewhere, and lead to their secure attachment to both the school and supportive adults.

Cernkovich and Giodano (1992) argued that the more secure the attachment that children develop with the school, the higher their aspirations, grades, and involvement, whereas lack of attachment to school tends to increase delinquency. Morrison et al. (1997) found that school attachment is positively correlated with academic achievement and negatively correlated with anti-social or disruptive behaviour in school. As argued by Morrison et al. (1992) and supported by Cernkovich and Giordano (1992), Hawkins and Weiss, (1995), and Ladd, (1990), children who experience stress while attending school experience further threats to achievement and well-being. This threat is either heightened or alleviated by their ability to access the social support required or the ability of the school to meet the needs of these children and provide the social support required.

2.4.9 Role of character education in resiliency. As the research above indicates, bonding with significant others and the school may act as a protective factor for children, helping them build the strength of character required to overcome the challenges of life. However, children face many stresses outside of the potentially protective school environment and away from potentially supportive teachers and school staff. Therefore,

it is important that educators, psychologists, mental health professionals, and other service providers consider how schools and teachers can develop intra-personal characteristics that promote and foster resilience and strength of character.

Recognizing that the development of these characteristics is of paramount importance if the needs of all children are to be addressed in a constructive and holistic manner, this section describes the constructs relevant to character education. In developing a programme of direct instruction (i.e., mediated learning) encompassing the FFM components of personality so that productive character adaptations can be internalized, it is helpful to expand directly on Webb's (1915a) and Deary's (1996) mapping work.

2.4.10 Role of personality in learning. Few data are available regarding the personality constructs relevant to learning, education, and the development of "strength of character". Therefore, it is necessary to [re]conceptualize educational initiatives in reference to developing pro-social behaviour and learner engagement. The best way forward is to consider how personality, as perceived within the FFM, can inform character education practice, based on research that indicates that it is not only possible but beneficial for all learners and teachers to develop certain skills and character adaptations associated with pro-social behaviour and effective learning (see White, 2007; White & Dinos 2010; White & Warfa, in press). However, before discussing each factor in the FFM and its importance in character education, it is necessary to discuss the application of the socio-cultural theory directly to the adaptation of intra-personal characteristics.

2.4.11 Application of socio-cultural theory to personality factors and character adaptation.

2.4.11.1 Conscientiousness. Goldberg (1992) defined conscientiousness, a key personality trait in the field of education and learning, as the drive to achieve, and described the habits and attitudes associated with this drive as organization, efficiency, practicality, and steadiness. Sockett (1988) agreed that conscientiousness is a central tenet to most character education discourse, reflecting the work of Webb (1915b), Ryans (1932), and others previously discussed.

2.4.11.2 Agreeableness. As argued by Hogan (1983), the trait of agreeableness assists individuals in working with others and overcoming disputes that arise within collective settings. Acts of kindness that promote cooperation and trustworthiness that lead to effective interpersonal relationships are encompassed within the trait of agreeableness. As argued by Bandura et al, (1963), agreeableness may be a key factor in promoting effective learning and inclusion within the socially charged milieu of formal education. As the review indicates more than seventy years ago McCloy (1936) found that character education that promotes the development of trustworthiness, respect, and sportsmanship promotes what is now seen as agreeableness and conscientiousness as perceived within the current understanding of personality as defined by the FFM. Kozulin's (1990) argument that cooperative learning through mediated experiences is beneficial in developing attitudes associated with civil society was affirmed by Stevens and Slavin (1995), who found that cooperative learning environments have significant positive influences on school achievement. Moreover, the teaching of pro-social conflict-resolution skills through restorative processes fosters empathy and forgiveness in children, which in turn increases their levels of cooperative understanding and agreeableness.

2.4.11.3 Openness. According to Rocklin (1994), the trait of openness is similar to what has more recently been referred to as *typical intellectual engagement* (TIE). TIE

being centred around intelligence as a typical performance parameter with high scores relating to (1) an expressed desire to engage and understand the world, (2) an interest in a wide variety of things, (3) a preference for a complete understanding of a complex problem and (4) a general need to know (Ackerman & Heggestad, 1997; Goff & Ackerman, 1994). Although TIE is a broader construct than the construct of openness within the FFM, it can be argued that it represents personality characteristics that enhance the ability to be open to new experiences. Ackerman and Goff (1994) argued that TIE is associated with the variance seen within school performance. In other words, one's degree of openness to new experiences is indicative of one's TIE and thus has a direct impact on learning outcomes. Winne (1995) found a strong connection between TIE and self-regulatory activities in relationship to educational outcomes, and Rocklin (1994) as well as Winne (1995) found that explicitly teaching character traits can enhance the actions, routines, habits, and attitudes that promote learner engagement. Therefore, within the character education model of behaviour management, it can be argued that mediated learning activities that develop respect, responsibility, trustworthiness, and kindness best enhance learner engagement and the development of a mastery-oriented approach to learning.

2.4.11.4 Extroversion. According to the FFM framework, an emotionally stable extrovert assumes leadership and is responsive and sociable, whereas an emotionally unstable extrovert (i.e., a neurotic extrovert) is touchy, aggressive, restless, and impulsive. Whereas the emotionally stable introvert is calm, even-tempered, reliable, and thoughtful, the emotionally unstable introvert is moody, anxious, rigid, and pessimistic. Both Broadbent (1958) and Furneaux (1957) found that university students who perform well academically score low on the rating of extroversion, a finding subsequently supported by Astington (1960), Child (1964, 1990), Lynn (1959), and Savage (1992). Eysenck and

Cookson (1969) found that only young children, generally those under the age of 12, who have a high level of extroversion are more proficient academically than introverted children. Eysenck (1992:137) argued that these findings indicate that children scoring high in extroversion “socialize instead of concentrating on work, seek non-academic outlets for energies, and have difficulty concentrating.” Similarly, Goff and Ackerman (1992) found a negative correlation between extroversion in both secondary school and undergraduate university students and academic achievement as indicated by grade point average. Therefore, it can be argued that children must develop a degree of self-regulation to concentrate on work when required and forgo their need to socialize to enhance their ability to concentrate on tasks at hand.

2.4.11.5 Neuroticism. Working from Eysenck’s early view in which neuroticism is seen to be directly related to emotional stability several studies (Eysenck, 1990; Finlayson, 1970; Lynn & Gordon, 1961; Savage, 1962) indicate that the correlation between neuroticism and academic attainment becomes more prevalent as individuals age, with a turning point occurring around 13 years of age. Although these studies relied on small sample sizes, calling for verification of their findings through replication, they provide adequate data with which to examine how emotional stability in particular and personality traits in general relate to emotional well-being and educational outcomes.

As there is considerable debate (Zen et al, 2004; Arthur, 2005; Berkowitz, 2002) in reference to a schools’ role in developing the character of children, many researchers refer back to Eysenck’s (1990) insights into possible ways of capitalizing on personality factors beneficial within the socially complex setting of formal education. Specifically, Eysenck highlighted the importance of two primary interactions: the intersection between personality and motivation and the interaction between teaching methods and personality. Research into the relationship between personality and motivation (see Dierne & Dweck,

1978; Dweck, 1975, 1986, 1999; Dweck & Repucci, 1973; Dweck & Legget, 1988) has identified the maladaptive response of *helplessness* and the more adaptive response of *mastery orientation*. Whereas helplessness is characterized by an avoidance of challenge and a decrease in performance when one is faced with obstacles, adversity, or stress, mastery orientation is characterized by the seeking out of challenging tasks and the maintenance of effort to complete these tasks even when one fails at first to overcome obstacles, adversity, or stress (Dienre & Dweck, 1978).

Paris and Byrnes (1989) argued that the character traits of an effective learner are self-regulation, emotional stability, and slight introversion. In other words, an emotionally stable and slightly introverted personality is able to enact the self-regulated behaviour best suited for meeting the demands of formal education. Additional research (see Bandura et al, 1963; Zimmerman 1990, Perkins & Zimmerman, 1995) identified diligence, resourcefulness, autonomy, and self-efficacy as the specific characteristics of the self-regulated learner.

2.5 Summary of the Role of Personality in Education

As highlighted in this literature review, personality traits influence educational outcomes and are predictive factors in life outcomes, emotional well-being, and the ability to overcome adversity. The FFM provides an understanding of personality development that aids the development of character education programming. Having determined that personality is an important factor in education and learning, this study now turns to consideration of the development of effective character education programming.

Although the research indicates that there is a bi-directional influence between educational outcomes and emotional and mental well-being, this bi-directional relationship has been underappreciated in the current drive to reach targets based solely

on academic achievement. Equally overlooked have been the traits identified as beneficial to the development of both educational outcomes and resiliency, which have been found to be similar. Within the FFM, the traits of conscientiousness, agreeableness, and openness are particularly beneficial in developing the strength of character necessary to achieve positive educational outcomes and to facilitate the strengthening of intrapersonal resiliency, the latter of which is necessary for maintaining educational achievement when exposed to risk. Whereas *intrapersonal resiliency* is defined for here as the ability to access in-person resources to recover after experiencing adversity, *interpersonal resiliency* is defined here as the ability to access community resources that provide support when intrapersonal resources become overwhelmed. It has been shown throughout this literature review that intra-personal resiliency as reflected in the character traits of respect, responsibility, trustworthiness, and kindness enhances social competence and skills related to rational and ethical decision-making, problem-solving, and pro-social conflict resolution, all of which are necessary to access and benefit from school-developed interpersonal resiliency.

The literature indicates that resiliency underpinned by the development of social competence and a cooperative disposition has been shown beneficial in aiding children as they progress through the challenges associated with achieving academically, attaining emotional well-being, and navigating the challenges of modernity. As research indicates, resiliency is a dynamic state that may be attainable by all if the appropriate support is provided by both significant others and the community (in this study, the school community). The school environment is well situated to become a significant protective factor in the lives of children if it offers programming developed to meet the needs of the whole child and access to authentically caring adults for support, as children will only

recognize the fulfilment of their needs through the development of strong and trusting relationships.

Chapter 3: Designing the Interventions

This chapter provides a review of the literature associated with the development of each intervention investigated during this study. This section of the of the literature review is required to provide a firm base in research for the design of each intervention and the advancement of the investigation. Therefore, after determining the role that personality, social competence, cooperation, and resiliency play in educational and life outcomes, the discussion now turns to consideration of the main question of this study:

- Can a holistic educational initiative be designed, effectively implemented in schools, and facilitated by teaching staff to enhance pro-social development and decrease anti-social behaviour among school-aged children?

To address this question, a further question must be asked:

- What type of educational initiative?

The first type of educational imitative examined in this study was a multi-component outdoor-education programme.

3.1 Situating the investigation.

Cross-cultural research has shown that young people's anti-social behaviour and conduct problems are very costly to society (Jones, Dodge, Foster, & Nie, 2002; Brugman et al, 2003; Kokko et al, 2006). In addition, research has increasingly highlighted that a major source of teacher discontent in the United Kingdom is related to problematic child behaviour, which has serious ramifications for the quality of teaching and learning within

schools (Macbeath et al., 2004; OFSTED, 2005). In planning a whole-school behaviour-support programme to address these issues, a review of the epidemiological research is required to understand the role of schools in addressing underlying mental health issues and pupil behaviour, particularly as mental health issues may not be appropriately addressed through a purely rule-based policy of behaviour compliance using extrinsic rewards and sanctions.

Epidemiological studies indicate that 12% of all children aged 5 to 16 in the United Kingdom are likely to be experiencing a mental health problem (Mental Health Foundation, 1999; British Medical Association, 2006) and that 20% of children and adolescents in the United States are experiencing symptoms of mental health disorders as defined by the DSM-IV (American Psychiatric Association, 2000). In the United States, 5% of all children between the ages of 5 and 18 display mental health disorder symptoms severe enough to impair their ability to function effectively (US Department of Health Services, 1999). Among the 20 to 30% of children under the age of 15 in the United Kingdom likely to display behavioural problems (see Metzger et al., 2000; Office for National statistics, 2004), roughly half display symptoms of conduct disorder, and 10 to 12% of all UK children between the ages of 5 and 15 will experience clinically defined mental health problems.

The forecast of “increases in many psychosocial disorders among young people” by Rutter et al. (1989:89) was confirmed by Atkinson & Hornsby (2002:3), who indicated that the majority of research to date suggests “increasing numbers of children who are experiencing mental health problems.” These unresolved problems have serious implications for both individuals and society, including negative physical, emotional, and social consequences and costs (Bell & Jenkins, 1993; Fitzpatrick & Boldizar, 1993; Schwab-Stone et al., 1995). These findings suggest that schools will continue to face

mental health challenges and therefore need to develop and implement interventions to address these challenges effectively. A likely focus for such programming is implementing mediated-learning activities designed to facilitate the development of self-regulation, social competency, and a cooperative disposition to help children acquire self-regulating strategies to effectively engage in the daily social interactions of the school and the broader community. Any school-wide approach to positive behavioural support must address children's needs within an inclusive and holistic framework that considers the underlying mental health needs of children experiencing difficulties.

As the above research indicates, 10% of UK children and 20% of US children are likely to experience significant mental health problems that will impact on their ability to function effectively within the socially charged school environment. This means that in any given school year, a teacher in a typical US classroom of 25 children may have five children experiencing clinically significant problems coping with the daily challenges of life, and a teacher in a typical UK classroom of 30 pupils may have three pupils experiencing clinically defined mental health problems. Although the above difference in the prevalence of these problems between the United States and the United Kingdom is likely to be more related to diagnostic than inherent differences, these problems negatively impact both countries in the same manner and are likely not to be addressed by the sanction-and-reward system of behaviour management found in both countries (Arthur, 2005; Vincent, 1999a), a system that may lead children to experience marginalization and exclusion from the school community. Indeed, 55% of all exclusions in the United Kingdom in 2004 were of pupils with special needs, an increase of 10% from 2000 (Finney, 2006).

Children and adolescents experiencing mental health issues often act out through engaging in anti-social behaviours that exact a variety of costs to communities, especially

when these problems go unresolved and persist from childhood into adulthood (Jones et al., 2002; Moffitt & Caspi, 2001). Research has found (Cairns, Cairns, & Neckerman, 1989; Loeber & Stouthamer-Loeber, 1986) that children and adolescents with conduct problems who engage in anti-social behaviours are more likely to leave school without any qualifications; misuse harmful substances; and, as adults, are more likely to be unemployed, divorced, and manifest a range of psychiatric problems. Clearly, the promotion of social competence and cooperative engagement in pro-social decision-making, problem-solving, and conflict resolution should be a primary objective of policy makers, community leaders, mental health practitioners, and educators (see NCLB, 2003; Every Child Matters, 2003; Children's Act, 2004; DfES, 2005).

3.1.1 Child and adolescent pro-social development as a protective factor.

Recent years have seen a growing interest in understanding the role of pro-social conduct in promoting good mental health (Finney, 2006). Pursuing this interest, several studies have considered the development of pro-social standards of conduct among children and adolescents to offset the negative impacts of engaging in anti-social behaviours. Pro-social and anti-social conduct have been defined, on one hand, as the opposite ends of a single continuum, and, on the other hand, as independent characteristics of the individual (see Eisenberg & Fabes, 1998; Eisenberg et al, 1996; Eron & Huesman, 1984; Koko & Pulkkinen, 2000; Pulkkinen, 1984; Shiner, 1998; Shiner & Caspi, 2003; Tremblay et al, 1991).

Over the past 30 years, research into anti-social conduct and research into pro-social conduct have run parallel courses, with the developmental psychologists who investigate psychopathology focusing their attention on anti-social conduct and social developmental psychologists investigating pro-social conduct (Krueger, Hicks, & McCue, 2001). Over the years, the dichotomy between these fields broke down as researchers in

both fields began to include descriptive models of individual differences and the development of pro-sociality and anti-sociality (see Block & Martin, 1955; Feshbach & Feshbach, 1969). Pro-sociality is defined for the purpose of this study as the embracing of attitudes and routines that support and enhance positive behaviour and development, while anti-sociality is being defined as the development of attitudes and routines that support the socialization of children into anti-social perspectives and behaviour.

More recent longitudinal (see Eisenberg et al., 1998; Hastings et al., 2000; Hitchcock & Hughes, 1995; Howes & Phillipsen, 1998; Hughes & Dunn, 2000; Tremblay et al., 1991) and cross-sectional studies (see Crick & Grotpeter, 1995; Wyatt & Carb, 2002) have found links between externalising behaviour and pro-social conduct, leading to further investigations that indicate that both anti-social and pro-social conduct are associated with individual characteristics. An important aspect of this research has been investigating how pro-social conduct protects individuals against the harmful effects of anti-social conduct. Several studies have shown that a pro-social tendency toward honesty, trustworthiness, and cooperation can protect children against peer rejection (see Bierman and Radin, 1997; Bierman & Smoot, 1991), discourage criminal behaviour (Pulkkinen & Tremblay, 1992), and provide a buffer against persistent unemployment during their adult years (Kokko & Pulkinen, 2000; Pulkinen & Tremblay, 1992). Considering these findings, it may be beneficial to consider how mediated- learning activities delivered through the educational system or other culturally constructed environments (e.g., sport clubs, after-school clubs, or youth detention centres) can influence the development of pro-social attitudes and conduct and pro-social personality traits.

3.1.2 Role of personality in pro-social conduct. Research into individual personality differences is generally conducted using either a person-centred or variable-

centred approach. Whereas the person-centred approach studies “types” of individuals and the patterns of characteristics within individuals, the variable-centred approach studies the differences in dimensions across individuals, with variables being the analytical units of study, as they are in the FFM. Although there may be an infinite variety of individual characteristics, there appears to be a small number of frequently observed “typical patterns” at the universal level (Bergman & Magnusson, 1997). By investigating the profiles associated with these observable typical patterns, person-centred investigations have obtained a robust body of information beyond that available from studies that focus on investigating variables separately (Bergman, 2001).

However, debate regarding the use of these approaches remains. Although Asendorpf et al. (2002) argued that there has been a renewed interest in person-centred approaches to understanding the role of personality in child and adolescent behaviours, Hofstee (2002) argued that the person-centred and variable-centred approaches should be seen as complementary, not contradictory, avenues of investigation.

Considering these arguments and in line with a growing consensus in personality research (McCrae & Costa, 2003), the types addressed in this study for understanding the role of personality and character adaptation in the development of tendencies toward pro-social standards of conduct have been situated within the FFM. As the FFM model identifies traits most relevant to the development of pro-social standards of conduct that underpin the development of pro-sociality and offset the development of anti-sociality it provides an avenue for furthering the investigation within a defined framework of personality. *Pro-social standards of conduct* are defined here as those encompassing pro-social reasoning and pro-social behaviour, with pro-social behaviour encompassing those actions that involve respecting self and others, such as acts of responsibility, sharing, comforting, or helping. *Pro-social reasoning* refers to the use of rational and ethical

decision-making, problem-solving, and conflict resolution to balance the satisfaction of one's needs with those of others within a context in which rules, regulations, laws, punishment, rewards, authorities, formal obligations, and other extrinsic criteria are irrelevant or de-emphasized (Eisenberg, 1979).

According to Eisenberg's theory of pro-social development (Eisenberg, 1982; Eisenberg & Miller, 1992), children's ability to engage in pro-social conflict resolution is developed during five developmental stages, with each stage encompassing a more advanced cognitive structure of social understanding than the prior stage. Whereas children focus on the self-oriented consequences of their behaviour at a low level of pro-social conflict resolution, they can consider the perspectives of others and internalised values at a higher level.

Considering the above referenced research, the first aim of the present study was examining the relationship between personality traits, character adaptations, and pro-social standards of conduct in the development of pro-sociality. The second aim was to examine the relationship between mediated cooperative learning and children's development of pro-social standards of conduct, reasoning, problem-solving, and conflict resolution through modest experiments and multiple case-study investigations.

3.1.3 Role of mediated cooperative learning in pro-social behaviour. When schools and teachers are pressured to take increased responsibility for maintaining standards, they tend to become more controlling, leading to a reduction in learner autonomy and potentially negative effects on learner behaviour (Ryan, Connell, & Deci, 1985). Oster (2002) found that schools need to nurture a sense of rightness and responsibilities so that pupils internalize and appreciate the need for responsible (i.e., pro-social) behaviour. With this in mind and borrowing from child-rearing research, two important themes have been identified as having key roles in the construction of pro-

social development: support and control (Eisenberg & Mussen, 1989; Hoffmann, 1975; Staub, 1979; Maccoby & Martin, 1983). These two factors play key roles in helping children become socialized and enculturated into pro-social standards of conduct, reasoning, problem-solving, and conflict resolution; that is, into attitudes and behaviours that reflect pro-sociality.

Rollins and Thomas (1979:320) defined support as “behaviour manifested by parents or other significant adults (i.e. teachers, mentors, coaches etc...) that helps the child feel comfortable in the presence of the parent (or significant care provider) and confirms in the child's mind that [s]he is basically accepted and approved of as a person by the parent (significant care provider).” Staub (1979) stated that it is possible to distinguish among the radically different aspects of support (e.g., warmth, nurturance, and responsiveness) and in turn how these support mechanisms promote positive outcomes. Clarke-Stewart (1973) asserted that the empirical data indicate that all these aspects of support are closely related and all have similarly positive effects on child development (Grusec & Lytton, 1988).

The second dimension important in a child's acquisition of pro-sociality is control. Different relationships have been found to exist between control and child developmental outcomes. Several studies have highlighted the negative aspects of control or *power assertion* (Hoffman, 1970), which is controlling behaviour through reliance on external controls or sanctions that provide recourse to the removal of privileges and/or material resources and the use of verbal threats and/or physical punishment (Hoffman, 1970). Baumind (1971:62) described the reliance on external sanctions to enforce rules as an *authoritarian* child-rearing style.

From a humanistic perspective, control can be exercised more democratically by using less coercive extrinsic methods that focus on the development of self-regulation

instead of external control by authority figures. Such self-regulation can be developed by pointing out the harmful implications of the child's actions on others; discussing the advantages of pro-social conduct; providing clear definitions of expected pro-social behaviour; defining responsibilities; and maintaining high expectations for adherence to pro-social standards of conduct, reasoning, problem-solving, and conflict resolution. It is suggested here that parents and teachers can assist children's development toward the independence of self-regulation through shifting focus from the use of external controls (i.e., rewards and sanctions) to the development of intrinsically embraced self-regulation through the delivery of character- development based learning experiences. Baumrind (1991:62) termed the progression from external control emphasizing compliance toward the development of self-regulated pro-social development as *authoritative control*, a form of control maintained by confident, knowledgeable adults facilitating mediated cooperative-learning activities until pro-social standards of conduct, reasoning, problem-solving, and conflict resolution are internalized (Baumrind, 1971; 1991).

Research has indicated a positive relationship between support and pro-social behaviour (see Feshbach, 1975 eighth; Hoffman, 1975; Mussen et al., 1970), authoritative control, and pro-social behaviour (Feshbach, 1975; Grusec, 1982) and a negative relationship between authoritarian control and pro-social conduct (Hoffman, 1975). What emerges from the research above is the indication that children's pro-social development is enhanced through providing caring support and maintaining fair, firm, and consistent authoritative control until a child internalizes the characteristics that underpin pro-social conduct, reasoning, problem-solving, and conflict resolution. Such authoritative support begins as a unidirectional process providing the foundation for the development of pro-social cooperation and social competence that eventually yields to a bidirectional

exchange of discourse that shapes and reshapes both regulative and instructional discourse.

Building on the research of Solomon et al. (1995, 1996, and 1997), caring support and firm and consistent authoritative control is seen here to be most effectively established within schools when the school ethos is underpinned by a sense of community. Solomon et al. (1996:720) defined a *community* as “a social organization whose members know, care about and support one another, have common goals in the sense of shared purpose, and to which they actively contribute and feel personally committed.” It is argued here that how children perceive the ethical atmosphere of their school community affects their attitudes and behaviour in and around the school community. In studies linking moral perception to behaviour, perception has been shown to be the first step in processing information (Gielen, 1991; Rest et al., 1999). In other words, the way that children perceive the morality of their environment directly affects their attitudes and understanding of expected behaviour. Therefore, the behaviour of children is directly linked to their perception of what is acceptable. Several meta-analyses of studies that investigated the relationship between moral competence and anti-social/delinquent behaviour (see Blasi, 1980; Nelson et al., 1990; Smetana & Braeges, 1990) indicate that the development of moral judgement in young offenders lags behind that of their non-offending peers.

These findings suggest that processes that support the acquisition of *moral competence*, defined within this study as the acquisition of skills related to pro-social decision-making, problem-solving, and conflict resolution under the guidance of knowledgeable adults exercising authoritative control until pro-social characteristics are internalized, is likely to lead to the development of pro-sociality underpinned by the development of social competence and a cooperative disposition. It is here argued that

mediated activity-based cooperative learning (MABCL) guided by knowledgeable adults or more competent peers designed to develop social competence and a cooperative disposition may help children develop the resilience necessary to overcome life challenges and engage in pro-social behaviours in a variety of contexts. It is further asserted that resilience is a key factor in maintaining tendencies and characteristics that support and maintain pro-social conduct and the skills necessary for effective decision-making, problem-solving, and conflict resolution. This resilience, underpinned by social competence and a cooperative disposition, is particularly important for children experiencing mental disorders and other risk factors, such as living with parents experiencing mental health issues, poverty, and learning disorders.

What emerges from the above literature is that there is a robust theoretical foundation that provides support for the development of resilience and self-regulated, pro-social standards of conduct through the delivery of mediated cooperative-learning experiences (MCLEs). Therefore, the literature guides this study to advocate for the development of a character education programme that delivers learning opportunities promoting social competency, cooperative learning, and learner engagement within the culturally constructed environment of the school setting. Through the development of social competence, a cooperative disposition, and resilience, “a strength of character” that provides a supportive framework for maintaining good mental health even in the face of mounting risks may be developed.

Considering that the school is the primary environment in which the majority of children must negotiate and function, a socio-cultural approach to understanding personality, behaviour, and pro-social development is helpful in developing school-based positive pro-social development initiatives. Specifically, such initiatives would promote positive educational and life outcomes and assist schools in breaking the cycle of

persistent and chronic anti-social behaviour among children that, if left unresolved, can lead to negative outcomes in adulthood. Such an initiative is particularly important for children experiencing mental health difficulties associated with negotiating social environments whilst experiencing conduct disorder, oppositional defiant disorder, or other mental health difficulties that undermine social competence and cooperation.

According to Vygotsky (1978), “Learning is a shared-joint process in a responsive social context.” Accepting Vygotsky’s description, it is argued here that learning facilitated within a responsive and supportive environment can promote the development of pro-sociality and overcome developmental trajectories that lead to mental health distress and undermine positive educational and life outcomes.

3.1.4 A socio-cultural perspective on behaviour management and pro-social development. As schools are social spaces, learning within formal education is a social process; pupils do not learn in isolation but in cooperation with their teachers, classmates, and other school personnel. As such, the social and emotional aspects of development play a key role in educational outcomes, and these aspects must be addressed by schools (Zins et al., 2004). Research indicates that pro-social behaviour within classrooms is linked to positive educational (Diperna & Elliott, 1999; Feshbach & Feshbach, 1987; Haynes, Ben-Avie, & Ensign, 2003; Pasi, 2001; Zins et al., 2004) and life outcomes (Cairns, Cairns, & Neckerman, 1989; Jones et al., 2002; Moffitt & Caspi, 2001; Loeber & Stouthamer-Loeber, 1986). To attend to these important aspects of educational outcomes, a coherent and comprehensive model for positive behavioural support that facilitates effective learning experiences and the development of pro-sociality within the classroom and throughout the school is needed.

3.1.5 A socio-cultural perspective on enhancing pro-social behaviour and decreasing anti-social behaviour. The socio-cultural learning model argues that culture

is the primary factor in the development of the individual. As such, children's learning maturation is a product of the culture in which they are born, including the culture of their family and those into which they migrate and inhabit, including the culture of the school, community, and society. The socio-cultural perspective considers context as important to teaching and learning (Colbert, 2000), arguing that there is interdependence between the individual, the environment, and life events, where each shapes and gives meaning to the others. Because these elements cannot be analyzed out of the context in which they occur (Boulder, 2000), this perspective promotes a "conceptual shift from individual to socio-cultural activity as the unit of analysis to move from cognition as the property of individuals to thinking of cognition as an aspect of human socio-cultural activity" (Rogoff, 1998). The socio-cultural perspective sees learning as a "shared interaction between individuals" shaped and influenced by the historical customs and artefacts of the individual's social group.

Goldberg (2000) argues that all development is embedded in a specific cultural context that influences the outward behaviour and inward mental processes of each individual. As these interactions are bidirectional, the culture shapes the individual just as the individual's formation of concepts and attitudes through interactions with others shape the culture over time. Likewise, just as culture is not static, no individual trajectory of development is static. Consequently, behaviour should be studied in context, and the units of analysis should be the social interactions of groups rather than individual interactions, as the former are influenced by both individual and cultural perspectives.

It is within this socio-cultural understanding of the fluidity of development that Rutter et al. (1989) argued that development can take many forms, as any interaction can influence every other. As Sacks (1997, p. 173) argued, it only takes one generation

to fail to convey to its children what it has learned from the preceding generations for the great chain of learning and wisdom to break. It is asserted here that it is through MABCL, defined here as the provision of learning experiences within the school setting slightly beyond the ability of the learners guided and assisted by knowledgeable adults or more competent peers, that this chain of knowledge is disseminated and strengthened within the pluralistic nature of our (post)modern world.

Kozulin et al. (2003) asserted that the socio-cultural perspective is most applicable to learning because it recognizes (a) the variability that exists among individuals, (b) the importance of learning within contexts, and (c) that learning changes over time. Schauble et al. (1997) explained that meaning emerges in the interplay between individuals acting in the social context and the mediators or tools (e.g., talk, signs, and symbols) employed in that context. In other words, learning and understanding are shaped by social interactions and activities while using the tools embedded by culture, which are influenced by time and geography.

The socio-cultural perspective has been significantly influenced by Vygotsky's (1978) thesis that children make the most gains when they participate in activities slightly beyond their ability with the aid of knowledgeable adults or more competent peers (Rogoff, 1998). Educational practices should focus on and educators must determine the difference between each child's competency and what the child can accomplish with the assistance of others, which Vygotsky termed the *zone of proximal development* (ZPD). Vygotsky (1978, 1987) introduced the concept of the ZPD in the context of the relationship between learning and development. Having rejected both the view that development precedes learning and the view that learning and development coincide, Vygotsky proposed an innovative approach that focuses on learning and development in school-aged children.

The key to this approach is matching instructional strategies to the child's developmental capabilities by first determining not only the child's ZPD but also the child's *zone of actual development* (ZAD), which represents what the child knows and can do as assessed by tasks that the child solves independently. Vygotsky (1978: 85) described the process as follows: "We give a child a battery of tests or a variety of tasks of varying degrees of difficulty, and we judge the extent of their mental development on the basis of how they solve them and at what level of difficulty." The ZAD reflects only those mental functions that are fully formed, fully matured, and fully completed; that is, the "end products of development" (Vygotsky: 86).

However, Vygotsky (1987) warned that the *actual* level of development ultimately provides an inadequate measure of the *state* of the child's development. Thus, what the child knows and can do with assistance and guidance from more competent others—so-called maturing functions—must also be determined to obtain a complete picture of the child's developmental potential.

To illustrate how the ZPD works in real life, Vygotsky provided the following example: "Assume that we have determined the mental age of two children to be eight years. We do not stop with this, however. Rather, we attempt to determine how each of these children will solve tasks that were meant for older children. We assist each child through demonstration, leading questions, and by introducing the initial elements of the task's solution. With this help or collaboration from the adult, one of these children solves problems characteristic of a twelve-year-old, whilst the other solves problems only at a level typical of a nine year old. This difference between the children's mental ages, the children's actual level of development, and the level of performance that each achieves in collaboration with the adult reflects each child's ZPD. In this example, the ZPD can be expressed by the number 4 for one child and by the number 1 for the other. These

children are not at the same level of mental development. The difference between these two children reflected in our measurement of the ZPD is more significant than their similarity as reflected in their ZAD”.

Research indicates that the ZPD has more significance for the dynamics of intellectual development and the success of instruction than the ZAD (Vygotsky, 1987: 209). The ZPD captures those functions and abilities that have not yet matured but are in the process of maturing and that can only be accomplished with assistance. As such, Vygotsky argued, “The actual developmental level characterises mental development retrospectively, while the zone of proximal development characterises mental development prospectively” (ibid, pp. 86-87). Vygotsky's perspective of the ZPD clearly reflects the two foundational assumptions of his socio-cultural approach to human development: (a) that higher mental functioning is mediated by language and forms of discourse that function as psychological tools and both facilitate and transform mental action and (b) that forms of higher mental functioning have their origins in social relations, as *intermental* processes between people are internalized to become *intramental* processes within persons (Wertsch, 1985; Tappan, 1991a, 1991b, 1997). The concept of the ZPD reflects the critical relationship that necessarily exists between intermental functioning and intramental functioning in a given socio-cultural context. The ZPD serves as an essential means through which the social world guides the child in the development of individual functions, as the tools and techniques of society are introduced to the child and practised in social interaction with more experienced members of society in the ZPD (Rogoff & Wertsch, 1984, p. 6). How the ZPD, which is related to cognitive development, can be understood in relationship to establishing mediated learning experiences that promote pro-social development is discussed below.

3.1.6 A socio-cultural understanding of teaching and learning beyond

Vygotsky. Researchers have found that powerful feelings and emotions can impair cognitive functioning, distort perception, and subsequently affect behaviour (Brooks-Gunn, Berlin, Leventhal, & Fuligni, 2000), leading to a breakdown of cooperative learning. In response to growing concerns about children's social-emotional intelligence and behaviour, recent years have seen a growing interest in effective peer cooperation and citizenship within schools (see Arthur, 2005). Children experiencing anxiety may be unable to deal with or understand the mix of complex feelings and emotions in the socially charged world of school. This anxiety within social settings may lead children to react impulsively, which in turn may lead to a breakdown in effective communication, peer cooperation, and problem-solving. Brooks-Gunn et al. (2000) found that children who feel anxious within social settings may use coping behaviours counter-productive to the learning process, such as bullying, clowning, cheating, and other anti-social defences, resulting in off-task behaviour and communication that detracts from engagement. On the other hand, *on-task communication*, defined as interaction, both verbal and non-verbal, that maintains engagement with the task, and pro-social behaviour are linked with positive intellectual outcomes (Barkley, 1997; DiPerna & Elliott, 1999; Hinshaw, 1992).

Adopting a socio-cultural perspective, Bruner (1966, 1971, 1977, and 1983) argued for the importance of *instructive learning*, defined as a systematic approach to providing learning experiences facilitated by a knowledgeable adult or more capable peer to promote the social, emotional, and cognitive development of the child. As previously discussed, Vygotsky's theory focuses on the individual learner and how he or she constructs and develops knowledge within social interactions, including those interactions that occur among students within the classroom setting. For example, when a teacher introduces a topic for discussion, the entire class will participate in sharing knowledge,

thus influencing the understanding of the individual through group processes. These group processes in turn are influenced by the cultural and social representations of the individuals and the group as a whole. The socio-cultural theory of learning explores relationships between instruction and development, the role of agency, and the knowledge shared in the classroom (Kozulin, 1990, 2000).

Extending the concept of the ZPD, Bruner (1983, 1987), Rogoff (1990) and Feuerstein et al. (1991) argued that child development results from the processes of scaffolding, guided participation, and mediated learning respectively. Scaffolded processes are important in supporting activities wherein “caregivers and children collaborate in arrangements and interactions that support children in learning to manage the skills and values of mature members of their society” (Rogoff, 1990:65). Kozulin and Rand (2000) define *mediated learning* as the learning that occurs when a mediator helps the learner extract knowledge from experiences or activities to make generalizations that will be useful in other contexts. *Mediated learning experiences* (MLEs) result when a child and educator work together to “(1) [build] bridges from children’s present understanding and skills to reach new understanding and skills, and (2) [arrange] and [structure] a child’s participation in activities, with dynamic shifts over development in the child’s responsibilities” (Rogoff, 1990: 8). Rogoff (1990:14) explained, “Children’s participation in cultural activities with the guidance of more skilled partners allows children to internalize the tools for thinking and for taking more mature (i.e. pro-social) approaches to problem solving that children have practised in social context.” Within the ZPD, an interaction or dialogue (see Bruner, 1987) occurs between children and their partners as both actively engage in, and thus transform, specific cultural practices, with children taking an active role in fostering and facilitating their own development.

The rapid development of young children into skilled participants in society is accomplished through their engagement in the mediated learning provided by ongoing cultural activities as they observe and participate with others in culturally organized practices. Rogoff's view, whilst consistent with a Vygotskian approach, provides more focus on the role of children as active participants in their own development as they seek structure, and even demand the assistance of those around them in learning how to solve problems. As Rogoff (1990:16) explained, "They [children] actively observe social activities, participating as they can", sometimes using non-verbal forms of communication to mediate and shape the interactions that occur within their ZPD.

Vygotsky's conception of the ZPD offers an innovative way to think about the relationship between the mediated delivery of educational activities and the developmental processes in children's lives. "Good learning", as Vygotsky (1978) argued, always precedes development, thus creating the ZPD and "awakening" developmental processes that initially operate only when the child collaborates with more competent others. Although learning is not development per se, properly organized learning results in mental development and sets in motion a variety of developmental processes that would be impossible without learning. Thus, learning is a necessary and universal aspect of the process of developing culturally organized, specifically human, psychological functions (Vygotsky, 1978: 90).

As a result of MLEs that occur within the ZPD, externally orientated and socially constituted learning processes between people become internally orientated (i.e., the processes become intrinsic or intrapersonal dialogue that informs decision-making), which in turn leads to semiotically mediated developmental processes (i.e., developmental processes mediated by the signs, symbols, and tools of the cultural environment). Vygotsky's educational and developmental assumptions are thus directly

linked, and these interrelated assumptions define a theoretical framework particularly useful in exploring the relationship between pro-social education and pro-social development within the framework of socio-cultural theory in the development of a holistic character education programme.

Building on this framework, Vygotsky (1978) emphasized the social origin of intramental functioning and the role that semiotics play in this mediation. Although, he did not complete this line of inquiry by defining the role of culturally constructed environments in developing higher mental functioning for the purpose of enhancing pro-social mediated action. He did, however, lay the groundwork for developing a more robust understanding of how the mental functioning of individuals is woven into the fabric of culture, history, and institutional settings in which they live.

A key aspect of Vygotsky's (1978) research focused on the ties between socio-cultural settings and individual mental functioning. As highlighted by Minick (1985), interactions between dyadic pairs or small groups expressed through actions are important aspects of the life of individuals and social systems. As Vygotsky (1987) progressed in his understanding of the socio-cultural influences on mental functioning, he turned his focus on formal schooling, specifically the role of school in the transition from "complex" to "genuine" to "scientific" concepts, which he described as the ontogenetic transition of the "decontextualization of mediated means". In other words, Vygotsky focused on how contextualized meaning constructed through the guidance of a teacher could be transferred to meaning constructed using the same processes in a different setting. Therefore, a critical aspect of guided and mediated learning is developing scientific concepts or ways of thinking that could be used to deduce meaning in a variety of settings outside the classroom in what is referred to as the development of critical thinking. Vygotsky focused on how forms of speaking in formal schooling provide the foundation

for concept development in relationship to the intermental interactions between teachers and pupils in contrast to a child's intramental functioning alone.

Building from Vygotsky's understanding of cognitive concept transition, i.e. from complex to genuine to scientific, what emerges is that by functioning on the socio-emotional level one can transition from an egocentric perspective to the ability to engage in the perspective taking of others. This ability involves the transitioning of decision-making from a complex to a genuine to a scientific (i.e., critical thinking) process that enhances one's self-regulation. It is this perspective of enhancing self-regulation through the direct learning of critical thinking in the application of perspective taking that informs the current research. In particular, the embedding of restorative processes to develop an understanding of how one's actions impact others is a step toward developing the ability to take the perspective of others in decision-making, problem-solving, and conflict resolution. An understanding of the socio-cultural perspective as it relates to teaching and learning underpinned the current study and informed the development of the cycle of inquiry conducted to investigate the role that mediated cooperative-learning activities play in pro-social development.

3.1.7 Improving social competence and cooperation through mediated interpersonal dialogue. Moving beyond Vygotsky's work, Bakhtin (1986) focused his analytical investigation on *utterances*, which he described as "the real unit of speech communication" (p. 71) because "speech can exist in reality only in the form of concrete utterances of individual speaking people...Speech is always cast in the form of an utterance belonging to a particular speaking [subject] and outside this form it cannot exist." Within this perspective, Bakhtin focused his research on situated action rather than objects that are arrived through analytical abstractions (Wertsch, 1991). He therefore, asserted that theoretical analysis and synthesis are only solved in reality on the basis of

concrete action. With this in mind he saw the utterance as the concrete form of reality and that by engaging in research on actions rather than objects, an understanding of the role of interactions in constructing meaning could be developed.

Bakhtin (1986) viewed utterances as inherently linked with *voice*, which he defined as the “speaking personality, the speaking consciousnesses” (Holquist & Emerson, 1981:434). Bakhtin (1986) stressed that voice always exists within the social and cannot exist in isolation from other voices. Although his perspective of the “speaking consciousness” included both the spoken and written voice, his primary concern was the “intention and world view of the individual’s ‘speaking consciousness’”. The speaking consciousness informs the role of dialogically mediated learning in the development of personality, character adaptations, behaviour management, and pro-social development. Bakhtin (1986) explained that a two-voice exchange operates in the translinguistic transmission of speech that constructs the speaking consciousness. This two-voice exchange is characterized by *addressivity*, as utterances are addressed to someone and inherently bound into the addressee’s utterance. As utterances cannot stand alone but are inseparably linked to the “chain of speech communication” (Bakhtin, 1986: 84), they “are not indifferent to one another and are not self-sufficient; they are aware of and reflect one another” (Bakhtin, 1986:96).

Bakhtin (ibid) described the constructing chain of discourse as the “dialogicality” of discourse. Because “the utterance is filled with dialogic overtones... to understand another individual’s utterances means to orient oneself with respect to it, to find the proper place for it in the corresponding context.... For each word of the utterance (i.e., the speaking consciousness) that we are in the process of understanding, we, as it were, construct a set of our own answering words” (Bakhtin, 1986: 102). The “greater the number and weight” of utterances, the “deeper and more substantial our understanding

will be” (Bakhtin, 1986:102). Bakhtin’s work reflects Vygotsky’s emphasis on the inner speech that mediates action and is derived from the process of socialization and enculturation.

Through investigating the role and principles of dialogicality in the construction of the speaking personality and the speaking consciousness, Bakhtin (ibid) examined the relationship between the voices of the novelistic discourse in the author’s voices (i.e., the speaking consciousness in written communication). It is this study of the author’s voice through dialogic communication as expressed in a group based learning opportunity engaging with the hero/villain discourse that informs the role that dialogicality plays in the development of the speaking personality. The use of the hero/villain storytelling and classroom discussions is a major part of the character education programme developed for this study, and therefore consideration of Bakhtin’s understanding of the importance of developing the speaking self or speaking consciousness is crucial in designing MLEs for the explicit teaching of intrapersonal and interpersonal speech related to self-regulation and pro-social development.

As Jacques Lacan (1999) contended, we are spoken (i.e. we are defined by others) before we learn to speak (i.e. able to define ourselves). It is this understanding of how the cultural dialogic informs our perceptions and constructs our inner discourse that informs the use of emotive utterances associated with the words *respect, responsibility, trustworthiness, fairness, caring, and honesty* for building a positive behaviour-support programme based on an understanding of the role of speech in the development of the self- regulating speaking consciousness.

3.1.8 Character education based on a socio-cultural understanding of pro-social development. This section proposes a humanistic Vygotskian perspective on character education grounded in the conception of the ZPD. As this perspective integrates

educational and developmental assumptions in ways that other current models of character education do not, it has the potential to transform the practice of character education in pluralistic societies and behaviour management within schools. Crucial to this perspective is the assumption that pro-social functioning, like all higher mental functioning, is a cultural practice or practical activity mediated by language and forms of discourse, and thus necessarily situated within a particular socio-cultural-historical context (Rogoff, 1990). As Oakeshott (1975) argued, pro-sociality is fundamentally a “practice” or a form of “conduct” that facilitates human interaction. The conditions that comprise a pro-social practice are not theorems or precepts about human conduct, nor anything as specific as a “shared system of values”. Rather, they comprise a vernacular/common language of colloquial intercourse that Oakeshott claimed is fundamentally pragmatic; it is a tool used “like any other language, [as] an instrument of self-disclosure...by agents in diagnosing their situations and choosing their responses; and it is a language of self-enactment which permits those who can use it to understand themselves and one another” (1975, 63). The development of a common language to express oneself and engage in pro-social shared decision making, problem-solving, and conflict resolution provides a solid framework for understanding the importance of using MLEs to facilitate socially competent and cooperative exchanges.

Pro-social functioning, understood as a socio-cultural or pro-social activity, is mediated by a vernacular shared by persons engaged in similar activities and similar social practices that fundamentally shape the ways in which they think, feel, and act (Tappan, 1997). This conception of pro-social functioning as a socio-cultural activity has profound implications for how the linked processes of pro-social education and pro-social development are understood. From a socio-cultural perspective, character education entails the use of MLEs, initially within the ZPD of the individual or group, to introduce

new forms of pro-social thinking, feeling, and action. This character education from a Vygotskian perspective sets the stage for pro-social development facilitated in culturally constructed environments by knowledgeable adults.

As discussed by Wertsch (1985), pro-social development occurs when the child begins to internalize pro-social thinking, feeling, and acting as intermental processes. Within this perspective what is crucial to this developmental process is that pro-social functioning, like all forms of higher mental functioning, is seen to be mediated by language and discourse. Thus, the semiotically and linguistically mediated social relations are internalized through the process of external speech between people, becoming inner speech within persons (see Vygotsky, 1987). It is at this level that overt, external pro-social dialogue becomes silent, inner pro-social dialogue (see Tappan, 1997) that assists in self-regulation and promotes pro-social decision-making, problem-solving, and conflict resolution beyond externally situated rule-based processes to an internally situated pro-sociality.

3.1.9 Role of the ZPD in social learning theory. Tharp and Gallimore's (1988) analysis of the four stages of the ZPD helps clarify and extend Vygotsky's conception of the ways in which pro-social development occurs. In the first stage, the child's performance is assisted by more capable others using six *means of assistance*: “modelling, contingency managing [rewarding and punishing], feeding back, instructing, questioning, and cognitive structuring [providing structures for understanding, thinking, and acting]” (Tharp & Gallimore, 1988: 44). In the second stage, assistance is provided by the self, primarily through inner, self-directed speech and inner dialogue. In the third stage, the child's performance is fully developed, internalized, automatized, and fossilized such that “assistance, from the adult or the self, is no longer needed” (ibid, 38). Finally, in the fourth stage, “de-automatisation of performance leads to recursion back through the

ZPD”, and the child is ready to develop new abilities and capacities (ibid, 38). This perspective provides a theoretical framework for the development and implementation of pro-social education within an inclusive educational mandate.

A socio-cultural perspective coupling the understanding of the ZPD with Bandura’s (1977, 1993) social learning theory provides the primary foundation for the Building Schools of Character Education (BSC) Programme, whilst Werner’s (1989; 1992) research on resilience provides the integrated framework for programme activities that can be delivered as MCLEs. Social learning theory provides guidance for designing and implementing behavioural change programmes from a socio-cultural vantage point based on the understanding that human behaviour results from the interaction of personal factors and the environment in what is known as reciprocal determinism. The key social learning theory constructs are the environment, situation, behavioural capability, expectations, self-control, observational learning, reinforcements, self-efficacy, and emotional coping responses. Individuals must have the knowledge and skills to perform the behaviour; feel confident to perform the behaviour; perceive that the environment promotes the behaviour; and be provided opportunities to set goals, self-monitor, and practice problem-solving and conflict-resolution skills. It is also important to highlight that observational learning requires credible role models of the desired behaviour to reinforce the dialogical component of the learning process. These role models provide the support, nurturance, and authoritative control/guidance children require for reaching their full potential.

Attachment theory (Ainsworth et al, 1978) posits that children become securely attached to caring, sensitive, and nurturing caregivers who provide challenging learning opportunities to overcome risks and challenges. These secure attachments provide

children with socially valued personal attributes such as high self-esteem, social competence, empathy, ego-resilience, and positive affect (e.g. Waters & Deane, 1985).

3.1.10 Role of attachment in pro-social development. Whilst Vygotsky's theories are mainly concerned with cognitive development through social interaction, Bowlby's (1969, 1973, and 1980) theories are primarily concerned with emotional development and the formation of personality. Bowlby's research was heavily influenced by Harlow (1957, 1958, 1961, 1963), who tested the psychoanalytic theory that infants become attached to their mother because she satisfies their basic needs, such as hunger and thirst. Bowlby espoused that secure attachment provides the necessary pathway for psychologically healthy development, whereas insecure attachment leads to a neurotic personality and a psychologically unhealthy developmental trajectory. Bowlby attempted to explain the formation of the earliest attachment bonds between infant and mother along ethological principles reformulated in human terms, arguing for a conceptualization of the primary emotional bonds between infant and mother unrelated to the traditional concepts of Freudian infant sexuality.

By doing so, Bowlby moved the discourse of personality development from inner driving forces to a socio-cultural focus on social interactions and exchanges. A key aspect of Bowlby's theory is that the mother (or other significant care provider) provides a secure base from which the developing infant can explore the world and periodically return in safety. It is this emotional attachment of the young child to the mother which normally provides the child with a sense of safety and security. The evolutionary function of such attachment behaviour is thought to be, in the short term, protecting the child from predators and, in the longer term, it providing the model on which all other relationships are based. Thus, a secure attachment in early socio-emotional development paves the way for secure and successful attachments in adulthood. In contrast, children who are

insecurely attached to their parents/primary caregivers tend to become parents of insecure children, and this cycle of neurotic personality development continues until one develops a secure and unconditional loving relationship.

Thus, the development of secure attachments with significant, knowledgeable, confident adults is a key factor in schools, as relationships with teachers play a key role in providing secure interpersonal attachments within a supportive, caring environment. With this in mind, what emerges from the literature is the hypothesis that through the appropriate delivery of initiatives designed to promote secure interpersonal relationships that provide a firm foundation of support, challenge, and control, schools can break the cycle of neurotic or maladaptive personality development by providing the secure attachment that all children need to prosper. The effectiveness of such an initiative may provide evidence for Bowlby's conclusions that personality formation is susceptible to environmental influences and that no trajectory is set at birth.

As the above evidence highlights, the relationship between personality, learning, and education has a long history, and many of the findings can be linked to what is now known as the FFM of personality. Therefore, in developing educational innovations to address the primary focus of this study it is important to understand that the research espouses that personality traits influence educational outcomes and are predictive factors in life outcomes, emotional well-being, and the ability to overcome adversity. Therefore, it is argued here that the FFM provides an understanding of personality development which can aid the development of character education programming. As discussed above, Sockett (1988) argued that personality-affecting achievement and outcomes can be directly influenced and constructed by the environmental context (i.e., culturally constructed learning environments). These findings promote the understanding that educational interventions may enhance the development of pro-social characteristics prior

to the onset of early adulthood, when traits become more entrenched and resistant to environmental influences. With this in mind, it is suggested here that learning initiatives that focus on enhancing emotional stability and agreeableness may prove beneficial in developing a framework for meeting the personal, social, and emotional needs of children within the educational setting.

Therefore, in moving forward toward programme development the social influences on development need be considered. As Vygotsky (1978), within his theory of the *zone of proximal development (ZPD)*, asserted that at each point of development children choose among multiple trajectories, some positive and some negative. Therefore, it is only through pro-social support constructed within mediated learning experiences that the positive will be manifested and the negative curbed or restrained throughout the overall life course of development. The key factor for the purpose of this study is that Vygotsky's perspective went beyond the perception of a linear or fixed developmental pathway and argued for the importance of support in reaching one's full potential. This provided an understanding that development was neither fixed nor stagnant (Pennington, 2002). Thus, it can be argued that based on the perspective that no trajectory is set or develops in a linear manner and that learning through mediated experiences precedes and facilitates development, education and learning is central in the reaching of the full potential and positive social enculturation into a pro-sociality. **In other words, a child's character that supports pro-social behaviour can be developed through mediated learning experiences.** It is this understanding that no trajectory is set that provide the foundation for developing school based character education within this study.

As the above themes emerged from the literature it became clear that a likely focus for developing a holistic approach to positive behaviour support programming

within schools is to implement mediated-learning activities designed to facilitate the development of self-regulation, social competency, and a cooperative disposition to help children acquire self-regulating strategies to effectively engage in the daily social interactions of the school and the broader community. Thus, in relationship to the development of educational innovations at this stage of the study it is important to suggest that school is the primary social environment in which the majority of children must negotiate and function. With this in mind, a socio-cultural approach to understanding personality, behaviour, and pro-social development is helpful in developing school-based positive pro-social development initiatives. Specifically, such initiatives that promote positive educational and life outcomes and assist schools in breaking the cycle of persistent and chronic anti-social behaviour. Furthermore, Vygotsky's theory of the ZPD offers an innovative way to think about the relationship between the mediated delivery of educational activities and the developmental processes in children's lives. Therefore, in building from Vygotsky's understanding of cognitive concept transition, i.e. from complex to genuine to scientific, what emerges is that by functioning on the socio-emotional level one can transition from an egocentric perspective to the ability to engage in the perspective taking of others and involves the transition of decision-making from a complex to a genuine to a scientific (i.e., critical thinking) process that enhances one's self-regulation. In addition to the above, it is the perspective of enhancing self-regulation through the direct learning of critical thinking in the application of perspective taking that underpins the development of an educational intervention at this stage of the study.

With the above in mind, the socio-cultural perspective as it relates to teaching and learning also informed the implementation of mediated cooperative-learning activities into the strategies developed to enhance pro-social development. As Oakeshott (1975)

argued, pro-sociality is fundamentally a “practice” or a form of “conduct” that facilitates human interaction. Therefore, it was considered important to understand that the development of a common language to express oneself and engage in pro-social shared decision making, problem-solving, and conflict resolution provides a solid framework for understanding the importance of using MLEs to facilitate socially competent and cooperative exchanges. Pro-social functioning, understood as a socio-cultural or pro-social activity, is mediated by a common language shared by persons engaged in similar activities and similar social practices that fundamentally shape the ways in which they think, feel, and act (Tappan, 1997). This conception of pro-social functioning as a socio-cultural activity has profound implications for how the linked processes of pro-social education and pro-social development are understood. From this perspective a socio-cultural understanding of character education entails the use of MLEs, initially within the ZPD of the individual or group, to introduce new forms of pro-social thinking, feeling, and action. Thus character education from a Vygotskian perspective sets the stage for pro-social development facilitated in culturally constructed environments by knowledgeable adults.

Therefore, within this emergent perspective the recognition that a just school community facilitated by authoritative, confident, knowledgeable adults may assist children in accepting and valuing pro-social standards of conduct is the vision that informed the development of the BSC initiative. It is this educational innovation that provides the main focus of the empirical work of this study and the grounds for investigating the influence of mediated cooperative learning on the pro-social development of school-aged children and behaviour-management strategies within schools.

3.2 The Interventions

3.2.1 The first intervention: Mediated Activity Based Learning Experiences.

The first intervention incorporated the use of outdoor education to enhance pro-social development and decrease anti-social behaviour. The following sections provide a synthesis of the outdoor education literature used to develop an evidence-driven programme design.

3.2.1.1 The outdoor-education research literature. Although there is a well-developed corpus of research relating to outdoor education, the vast majority has been conducted by American and Australian researchers. In a meta-analysis of 96 studies, Hattie et al. (1997) found that participants in a structured outdoor education programme experienced a 15% improvement in their rate of learning and that 65% exceeded the learning of those who did not participate in such a programme. Hattie et al. (1997) also found that in “contrast to most Educational Research, the short-term gains were followed by substantial additional gains between the end of the programme and follow up assessments.” Following a similar meta-analysis of 43 research studies, Cason and Gillis (1994) concluded that participants in outdoor education programmes experienced a statistically significant (12.2%) improvement in their learning. Furthermore, Reddrop (1997) found that participation led to positive outcomes in terms of participants’ self-esteem, self-concept, and locus of control (i.e., self-regulation). These findings led Neill and Richards (1998) to argue that outdoor education programmes have a positive impact on participants and Farnham and Mutrie (1997) to conclude that they improve group cohesion.

More generally, Hattie et al. (1997) argued that across all interpersonal dimensions, “it certainly appears that adventure programmes affect the social skills of participants in desirable ways”. Hattie et al. (1997) claimed there are two main

characteristics of outdoor education programmes that lead to positive outcomes: they provide participants with opportunities to be successful in a variety of challenging situations, thus increasing self-confidence and self efficacy, and they place participants in a challenging and unpredictable setting that requires them to modify their behaviour, thus enhancing their self-control and independence. Hattie et al. (1997) concluded, “Adventure programmes have a major impact on the lives of participants, and this impact is lasting.” The first programme developed as part of the current study was based on these findings, and aptly named the Mediated Adventure Based Learning (MABL) Programme.

3.2.1.2 Theoretical background to the MABL Programme. Outdoor education is an approach that encourages the promotion and fostering of positive aspects of young people’s lives and of healthy ways of interacting and communicating through the use of mediated activity based learning opportunities; such as, camping, canoeing, rock climbing, hiking, etc. From a psycho-educational perspective, the focus of outdoor education programme development is the “whole person”, not simply his or her problem behaviours. In the past, programmes have focused on providing services for youths and families in response to existing problems (intervention), as well as identifying and addressing factors that predict problem behaviours for at-risk youths (prevention). Although both of these approaches can be useful, they may not effect long-lasting change because they ignore aspects of young people’s lives that are important to them, namely their strengths, interests, and relationships.

The theoretical foundation of outdoor education is found in humanistic psychology (e.g., Rogers, 1961; Bohart & Greening, 2001) and the more recent field of positive psychology (e.g., Seligman & Csikszentmihalyi, 2000). Specifically, outdoor education emphasizes the humanistic concepts of agency, empowerment, the human potential for growth, and the fostering of healthy relationships. The goal of positive

psychology is to scientifically study people's strengths rather than their flaws in an effort to promote the positive qualities that make them human. Despite the tension and miscommunication between humanistic psychology and positive psychology, both perspectives have similar goals and both can inform the practice of outdoor education.

3.2.1.3 Characteristics of outdoor-education programmes. Seligman (2002) described a primary quality of outdoor educational programming as a focus on *signature strengths*, which he defined as individual areas of proficiency important for young people to develop and nurture. Cowen (1994) argued that outdoor-education programmes should focus on promoting psychological wellness by fostering early attachments, age-appropriate competencies, adaptability to changing environments, empowerment, and coping skills in young people.

Tseng et al. (2002) argued that because promoting social change among young people should be the focus of outdoor-education-based strategies and interventions, outdoor-education-programme developers must focus on systematic rather than individual change; engage in continuous critical analysis of the delivered programmes; develop explicit acknowledgement of the values supported by outdoor educators; understand the impact of the language used to promote change; and adapt programming based on time, cultural, and power differentials in society. Larson (2000) and Bardoliwalla (2002) added that because a primary aspect of effective outdoor education is the promotion of initiative, programmes must be personally relevant to young people to foster their intrinsic motivation to engage with challenging situations. This can be accomplished by providing well-structured, goal-oriented, developmentally appropriate programmes that can be sustained over time.

According to Snyder et al. (2002), the promotion of self-discipline, which involves setting goals that young people value and find adequately challenging, should

play a prominent role in any outdoor-education initiative. To maintain the appropriate level of challenge, participants must be given the means and support needed to achieve their goals. Leffert, Benson, Scales, Sharma, Drake, and Blyth (1998) highlighted that young people have both internal and external factors that lead to success, as well as that social and emotional self-regulation is correlated with better academic success and decreased violence. Thus, the roles of both internal and external factors in educational outcomes must be considered when considering the strategies embedded in the development of outdoor education programmes.

3.2.1.4 Role of mediated-learning activities in outdoor-education programmes.

The qualities of promotion-focused programmes can be used as criteria upon which to evaluate the effectiveness of existing outdoor education programmes (e.g., Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2002) and design new outdoor education programmes. However, the issues of affordability, portability, and sustainability must also be considered. Regarding feasibility, outdoor education can be incorporated into existing educational programmes to increase and broaden the context of their effectiveness. Recognizing that existing school-based programmes aimed at intervention or prevention are necessary but may not be sufficient to make lasting change, outdoor education approaches should aim to improve social and emotional regulation to increase educational effectiveness and decrease anti-social behaviour within schools.

3.2.1.5 Designing MABL activities. During this stage of the investigation, the qualities and strategies shown to be beneficial in outdoor education innovations to address the questions of this study were considered. As the focus of this study was the development of a programme to enhance pro-social development, the promotion of social competence was a primary consideration in programme effectiveness. Therefore, a working definition of social competency and the appropriate means of analyzing the

impact of the programme on social competency were developed for the purpose of this study.

3.2.1.5.1 Social competence. As indicated in the literature reviewed above there is a general agreement that social competence is domain specific and developmental. However, no consensus on the definition of the term exists, with the definitions used varying according to their usefulness to differing theories and approaches. Typically, the definitions fall into two main categories: global, generalized definitions and definitions that consider specific components and skills (competencies) as indicators of social competence (Peterson & Leigh, 1990). Definitions also differ according to a focus on either internal processes and behaviours or external outcomes (Dodge & Murphy, 1984). Since the effectiveness of social behaviour can only be determined within the context of a particular social environment, which encompasses the community, peer groups, the family, and the culture (Oppenheimer, 1988), both individual behaviours and social outcomes are important considerations in defining socially competent behaviour.

The following indicators are considered by Topping (2000) as components of social competence:

1. Effective communication in various social relationships.
2. Social problem-solving and decision-making ability.
3. Constructive resolution of conflicts.
4. Effective use of basic social skills.
5. Self-control and self-monitoring of behaviour.
6. Respect for individual differences.
7. Ability to solicit and utilize social support.
8. Sincere interest in the well-being of others.
9. Empathy and perspective-taking ability.

10. Maintenance of an attachment to school.

11. Ability to distinguish between positive and negative peer pressure.

Socially competent children and adolescents have a sense of belonging, are valued, and are given opportunities to contribute to society (Beaumeister & Leary, 1995; Gullotta, 1990; Leary, 1957), which, to a large extent, is made possible within the various social environments in which they live, such as the family, school, and community. The development of social competence is facilitated by strong social support through supportive relationships and a supportive socio-cultural and physical environment. Inhibitors of social competence include cultural and social barriers based upon factors such as race/ethnicity, gender, and socio-economic status (Bloom, 1976, 1990).

For the purpose of this study, *social competence* is defined as a collection of specific behaviours and abilities that enhance an individual's or group's ability to engage in effective communication, cooperation, and pro-social problem-solving and conflict resolution in a variety of social contexts. As previous research highlights, interventions intended to enhance social competence often combine health-promotion and problem-prevention programming, such as life-skills training programming (e.g. Botvin, 1996; Danish, 1996), which attempts to reduce risk behaviours as well as promote healthy adjustment and development. Several researchers have found that the most effective programmes are multi-dimensional and multi-level, such as programmes that combine skills-based and environmentally oriented approaches (Schinke, McAlister, Orlandi, & Botvin, 1990). Other researchers (e.g., Caplan & Weissberg, 1988) have stressed the importance of addressing the affective (e.g., stress management), cognitive (e.g., problem-solving), and behavioural (e.g., social-skills training) components of social competence in enhancement efforts.

Weissberg et al. (1996), who concluded that social competence promotion in the school setting is a “highly promising and appropriate educational strategy for preventing high risk behaviour” (p. 287), found that the most enduring outcomes result from using real-world applications to promote the generalization of skills and maintenance of consistency in intervention throughout the school years to allow children to build on previous learning. With most intervention programmes, the generalization of what is learned is the greatest challenge, as learned skills and desired outcomes do not always match. The more comprehensive the intervention effort, the more likely that learned skills will be applied in various contexts and behavioural changes sustained over time.

3.2.2 The second intervention: Mediated Cooperative Learning Experiences (MCLE). Following the investigation of MABCL, a further review of literature was considered appropriate for developing a strategy delivered by teachers in all schools for all children. This section of the literature review discusses the literature associated with cooperative learning within schools and how an in-school programme that focuses on constructing cooperation through MABCL experiences might answer the primary question of this study.

The aims of this section of the literature review are the following:

- Consider previous MABCL research in the development of cooperative intra-group communication.
- Discuss the role of systematic school-based approaches in meeting the social, emotional, and cognitive needs of children.
- Provide an overview of how MABCL delivered specifically to develop inter-group trust and cooperative communication might improve on-task communication and task completion.

What emerged from the review of literature at this stage of the investigation is that the majority of research into peer cooperation investigates dyadic pairs or small-group ($n < 8$) interactions. In the broader realm of educational research, prior efforts to define peer cooperation generally shared four features: peer cooperation usually took place in the context of a task that none of the members of the group would be able to accomplish alone (Ames & Murray, 1982; Forman & Cazden, 1985; Kneser & Ploetzner, 2001; Miller & Brownell, 1975; Phelps & Damon, 1989; Schwartz, Neuman, & Biezuner, 2000); the members were all relative novices with roughly symmetrical knowledge (Phelps & Damon, 1989); the members constructed a shared representation of the task and attempted to maintain that representation while collaborating (Teasley & Roschelle, 1993); and the members were required to coordinate their background knowledge to successfully perform the task (Kneser & Ploetzner, 2001).

Several studies have documented successful group performance (Cohen, 1994; Cohen & Manion, 1981, 2000; Dillenbourg, 1999; Hill, 1982; Webb & Palincsar, 1996). Estimates of the effect sizes (i.e., the measure of the strength of the relationship between two variables) for the impact of cooperative learning range from $r = 0.21$ (Slavin, 1990) to $r = 0.88$ (Johnson & Johnson, 1992). This broad range suggests cooperation may be beneficial only under certain conditions. More specifically, Phelps and Damon (1989) argued that the effects of peer cooperation are not universally helpful for all types of learning tasks. Even within complex reasoning tasks, there can be wide variation in group performance, and even groups comprised of high achievers are not immune to difficulties in the group problem-solving process. For example, when Barron (2000a) tested triads of high-achieving students on a complex maths problem, she found that on average, the triads outperformed individuals working on the same task. However, Barron (2000b) also noted that some groups appeared to be working below their individual competencies.

Based on the results of a study in which they trained students in either qualitative or quantitative physics before directing them to solve five kinematics problems collaboratively, Kneser and Ploetzner (2001) concluded that the benefits of cooperative learning depend on the background knowledge of the collaborators. As demonstrated by the post-test, the students trained in qualitative physics learned more from their quantitative partners than their quantitative partners learned from them, suggesting that the benefits of cooperation are not always equal for all partners. Other researchers found evidence that participants can regress after collaborating. For example, Tudge (1989) found that some children regressed from the pre-test to the post-test on a balance-beam task. A closer analysis of the children who regressed revealed that they lacked confidence in their answers during cooperative problem-solving, and were especially prone to regression when paired with individuals who were confident in their inaccurate answers.

The findings of these studies suggest that cooperative learning and problem-solving is not universally beneficial. Whereas research on peer cooperation has historically concentrated on identifying instances of successful cooperation or on relating what is occurring, a greater focus should be placed on explaining why cooperation is effective or what action or intervention is necessary to enhance effectiveness (Hogan, Nastasi, & Pressley, 1999). Most contemporary research on cooperative learning investigates either outcomes or attempts to describe what is occurring. However, the benefits to learning and working in groups have been known for many years. Johnson and Johnson's (1992) meta-analysis of over 120 research studies indicated that group learning is considerably more effective than competitive or individual learning. Good et al. (1990) argued that because group work is a key factor in school achievement and positive peer-to-peer communication, future research should focus on socially situated learning that

occurs in groups and the factors that affect cooperative processes and achievement outcomes.

As stated previously, research has highlighted the inconsistent outcomes of cooperative work (e.g., Barron, 2000b; Kneser & Ploetzner, 2001, Tudge, 1989). It is important to note that much of the research on peer cooperation in classrooms has been conducted with children aged 3 to 11 years (see Johnson and Johnson 1992; Slavin, 1990) in classroom of less than 20 students. Other studies (e.g., Maher, 1995) were conducted in non-naturalistic classroom milieus, raising questions concerning the generalizability and applicability of these findings to all school environments. It is these gaps in the research that led to the development of the second investigation in this study. Following Mills' (1959) assertion that applied social research questions, in their very structure and content, should point to social action or intervention, it can be argued that research is the leading edge for constructing knowledge within education. Therefore, if the goal of education is to promote knowledge, goodness, and collective prosperity, programming to develop and promote effective cooperation is required. Coupling this with the knowledge that learning occurs within a socially charged environment, one can recognize the importance of research into not only what occurs in the individual construction of knowledge and within cooperative peer interaction, but what leading action can be taken to develop cooperative maturity for effective learning. Based on this recognition, a pre-test/post-test control-group design was employed to investigate how MABCL might enhance the success of peer cooperative-learning milieus.

The aim of the second experiment was to determine the change, if any, in on- and off-task communication during peer cooperative problem-solving tasks following the delivery of MABCL activities designed to enhance cooperative communication to test the following hypothesis:

MABCL activities structured to develop trust, effective communication, and group cohesion will increase on-task communication during peer cooperative problem-solving exercises.

3.2.3 The third intervention: The Building Schools of Character Programme

(BSC). Following the first and second experiment of this investigation, I returned to the literature to conduct a further review of available literature associated with character education, restorative justice, and school support centres. The return to a further review of literature resulted from the themes that emerged from the data gained by the formative investigations. This constant comparison, coding and memoing of the data was seen to be necessary for providing a more robust saturation of the themes associated with the development of a unified approach to a universal, cost-effective, and teacher-delivered, in-school initiative. An initiative designed to enhance pro-social development and decrease anti-social behaviour among school-aged children. This section of the literature review provides the framework for developing what I classify as a socio-culturally defined character education programme that embeds restorative processes to provide intensive intervention for children experiencing difficulties in the classroom.

3.2.3.1 Character education supporting pro-social development. The character education programme developed within the BSC Programme should not be confused with the character education model perceived to teach “moral codes” or “social conventions”, nor should it be confused with models conceived to impose control through the use of rewards and sanctions with the aim of blind obedience to the demands of authority figures. Within the BSC Programme, character education is hypothesized to have the capacity to create a cooperative and caring learning environment by building both intrapersonal and interpersonal capacity in social competence and a cooperative disposition. Therefore, character education within this programme is facilitated through

the development of lessons designed to improve all students' ability to engage in rational and ethical decision-making, problem-solving, and conflict resolution, thereby establishing a commitment to socially responsible conduct from all members of the school community.

It was hypothesized that the order established through group cooperation and commitment to pro-social standards of conduct would be enhanced when children are socialized and enculturated such that they develop the beneficial character traits of respect, responsibility, trustworthiness, fairness, caring, and honesty. It was further hypothesized that character education designed to develop social competence and a cooperative disposition may strengthen both intrapersonal and interpersonal resiliency by providing learning opportunities that help children become conscientious, open to new experiences, and agreeable. As discussed in the literature review, these three personality traits as defined within the FFM, along with enhanced resiliency, appear to play a key role in positive educational and life outcomes.

Recognition of the need to build resilience developed and maintained by social competence and a cooperative disposition supported by the character traits of respect, responsibility, trustworthiness, fairness, caring, and honesty provides the theoretical foundation for the character education component of the BSC programme. The final underpinning conceptualization of the character education component is the perspective that routines shape habits, which in turn establish attitudes. It is this understanding of how routines and habits shapes attitudes that underpins the use of cognitive-dissonance mediated learning through vicarious or lived experiences to increase children's commitment to pro-social standards of conduct and pro-sociality.

Therefore, it was hypothesized that changing the routines and habits of classroom behaviour management from an extrinsic incentive-based approach to a humanistic

intrinsic-based approach based on a socio-cultural understanding of the routines and habits of self-responsibility would create the psychological tension necessary to assist children in acquiring and supporting self-regulated pro-social attitudes. Doing so would build the strength of character necessary to enact pro-social behaviour, even during times of adversity or in the face of anti-social peer pressure. As pro-social attitudes are first developed interpersonally, they may require support in the form of clearly defined pro-social routines. As these routines develop over time, they support habits that in turn support new attitudes until these attitudes are internalized. For example, if a child enters school with maladaptive social behaviour, a shift from this maladaptive/inappropriate behaviour to pro-social behaviour may best be facilitated through using storytelling and mediated dialogue to create cognitive dissonance within the child so that he or she understands the impact of maladaptive/anti-social behaviour on him/herself and others. When this shift in knowledge and understanding occurs, children might further benefit from routines that support the development of habits associated with this commitment. These habits, supported by the influence of routines, provide the support that children require to internalize motivations, which in turn provide the impetus for them to embrace pro-social attitudes and behaviours to enculturate a pro-social disposition.

3.2.3.1.1 Role of cognitive dissonance in change. Before providing examples of how MCLEs could transform maladaptive behavioural attitudes into attitudes based on pro-social standards of conduct within the classroom, cognitive dissonance and its role in the motivation to assimilate and accommodate new knowledge and understanding must first be discussed. In an attempt to move beyond the observable behaviour of children into an understanding of how interpersonal and intrapersonal factors influence decision-making and the behaviour resulting from this decision-making, it is important to consider Lewin's (1951) research into the intrinsic factors that contribute to the outward display of

behaviour. In “Field Theory in Social Science”, Lewin (1951) argued for a turn away from Watson’s confining of psychological concerns to the observable aspects of behaviour to an understanding that observable behaviour is a result of a complex mental life influenced by in-self (i.e., intrapersonal) and environmental events.

Building on Lewin’s humanistic perspective, Festinger’s (1954) theory that individuals establish the correctness of an attitude or opinion by comparing their own attitudes or opinions with the attitudes or opinions of others provided the foundation of the yet-to-be- conceived theory of dissonance. Festinger’s (1954) central claim was that individuals have cognitions or pieces of knowledge about their behaviours and the environment and those of others. According to Harmon-Jones (1999:95), when a new and valid cognition challenges a previously existing belief, one experiences psychological tension (i.e., discomfort) or what is now known as *dissonance*, an adaptive response that increases awareness of the inconsistency of these opposing cognitions. Harmon-Jones (1999) explained that one’s knowledge of the world needs to be “true” or consonant with one’s beliefs for one to be competent (p. 95). The socialization of children into socially competent and cooperative routines and habits that help support attitude change (i.e., enculturation), mediated through cognitive dissonance and designed to show them that their behaviour is not in accord with the desired behaviour of their peer group, facilitates their move away from maladaptive anti-social routines, habits, and attitudes. It is this socialization that is the goal of the character education component of the BSC Programme.

Brehm (1956, 1962) and Brehm and Cohen (1962) concluded that in order to produce a change in attitude, one’s cognition had to be in dissonance with one’s commitment, suggesting the use of the terms *volition* and *commitment* to describe the conditions necessary for dissonance and its reduction to occur (Cooper, 2007). Brehm and

Cohen (1962) further claimed that the relationship between opposing pieces of knowledge or cognitions must occur voluntarily and with high resistance to change for attitudes to change. Moreover, one must make a commitment to a belief, value, or piece of knowledge and then be introduced to a conflict in one's observable behaviour with this commitment to achieve dissonance. For example, one can facilitate dissonance through the use of mediated-learning activities designed to entice one to commit to a belief, value, or piece of knowledge, and then highlighting one's behaviours, either lived or vicariously experienced, not in accord with this cognitive commitment. Once this dissonance is aroused, a facilitator uses mediated dialogue to help one develop an understanding of behaviour that is in accord with one's commitment.

The process of mediating dissonance involves obtaining a commitment; challenging this commitment; and supporting the attitude shift by providing behavioural strategies that maintain consonance with the belief, value, or cognitive commitment. As Mills (1960, 1965, 1968, and 1999) demonstrated, a definite bias toward favoured alternatives supports the re-evaluation of beliefs, values, and behaviours. This re-evaluation may be required to promote behavioural change through shifts in attitudes through mediated cooperative-learning activities to create cognitive dissonance and the subsequent acquisition of intrinsic drives in order to develop self-regulated pro-social standards of conduct. Character education within this framework is designed to facilitate the development of the cognitive dissonance between the commitment to be respectful, responsible, trustworthy, fair, caring, and honest and behaviour that is disrespectful, irresponsible, untrustworthy, unfair, uncaring, and dishonest to facilitate an attitudinal shift. Such a shift brings both commitment and behaviour into accord and leads to sustainable behavioural change.

In discussing mediated cooperative-learning activities for the purpose of facilitating intrinsic motivation to enhance self-regulated pro-social behaviour, it is important to explain how extrinsic incentives complicate and undermine the effectiveness of this process. The *induced-compliance paradigm*, an extension of cognitive dissonance theory, explains what happens when positive incentives (e.g., rewards) or negative incentives (e.g., punishment) are used to promote counter-attitudinal behaviour. The use of positive or negative incentives allows individuals to generate rationales to justify their dissonant behaviour. In other words, the use of incentives provides excuses for individuals to engage in externally condoned behaviour (i.e., behaviour sanctioned by others) without causing them to experience dissonance. These excuses allow individuals to maintain their previously held maladaptive anti-social attitudes even when they engage in pro-social behaviour, as they can justify this behaviour by rationalizing that they are only doing what others want them to do. Thus, when either the incentives or the individual who delivers the incentives is removed, the individual's behaviour returns to consonance with previously held maladaptive or anti-social attitudes.

The above theme associated with how the use of incentives provide a pathway for avoiding dissonance was further supported through my research and work as a Behaviour Support Teacher. During my school based observations the data I collected indicated that in the school setting, if the incentives previously provided to maintain compliance with classroom rules become unavailable or the authority figure in charge of distributing the incentives (the teacher in this study) is no longer present, the child's behaviour will return to unsanctioned/inappropriate behavioural norms. The data collected during these observations also indicated that the return to inappropriate behaviour is most often seen within a classroom in which the teacher relies heavily on maintaining control and compliance with classroom rules by using stickers, star charts, and sanctions. the use of

incentives such as previously provided become unavailable or the authority figure in charge of distributing the incentives (the teacher for the purpose of this study) is no longer present, the child's behaviour will return to unsanctioned/inappropriate behavioural norms (i.e. being disrespectful) outside of the control (on the play ground, in the lunch room) of the authority figure (i.e. the teacher). Moreover, these observations indicated that when the teacher who uses the incentives is away from the classroom, children often act in disrespectful ways toward supply teachers, as the supply teacher does not know the behaviouristic scheme employed to maintain compliance with imposed rules or regulations. The data gained from these observations supports the above argument to shift behaviour management from a behaviouristic use of incentives (i.e., the use of extrinsic motivators) to a humanistic behavioural development approach (i.e., the development of intrinsic motivation) through character education that develops self-regulation.

Festinger's (1959) research best illustrated how the use of incentives undermines the development of dissonance and the subsequent search for equilibrium (i.e., dissonance reduction) between one's beliefs and behaviours. In Festinger's (1959) study, a group of volunteers participated in a boring task and were then paid either \$1 or \$20 to lie to other students by telling them that the task was fun and interesting. When they were later tested on their attitude toward the boring task, Festinger found a significant difference in the attitudes of the groups; the participants paid \$1 remembered the task more positively than the participants paid \$20. Festinger (ibid) concluded that more dissonance was experienced by those paid \$1 because the dollar did not constitute sufficient justification for telling a lie. Therefore, the only way to alleviate the dissonance between the commitment not to tell lies and the behaviour of lying was to unconsciously bring their original attitude (i.e., the task was boring) into line with their induced behaviour (i.e.,

saying the task was fun and interesting) and present the experience in a positive light. The participants who were paid \$20 experienced less dissonance because they perceived the amount paid as sufficient to justify telling a lie (i.e., engaging in attitude-discrepant behaviour), resulting in less dissonance and motivation to alter original their original perception (Aronson & Mills, 1959; Festinger, 1964; Festinger & Carlsmith, 1959; Festinger et al, 1956; Aronson et al, 1995).

These findings suggest that people can reduce dissonance by coming to believe in the appropriateness of their behaviour. From this understanding of dissonance theory, character education lessons are designed in a way that allows the facilitator first to achieve voluntary commitment from the students to strive to be of good character, and then provide mediated cooperative-learning activities to align the students' behaviour with this commitment. This alignment between commitment and behaviour is facilitated through the use of storytelling, narratives, and the sharing of lived experiences to highlight when behaviour is dissonant with commitment, and then discussing how to bring behaviour in line with a commitment to pro-social behaviour.

It is important to note that when situations reveal an inconsistency between commitment and actual behaviour, dissonance tends to be very high and the need to reduce it very strong. The mediation of this dissonance should be continued until reduction is achieved because unresolved dissonance can become a threat to self-image, leading to the use of maladaptive dissonance strategies, including the development of *hypocrisy* (Aronson, 1968) and *situational channelling* (Scheier & Carver, 1982) effect. The concept of hypocrisy is based on the belief that people want to see themselves as consistent or competent. As such, they may resolve the dissonance that arises when they have not lived up to a commitment by attributing the arousal to a source other than their own discordant behaviour (e.g., blaming someone or something else). This strategy can

be very effective in reducing dissonance, as no attitude or behavioural change needs to occur for one to maintain a belief in one's competency and consistency (Aronson, 1999).

Likewise, situational channelling achieves dissonance reduction without the need to adopt new attitudes or behaviours. Situational channelling occurs when individuals become less likely to change their attitudes and more likely to reflect on their dissonance-causing behaviour, considering it not all that contrary to their initial attitudes when asked to focus on their original attitudes or behaviour (Simon, Greenberg, & Brehm, 1999). In other words, when people are asked to evaluate the importance of their dissonant behaviours within the context of the environment in which the behaviour occurred, they trivialize the discrepancy between their views and their behaviour. Considering the negative impact of these maladaptive dissonance-reducing strategies on individuals, particularly their undermining of the attitudinal shift necessary for behavioural change to occur, it is important to facilitate mediated activities and constructive dialogue that discourages individuals from "escaping" from their dissonance by employing either of these strategies.

3.2.3.1.2 Role of cognitive dissonance in the BSC Programme. As the above review of research suggests, cognitive dissonance is a powerful, possibly crucial, part of the learning process. If one considers the role of education as a transformational process, all teaching and learning objectives may benefit from an understanding of the power of cognitive dissonance in enhancing learning and the assimilation of new knowledge and understanding. Moreover, it could be argued that the understanding of cognitive dissonance as it relates to all teaching and learning opportunities associated with the transference and acquisition of knowledge may enhance learner engagement by creating the motivation to engage with learning opportunities that provide the knowledge necessary to reduce the tension created.

As cognitive dissonance is most powerful when aroused in relationship to beliefs, values, and cognitions that have a high degree of personal investment (i.e., those that relate to self image/concept), teaching and learning focused on character development is likely best situated to be enhanced by dissonance arousal and the subsequent efforts to reduce the psychological tension that it creates. As previously discussed, the BSC Programme facilitates character education by promoting voluntary commitment to a set of ideals, and then through discussion of real-life moments, storytelling, provision of assignments, and asking of probing questions, attempts to create cognitive dissonance to assist in the internalization of attitudes in accord with one's commitment to developing good character and pro-social standards of conduct. This commitment to developing good character becomes directly related to one's self-image, and it is this relationship that provides the high level of personal investment required to promote intrinsic self-regulation.

In other words, as self-regulation is directly tied to good character, self-regulation becomes the ideal and self-image is tied to the valued ideal of one's peer group. When one acts in conflict with this ideal, dissonance that challenges one's self-image is created, producing a high level of psychological discomfort that one seeks to reduce through behavioural change. Because this discomfort may lead to the adoption of maladaptive strategies, dissonance must be managed through mediated experiences facilitated by a caring and knowledgeable adult or more competent peer. The key consideration is mediating and managing dissonance to produce behavioural change that supports the maintenance of consonance between one's commitment and one's actions. Through a heightened level of consonance between one's beliefs and values and those of the peer group, self-image is enhanced and competence increased.

Cognitive dissonance theory suggests that it is very unlikely for some children to achieve ongoing development if the creation of dissonance is not part of the learning and teaching process. Vygotsky's (1978) theory of social learning, which stresses that social, emotional, and cognitive abilities are first developed interpersonally before becoming internalized (i.e. intrapersonal), provides a coherent and comprehensive understanding of how culture provides both the tools and content of intellectual adaptation. Cultural tools are first understood interpersonally, and then through the routines and habits associated with these cultural tools, cognitive tools are developed, which underpin the attitudes associated with contextualized behaviour. Therefore, it can be argued that good character education, as well as good teaching, is an ongoing, systematic approach to mediated learning designed to socialize and enculturate children into the expectations of their social context. This systematic approach or scaffolding (Bruner, 1987) is the continuous adaptation of the amount and kind of assistance provided to children based on their level of performance (Vygotsky, 1978) and their ability to cope with the dissonance created during learning (Aronson & Carlsmith, 1962).

When applying this approach, teachers should remain aware that when dissonance is too great and appropriate levels of support are not provided, the ensuing psychological tension or internal conflict may be destructive to children's social, emotional, and cognitive development (Thompson, 1999). Teachers should strive to design developmentally appropriate programming within children's ZPDs and mediate the reduction of high degrees of dissonance so that they do not resort to ineffective dissonance reduction strategies (i.e., hypocrisy or situational channelling). As cognitive dissonance research suggests, the creation and mediation of dissonance may be essential for enhanced engagement with and assimilation of the objectives and aims of formal learning opportunities throughout the curriculum. Without the discomfort aroused by

dissonance, children are unlikely to become adequately motivated to think critically about the subject matter presented to them.

Just as the creation of dissonance can be used to achieve positive outcomes, it can be used for questionable ends. Considering that children and youth are pulled in many directions by conflicting and at times hypocritical value systems, their desire to belong may lead them to adopt maladaptive, anti-social, and/or violent behaviours supported by groups that use their unmediated dissonance to encourage them to adopt normed transgressive beliefs, values, and behaviour. Marginalized, disengaged, and disaffected children and youth are particularly vulnerable to becoming socialized into the normed transgressive behaviours and attitudes of these groups, particularly if they lack the social competence and cooperative disposition necessary to maintain healthy and productive relationships and self-regulated, pro-social standards of conduct.

In other words, cognitive dissonance can influence the acceptance of pro-social behaviour or the acceptance of transgressive behaviour, depending on the routines, habits, and attitudes into which the child is socialized and enculturated. Children's desire for a sense of belonging may result in their membership into socially responsible and civil groups or anti-social and transgressive groups. It is this understanding of how children are socialized into pro-social or anti-social group membership that strengthens the utilization of character development as a key component in the BSC Programme. If children have been socialized into anti-social standards of conduct before entering school, these anti-social attitudes may need to be shifted in powerful ways so that they can become socially competent and cooperative members of a learning community that embraces the ideals of a just and civil society.

3.2.3.1.3 Character education in the classroom and school. As discussed above, voluntary commitment is seen here as a necessary precondition for the production of

dissonance and its eventual reduction. The first step in the implementation of the BSC Programme is envisioned to achieve this commitment from the students before subsequent components are implemented. It was hypothesized that this may best be achieved by facilitating a highly emotive and powerful use of dialogue (Bakhtin, 1974, 1975, 1984) by discussing the characteristics of heroes in contrast to the characteristics of villains using movie clips or stories.

By using emotive film clips, stories, or accounts of lived experiences, it is hypothesised that the facilitator can mediate a learning experience from which pupils vicariously experience the role of heroes, villains, cowards, and bullies. The facilitator should focus on mediating the discourse to fully engage with the meaning and definitions of respect, responsibility, trustworthiness, fairness, caring, and honesty to help children establish supportive and caring friendships. When this process is delivered in a powerful and thought-provoking way, the facilitator can gain a voluntary verbal commitment from the class to live up to these valued pro-social character traits. This commitment is facilitated through the development and mediation of cognitive dissonance produced from the creation of vicarious experiences from an emotive discussion enhanced through the use of visual imaginary.

As previously discussed, it was hypothesized that this voluntary commitment is a crucial factor in the successful implementation of all components of the BSC Programme and the initiation of the process whereby previously held anti-social attitudes become attitudes supporting pro-social standards of conduct. The commitment to ongoing delivery of character education lessons in the classroom and school is hypothesized to be beneficial in reinforcing this commitment and for developing routines and habits that support the adoption of pro-social attitudes. Character education lessons delivered in a systematic and scaffolded process within the individual or group ZPD may help children

learn what it means and see what it looks like in terms of practical behaviour to be respectful, responsible, trustworthy, fair, caring, and honest. By then providing opportunities to put these character traits into action, children may feel what it means to be a trusted and respected member of their peer group.

In concluding, it is envisioned that as all students, teachers, and support staff develop a commitment to facilitating and supporting the development of character traits that promote a cooperative learning environment, all teachable moments will become underpinned by character education. This character education is designed to promote the use of pro-social standards of conduct in all interpersonal interactions, thus embedding the regulative discourse of behaviour management within an instructional discourse of self-regulated, pro-social standards of conduct. When pupils display disrespectful, unfair, dishonest, untrustworthy, uncaring, or irresponsible behaviour, they are immediately reminded by the classroom or school community of their commitment to good character in a respectful manner. The language used to mediate the discourse around this inappropriate behaviour utilizes the six words that underpin all character education lessons—*respectful, responsible, trustworthy, fair, caring, and honest*—with the aim of moving from interpersonal to intrapersonal self-regulation of a discourse internalized to bring behaviour into accord with commitment. This dialogue is underpinned by restorative justice principles and guides the school-wide approach for overcoming persistent displays of disrespectful, irresponsible, untrustworthy, unfair, dishonest, and/or uncaring behaviour.

3.2.3.2 Restorative processes within the BSC Programme. This section introduces and discusses the restorative processes which have emerged from the literature and formative experiments data as being a fundamental component of the BSC Programme. The restorative component of the BSC programming is seen to be best

placed within the framework of procedural justice, and the manner in which character education underpinned by restorative processes is a key component in building relationships based on respect, responsibility, trust, honesty, fairness, and caring. It is important to reiterate that a prior commitment to pro-social character traits and standards of conduct is hypothesised to be paramount in the implementation and effectiveness of restorative processes facilitated to solve problems and resolve conflict. The restorative processes of the BSC Programme are underpinned by the belief that children need to learn how to take responsibility, solve problems, and resolve conflict in powerful ways that are first facilitated through interpersonal dialogue mediated by a knowledgeable adult or more competent peer. This dialogue needs to be designed and facilitated to develop the strength of character necessary for this dialogue to become the intrapersonal language of self-regulation, and this intrapersonal self-regulation enhances the ability to maintain a commitment to pro-social standards of conduct when faced with the social challenges of interpersonal relationships. It was hypothesized that interpersonal dialogue that leads to cognitive dissonance and provides pathways to reduce this dissonance is best employed to develop the intrinsic self-regulation necessary to accord action and commitment.

The foundation of the BSC Programme was built from a diversity of intellectual perspectives that provide a coherent understanding of how restorative justice might be implemented within the school community. The implementation of restorative justice is embedded within the philosophy that schools benefit greatly from an effective strategy for developing a commitment to and compliance with pro-social behaviour that does not depend on incentives-based behaviour management. The goal is the development of social situations in which people would act in socially responsible and cooperative ways for rational and ethical reasons, not due to fear of punishment for wrongdoing (Sherman, 1993, 1998, 1999, 2003; Sherman et al, 1997; Tyler, 1990, 2003a).

In building an understanding of the mechanisms underpinning the restorative approach in relation to promoting a climate of social responsibility within schools, two broad conceptions of restorative justice must be considered: the *values-based conception* and the *process-based conception*. The values-based conception focuses on accountability to authority underpinned by a commitment to a socially situated set of values or principles, whereas the process-based conception focuses on bringing together all affected by harm or rule breaking as well as healing and restoration. A process-based restorative approach often begins with a meeting that includes a discussion concerning what happened facilitated by a mediator, thus providing an opportunity for all parties to describe how they were affected by the interaction. The process concludes with a consensus as to what reparation would redress the wrong and address the harm that occurred.

The restorative perspective envisions the path toward a civil society as one that invests in and values social capital. It is here argued that individuals must feel ties to their community and a personal commitment to good character for restorative processes to operate to their full potential. To this end, the BSC Programme sees the practice of restorative processes as being a key factor in transforming conflict (i.e., regulative discourse) into teachable moments (i.e., instructional discourse). The highly emotionalized nature of these teachable moments enhances the attachment children feel toward their previously verbalized commitment to act in accord with pro-social standards of conduct.

Within the BSC Programme, the MCLEs provided as part of the restorative process emphasize the harm that one's negative actions can do to both intrapersonal and interpersonal relationships. By focusing more on harm than rule breaking, the process-oriented restorative approach has the potential to repair interpersonal relationships

through the management of intrapersonal dissonance. In turn, the approach can be used to address intrapersonal, interpersonal, intra-group, and intergroup conflict, providing a potentially powerful avenue for schools to strengthen attachment and build social capital among all members of the school community.

Research into the efficacy of restorative justice has included investigation of the theoretical basis of restorative processes (Tyler, 1990) and the theoretical relevance of the social and emotional responses of shame and pride (Ahmed, Harris, Braithwaite, & Braithwait, 2001; Braithwait, 1989, 2002a, 2002b; Morrison, 2001, 2002, 2003, 2005, 2006, & Scheff, 1994; Sherman & Strange, 2007; Strange, 2003). The literature spans the social context of the United States, the United Kingdom, Canada, and New Zealand (Maxwell, 2006a, 2006b; Maxwell & Hayes, 2006; Morris & Maxwell, 2001), providing a cross-cultural perspective into the efficacy of restorative justice. This broad base of evidence provides a comprehensive understanding of the approach with which to develop a conceptualization that embraces the two key psychological mechanisms of shame and pride, both of which underpin the efficacy of restorative approaches. It also emphasizes the need for educators and other community stakeholders involved within the school community to accept the relevance of pride and acknowledge the need for shame and shame management in developing a commitment to pro-social standards of conduct.

The restorative approach stresses the educational value of interpersonal dialogue designed to facilitate cognitive dissonance in the path toward developing intrinsic appreciation of social responsibility and civility, which may provide the additional connection necessary for educators to use each occurrence of conflict as an invaluable teachable moment in the course of pro-social child development. This last point is particularly salient if schools are to embrace their role in helping children socialize into and maintain a socially responsible and civil society. The following sections present an

integrated, multi-dimensional understanding of the restorative approach as espoused by the BSC Programme by reviewing the restorative justice research into school bullying.

3.2.3.2.1 Bullying and shame management. Approaches for preventing bullying mentality and behaviour through restorative processes provide templates for the effective conceptualization of approaches to facilitating positive child development and a cooperative and socially competent school community. Evidence suggests that restorative processes have the potential to empower pupils and school staff to develop a caring and fair climate of respect and responsibility underpinned by an honest and trustworthy commitment to socially responsible standards of conduct. As Lerner (2002) and Morrison (2001, 2002) stressed, the central aspect in developing a civil society is facilitating the development of positive pro-social child development. However, Peterson (2004) found that bullying continues to undermine the positive development of children by the systematic abuse of power. The mental health implications of this subversive mode of interpersonal interaction are well documented. Lerner et al, (2002), Bond et al, (2000) and Bond et al, (2001) found that the victims of bullying are more likely to suffer from depression compared to those who do not experience bullying. Other researchers have linked bullying with posttraumatic stress (Mynard et al., 2000) and suicidal ideations (Rigby & Slee, 1999).

Recognizing that bullying clearly has deleterious effects on the emotional well-being of students and staff, schools have implanted anti-bullying initiatives, but most have been ineffective (see Smith et al., 2004). Based on a meta-analysis of bullying research, Rigby (2004) concluded that anti-bullying initiatives have had “small effects in reducing the proportion of children being victimized and little or no reduction of children bullying others” (p. 28), but that “research has not produced any conclusive evidence on which of the different ... practices are most likely to reduce bullying in schools” (p. 297).

However, Olweus' (1993) Bullying Prevention Programme, a Norwegian initiative, was found to have reduced bullying by 50%. Olweus' Bullying Prevention Programme is a four-component intervention that provides warm positive interest and involvement with adults, firm limits on unacceptable behaviour, consistent application of non-punitive sanctions on violations of rules, and adults who act as authority figures and positive role models. However, subsequent evaluation of the programme in England and the United States found it to be less effective (Lember, 2004; Black, 2003). This disparity in findings could be related to the restorative approach situated within the value-based concept of restorative processes (i.e., focused on rule breaking and deference to authority), which is addressed in more detail below.

As the values-based concept of accountability to authority and the process-based concept of reparation of harm both have strengths and weaknesses, it is hypothesized here that an integration of both within the conceptualization of a restorative process that embraces a commitment to voluntarily accepted pro-social standards of conduct and self-responsibility for harm caused to others may help schools effectively address the growing level of disruptive, inappropriate, anti-social, and aggressive behaviour. The main aim is to establish social responsibility and maintain the understanding that consequences, whether positive or negative, are directly linked to actions that are all related to one's decisions and choices. This commitment to pro-social conduct is envisioned to assist children in acquiring the pro-social knowledge and understanding that supports and sustains self-regulated cooperative learning environments and civil societies.

As stressed by Rigby (2002), restorative processes are particularly applicable to bullying behaviour, as bullying is often defined as the systematic abuse of power. As Braithwaite (2001, 2002a) explained, restorative approaches seek to address and transform power imbalances within social relationships. Therefore, restorative justice

approaches may provide an effective strategy to decrease bullying behaviour and enhance interpersonal relationships to maintain a cooperative learning and teaching environment. Morrison (2006) confirms that restorative approaches properly envisioned and facilitated can empower those engaged in and affected by harmful behaviour to accept responsibility for this harm. This acceptance of responsibility can in turn strengthen mechanisms that support accountability and the healthy management of shame, which appears to be the primary emotion in determining behaviour. Morrison argues that shame management provides an essential avenue for overcoming the persistent cycle of harm associated with bullying behaviour. Thus, approaches based on the intrinsic development of pride and shame management may be more effective for facilitating the development of pro-social standards of conduct than compliance-based approaches based on the fear of punishment for wrongdoing.

A considerable body of research has focused on the effectiveness of deterrence in establishing pro-social behaviour. Nagin (1999) found that threatening and/or delivering sanctions is often effective in shaping rule-following or law-abiding behaviour, and a number of studies suggest that people are less likely to engage in illegal behaviours when they think that they might be caught and punished for infractions (Nagin & Paternoster, 1991; Paternoster, 1987, 1989; Paternoster & Iovanni, 1989; Tyler, 1990, 2003a). In contrast, several studies highlight the limitations of the deterrence approach and the factors that undermine the effectiveness of this approach in developing self- and social regulation. Research has consistently found that the deterrent effects, when they are found, are small in magnitude. In a review of studies related to illegal drug use and deterrence strategies, MacCoun (1993) found that only around 5% of the variations in drug-use behaviour can be explained by variations in the expected likelihood and/or severity of punishment. Nagin (1999) argued that the perception of the certainty of

punishment, rather than the severity of punishment, has the most impact on behaviour. Several researchers (Ellsworth & Gross, 1994; Tyler, 1990) point out that a certainty of punishment is associated with heavy surveillance and visible policing, the thought of which in schools, and in democratic societies in general, is distasteful. Therefore, because the probability of being caught when breaking many laws is low, deterrence based on the probability of being caught for wrongdoing is generally a poor strategy. Moreover, it is deleterious to pro-social development, as it places responsibility for control on others rather than oneself.

Another consideration is that people may follow the rules while under surveillance but engage in wrongdoing when no authority figure or camera is watching, even when they consider the imposed rules to be legitimate. For example, many children will follow the rules of the classroom while under the supervision of their classroom teacher (the primary authority figure responsible for sanctions and punishments), but will readily break the rules while under the supervision of a supply teacher, causing the classroom to disintegrate into chaos. As this example shows, the deterrent model of behaviour management requires consistent and ongoing surveillance that offers little for the development of intrinsic sanctioning systems (i.e., self-regulation). In contrast, the character development and restorative processes of the BSC Programme aim at facilitating the development of pro-social attitudes that lead to the development of self-regulation, guided by the framework of procedural justice and moving beyond the use of surveillance, punishment, and rewards.

Educational stakeholders would do well to recall the words of Kant (1781):

If you punish a child for being naughty and reward him for being good, he will do right merely for the sake of the reward; and when he goes out into the world and discovers that goodness is not always rewarded, nor wickedness always punished,

he will grow into a man who only thinks about how he may get on in the world, and does right or wrong according as he finds advantage to himself.

Immanuel Kant 1724-1804

3.2.3.2.2 Using restorative processes to develop intrinsic self-sanctioning systems.

Essential to the punitive and deterrence approach is the use of sanctions. A major consequence of over-reliance on sanctions and the deterrence approach in schools in general is a troubling level of disengagement, marginalization, disaffection, and exclusion, which can lead to transgressive attitudes and behaviour and an increasingly negative relationship with authority figures that may persist throughout the life course (Haney & Zimbardo, 1998; Tyler, 1997, 1998; Tyler & Huo, 2002). Lewin et al. (1939) distinguished between two core elements in human motivation, termed instrumental or self-interested motivations that regulate behaviour: these being; the desire to maximize gain and the desire to minimize loss in interactions with others. As discussed above, the deterrence model of motivation focuses on the ability of legally sanctioned authorities or institutions to shape behaviour by threatening sanctions for rule breaking. The goal of this approach is to “gain control of the situation” (Reiss, 1971: 46) by “manipulating an individual’s (or group’s) calculation of risk regarding whether or not ‘crime pays’ in a given circumstance” (Meares, 2000; 396).

On the other hand people are intrinsically motivated to engage in actions that they enjoy or to which they are committed, and are also motivated to act on behalf of groups and people to whom they feel personally attached and committed. This was first discussed by Lewin (1936, 1943 and 1946) in which he stressed that of the many types or sets of internal motivations are associated with activities people want to do. For this study this is seen to be a salient point and underpins the implementations of activities that people voluntarily commit to undertaking following a mediated discussion with a knowing adult.

A second set of internal motivations that are key factors in the BSC Programme are feelings of social responsibility and obligation, which reflect the willingness and desire to act based on feelings of social responsibility. This perspective of intrinsic attitudes related to behavioural regulation is broken into two key values, *legitimacy* and *morality*, that underpin the desire to act in accord with expectations of orderly pro-social standards of conduct (Tyler & Blader, 2005). Legitimacy refers to the feeling of obligation to defer to an authority other than one self. French and Raven (1959) defined this deference to a legitimate authority as an authority regarded by a person, group, or society as entitled to have their decisions and rules accepted and followed by others.

Weber (1968) warned that the ability to use power is not the sole factor in the issuance of commands and blind obedience. Weber wrote extensively about the evolution of the commitment to follow laws that reflect the level of responsibility associated with willingly and voluntarily suspending personal consideration associated with self-interest that legitimizes the role of authority. Therefore, Legitimacy is only gained if people believe that the authority, authority figure, or institution is entitled to determine the appropriate behaviour in a given situation. Defining legitimacy as the authority given to an institution or person to decide rules or laws, Kelman and Hamilton (1989) argued, “Behaviourally, authorization obviates the necessity of making judgments or choices [by the individual such that] not only do normal moral principles become inoperative, particularly when the actions are explicitly ordered, a different type of morality, linked to duty to obey orders from superiors, tends to take over” (16). In considering whether or not legitimacy matters, Sunshine and Tyler (2003a), Tyler (1990), and Tyler and Hou (2002) found that internal motivations do influence law-related behaviour; concluding that the internal motivation for the need of legitimacy influences compliance with rules or laws.

It is this process of activating internal motivations for legitimacy that develop and support orderly pro-social behaviour upon which the restorative processes of the BSC Programme focuses. The BSC learning objective is to activate internal motivations that legitimize pro-social behaviour, thus providing an alternative to the deterrence model's reliance on external controls. Furthermore, this approach facilitates the development of social responsibility rather than deference to external authority (whether legitimate or not), figures, or institutions to ensure that blind obedience never obviates the necessity of making ethical and rational decisions, judgements, or choices when considering the well-being of oneself and others.

Tyler (2004) suggested that when people see authority figures following a procedurally just course of action, they attach a higher degree of legitimacy to the process. Tyler (2004) argued that this legitimacy, once conferred, promotes compliance and pro-social standards of conduct. Applying the theory of dissonance to the process of procedural justice provides strategies for activating intrinsic commitment and legitimacy so that responsible adults or more competent peers can guide a restorative process, which supports the commitment to act in accord with pro-social standards of conduct.

Procedurally just restorative processes legitimize the acceptance of responsibility and support the development of intrinsic values that inform motivation to act in accord with a commitment to pro-social standards of conduct. Therefore, it can be argued here that schools and communities at large may benefit from processes that activate the internal motivations that develop self-regulation through restorative justice. For schools to facilitate the development of an intrinsic commitment to social competence and a cooperative disposition, it is important that all behaviours contrary to the commitment to good character immediately be addressed through a firm and consistent process that maintains self-responsibility and accountability through procedurally just protocols. This

process, coupled with the facilitation of dissonance and the subsequent mediation of that dissonance through the restorative process, may assist schools in accepting and using behavioural mistakes as teachable moments. These teachable moments should be seen as opportunities to use lived experiences to create cognitive dissonance for overcoming persistent displays of anti-social, aggressive, and harmful behaviour.

By introducing restorative processes underpinned by procedural justice, schools may provide an avenue for children to develop the intrinsic values of responsibility and the obligation to uphold their commitment to be fair, caring, responsible, respectful, trustworthy, and honest when relating to others. This commitment legitimizes the responsibility of adults for developing a cooperative learning environment at the macro-level and the responsibility of students in developing a commitment and adherence to socially competent and cooperative interpersonal interactions. This shared responsibility empowers both staff and students to accept their role in developing a caring, fair, and just community based on a voluntary commitment to character development in cooperation with process-based social regulations at the systems level (Tyler & Huo, 2002; Tyler & Sunshine, 2003a) and supported by intrinsic motivation at the individual level.

As previously discussed, legitimacy is not the only internal motivation associated with the social values upon which the restorative process is based. Morality, the intrinsic motivation to act in accord with a commitment to do the right thing, is the second factor. Tyler (1990, 2006) argued that people are less motivated to behave in ways that they think are immoral, regardless of whether the behaviour is legal or not; as in the case of legitimacy, morality is internal and influences and guides actions beyond consideration of the risk of being caught and punished. The social value of morality is influenced by the internalization of responsibility to live up to one's commitments (Robinson & Darley, 1995). The underpinning aspect of this intrinsic motivation is that people feel the

psychological tension (i.e., dissonance) of shame when they have failed to act in accord with their commitment to be responsible, respectful, trustworthy, fair, caring, and honest. Once their commitment to the ideals of pro-social behaviour is internalized, they become self-regulatory. Their acquired intrinsic motivation allows them to move beyond reliance on others to regulate their behaviour and empowers them to become self-competent members of the learning community, enhancing their self-image and supporting their acquisition of self-directed motivation, learning, and development.

It is proposed in this study that Vygotsky's (1978) contention that learning precedes development also holds true for the development of morality. The learning and development of pro-social behaviour (i.e., ethical decision making, problem solving, and morality) is no different than the development of mathematical learning. Few educators expect children to arrive at school knowledgeable of advanced algebra; rather, children are provided with very systematic and well-structured mediated learning activities to instil within them the knowledge required to meet the demands of advanced mathematical learning as they progress through their school years. However, as evidenced by zero tolerance policies and the use of rewards and sanctions instead of proactive teaching and learning opportunities it appears that many educators expect children to arrive at school with the complex knowledge required to navigate the socially charged atmosphere of the classroom. This is further evidenced by a review of school behaviour policies, the UK Educational Act (2006), discussions with teachers and school observations (White, 2007). It is suggested here that for children who have not been previously socialized into pro-social behaviours or find themselves overwhelmed by the social complexity of the school setting, this expectation may give rise to anxiety and maladaptive behaviour. This holds especially true if systematic and well-structured mediated-learning activities are not facilitated to actively socialize the child into normed pro-social behaviour. This active

socialization may be initially achieved by establishing socially responsible routines, habits, and attitudes. As these routines are first developed interpersonally and are initially external to the individual, they may conflict with the child's desires. However, through constant support and mediated- learning activities focused on developing intrinsic pro-social attitudes, routines and habits designed to instil respect, responsibility, trustworthiness, fairness, caring, and honesty may eventually become part of children's intrinsic discourse (i.e., internalized system of regulation) and guide their behaviour even in the absence of external authority, rules, laws, or regulations.

It is suggested here that the internalization or intrapersonal discourse of pro-sociality forms the root of the self-regulatory language that brings action into accord with the commitment to good character. It is hypothesised that the commitment to good character, once firmly rooted within the intrinsic systems of self-regulation, replaces the need for control by others with control of the self by the self. Even though many schools are beginning to turn toward restorative justice approaches (see Hopkins, 2002; Zehr, 1995), many are implementing an approach based on deference to authority, leading to regulation based on deterrence rather than the intrinsic motivation to act in accord with normed pro-social standards of conduct.

The restorative process embedded in procedural justice focuses on the values associated with a personal commitment to act in accord with rational and ethical judgement, decision-making, problem-solving, and conflict resolution by promoting the personal responsibility necessary to suspend self-interest to do what is just for the self and others. As argued here, a properly conceived restorative process uses a conflict as a teachable moment to create dissonance, and then mediates this dissonance until reduction can occur and consonance with commitment be regained. The process focuses not only on the harm done to relationships but also to intrinsic motivation, and, supported by self-

image, aids one in acting in accord with one's commitment. This process is particularly important during the socialization of children to develop socially competent and cooperative school communities. As Sunshine and Tyler (2003b) explain, if the goal is to develop a commitment to a just (i.e., legitimate and moral) standard of conduct, authorities (schools in this case) should pursue policies consistent with promoted and accepted values. Therefore, schools should assume responsibility for providing learning opportunities and activities based on respectful, responsible, fair, trustworthy, caring, and honest procedures when children fail to act in accord with their commitments. It is in this way that children will understand and legitimize the exercise of authority when necessary. The restorative process strives to activate the commitment to act responsibly, respectfully, honestly, and fairly in a caring and trustworthy way during all interpersonal interactions.

According to Tyler and Blader (2005), people view interventions that adhere to their same standards of conduct as just (i.e., moral and legitimate). Therefore, Sunshine and Tyler (2003b) contend that the ways in which authority figures exercise their authority confirms to others whether or not they share the same values or level of commitment to pro-social standards of conduct, which is very important when working with children. During the socialization of children into the ideals of good character and high standards of pro-social conduct, the internalization of this commitment may be undermined if people in positions of authority do not adhere to the same standards and commitment. Restorative processes provide school staff with the avenue to demonstrate that they share the same standards of conduct and commitment to the standards of just behaviour by acting in ways consistent with the ideals of good character. By teaching children to use rational and ethical judgement to resolve conflict and solve problems in a respectful, caring, fair, honest, trustworthy, and responsible manner, the standard of conduct is seen as legitimate, allowing the shift from external to intrinsic regulation.

The psychological literature on moral development focuses heavily on strategies that help children internalize moral values and how children later shape moral judgements during adulthood (see Kurtines & Gewirtz, 1984; Lickona, 1976; Rest, 1986). Although the majority of the literature suggests that most children develop moral values, this development is not guaranteed. If children do not develop moral values and the commitment to these values or standards of conduct, they may lack the ability to act morally (i.e., in a socially responsible, cooperative, and just manner) in adulthood. With this in mind, it could be inferred that the level of commitment to act morally as a child shapes future adult behaviour, and has serious implications for the orderly and civil functioning of society. Therefore, it is suggested here that restorative processes that focus on developing social competence and cooperative dispositions can provide the support required to internalize attitudes that support pro-social behaviour during childhood as well as later in life.

3.2.3.2.3 Developing and enhancing social competence and cooperation. The restorative justice perspective views a just society as one that invests in and values social capital. Within schools, the use of restorative justice focuses on transforming conflicts into teachable moments and learning opportunities to rebuild and strengthen relationships (i.e., enhance social capital). These relationships in turn become the focal point of maintaining one's commitment to good character and committing to pro-social standards of conduct in a cooperative and socially competent learning environment. Schools implementing restorative justice programmes should see the goal as building stronger relationships and attachments, with the understanding that secure attachments and mutually respectful relationships are key mechanisms in building schools of character, as it is these mechanisms that provide an effective base for the use of restorative justice and developing a civil and just school community. The process should be directed toward

enhancing the intrinsic motivation to engage in interpersonal and intrapersonal dialogue and self-regulation of behaviour independent of the need for external incentives or deterrence.

Braithwaite (2002) suggests that the route to effective restorative justice is resolving disputes through the dissonance created by the process of *re-integrative shaming*, defined as the process of expressing strong disapproval of irresponsible, disrespectful, unfair, dishonest, uncaring, and untrustworthy behaviour while maintaining respect for the individual who has failed to live up to his or her commitment. This commitment, as previously discussed, should be first supported by character development lessons that create the desire to act in a socially competent and cooperative manner. As this is a key mechanism in the effectiveness of restorative approaches within schools, effective relationship-building leading to secure attachment to the person disapproving of the inappropriate behaviour or failure to maintain a commitment to pro-social standards of conduct should be pro-actively constructed and maintained.

The maintenance of strong and secure relationships and commitment to pro-social behaviour is supported by mutually respectful interactions both during times of successful (i.e., socially competent and cooperative) interpersonal interactions and times of difficulty. The development of mutual respect is further supported by a commitment to restorative processes from all members of the school community. The goal of this process is to help children learn how to restore respect for self and others after harming relationships and challenging their self-image through a failure to act in accord with their commitment to the standards of good character. The aim is to give all parties a voice and instil in each individual that all members of the school community are valued and respected. Encouraging the acknowledgement of the shame felt regarding inappropriate,

anti-social, or harmful behaviour begins the healing process necessary to overcome marginalization, disengagement, and disaffection.

As research has shown, the persistent and inappropriate management of shame can lead to stigmatizing shame and its displacement into anger, which perpetuates the cycle of harmful behaviour (Braithwaite, 2001, 2002). Restorative justice focuses on developing appropriate and effective shame-management strategies through mediated dialogue facilitated by a knowledgeable adult or more competent peer to encourage individuals to first, honestly and sincerely accept responsibility for their actions; second, apologize in a sincere manner that voices regret for the harm their actions caused; and, finally, accept the logical consequences for their actions according to an agreement between them and those whom they have harmed. The objective is to develop and strengthen mutually respectful relationships, heighten the sense of responsibility to all members of the school community, support and strengthen every child's commitment to self-regulated social competence and cooperation, and maintain a connection between action and consequence. When dissonance is created and mediated through restorative justice in a manner that facilitates the development of effective shame management, it can support the intrinsic development of pro-social attitudes by providing routines and habits and showing the connection to logical consequences when one fails to maintain the accepted standards of conduct supported by the school community.

The restorative justice process is suggested here to have the potential to be an effective tool in continuing character development by fostering accountability and responsibility for one's actions. To achieve the intrinsic acceptance of self-responsibility, the restorative justice process seeks to reduce dissonance and denial by dialogue mediated to create a trusting atmosphere where shame can be acknowledged and dissonance reduced. This dialogue provides a discourse designed to reaffirm a commitment to pro-

social standards of conduct and a consensus between the offended and the offender(s) concerning appropriate reparation and healing. This process is first accomplished through interpersonal dialogue facilitated by a knowledgeable adult or more competent peer, with the goal being the eventual transference of this discourse into an intrapersonal self-regulating discourse.

The aim of this process is to enhance both interpersonal and intrapersonal resiliency to address conflicts as they arise in a caring, respectful manner that promotes healing, reparation, and reintegration for both the offender(s) and the offended. The mediated reduction of dissonance aims to ameliorate efforts to prevent further harm, disengagement, and disaffection for both the offended and the offender(s). The first challenge in adopting and implementing this process is the willingness of educators and other stakeholders to accept the theoretical relevance of social and emotional responses, such as shame and pride, in understanding the underlying social and emotional mechanisms of effective restorative processes. The second challenge is accepting that conflicts should be seen as teachable moments and points of development.

3.2.3.2.4 Challenges to implementation and maintenance of restorative justice programmes. Several studies have described the interplay among a pupil's feelings of respect within the school, pride in being a member of the school, the emotional value of feeling a sense of attachment to the school, and shame management in relationship to transgressive or anti-social behaviours. Building on previous research (see Lind & Tyler, 1980, 1988; Tyler & Lind, 1992), Tyler and Blader (2000) suggest that two group-oriented status factors are key mechanisms in shaping intragroup cooperation: the respect and the pride in being a member of a group. Tyler and Blader (2000) found that a high level of cooperative interaction is achieved within a group when the members have a high level of respect for each other and feel a high level of pride as members of the group.

Tyler and Blader argue that social status is supported by both pride and respect, with pride reflecting the feeling one experiences based on group status and respect by one's feeling in relation to one's status in the group. They explain that when both pride and respect are experienced at high levels, cooperation with pro-social standards of conduct is also high.

Pride, attachment, and shame management are key factors in the development of intrinsic sanctioning and adherence to pro-social standards of conduct. A proactive approach to facilitate the development of these key factors in both intrapersonal and interpersonal interactions through mediated cooperative-learning activities may meet the social, emotional, and cognitive needs of children within the educational setting. The literature confirms that when children do not develop strong connections with significant others and the school, pride in self, membership in worthwhile groups, and an intrinsic commitment to pro-social standards of conduct, they are susceptible to association with subcultures of delinquency (Farrington, 1991, 1993), crime (Olweus, 1993), and social isolation (Hawker & Boulton, 2000), which may lead them to experience depressive symptoms (Newman, 2004) and suicidal feelings (Hawker & Boulton, 2000).

Research has also shown a correlation between disconnection or a lack of a sense of belonging and self-destructive behaviours. This disconnection and subsequent engagement in self-destructive behaviour often leads to aggressive and anti-social behaviour against oneself and others (William et al., 2005). Blum and Libbey (2004) found that attachment to school and successful educational outcomes are key protective factors in decreasing anti-social behaviour, suggesting that a significant factor in childhood anti-social behaviour and disaffection is the connectedness children feel as a member of their school community. This is related to a sense of respect that they feel from their school community and the pride that they feel in being a valued member of

their school. As this attachment is developed and supported, the commitment by all members of the school to be respectful, responsible, trustworthy, fair, caring, and honest is strengthened and supported by restorative processes that provide learning experiences to help them develop adaptive shame-management strategies and the emotional stability (i.e., resiliency) required to successfully address conflict and heal damaged relationships with self and others. These processes support the development of resiliency by connecting individuals to group-supported pro-social values, which provide the support required for effective shame management and maintenance of healthy relationships.

3.2.3.2.5 Merging restorative justice with character education. As stated above, the use of restorative processes within the BSC Programme is aimed at empowering all school stakeholders to take responsibility for building emotionally stable and healthy relationships. The promotion and expectation of accountability is a major aspect; all members of the school community should support each other as they learn to be socially competent and cooperative while holding other members accountable for their actions. This process is hypothesised here to have the potential to provide the links required for children to learn that all actions have logical consequences: Positive, pro-social behaviour leads to positive consequences and negative, anti-social actions lead to negative consequences. For young children, this connection to action and consequence is seen to support the development of the routines and habits required for establishing pro-social attitudes. As previously discussed, if this connection is removed or negative actions are rewarded with positive consequences (e.g., a pupil who displays disrespectful behaviour during a maths lesson is offered the chance to complete one division problem and then have time on the computer), children may become confused as to what behaviour is appropriate, which may lead them to rely on inappropriate actions in the attempt to have

their ego-centric needs met without consideration of the perspectives of others (Lewins et al., 1936).

As Baumeister and Leary (1995) suggested, fulfilling the basic needs of connection to and respect from others is a key mechanism supporting the development of self-worth, another basic human need. The two basic needs of connection with and respect from others increase the development of beneficial attachments that in turn empower individuals to commit to pro-social standards of conduct in the best interest of the group and themselves. The importance of school attachment was further confirmed by McNeely, Nonnemaker, and Blum's (2002) review of the literature that indicated when children feel an attachment to their school, anti-social behaviour decreases and is replaced with a rising level of pro-social behaviour. This evidence suggests that if left unresolved, anti-social behaviour undermines the development of healthy attachments for all school members, resulting in a sense of disconnection that may lead to a further feeling of disaffection and a cycle of harmful behaviour (i.e., anti-social routines and habits) that becomes more difficult to overcome as these behaviours develop into anti-social attitudes (Nonnemaker & Blum (2002).

Based on this review of research, it is suggested here that beginning with their earliest contact with the school and throughout their school years, children should receive proactive character education that facilitates positive pro-social development. This consideration is a key factor in the BSC Programme, as it is recognized that by actively facilitating pro-social development, schools can break the growing cycle of maladaptive anti-social behaviour increasingly reported by school staff and other community members. The grounding principle of the BSC Programme is the use of firm, consistent, and fair approaches to support the development of pro-social and cooperative development and decrease anti-social behaviour by jointly implementing character

education and restorative processes. This combination of approaches is seen as the most effective avenue for addressing the relationship-harming behaviour of children who lack the necessary commitment to the pro-social standards of conduct required to become socially competent and cooperative learners. The character development lessons are designed to use both vicarious and lived experiences to develop pride in the self and school membership as well as attachment to school and others. The restorative processes are used to address and enhance social responsibility and shame management when harm occurs. It is this development of pride, acknowledgement of shame, and shame management that is hypothesized to support the effective use of character education and restorative justice in developing a cooperative learning environment that provides for the success of all members of the school community.

3.2.3.2.6 Supporting shame acknowledgement and management. Because shame is a central aspect in the development of disengagement and disaffection (Scheff, 1994), people are most capable of self-regulated behaviour when shame is acknowledged and processed. As such, it is crucial to realize that the acknowledgement of shame creates cognitive dissonance both disconcerting and beneficial in the acquisition of pro-social development. It is also crucial to recognize that this dissonance needs to be reduced through mediated experiences designed to facilitate the development of effective shame management allowing one to acknowledge and manage shame and decrease disengagement and disaffection, thus enhancing resilience and the strength of character necessary to overcome adversity that challenges and undermines self- image. Both shame acknowledgement and shame management are key psychological strategies supporting pro-social behaviour that children must develop. These strategies are supported through the facilitation of restorative processes designed to develop and enhance intrapersonal resiliency; that is, the strength of character sufficiently resilient to acknowledge and

manage shame when one breaks a commitment to pro-social attitudes and standards of conduct without becoming overwhelmed and resorting to ineffective shame-management strategies.

Reintegrative shame theory (Ahmed et al., 2001; Braithwaite, 1989), which identifies shame as the central aspect of harmful behaviour and disaffection for both the perpetrator of harm and its recipients, describes the two mechanisms of *reintegrative shaming* and *stigmatizing shaming* as underlying self-regulation. Reintegrative shaming is facilitated through a challenging and supportive process that maintains respect, fairness, and caring for all individuals involved in the harmful situation; never condones nor ignores any level of anti-social behaviour; mediates the acknowledgement of the harm done; and provides an avenue for reconciliation. Reconciliation is understood as a necessary component in the management of shame felt by both the offended and the offender(s). Reintegrative shaming facilitated through restorative processes provides opportunities to create dissonance in relationship to commitment and actions; mediate the reduction of that dissonance; connect actions to logical consequences; and provide an avenue to resolve the conflict in a responsible manner, supporting the development of socially responsible and caring relationships.

As the process is conducted in a responsible, respectful, fair, and caring manner, it supports and maintains a sense of attachment for both the offended and the offender(s). Restorative processes recognize the need to develop effective shame-management strategies for all parties affected by any anti-social, aggressive, and harmful behaviour, confirming to children that they are supported unconditionally as individuals but that anti-social behaviour is not acceptable in any form. This supportive but firm reproach to anti-social behaviour at any level provides the support required as children learn how to meet

their commitments and become individuals of good character. It also provides the opportunity for school staff to teach children rather than policing and punishing them.

Stigmatizing shaming, on the other hand, is based on the notion that support should be conditional on deference to school authority and rules; thus, those who misbehave must be arbitrarily punished and even excluded from the school. Such conditionality is hypothesized to be an undermining mechanism for dissonance that leads to disaffection and a persistent cycle of anti-social, aggressive, and harmful behaviour. Whereas reintegrative shame management facilitated in a caring, honest, and sincere manner respects the person but firmly disapproves of any anti-social behaviour, stigmatizing shame management condemns and punishes the person for transgressions. The former leads to acceptance of responsibility, reduction in dissonance, and a re-commitment to pro-social behaviour, while the latter leads to ineffective shame management that may result in situational channelling and increased anger.

Ahmed et al. (2001) argued that shame management is a key factor in interrupting the cycle of anti-social, aggressive, and harmful interactions that may lead to victimization, and as such, “the key issue with shame management is helping wrongdoers acknowledge and discharge shame rather than displace it into anger” (p. 17). As Lewis (1987) confirmed, victims also experience feelings of shame because wrongdoing damages relationships and violates their sense of trust, self-respect, and fairness. Therefore, shame management should be provided through the use of restorative processes that help the offended discharge shame rather than displace it into guilt. The process of shame management facilitated through character education and restorative justice recognizes that for individuals to work together in a cooperative and inclusive learning environment, shame must be acknowledged, accepted, and discharged to develop

a balance between the intrapersonal needs of the self and the interpersonal needs of the group.

Ahmed et al. (2001) suggested that three steps underpin the development of effective self-regulated, pro-social behaviour. The first step is acknowledgement and acceptance by all members of the school community that others have been harmed by one's actions and that one feels both interpersonal and intrapersonal shame. The recognition of shame as a key factor in both self and social regulation should be acknowledged and accepted by all stakeholders interested in facilitating restorative processes for the successful development and maintenance of healthy relationships to break the cycle of harmful behaviour. The second step is the acceptance of full responsibility for the hurt and harm done by the wrongdoer, followed by the third step of accepting the consequences of the wrongdoing and the voicing of sincere regret. Ahmed et al. (2001) warned that maladaptive shame management results when one of these steps are not fulfilled, and the failure to successfully navigate shame management may result in a breakdown of self-regulation, resulting in the inability to develop internal sanctioning systems necessary to function in a pro-social manner.

Morrison (2006) identified the factors associated with the failure to internalize or fully realize a self-sanctioning mechanism as situational effects, such as family and school climate, and dispositional effects, such as low motivation to engage in effortful cognitive endeavours (Cacioppo & Petty, 1982). The hypothesis that the dispositional effect of low motivation to engage in highly emotive and effortful cognitive endeavours has serious implications for the effectiveness of restorative processes led to the implementation of character development and restorative processes as primary components of the BSC Programme. It was hypothesized that by developing strength of character and pride in oneself along with the commitment to act in a socially responsible

manner, schools may enhance the motivation to engage in the cognitive effort required for the successful facilitation of the restorative process. In turn, the increased capacity for all members of the learning community to engage in the highly emotive and disconcerting dialogue of restorative justice may help the school address irresponsible and disrespectful behaviour. It is suggested here that the motivation to engage in effortful cognitive endeavours is a key factor in not only the successful implementation and effectiveness of the restorative process for learning and maintaining adaptive shame management but also in providing learning opportunities throughout the school, especially in programming related to establishing a commitment to pro-social standards of conduct.

As normed transgressive behaviours become more embedded in a culture, children may lose their connectedness to pro-social cooperative norms and engage in increased levels of transgressive behaviours (UNICEF, 2007). This confusion as to what behaviour is expected and accepted by the culture needs to be addressed if children are to become socially competent, develop cooperative dispositions, and commit to pro-social standards of conduct. Once this connectedness is developed or restored, a commitment to normed pro-social standards of conduct can facilitate adaptive shame management. McDonald and Moore's (2001) finding that shame precedes pride in transforming conflict into cooperation in the restorative process has important implications. As Ahmed et al. (2001) argued, "Shame management is more important than pride management in building a safer community" (p.17). Despite this finding, it is important to recognize both pride and shame as significant factors in the pro-social development of children and the establishment of caring school communities.

3.2.3.2.7 Summary of the role of restorative processes in character education.

According to Braithwaite et al. (1989, 2002a , 2002b), voluntarily committing to pro-social standards of conduct, focusing on acts of good character rather than acts of rule

compliance or deference to authority figures, shaming acts of poor character to facilitate the development of dissonance, and mediating the dissonance arising from the acknowledgement of shame are the primary steps in regulating social conduct; building a school climate of respect, cooperation, and engagement; and developing individual resiliency and self-regulated behaviour that embraces the beneficial aspects of pro-social standards of conduct. The final step may be undertaken by facilitating restorative processes that mediate shame management so that the dissonance created is reduced and processed both interpersonally and intrapersonally until it is effectively discharged. The acknowledgement and acceptance of these factors provides the framework for establishing mediated cooperative-learning activities facilitated by knowledgeable adults or more competent peers for building pride in and commitment to good character; developing a school environment that maintains a commitment to developing the social, emotional, and intellectual competency of all children; and developing shame-management strategies that maintain a healthy self-image and support cooperative engagement with others.

As “shame seems to occupy a singular place among the emotions and social relationships” (Scheff, 1994, p. 53), this “master emotion” is a key factor in the effectiveness of character development and restorative processes. This is especially true when conflict, accepted as an inevitable occurrence in social interactions, provides teachable moments within the school setting that have the power to transform anti-social behaviour into cooperative adherence to pro-social standards of conduct. It is this transformation that may strengthen attachments, in turn providing the scaffolding required to establish the framework necessary to build a socially responsible and civil society of learners within the school.

Many researchers and practitioners facilitating and investigating the mechanisms underpinning potential restorative processes for reducing anti-social behaviour and ameliorating the harm this behaviour has on self, others, and the broader community argue that shame is a powerful social and individual regulator of behaviour. As Morrison (2006) explains, restorative processes designed to address behavioural concerns within schools and build socially competent and cooperative-learning environments work from an emotional base in which attachment, cognitive dissonance, pride, and shame management interact to help individuals move beyond the negative effects of anti-social actions and build positive affect through the healing of damaged relationships, trust, and respect.

A commitment to embrace pro-social standards of conduct is the first step in addressing anti-social, aggressive, and harmful acts. Therefore, the first component of the BSC Programme aims to establish pride in oneself and a verbalized, sincere commitment to pro-social standards of conduct legitimized and sanctioned by all members of the school community. This commitment develops pride in belonging to a community that embraces a sense of respect, responsibility, and care for all members and maintains an inclusive ethos to meet the needs of all children. This pride establishes a connectedness to the school community and an increased sense of self-worth, and personal commitment establishes the relationships necessary to successfully embed restorative processes in the school's commitment to teach children socially competent and cooperative interpersonal discourse aimed at the adoption of attitudes that support self-regulation and pro-social responsibility.

As Ahmed et al. (2001) concluded, the acknowledgement of shame connects or reconnects individuals to their community. Thus, unacknowledged or mismanaged shame undermines reintegration and may lead to the cycle of overwhelming emotional responses

known as “shame rage”, the worst form of ongoing anti-social conflict (Ahmed et al., 2001). Shame management is a key factor in constructing an intrinsic commitment to socially competent and cooperative interactions that lead to social integration and pro-social identity formation, which support the development of resiliency. Resiliency, coupled with shame acknowledgement and management, provides an avenue of restorative justice that supports the BSC approach for developing socially competent and cooperative learners who have the resiliency to overcome self-image-damaging adversity. The active development of social competence and a cooperative disposition is an effective approach for schools to address behavioural issues to socialize children into the pro-social standards of conduct associated with rational, ethical, and civil societies and enculturate them into the values and beliefs that support and maintain a caring, civil, and just society.

By enhancing pride in oneself and the group through mediated cooperative-learning activities designed to socialize children into pro-social standards of conduct, shame management can be enhanced through restorative processes that facilitate the acceptance of responsibility for harm. As a growing body of research suggests, there is a strong relationship between shame acknowledgement and management and the development of social competence and a cooperative disposition. In developing the capacity to accept and work through shame, schools can assist children in navigating the complexities of their social world and provide them with a pathway to a stronger sense of attachment and social integration based on an intrinsic desire that helps them maintain respectful, responsible, fair, caring, honest, and trustworthy relationships within the school, family and community. If behaviour-management processes continue to overlook shame acknowledgement, accountability, and social responsibility, individuals will continue to be susceptible to being drawn into a cycle of alienation, anti-social conflict, and violence.

By mediating shame management to repair damage to the self-image of both the offended and the offender(s), the BSC restorative processes aim to (a) develop and maintain self-regulated pro-social behaviour; (b) provide routines and habits that support the continued development of pro-social attitudes; (c) develop and support an intrinsic motivation to engage with effortful cognitive endeavours; (d) provide the knowledge and understanding required to make rational and ethical decisions, solve problems, and effectively resolve conflicts; and (e) offset the negative influences of ineffective shame management that may result in shame rage.

3.2.3.3 Role of school support centres. This section of the literature review discusses school support centres (SSCs), the third component of the BSC Programme. As in many learning situations, some pupils find it particularly challenging to maintain socially competent and cooperative interactions in the socially complex setting of large classrooms, playgrounds, and the general school setting. This in turn may lead to a cycle of anxiety and anti-social and maladaptive behaviours that could disrupt learning and teaching in the classroom. Such disruptions, if allowed to persist and escalate, may decrease the ability of the child experiencing these difficulties to construct a pro-social self-identity. If these difficulties remain ignored or unresolved, they may undermine the pro-social climate of the classroom, playground, and general school community, leading to added difficulties in maintaining a cooperative ethos and learning environment within the school. Moreover, if low-level disruptive or attention-seeking behaviour is ignored or remains unaddressed, children with low social competence or uncooperative dispositions may develop maladaptive strategies that lead to transgressive behaviour becoming normed within their interpersonal interactions. This normed transgressive behaviour may influence the behaviour of others, leading to an entrenchment of maladaptive behaviours

and the subsequent spread of transgressive behaviours within the classroom and/or school setting at large.

Therefore, in considering the establishment of on-site support, schools should consider Cohen and Prinstein's (2006) research that highlights the impact of peer contagion on the spread of anti-social attitudes and behaviours. When considering how this contagion could draw others into a cycle of aggression, alienation, and disaffection, schools should develop strategies for immediately intervening with pupils displaying challenging behaviour and resisting making a commitment to pro-social standards of conduct. Such strategies are particularly important for preventing students from being drawn into a cycle of transgressive behaviour resulting in a further erosion of the socially competent and cooperative nature of the school setting. It is this cycle that may cause transgressive behaviour to become the norm, leading to a persistent cycle of disrupted learning and teaching and a further erosion of the feelings of pride, shame, and attachment necessary for the development of social competence and a cooperative disposition.

Based on these findings, it is hypothesized that a school-based support centre properly conceived may provide the required programming necessary to meet the needs of children with low levels of social competence and non-cooperative dispositions and addressing the eventual conflict that arises. SSCs may also provide the intervention necessary to meet the needs of hard-to-serve pupils, thereby providing an alternative to exclusion that circumvents the cycle of shame avoidance and development of shame rage. The implementation of SSCs is rooted in a socio-cultural theory of learning that underpins all three components of the BSC Programme, yet is especially salient in developing supportive and challenging centres embedded in the community school for children experiencing particularly challenging social, emotional, and behavioural

difficulties. The socio-cultural theory also aids in understanding the psychological importance of support centres conceived to provide intensive learning experiences that re-establish and maintain effective pro-social attachments, rooted in the understanding that attachments (Bowlby, 1974) are important in providing a sense of unconditional commitment to children.

It is understood within the socio-cultural perspective of this programme that all children may have the potential to become enculturated into a socially responsible and civil learning community if provided with the assistance that they require. The assistance provided should be authoritative, firm, consistent, and supported by the awareness that some children may not have been socialized into pro-social standards of conduct before entering the school, and therefore need to be provided with learning opportunities that end their maladaptive behaviour and facilitate the development of pro-social routines, habits, and attitudes.

3.2.3.3.1 Socio-cultural foundation of learning support. Vygotsky's (1978) socio-cultural theory of learning, specifically his understanding of the ZPD, provides a framework for understanding how targeted support can assist children experiencing difficulties in adopting and committing to pro-social standards of conduct. As Monro's (1999) research indicated, teachers' performance and effectiveness increase when they receive in-service professional development specifically designed to enhance their ability to incorporate a socio-cultural theory of learning and teaching into the daily pedagogical routines of their classrooms. An understanding of the ZPD can assist teachers in the process of developing MCLEs that can greatly increase child development. As Bruner (1987) explained, the cognitive "scaffolding" of learning activities mediated by knowledgeable facilitators enables learners to stretch their knowledge and understanding by challenging their cognition. Coupling this understanding with Festinger's (1957)

research on cognitive dissonance and Piaget's (1951, 1954, 1964, 1977) understanding of how learners seek equilibrium when anomalous information challenges their current knowledge and understanding, learning opportunities can be designed and delivered that challenge and support learners in mastering new knowledge, understanding, and skills.

To illustrate this synthesis of learning and teaching theory, Figure 2.2 provides a simplified visual representation of how assisted learning within the ZPD, along with the facilitation of cognitive dissonance and its eventual reduction through the acquisition of equilibrium, supports continued development.

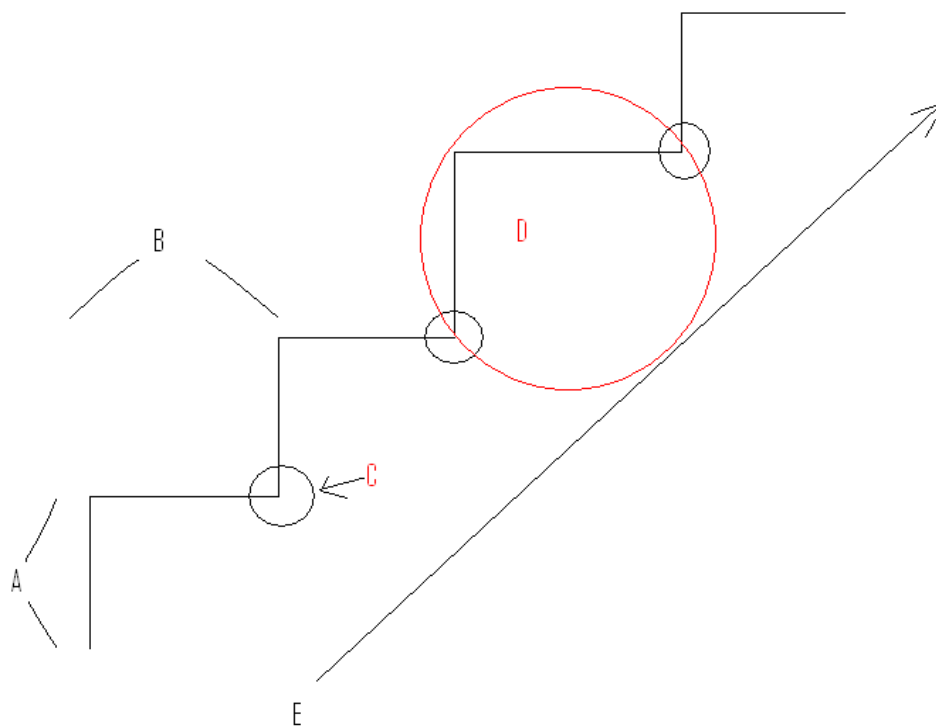


Figure 3.2. How assisted learning within the ZPD supports continued development.

In the figure, A represents the ZPD, which provides the space for the delivery of MCLs that stretch learners' current cognitions (social, emotional, and cognitive) and

abilities. **B** depicts the time that learners might need to effectively assimilate and accommodate this new knowledge on their own without assistance. During this time, the mistakes that occur can be used as teachable moments to reinforce the acquisition of new knowledge. It should be recognized and accepted that the time to reach equilibrium may differ from child to child. **C** represents the point at which the learner has mastered the previous knowledge supported by mediated learning and where the facilitator provides opportunities to challenge this understanding by providing new experiences that create cognitive dissonance within the learner. This dissonance intrinsically motivates the learner to seek further engagement with learning opportunities mediated by the facilitator to further master knowledge, understanding, and skills. During this point, educators must remain aware that the degree of dissonance they create and the time that they devote to its development should accord with the children's readiness to take the next step along their developmental path with assistance; too much too soon may lead to anxiety and disaffection, whereas too little too late may lead to boredom and disengagement.

D represents a systematic approach facilitated by teachers for providing both assistance and challenge so that children gain the intrinsic drive to master the complex knowledge, understanding, and skills associated with pro-social development. The scaffolding of learning, represented here by each stair, represents the space required for both assisted and independent learning to occur. **E** represents the "big picture" and supports Vygotsky's (1978, 1987) argument that learning precedes development. Learning is the assimilation and accommodation of cultural tools that are first exchanged through interpersonal interactions that subsequently develop into the intrapersonal cognitive tools required to successfully navigate the social world. Although the above figure over simplifies the processes that actually occur it provides a visualisation to

support the discussion of the synthesis of theories associated with mediated learning and development.

The intrapersonal cognitive tools that are developed through the inheritance of cultural tools play a subsequent role in interacting with and transforming cultural tools as self-regulating learning and development progress. However, as Noddington (1995) pointed out, the applications of this theory are highly dependent on the socio-emotional factors of trust and caring. Therefore, a commitment to meet the needs of learners within a caring climate is dependent upon establishing trusting, respectful, responsible, fair, and honest attachments. This commitment is perhaps best supported and most convincing when individuals feel that the support is based on a genuine care for their well-being.

The development of secure attachments is particularly important in meeting the needs of children experiencing a range of inappropriate, anti-social, aggressive, harmful and/or violent behaviours that correspond to Bowlby's (1975) description of attachment disorders. Many of these children may be displaying difficulties due to insecurity from lack of attachment to caregivers. Learning activities facilitated by experienced and knowledgeable adults within a small-group setting may provide an opportunity to establish secure attachments with caring and responsible adults while still maintaining connection to the school community with which children are more familiar, thus avoiding further disengagement due to a transition to an unfamiliar setting following exclusion.

3.2.3.3.2 Aims of school support centres. The primary aim of the SSC is to provide children with challenging yet supportive learning opportunities that target the development of social competence and the cooperative disposition necessary to engage in socially responsible relationships within the school and wider community. A properly conceived SSC offers an environment where well-informed and experienced facilitators can work within each child's ZPD to support learning opportunities that challenge

disruptive, coercive, erratic, disorganized, and aggressive behaviour without disrupting the learning of other students or undermining the school climate and its commitment to pro-social standards of conduct. Based on the understanding that early attachments may have not met the needs of children experiencing difficulties, leading to incomplete socialization and lack of enculturation into pro-social standards of conduct, SSCs are designed to provide intensive character development and supportive learning opportunities to build secure and productive attachments, social competence, and a cooperative disposition.

Research indicates that school attachment (Cervovich & Gordano, 1992; Hawkins & Weiss 1985; Lazurus & Folkman 1984), support from at least one significant adult (Garmzey, 1993; Rutter, 1985, 1987; Werner, 1989) and the ability to access social support (Ladd, 1990; Morrison et al., 1997) are key protective factors in predicting life outcomes. Within the BSC Programme, schools can provide children with access to social support and the opportunity to develop secure attachments with significant caring adults if schools take an active approach in socializing and enculturating children into pro-social standards of conduct. The SSC is designed to bridge the gap between children experiencing marginalization, disengagement, and disaffection by providing an alternative to exclusion from the community school while ensuring the continued learning of all pupils. The SSC provides a space for children experiencing difficulties to access the full curriculum through cross-curricular planning underpinned by character development opportunities throughout the learning experience. For example, an SSC teacher planning a cross-curricular activity designed to cover maths, geography, science, and literacy would precede the learning experience with a discussion of the expectations for and a practical description of pro-social conduct. When a breakdown in cooperation occurs, the teacher would use this point of conflict as a teachable moment to scaffold the children's mastery

of pro-social knowledge and understanding to help them develop the skills necessary to be socially competent and cooperative within the social environment of school.

To more closely match the ZPD of all children and concentrate more effectively on their social and emotional needs at this stage in their attachment, learning, and development, the SSC would have the added benefit of smaller groups. An SSC embedded in the school and implementing the BSC Programme would focus on character development and restorative processes, with the goal of providing the support necessary to reintegrate the child into the broader school community in a timely and effective manner. It is hypothesized that as the entire school community becomes more socially competent and cooperative through the BSC Programme, all members will embrace the commitment to help all members of the community maintain pro-social standards of conduct, particularly children who require support in reintegrating into the broader school community. These children will transition back into the broader school community after having developed enhanced resiliency within the SSC, which will provide them with the necessary foundation to resolve conflict without resorting to inappropriate, aggressive, or harmful reactions.

A further key factor in establishing an SSC within the school community is maintaining all previously developed productive and secure attachments that a child has developed within the school. These secure attachments provide children with a sense of unconditional support from people who care enough to challenge their unacceptable transgressive/anti-social behaviour, yet maintain the expectation that all children are capable of socially competent and cooperative conduct if assertive, firm, and consistent support is provided in an authoritative manner. The ideal SSC would be staffed by three highly motivated and effective adult facilitators: one experienced and highly effective teacher, one experienced and highly effective interpersonal therapist, and one experienced

and highly effective teaching or counselling assistant. All staff members must be knowledgeable in interpersonal relationship building, activity-based counselling, and group dynamics. Because the ideal staffing requirements may be difficult to realize at this stage of programme development, the SSC could be staffed by, at a minimum staffing level, one experienced and effective teacher and two experienced and effective teaching assistants motivated to develop their understanding of group dynamics and activity-based cooperative learning.

A further staffing consideration is that of the 20 to 30% of children who are likely to experience behavioural problems, roughly half are likely to display symptoms of conduct disorder (Mental Health Foundation, 1999). Another significant consideration is that 10% of school-aged children will display emotional disturbances that result in substantial functional impairment (Friedman, Kutash, & Duchnowski, 1996). These findings suggest that appropriate resources should be made available to schools for meeting the needs of all children within their community schools. Table 2.2 below displays statistics on the prevalence of mental health disorders in children and adolescents.

Table 2.2

Prevalence of Mental Health Problems Among UK Children by Region, Age, and Sex

	Country/Region							
	London Inner	London Outer	Other Met England	Non-Met England	England	Scotland	Wales	All
	Percentage of children with each disorder							
	Children aged 5-10							
Emotional disorders	3.9	4.2	3.6	2.9	3.3	4.3	1.8	3.3
Conduct disorders	3.6	4.4	5.1	4.5	4.7	3.6	5.1	4.6
Hyperkinetic disorders	2.0	1.0	1.2	1.8	1.5	1.0	2.0	1.5
Less common	-	0.6	0.5	0.6	0.5	0.4	0.6	0.5

disorders								
Any disorder	7.5	9.2	8.7	8.0	8.3	7.7	6.4	8.2
Base	271	356	1,807	2,636	5,070	481	278	5,829
Children aged 11-15								
Emotional disorders	7.9	4.3	5.3	5.6	5.5	4.8	7.7	5.6
Conduct disorders	6.6	4.6	6.0	6.6	6.3	5.8	5.5	6.2
Hyperkinetic disorders	1.6	0.9	1.1	1.7	1.5	1.3	0.4	1.4
Less common disorders	0.5	0.5	0.9	0.4	0.6	0.7	0.7	0.6
Any disorder	14.6	9.4	11.2	11.3	11.3	9.4	12.0	11.2
Base	246	257	1,404	2,041	3,948	411	250	4,609
All children								
Emotional disorders	5.8	4.2	4.4	4.0	4.3	4.6	4.6	4.3
Conduct disorders	5.0	4.5	5.5	5.4	5.4	4.6	5.3	5.3
Hyperkinetic disorders	1.8	0.9	1.2	1.8	1.5	1.1	1.2	1.4
Less common disorders	0.2	0.5	0.7	0.5	0.5	0.5	0.7	0.5
Any disorder	10.9	9.3	9.8	9.4	9.6	8.5	9.0	9.5
Base	517	613	3,211	4,677	9,018	892	527	10,438

Note. - indicates no cases. Adapted from *The Mental Health of Children and Adolescents in Great Britain*, by Meltzer et al, 2000.

The data presented in the chart suggest that in a primary school of 200, approximately 10 to 14 children experiencing mental health difficulties have the potential to negatively impact their learning and that of others may present at any given time, and within a secondary school of 1,500, approximately 165 adolescents have the potential to do so (Office of National Statistics, 2005; Mental Health of Children and Young People in Great Britain, 2004). If preventative measures fail to meet the needs of these children and adolescents at an early stage of difficulty, the cost in terms of social cohesion and financial resources will continue to increase. As the difficulties facing children are most effectively addressed within each child's community school, investment in capacity

building should focus on the professional development of school staff to meet the needs of all children within their community school.

It should be recognized that the SSC is not a venue in which to confine pupils in a segregated classroom. Learning and development are the key factors associated with a properly conceived SSC, not control and containment. The emphasis should be on meeting the learning and developmental needs of children experiencing difficulties in working cooperatively with others in a socially responsible manner. Therefore, the SSC is envisioned as the access point of support for all members of the school community when difficulties arise that overwhelm a child's level of intrapersonal resiliency or persistent mental health problems continue to challenge the child's ability to maintain a commitment to pro-social standards of conduct. The properly conceived SSC should not be a venue in which children can avoid challenges and difficulties but rather a venue that facilitates the support necessary for children to master the knowledge, understanding, and skills required to overcome their challenges and difficulties. By overcoming these difficulties, children can build and maintain the intrapersonal resiliency necessary to become productive members of society capable of socially competent and cooperative interpersonal relationships within the broader social world beyond the school setting.

3.2.3.3.3 Summary of the role of school support centres. The SSC properly embedded within a school that provides universal and targeted character development and restorative processes is capable of providing intensive support to meet the needs of all learners within an inclusive ethos. By providing universal, targeted, and intensive school-based programming, the BSC Programme aims to strengthen both the intrapersonal and interpersonal support required for children to develop and maintain a commitment to the pro-social standards of conduct that underpin successful educational and life outcomes. As highlighted by Eber et al. (2002), school-wide approaches are showing promise in

meeting the social and emotional needs of students, including students with intensive and chronic behavioural problems. Meeting these needs is particularly important, as Finney (2006) concluded that 12% of all children are likely to suffer from some form of mental health problem that has the potential to undermine educational outcomes. Moreover, a growing body of research confirms that if mental health issues are not addressed during childhood, they are likely to persist into adulthood, with serious implications for individuals and communities (Richardson et al., 1996). Dwyer's (2004) and Hunter and Chopra's (2001) research indicates that in the United States, school-based prevention and intervention programmes have become an essential component in reducing the incidence of mental health problems that negatively impact learning and social development.

3.3 Summary of the BSC Programme

The BSC programme is designed to provide universal (school-wide), targeted (classroom-based restorative processes), and intensive (the SSC) programming to address the concerns discussed above in a cost-effective manner. This approach may allow all schools to meet the needs of all children, even those experiencing intensive and chronic behavioural problems or mental health difficulties or who are at risk of doing so. Recognizing Vygotsky's (1978) argument that learning precedes development, the BSC pedagogy is based on socio-cultural theory underpinned by a social constructivist framework that provides a preventative pathway for educators and other community mental health professionals to work together to meet the needs of all children, including those with persistent, chronic, and intensive behavioural difficulties, without stigmatizing, marginalizing or isolating those who are most vulnerable. Despite the fact that children with special needs constitute 20% of the school population, 55% of all school exclusions in the United Kingdom in 2007 involved pupils with special needs, up from 44% in 2003 (Garner, 2007).

The primary objective of the BSC Programme is providing community schools with a cost effective and sustainable “tool kit” stocked with mechanisms for facilitating character development and restorative processes through the implementation of SSCs for all children to facilitate the development of the pro-social attitudes and behaviour necessary for children to become socially competent and cooperative. This competence and cooperation provides the resiliency or “strength of character” required to effectively address and ameliorate childhood difficulties and their consequences: disruption of learning and teaching, marginalization, disengagement, exclusion, and disaffection.

Chapter 4: Research Methods and Design

This chapter describes the methods and research design employed in this study to provide an in-depth understanding of the phenomena under investigation. A sequential approach was used to address the complexity of the phenomena under investigation and to develop a school-wide approach for addressing the social, emotional, and cognitive needs of children.

4.1 Introduction

Robson (2002) explained that *action research* is distinguishable from other forms of research by its purpose: to influence or change some aspect of the focus of the research. As such, advocacy for change is a primary goal of action research, along with the traditional research goals of description, understanding, and explanation. In recognition of this fact, Robson (2002) contended that when the goal of research is to support or engineer change, action research is appropriate and influential. Mills (1959) argued that the very questions of applied social research, in their content and structure, should point to social action and intervention, with key word being *action*. Accepting this argument, this study adopted the view that researchers are responsible for not only gaining understanding of their findings but also suggesting interventions or innovations that address the concerns associated with the social phenomena under investigation and monitor the effectiveness of these processes and innovations (Brown, 1992).

In configuring the cycle of scientific research for this study, Tashakorri and Teddlie's (1998, 2003) cycle was integrated with Kemmis and Wilkinson's (1998) conception of the spiral or cyclical process consisting of planning change, implementing the change, observing what happens after the change, reflecting on the processes and consequences of change, and planning further action. This cycle of investigation within an action research framework, led to the development of three distinct educational

programmes and their subsequent implementation and evaluation. The cycle of scientific research used for this study was an in-depth investigation that informed real-world field experiments, consisting of the simultaneous collection of both quantitative and qualitative data from archival records, open-ended and semi-structured interviews, surveys and observations. This process achieved data saturation, as espoused by Strauss and Corbin (1987), and allowed for the emergence of descriptive themes that were used to develop analytical themes for informing further research.

4.2 Methodology

Brown (1992) contended that educational researchers have a responsibility to engineer innovative educational environments and conduct experimental studies of these innovations in order to ultimately inform practice. Brown argued that these innovations must be based on theoretical descriptions that delineate why they work, which renders them reliable and repeatable. However, she warned that the difficult aspect of designing experiments to investigate real phenomena in a real-world setting is that changes to one aspect may contribute to further effects throughout the entire setting. Because real-life learning takes place in the social setting, the research design for a study in an educational setting must consider the “rich, complex, and constantly changing environment of the classroom”. Brown therefore recommended that researchers do the following when investigating educational innovations:

- Consider the most appropriate design for assessing the richness and reality of the setting.
- Gather multiple types of data.
- Embrace designs focused on obtaining richness and reality.
- Understand that observational studies must be made in the classroom
- Accept that theoretical advancement can emerge from real-world settings.

Brown (1992) asserted that the three main factors associated with research designed to investigate educational innovation as *choice of approach*, *variation over time*, and *choice of data- collection method*. The researcher must choose between an *nomothetic approach*, which is appropriate for investigating a “single variable in many subjects for the purpose of discovering general laws or principles of behaviour” (Brown, 1992: 154), or an *idiographic approach*, which is appropriate for “a thorough study of individual cases, with emphasis on each subject’s characteristic traits” (p. 155). For example, a psychologist interested in the study of personality through the use of the psychometric approach compares individuals in terms of traits common to everyone using a nomothetic approach or in other words the tendency to generalize through the study of cohorts of individuals. On the other hand, the idiographic approach, as depicted by Allport’s (1937) work, which found over 18,000 separate terms for describing personality traits argued for an idiographic approach for investigating the uniqueness of individual personality formations through the study of the individual with a focus on setting each person apart from all other individuals. The idiographic approach was later advanced by Carl Rogers and George Kelly with a focus squarely placed on an individual centred understanding of the uniqueness of each person within the therapeutic milieu.

In addition to the above approaches, the researcher must consider the variable of change over time by choosing among a *cross-sectional*, *longitudinal*, or *microgenetic* design. A cross-sectional design collects data from specific age groups at one point in time to make inferences about change or development through comparison of the data. A longitudinal design collects data from one age group receiving a specific treatment at several time intervals over a period of years. A microgenetic approach involves conducting observations of the research participants over short periods of time (e.g., days or weeks).

Finally, the researcher must decide whether to use a *qualitative, quantitative, or mixed-method approach* to collect and analyze the data. This study used a mixed-methods approach that incorporated a variety of designs and data collection strategies at various stages throughout the investigation to inform the development of an educational innovation to promote pro-social development and decrease anti-social behaviour among school-aged children. In addition, the research cycle was designed to investigate the efficacy of each innovation investigated during this study.

4.2.1 Qualitative methodology. This section describes the implementation of qualitative methods into the research design of this investigation. According to Strauss (1987), social science research, which can employ diverse approaches (e.g., interviews, surveys/questionnaires, archival data, field observations, etc.), requires application of effective theory at various levels of generality based on analysis of the data, and that without grounding in data, the theory will be speculative, and hence ineffective in addressing the issue under investigation. He suggested that given the diversity of social settings, research projects, individual research styles, and unexpected contingencies that affect research, it is impossible to provide definitive rules governing qualitative analysis, but it is possible to provide general guidelines (Strauss, 1987). Strauss argued that because research is basically a set of tasks, both physical and conceptual, carried out by researchers, data analysis can be enhanced by thinking specifically of the basic set of tasks associated with research.

Strauss (1987) argued that the basic question facing the social science researcher is “how to capture the complexity of reality and then how to convincingly make sense of it”. Glaser (1978) concluded that making sense of reality comes from the extensive collection of and subsequent engagement with the data. Strauss (1987) described three recommendations associated with making sense of complex data sets: (a) complex

interpretation and data collection are guided by sequentially evolving interpretations made during the course of the study; (b) to avoid a simplistic explanation of the phenomena under study, a theory must be conceptually dense; and (c) to achieve this density it is necessary for the researcher to provide a detailed, intensive, and minute examination of the data.

As Glaser and Strauss (1967) argued, all scientific theories are first conceived, then elaborated, and then verified in a sequence of *induction*, *deduction*, and *verification*. Induction is the work that leads to the creation of a hypothesis. Deduction is the drawing of the implications from a theory. Finally, verification is the process of confirmation upon which total or partial qualification or negation of the hypothesis is based. Glaser and Strauss (1967) argued that the researcher is responsible for genuinely verifying or qualifying the original data, interacting deeply with the data, and developing and refining theory on the basis of a true transaction between the findings and constantly evolving theory as the cycle of scientific inquiry progresses. It was this process of induction, deduction and verification that provided the cycle of inquiry that provided data for transforming a hypothesis into an educational innovation designed to address social climate and behavioural concerns within schools

4.2.2 Quantitative methodology. Quantitative methods were also incorporated into the research design of this study. Considering that the quantitative approach allows the use of a variety of strategies (e.g., surveys and observations) to collect data, the approach was essential in providing the data required for objectively assessing outcomes of the innovation. These data can be used to produce statistical data (Creswell, 2003), which are valuable in reporting the findings in a concise and accepted format. Creswell argued that when researchers want to identify factors that influence outcomes or to investigate the efficacy of an innovation, the quantitative approach should be considered.

Within scientific inquiry as a method for investigating causal relationships among variables, both *controlled experiments*, normally known as *randomized controlled trials* (RCTs), and *quasi-experiments* are conducted. RCTs typically compare the results obtained from an experimental group/sample of the population (i.e., a group receiving an intervention or innovation) against a control group/sample of the population (i.e., a group not receiving the intervention or innovation). It is important to note that the experimental and control group are identical except for the independent variable being tested (Oakley, 2000). Although the term *experiment* is used to describe an investigation involving a control, it is often prohibitive or impossible to conduct an investigation under these conditions. When the use of a control proves impossible, a researcher may conduct a quasi-experiment, which relies on observations of the variables under investigation. Whereas both the experimental design and quasi-experimental design may manipulate several variables at one time, quasi-experiments attempt to collect data in a way that all contributing variables to the relationship between dependent and independent variables can be determined. Campbell and Stanley (1963: 5) argued that the use of some form of RCT experiment is the only way to resolve conflicting positions within educational practice. However, because RCTs do not always provide details of the mechanisms underpinning the results, it can be argued that using a mixed methodology can enhance an experimental or quasi-experimental design when the focus is on providing a comprehensive description of the mechanisms required for sustainable outcomes (Robson, 2002).

The researcher is responsible for establishing and manipulating the experimental situation so that predicted mechanisms can operate to study the efficacy of an innovation (Brown, 1992), which calls for a considerable degree of prior knowledge of the situation under study (Robson, 2002). Using a mixed-method approach within a spiral cycle of

investigation, the ability to predict likely mechanisms, the context in which these mechanisms work, and for whom these mechanisms will work in future large-scale implementations may increase (Robson, 2002).

4.3 Research Design

The first phase of the research design, the discovery and formulation of the theory underpinning the development of the educational innovation under investigation, began with a multi-phase review of the literature. The literature was subsequently referenced at various stages of the investigation as new themes emerged from the various quasi-experiments and investigations conducted. The first phase of the literature review focused on the role of personality in educational and life outcomes and how the development of resiliency facilitates the ability to withstand life stresses. From the literature review emerged the two primary themes of the development of social competence and the development of a cooperative disposition through MCLEs to enhance resiliency. The research questions that emerged to inform the initial fieldwork were the following:

1. Can the development of social competence and a cooperative disposition be increased by the use of MCLEs?
2. If yes, what form do these MCLEs take?
3. What is the impact of MCLEs on group cohesion, on-task communication, and performance, which appear to be indicators of social competence and a cooperative disposition?

4.3.1 Formative investigations. To test the initial theories, the first quasi-experiment investigated the relationship between self-concept and social competence and how they could be influenced by mediated adventure-based learning (MABL) within an outdoor education framework using a quasi-experimental, control-group, pre-test/post-test, mixed-methods design (White, 2007). The second experiment investigated the role of

mediated activity-based cooperative learning (MABCL) on cooperative communication during activity-based group problem-solving challenges and task completion (White & Dinos, 2010). In the second experiment, a sample of Year 8 students was randomly assigned to either the control or experimental group as part of a pre-test/post-test RCT design to assess the level of cooperative communication and task performance during group problem-solving. Following a synthesis of the findings from the two investigations and a further review of the literature, a multiple-component character education programme was designed. To investigate the efficacy of the new programme, a pilot study was designed and conducted (White, in press) of one primary school using a mixed-methods case study design.

4.3.2 Multiple case study. Upon concluding the pilot study data analysis, an RCT was designed and participant recruitment conducted. Of the 10 schools that volunteered to take part in the RCT, five were assigned to the control group and five to the experimental group. However, after a couple of months it became apparent that conducting an RCT to completion would be impossible for a self-funded researcher working alone in a relatively small geographical area. The main issues that led to the collapse of the RCT were the close proximity of the schools and the fact that the head teachers all met at regular meetings. At these meetings, many aspects of the intervention were discussed between the control and experimental group, with several of the control group head teachers introducing large portions of the intervention into their schools, leading to contamination of the experiment and undermining of the trustworthiness of the data.

Attempting to avoid the total abandonment of the study, I revisited Yin's (2003:47) statement, in which he asserts that "When one discovers significant findings from a single case... the immediate reaction would be to replicate this by conducting several experiments". Therefore, following the collapse of the RCT I concluded the study

with a multiple case-study investigation that replicated the original pilot study. I would also assert that Yin's statement is particularly apt considering the research finding of Merrell et al. (2007) that many educational initiatives fail to sustain the findings of the pilot study following large-scale implementation. With this in mind, the study was concluded by using the schools originally placed in the experimental group of the RCT as the cases for study ($n = 5$) within a multiple case study design to determine if the findings from the pilot study would be sustained in a broader context prior to suggesting a large scale implementation. In reference to the concern expressed by Merrell et al., multiple case studies could be seen as part of a comprehensive process of replication in which sufficient data is obtained for a researcher to responsibly suggest that the findings are worthy of further consideration, continued investigation, and large-scale implementation. This view is supported by Yin's (2003) argument that it is only through replication of the original findings from the original investigation that one feels confident in continued investigation.

Yin (1994) differentiated between two versions of the case study on the basis of the level of analysis: (a) the *holistic case study*, in which the concern remains at a single formal level and is typically of a single individual or institution as whole, and (b) the *multiple case study*, which Yin (1994) described as multiple cases selected to develop a corpus not for the purpose of gathering a sample of cases for generalization to a population but rather to triangulate data for the purpose of developing an understanding of the mechanisms underpinning the findings of the investigations. Robson (2002) claimed that the multiple case-study approach provides an effective strategy when the aim is developing an understanding of the mechanisms associated with significant findings and providing robust, descriptive data sets. This approach may also allow the researcher

to address why some programmes that show promise in the pilot study fail following large-scale implementation.

4.4 Data Collection Methods

4.4.1 Interviews. Interviews, widely used in social science research, are typically categorized as *structured* (formal), *semi-structured*, or *unstructured* (open-ended; Robson, 2002: 269). The choice of interview type is normally based on the degree of depth that the researcher seeks and the researcher's prior knowledge of interview strategies. On the highly structured end of the interview continuum is the survey/questionnaire interview, in which the researcher asks a set of fixed questions prearranged in a predetermined order using standard wording (Robson, 2002). The semi-structured interview also relies on a predetermined order of questions, but their order and wording can be modified by the interviewer as the interview progresses. This provides a more flexible approach, allowing the researcher to investigate avenues of interest that may emerge during the interview and expand the interview to investigate areas not previously conceived of during the planning stage. Despite its flexibility, the semi-structured nature interview allows the interviewer to maintain some structure to keep the process on track. The unstructured interview, which provides the most flexibility, may be used as part of an exploratory process when the researcher is seeking to develop a deeper understanding of a general area of interest to identify categories for further investigation. This flexibility allows a "conversation" to develop and avenues of investigation to emerge freely during the interview (Robson, 2002).

Semi-structured and unstructured interviews are dynamic, flexible, and adaptive processes for addressing areas of interest and developing a deeper understanding of the phenomena under investigation from the perspective of the research participants.

Interviews, whether one-to-one or in groups, can provide avenues for investigating the

underlying mechanisms and motives that surveys, questionnaires, and observations might not discover (Burton, 2000). The interview method in its various forms can provide valuable insight at various stages of the investigation to inform observations, develop standardized questionnaires, and inform further avenues of investigation. Interviews can also be used at various stages throughout the research cycle to inform the understanding of the mechanisms associated with change, issues of implementation, and/or issues of sustainability from the perspective of the research participants and the deductive reasoning of the researcher.

However, interviews are time consuming and require a certain set of interpersonal skills and careful preparation (Robson, 2002:273). Additional issues to consider are the lack of standardization of the interview process and the reliability of this process, as the biases of both the interviewer and interviewee may “cloud” the course of the interview and the subsequent data extrapolated from the process. Throughout the stages of this investigation, both semi-structured and unstructured interviews were conducted one-to-one and in groups to develop an increasingly deeper understanding of the participants’ perspectives of the phenomena under investigation.

4.4.2 Surveys. Surveys, defined as self-report data collection tools that can provide an understanding of how research participants view their own behaviour, feelings, attitudes, and personality constructs, can be used to gather data from a large sample in a time-efficient manner. However, the ever-present risk of a high non-response rate or a low response rate poses a threat to external validity (generalizability) and internal validity (inference quality) of surveys (Tashakorri & Teddlie, 1998, 2003). An additional threat is the possibility that respondents are systematically different from the broader sample population (Tashakorri & Teddlie, 1998, 2003). Other concerns regarding the use of surveys and questionnaires are the tendency to draw incorrect inferences from

correlations in the data and the fact that the data gathered are less detailed in comparison to those gathered from observation.

Considering both the advantages and disadvantage of surveys, they are a suitable method to both inform subsequent data collection and to triangulate the findings with data gained from other methods used within a comprehensive investigation. In this study, they proved useful for gaining a better understanding of how the participants view their behaviours, the behaviours of others, and the impact of these behaviours on school climate, the central concerns of this investigation.

4.4.3 Observation. Robson (2002:310) identified two traditions of observation: *participant observation*, defined as an “essentially qualitative style” rooted in anthropology, and *structured observation*, defined as a “quantitative style” rooted in a variety of disciplines. Tashakorri and Teddlie (1998:106) classified observational methods as either *participant observation*, in which the researcher becomes a member of the community in which the observations are conducted, and *non-participant observation*, in which the researcher is not an active part of the setting. Participant observations are often conducted to measure and document behaviours or interaction patterns as they occur within the natural setting. Therefore, borrowing from both Robson (2002) and Tashakorri and Teddlie (1998, 2003) and based on an understanding of observational methods and interview styles, observations can be classified as structured participant and non-participant observations, semi-structured participant and non-participant observations, and unstructured participant or non-participant observations. While asserting that both participant and non-participant observations can provide valuable evidence, Yin (2003) contended that it is best to rely on a variety of sources, which allows for triangulation of the data underpinning the findings. This engagement with the data allows the researcher

sufficient scope to make inferences about the mechanisms associated with the observed behaviour(s).

The primary advantage of observation is that it allows the researcher to directly collect data on behaviours and/or interaction(s) occurring in the natural world of the research participants without the need for self-reporting measures (Robson, 2002). As Robson (2002) highlights, Auge and Auge found in their research of drug use, what people say and what people do are not always in accord. This finding points to the possible need for observation to provide confirmatory data to increase validity and reliability when evaluating behaviours. The disadvantages of employing observation in a complex case study or multiple case study investigation are (a) the observer affects the situation under observation; (b) the large amount of time required to conduct multiple observations; and (c) the bias of the observer, particularly when the researcher is close to the subjects under investigation (Robson, 2002). These concerns may be alleviated if the researcher does the following:

1. Desensitizes the participants being observed to the presence of the researcher. This may occur if the researcher is present on several occasions before the formal observations take place.
2. Maintains awareness of his or her connection to the research and the biases that this may create.
3. Uses structured or semi-structured observations to keep the observations on track.

In addition to a main method, observation can be used as both a supportive and supplementary method (Robson, 2002: 312) to collect data throughout the research cycle. This facilitates further triangulation of the data to inform subsequent engagement with the

research data to elucidate theory and define the mechanisms underpinning the findings (Duffy, 1987).

4.4.4 Archival data. The review of archival data, which consist of maintained records or sets of records may assist in “suggesting questions or informing unforeseen lines of inquiry” (Robson, 2002:361) in a thorough exploratory study. A review of school records can provide archival data on exclusions (both fixed term and permanent), attendance, office behavioural referrals, and behaviour- management procedures. The collection of archival data can also inform interviews and observations in a further triangulation of data, assisting in developing a comprehensive and coherent understanding of the phenomena, case, or innovation under investigation; developing a broader picture of the setting; and ascertaining the baseline relationship between cases (e.g., schools). Moreover, these records may provide a data set for pre- and post-test comparison following the implementation of an initiative or programme.

The primary advantage of using archival data is their ability to help the researcher develop a stronger historical view and a broader picture of the case under investigation. The primary disadvantage is that large data sets may contain information unlikely to inform the research question through which the researcher must spend much time sifting to obtain information directly related to the research topic.

4.4.5 Analysis and triangulation of the data. Denzin and Lincoln (1999, 2003) argued that the rigour of an investigation can best be established by (a) triangulating the data through using multiple methods to collect relevant data, (b) combining both quantitative and qualitative data sets to achieve methodological triangulation, and (c) using multiple perspectives and theories to inform the intervention or innovations to achieve theory triangulation. Triangulation of data allows the findings to be used to

discover not only what is occurring but also the themes emerging out of the data as to why it is occurring.

By employing a mixed-methods design that used a variety of strategies to collect data, the data collected from each phase of this study could be reviewed, analyzed, and synthesized. By collecting quantitative and qualitative data sets, comparisons could be made and questions asked of the data throughout the investigation as part of what Pidgeon and Henwood (1996: 92-4) refer to as the *method of constant comparison*, which allows each interview and observation to inform subsequent interviews and observations. This probing of the data assists the researcher in developing a deeper understanding of participants' perspectives regarding what change is valued. This process of constant comparison was facilitated in this study by following Strauss and Corbin's (1998) guidance on conducting open coding of qualitative data sets to define categories, followed by axial coding to interconnect these categories and selective coding to establish the core category or categories within the corpus of data. Open coding is the process of identifying, categorizing, and describing phenomena found in the data; axial coding is the process of relating of codes to each other by both inductive and deductive reasoning; and selective coding is the process of selecting one or more categories to serve as the core of a theory and then relating all other categories to it/them, thus providing an adequate road map for identifying the themes underpinning the findings of the investigation.

4.4.6 Engaging with qualitative data. To engage with the qualitative data, Miles and Huberman's (1994) general framework for conceptualizing qualitative data analysis was used within the scientific cycle of the research. Miles and Huberman espoused a realist perspective based on the argument that phenomena "exist not only in the mind but also in the objective world, and that some lawful and reasonable stable relationships are to be found among them" (1994:4). This perspective should be adopted in a mixed-

methods multiple-case investigation when the researcher “aims to account for events, rather than simply to document their sequence ... is looking for individual or social processes [and/or]... a mechanism or a structure at the core of the events that can be captured to provide a causal description of the forces at work” (Miles & Huberman, 1994:4).

Miles and Huberman (1994) rejected the conventional wisdom that only classical experimental control designs (see Campbell and Stanley, 1963) are appropriate when seeking causal attributions. They claim that within social science research “seeing that an experimental group had effect X and the control group did not tells us nothing about what went on in the ‘black box’; we didn’t understand how or why it happened, and can only guess at the mechanisms involved” (p. 147) . To resolve the above concern I would assert that the triangulation of both quantitative and qualitative data has the potential to provide a robust scaffold for formulating a coherent and comprehensive theory rooted in an empirical basis. Therefore, research designs that adopt a mixed- methods strategy for determining the outcomes and the mechanisms supporting or supplanting the outcomes may be the best approach for conducting educational research that builds an understanding as to what went on in the “black box” to answer what mechanisms lead to the why and how of the outcomes.

With the above considerations in mind, the analysis of the qualitative data was conducted within a grounded theory perspective. As briefly discussed above this approach involves the creation and application of codes to data from a variety of sources. Decisions regarding which categories should be used can be based on a variety of sources—theory, literature, research experience, or the data themselves. Once the coding process begins, a distinction is made among open coding, axial coding, and selective coding. The first refers simply to the creation of categories, axial refers to the

relating of those categories to each other and selective coding involves the process of selecting and identifying the core category and systematically relating it to other categories. It involves validating those relationships, filling in, and refining and developing those categories. Understanding the general principles of coding is pretty straightforward; the idea is to develop themes and to work out how they relate to each other within your data and then developing a systematic approach that allows the researcher to validate the relationship between codes. While thematic coding may be straightforward putting it into practice provides certain challenges that need to be overcome in an effective and trustworthy manner. Therefore, it is important to write down the definitions of codes when they are created and to be sure that the application of each defined code is used in the same way every time throughout the analysis. In other words, it is not always an easy task and can prove difficult at times to say that a particular instance of code A is the same as instance B; as there can be subtle differences in speech between interviewee 1 and interviewee 2 that make it difficult to decide that they are saying the same thing but using different words. In addition, as a constant comparison of the data is undertaken and the application of a code is applied across the data it may be necessary to modify the definition of the code you originally developed. This can mean that the more times the code is applied, the broader the definition becomes. With this in mind, if the definition of the code does change it may be necessary to go back and check that the new definition still fits the previous uses of the code or if in fact a new code would be more appropriate to catch the riches of the data. With the level of data involved in this investigation it proved beneficial to develop a relatively small number of very general codes in the first wave of coding, and then subsequently developed more specialized codes as I continued to engage with the data.

When considering what constitutes a theme, Braun and Clarke (2006) recommend determining how each theme captures something important about the data in relation to the research question and represents some level of patterned response or meaning within the data set. The validity of a theme is not necessarily dependent on quantifiable measures but rather on whether it captures something important in relation to the overall research question.

Prevalence was counted at the level of the data item, in other words in a constant comparison engagement with the data the question; was the theme repeated throughout the data collection from a variety of informants? was continually asked. On the other hand, an alternative approach for determining prevalence is to consider how many different speakers articulated the same theme across the entire data set or each individual occurrence of an event (Riessman, 1993). Within this second approach there are various descriptors for representing prevalence within qualitative analysis that do not provide a quantified measure, such as “the majority of participants” (Meehan & Puggnetti, 2000: 372), “many participants” (Taylor and Usher, 2001: 298), or “a number of participants” (Braun et al., 2002: 249). Such descriptors are important for suggesting that a theme exists within the data and provides a means for the reporting of themes in a truthful manner. As in the development of themes and the application of themes across the data in a consistent manner, the use of non-quantifiable prevalence modelling needs to be explicitly stated when reporting the findings of the study.

The approach for identifying themes emerging from the data within this study was inductive or, as referred to by Frith and Gleeson (2004), *bottom-up*. Inductive analysis is a process of coding the data without trying to fit it into a pre-existing coding frame or the researcher’s preconceptions. In this sense, this form of analysis is driven

by the data. However, as Braun and Clarke (2006) warned, it is important to remember that researchers cannot free themselves of their theoretical and epistemological commitments and that data are not coded in an epistemological vacuum.

Another important consideration in the development of themes from the data is related to the level at which themes are to be identified: at a semantic or explicit level or at a latent or interpretative level (Boyatzis, 1998). Boyatzis explained that an analysis of a study typically focuses exclusively or primarily on one level. With a semantic approach, the themes are identified within the explicit or surface meanings of the data, and the analyst is not looking for anything beyond what a participant has said or written. In this study, the analytical process involved a progression from description, by which the data were simply organized to show patterns in semantic content and summarized, to interpretation, by which the significance of the patterns and their broader meanings and implications were theorized (Patton, 1990).

Based on Braun and Clarke's (2006) recommendations, the following steps were taken during the analysis of the qualitative data:

1. Becoming familiar with the data: Reading and re-reading the data and recording initial ideas.
2. Generating initial codes: Coding interesting features of the data in a systematic fashion across the entire data set and collating the data relevant to each code.
3. Searching for themes: Collating codes into potential themes and gathering all data relevant to each potential theme.
4. Reviewing themes: Determining if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2) and generating a thematic map of the analysis.

5. Defining and naming themes: Conducting ongoing analysis to refine the specifics of each theme, developing the overall story that the analysis tells, and generating clear definitions and names for each theme.
6. Producing a detailed map of the themes with succinct informant comments: Selecting vivid, compelling extract examples; conducting final analysis of selected extracts; relating the analysis to the research question and literature; and producing a synthesis of the analysis.

Grounded theory analysis results neither in a collection of extracts strung together with little or no analytical narrative nor a selection of extracts with analytical comment that simply or primarily paraphrases their content. Rather, the extracts are illustrative of the analytical points that the researcher makes about the data, and, as suggested by Braun and Clark (2006), should be used to illustrate or support an analysis that goes beyond their specific content, makes sense of the data, and tells the reader what the data do or might mean. One of the central positions associated with qualitative research pertains to the idea of *interpretivism*, which argues that meaning is imposed on the world from one's cultural understanding of the world, and that all researchers live within cultural worlds and engage in cultural practices that are defined by shared interpretations. One of the criticisms of qualitative research from those outside the field is the perception that "anything goes". As Laubschagne (2003) explained, for many scientists accustomed to doing quantitative studies the whole concept of qualitative research can remain unclear. Therefore, he suggests that even though qualitative approaches cannot be subjected to the same criteria as quantitative approaches, they provide methods of analysis that should be applied rigorously to the data. Furthermore, criteria for conducting good qualitative research do exist and should be employed

throughout the investigation (see Elliott et al., 1996; Parker, 2004; Seale, 1999; Silverman, 2004; Yardley, 2000).

4.4.7 Engaging with quantitative data. Chi-square analysis was performed extensively in the various stages of the study. A *chi-square* is statistical analysis that provides a measure of the degree of association or linkage between two variables (Robson, 2002:418) based on the differences or discrepancies between the frequencies in different cells. This analysis provides a table of data that can be triangulated with qualitative data collected throughout the various investigations of the study. Fitz-Gibbon and Morris (1987:99) stipulated that (a) the contingency table contains mutually exclusive and exhaustive categories and (b) each observation is independent of the other observation.

The second analysis of the quantitative data was calculating the effect size between two groups and for pre- and post-test comparison using Cohen's *d* (Cohen, 1988). Cohen (1988) defined *d* as the difference between the means ($M_1 - M_2$) divided by the standard deviation (SD) of either group, arguing that the standard deviation of either group could be used when the variances of the two groups are homogeneous. However, the pooled standard deviation has begun to be used more commonly (Hedges & Olkin, 1985). The pooled standard deviation is the root mean square of the two standard deviations weighted by sample size (Cohen, 1988, p. 44); that is, the pooled standard deviation is the square root of the average of the squared standard deviations. When the two standard deviations are similar, the root mean square will not differ much from the simple average of the two variances. The formulas used for these calculations are as follows:

$$Cohen's\ d = M_1 - M_2 / \sigma_{pooled}$$

The following formula is used for groups of equal size

$$\sigma_{\text{pooled}} = \sqrt{[(\sigma_1^2 + \sigma_2^2) / 2]}$$

The following formula is used for groups of unequal sizes:

$$S_p = \sqrt{\frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}}$$

Note. M is the mean, with M_1 representing the mean of the data from one observation (e.g., the mean of the data from a pre-test observation or survey) or of one group; M_2 representing the mean of the data from a second observation (e.g., the mean of the data from a post-test observation) or a second group; and S_1, S_2 representing the SD.

The following formulas are used to calculate the SD and variance (V):

$$SD = \sqrt{\sum(x - \bar{x})^2 / n - 1}$$

$$V = SD^2$$

A final analysis performed to determine statistical significance was the Wilcoxon Matched-Pairs Signed-Rank Test (see for example Bland, 1986, 1995; Conover, 1980), a non-parametric test that parallels the paired t -test. The main difference between the two is that parametric techniques make distributional assumptions, usually that data follow a normal distribution. The pairing of data means that the values in the two groups being compared are naturally linked, and usually arise from individuals being measured more than once. This distributional assumption is avoided in the Wilcoxon Signed Rank Test because it is based on the rank order of the differences rather than the actual value of the differences. However, it is still necessary to assume that the distribution of the differences is symmetrical (Bland, 1995). To

conduct the Wilcoxon Signed Rank Test, two observations of each subject are needed. This test uses data from before and after an intervention has been delivered to the subject and in which case the central point under the null hypothesis would be expected to be zero.

After conducting the Wilcoxon calculations, *p*-values were used to either reject or accept the null hypothesis. As each statistical test has an associated null hypothesis, the *p*-value is the probability that a sample could have been drawn from the population(s) being tested or that a more improbable sample could have been drawn assuming that the null hypothesis is true. A value is chosen by the researcher (the *p*-value) which is the lowest level of significance that would lead to rejection of the null hypothesis. A *p*-value of .05, for example, indicates only a 5% chance of drawing the sample being tested if the null hypothesis were true. Null hypotheses are statements of no difference or effect. A *p*-value close to zero is usually interpreted as indicating that the null hypothesis is false and that a difference is very likely to exist. Larger *p*-values closer to 1 imply that there is no detectable difference for the sample size used. A *p*-value of 0.05 is a typical threshold used in educational research to evaluate null hypotheses.

4.5 Trustworthiness of the Data

To maintain the trustworthiness of the findings, research participant bias, researcher bias, and construct validity were considered. Research participant bias may arise when research participants provide the answers that they think the researcher is seeking or that make them or their schools appear more positive, although this may occur unconsciously. Consideration of researcher bias is particularly important when the researcher spends a prolonged period in the field and becomes closely involved with the case under investigation or the theory being developed. Robson (2002) noted that researchers who conduct case studies need to take this issue very seriously and remain

aware of it during interpretation of the data. External validity was also relevant to this investigation, as one of the primary goals was to develop a programme that could be transferred from the study to other school settings. The difficulties in conducting in-depth case studies and the biases that may arise from closeness to the subject were continuously assessed.

4.6 Bias

This investigation required several years of study during which the researcher became very close to the subject of the study. As such, there was a need to remain aware of bias and how it may influence the objective analysis of the data. Wolcott (1994) suggested that researchers view subjectivity as a strength in qualitative approaches, arguing that the researcher needs to be candid and not attempt to establish a detached objectivity that is not wanted or needed. However, without maintaining an objective viewpoint when disseminating information from the findings of a study, resources may be used to promote and implement a project that does not warrant the use of limited resources. This point is particularly poignant considering the number of failed initiatives following large-scale implementation and the costs associated with these failures.

In consideration of the fact that researcher bias could influence the outcomes and dissemination of the findings, full disclosure is warranted. The researcher has spent several years working on this investigation and considerable time in the schools where the experiments and case studies were conducted. Therefore, a close relationship between the researcher and participants developed that may have influenced both self-reporting and the observational data, thereby producing erroneous findings. The researcher attempted to address this possibility in a variety of ways, including having trained volunteers conduct the data collection through observations and interviewing County Behaviour

Support Teachers. However, all the participants knew of the researcher's involvement in and development of the interventions and the purpose of the research.

Although a variety of strategies were put in place to alleviate researcher bias my involvement in training staff and working directly with participants at various stages of the study may have influenced not only my interpretation of the data but may have also affected the collection process as well. The data collected may have been influenced toward researcher bias as I conducted all interviews and the participants may have provided feedback that was unduly positive because of their known or unknown desire to assist me in this study. Additionally, even though I tried to distance myself from data collection in the final stage of this study by having county behaviour support teachers and other volunteers collect observational data, I provided the training to them. This training may have also erroneously influenced what data was collected and/or reported. Therefore, even though I incorporated data collection strategies to alleviate researcher biases, bias may have still influenced my findings. With this in mind, it would be erroneous to claim that my own intervention in the educational innovation was completely free of bias and that these biases did not influence the final collection, interpretation and conclusions drawn from the data.

Considering the above concerns in relationship to researcher bias it would be judicious at this stage to recommend that further research be conducted. Therefore, with proper funding in the future, more distance and, in turn, more objective findings can be obtained through the successful use of RCTs. Despite reflection upon the possibility of bias and the triangulation of several data sets before recording of the findings, it is difficult to determine to what degree the researcher's presence during observations and

interviews has influenced the data. Therefore, it is heavily warranted at this stage to recommend further research (e.g., a properly funded RCT conducted by detached researchers) to address these issues.

4.7 Ethical Considerations

At all stages of this study the nature and purpose of the research was explained to all research participants (head teachers, teachers, support staff, pupils, and parents) taking part in the study. With the support of the head teacher from each school involved, invitations were sent inviting parents to an information session on the project. Prior to conducting the interviews, all participants were asked for their consent to participate in the interview and for their anonymous comments to be incorporated into the final report. Other ethical considerations concerned treating interviewees with respect, allowing them to choose the venue for the interview so that they felt comfortable, assuring them that they had the right to withdraw from the process at any time, and allowing them to see the findings following the conclusion of the investigation. In addition, full approval of this study was sought and received from the Ethics Committee at the University of Durham.

Part II

Chapter 5: Mediated Adventure-Based Learning

This chapter discusses the results of the Mediated Adventure-Based Learning (MABL) experiment, the first experiment conducted during the study. The primary aim of the MABL experiment was to investigate the role that mediated cooperative learning framed within outdoor education might play in developing social competence and a cooperative disposition.

5.1 Introduction

For the purpose of this experiment, an outdoor education programme was developed for students (aged 10-14) experiencing marginalization and displaying signs of emotional difficulties in engaging fully with school and family life. The experiment encompassed an evaluative assessment of the effective use of an integrated outdoor adventure-based educational programme delivered in a complementary variety of classroom, outdoor, and “wilderness” venues. The primary consideration was the enhancement of trust and social competence and their transference from a mediated outdoor-based educational setting to the social and academic settings within the secondary school environment.

As highlighted in the literature, considerable research has found that increased trust and social competence boosts social-emotional learning and increases school engagement and academic achievement, which play an important role in developing resiliency and improving life outcomes. However, little research has been conducted in the United Kingdom regarding the impact of an integrated outdoor-adventure based educational programme on marginalized pupils. To fill this research gap, this study collected and analyzed both quantitative and qualitative data to produce the evidence necessary to

discuss the value of mediated outdoor-adventure based educational programming in relation to personal development and school engagement.

The MABL Programme designed for this study consisted of a school-based delivery of trust- building activities, outdoor-education-based delivery of group dynamics, effective communication activities, and a confidence-building wilderness trip. The pupils were assessed using standardized assessment tools before, during, and after programme participation. Furthermore, teachers, parents, and school administrators had the opportunity to participate in open interviews, thus providing valuable qualitative and quantitative information used to develop a broader understanding of the influences of the programming and the mechanisms behind the findings.

5.2 Methods

5.2.1 Participants. The control group consisted of 12 male and 12 female Year 8 students randomly selected, with a mean age of 13 +/- 7 months, enrolled in an Essex, England state comprehensive secondary school. The experimental group consisted of 12 male and 12 female randomly selected Year 8 students, with a mean age of 13 +/- 5 months, enrolled in an Essex, England state comprehensive secondary school. All of the students in both groups supplied all the data requested.

5.2.2 Materials. To measure social competence within self-concept, the participants were administered the 150- item self-report Multi-Dimensional Self-Concept Scale (MSCS; Bracken, 1992). First designed as a comprehensive assessment tool to facilitate the clinical appraisal of youth aged 9 to 19, the MSCS was later combined with other personality measures to serve as a more global assessment of self-concept. As a dependent measure, the MSCS allows for reliable multidimensional assessment of self-concept (Bracken, 1992).

Developed by Bracken (1992), the MSCS is a behaviourally based 150-item self-report instrument measuring self-perception in the following six sub-scales, each of which contain 25 items:

1. Social competence related to interactions with others (social subscale);
2. Success/failure in attainment of goals (competence subscale);
3. Recognition of affective behaviours (affect subscale);
4. Academic achievement and competence in other school-related activities (academic subscale);
5. Competence related to interaction with family members (family subscale);
6. Physical attractiveness and prowess (physical subscale).

The MSCS can be administered either individually or in groups and generally requires between 20 to 30 minutes. Participants are asked to respond to a simple declarative statement by circling one of four alternatives that they believe best describes themselves: absolute (success or failure), comparative (in comparison with others' performance), ipsative (performance in one area in relation to general performance), and ideal (expected level of performance). Bracken (1992) reported high internal reliability estimates, ranging from .87 on the competence subscale to .98 on the total scale. Test-retest reliability estimates have ranged from .73 for the affect subscale to .90 for the total scale over a four-week period. Byrne's (1996) research shows that the MSCS has solid psychometric credentials in addition to a carefully constructed set of sub-scales to which a well-established theoretical framework is solidly linked. Thus, the MSCS is an appropriate tool for assessing pre-adolescent and adolescent self-concepts.

Self-concept was measured one week before MABL Programme implementation and one week after programme completion. Qualitative data was also collected and coded to develop an understanding of trust and group cohesion (seen here as enhancing

attachment), facilitated by recording and video-taping all discussions and interviews before coding and analyzing the data using the constant comparison technique based on the grounded theory approach of Strauss and Corbin (1990). The semi-structured and unstructured interviews conducted at the start and throughout the programme including interviews with the parents of the experimental group and the experimental group participants one month after the completion of the MABL Programme were recorded and coded. Observations were conducted throughout all aspects of the project, and all notes and video tapes were coded for analysis.

5.2.3 Procedure and design. To obtain consent for the study, a meeting was held with the head teacher, pastoral support manager, and head of Year 8. A synopsis of the study was presented that provided full details and its primary focus. After obtaining school administrative consent, a letter was sent home with all Year 8 students apprising their parents of the intent of the study and requesting a letter of objection if they did not want their child to participate. After allowing two weeks for parents to return letters of objection during which none did so, an assembly was conducted providing full details of the study. Following a short question-and-answer session, those interested in participating were asked to place their names on a card. The cards were collected and placed in two bags marked “boys” and “girls”, then randomly selected in order to assign each participant to either the control or experimental group. Once the participants had been selected, a letter was sent home to their parents to gain their full consent.

The design of the MABL Programme is based on Vygotsky’s (1978) social constructivist theories, Bakhtin’s (1981, 1990) dialogue-facilitation techniques, Dewey’s (1933) conceptualization of reflective learning, and an understanding of the personal growth and development that occurs when physically, emotionally, and socially intense adventures are undertaken. The programme was designed to provide development in three

stages. The first stage consisted of four two-hour sessions delivered once per week facilitated at the participating secondary school for one month. Within the sessions, a constructivist approach was taken to develop trust and build effective communication. Typical activities included trust games, group challenges, and group initiatives, followed by debriefings. The second stage consisted of a five-day residential component at the Outdoor Education Centre that included initiative tasks, cultural studies, obstacle courses, cross-country hikes, canoeing, high-ropes courses, and wall climbing, all followed by feedback sessions and debriefings. The third stage consisted of a three-and-a-half day wilderness trip to the Brecon Beacons of Wales. The wilderness phase incorporated a backpacking trip over rugged terrain during which the participants were responsible for meal preparation, pitching camp, and meeting all other group needs. Following the trip, a group discussion was conducted to collect further qualitative data.

5.3 Quantitative Analysis and Results

The MABL programme consisted of a three component educational initiative delivered over a three months time frame. The first component comprised one two hour session focused on building trust and delivered at the participants' school once a week for four weeks. The second component entailed a five day four night outdoor school residential experience. And the final component consisted of a three and a half day wilderness trip (for a full description see appendix A).

Table 4.1 shows the results of the analysis of the MSCS data from both the control and experimental group prior to and following the implementation of the MABL intervention to ascertain if any significant changes in global self-concept occurred following the delivery of the intervention. To determine the difference of the effect of the intervention on global self-concept between the experimental and control group, t-test was conducted using the Statistical Package for the Social Sciences (SPSS) software.

Table 5.1

Results of Testing for Between-Subjects Effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected model	57633.107(a)	2	28816.554	38.385	.000
Intercept	15508.671	1	15508.671	20.659	.000
Before	40114.586	1	40114.586	53.435	.000
Groups	22747.830	1	22747.830	30.302	.000
Error	33782.205	45	750.716		
Total	10731307.000	48			
Corrected Total	91415.312	47			

Note. R Squared = .630 (Adjusted R Squared = .614).

5.4 Discussion

Table 4.1 indicates that there was a very statistically significant change in self-concept in relationship to the measures of the multiple self-concept scale following the implementation of the MABL intervention within the experimental group by conventional criteria ($p < .05$).

5.5 Qualitative Analysis and Results

During their follow-up interviews, all participants reported positive results in relationship to building trust, group cohesion, and emotional regulation. During the semi-structured interviews conducted with all participants ($n = 24$) one week after programme completion, 100% indicated that the experience was “highly successful”, 86% that their self-confidence had improved, 78% that they had increased their ability to persevere through frustration, 64% that they had become more aware of the needs of others, 89% that these changes would last their lifetimes, 88% that they had increased their ability to regulate their emotions, 75% that they have experienced positive gains in their family

since beginning participation in the programme, and 100% that they had developed a deeper level of trust for the other group members.

As discussed above the data collected through semi-structured interviews with school staff, which included five teachers, the Head of year 8 and the Head teacher and all parents of the experimental group following the conclusion of the intervention, indicate that positive change related to school and home behaviour and engagement was displayed by the participants. In addition, the qualitative data collected during the interviews with the participants conducted at the school one month after completion of the MABL Programme suggests that the participants had developed a strong trust for one another and a commitment to remaining friends. During semi-structured interviews it was revealed that the group has started their own “Outers’ Club” to engage in adventurous activities outside of the school setting. In addition, their parents expressed overwhelmingly positive attitudes about the change brought about in their children in such a short space of time, particularly one mother who reported that her son has become so helpful around the house and in the family that she “just cannot believe the change in him”. Likewise, the reports from teachers were overwhelmingly positive. One senior teacher stated, “I have been teaching for nearly 30 years and I have never seen such positive results from any one programme over such a diverse group of students”, confirmed by another who added, “I have known one of the students now for two years and I have never seen him smile once. Now he is constantly smiling ever since he has been involved with the programme.”

As one of the main considerations of this experiment was the role of MABL in the development of intra-group trust, the participants were asked to reflect upon the trust within the group during interviews. One participant stated, “I never knew I could trust so many people, and people would trust me. I just can’t say how great I feel.” Another

added, “I have realized that I can be who I am, not what everyone else wants me to be. I have learnt that I can really trust people who support me for who I am.”

An observation made during the trip to the Brecon Beacons in Wales highlights the impact that this type of programming can have on the construction of trust. When the weather became very harsh on the wilderness trip, with the wind literally knocking the participants to the ground, everyone pulled together to help each other down the mountain; there was no laughing or “winding each other up” (as described by one participant), just collaboration. When asked about this incident after the trip, one boy stated, “If something like that happened at school, the weak kids would really be bullied and made fun of, but out there we knew we were in it together. We have learned through you that if we work together, we can overcome anything.”

5.6 Synthesis of the Quantitative and Qualitative Data

The analysis of the MSCS data collected after the intervention indicated a very statistically significant difference in the global measure of self-concept between the experimental and the control group. In addition, the qualitative data collected from interviews with students, school staff, and parents indicate that the participants in the MABL Programme experienced a change in their behaviour and increased engagement with the learning environment within the school and with their families. These findings lead to the conclusion that adventure-based programming based on a humanistic approach for facilitating mediated activities to increase group cohesion through the establishment of trusting relationship fosters positive interaction with others and the desire to build lasting friendships. The follow-up interviews indicate that all the students had an enjoyable experience that helped them develop meaningful and trusting relationships, as indicated by the students establishing the Outers’ Club as a positive, self-initiated strategy to maintain the friendships that they had developed and to continue to experience the

positive effects of building trust and maintaining group cohesion from engaging in adventure activities.

5.7 Limitations of the MABL Programme

It is important to highlight the constraints of this modest exploratory experiment. The experiment was conducted at only one secondary school in Essex, England, facilitated by staff from only one outdoor education centre rather than mainstream school staff, and delivered only to 24 Year-8 (12 and 13-year-old) students over three months. Thus, a broader longitudinal study of a larger number of schools, outdoor centres, and programme participants is necessary to determine if the findings can be fully attributed to the MABL Programme. In addition, the experiment delivered a very specific type of MABL programme designed specifically to meet the needs of the participants, as ascertained by collecting baseline data, with a strong emphasis placed on the language and activities used to mediate an experience aimed at promoting group cohesion, trust, and self-concept before helping the participants link the challenges of the outdoor experiences with the challenges of school and home and apply the lessons learnt in one setting to overcome difficulties in other settings. Therefore, it may be erroneous to claim that all adventurous activities would produce the same positive results or that all outdoor centres deliver the same level of programming.

5.8 Conclusion

As previously discussed, research shows that powerful feelings and emotions can impair cognitive function, distort perceptions, and subsequently affect behaviours. Children may be unable to cope with or understand the mix of complex feelings and emotions in the social world of school, family, and the broader community, and may also experience difficulty linking their actions with consequences (Thomasgard & Metz, 2004). Experiencing anxiety within social settings may result in impulsive reactions to

situations, which for some can lead to aggressive and disruptive anti-social behaviour that interferes with a pro-social trajectory of development. If this behaviour is not addressed, it could result in increased delinquency, depression, and disengagement with school and family (Salvador, 2003). Furthermore, it could lead to the use of coping behaviours counter-productive to learning such as bullying, clowning, and cheating (Brooks, 1994). Such behaviours may lead to marginalization and increased difficulties with integrating fully into school and family life, preventing attainment of personal satisfaction and self-actualization.

To address these concerns, this experiment was undertaken to ascertain what effect, if any, a structured outdoor-education programme focused on social-emotional learning can have on its participants. The project used both quantitative and qualitative methods to collect and code data to address the research question in an open and honest manner. Recognizing that understanding is one of the key tenets in action research (Winter, 1989), all participants were fully involved, and consented to every aspect of the experiment.

Observation clearly indicated that the MABL Programme was well received by the participants and their parents, teachers, and school administrators. Over the course of the programme, participants engaged fully with the outdoor educators; developed the ability to engage in more cooperative and pro-social behaviour; became more trusting of others; connected to their peers; and showed an increase in trust, effective communication, and consideration for all members of the group, all of which are factors that may support future positive interactions with their families and school. Based on analysis of the self-reported global self-concept scores using the MSCS, the null hypothesis can be rejected, and it can be concluded that the programme had a positive impact on participants in relationship to global self-concept, group cohesion, trust, and

positive group participation, supported by qualitative results that all support the development of social competence over time.

Other researchers have reached similar conclusions. A meta-analysis of outdoor educational research by Hattie et al. (1997) indicated that adventure programmes have a major impact on the lives of participants, and this impact is lasting. Fox and Avramidis (2003) found that within outdoor education, “learning objectives are achieved alongside enjoyable and challenging activities which cannot be performed in conventional classroom settings.” Moreover, this UK study confirms the findings of previous American and Australian studies into the learning processes inherent in outdoor- education programmes constructed specifically for the development of pro-social skills and the development of trust and group cohesion. Although the MSCS analysis did not indicate a statistically significant improvement across the individual measures of self-concept, the experimental group did show a statistically significant improvement in global self-concept measures, and reported improved school, peer, and family interactions when interviewed. This improvement in interpersonal interactions, also reported by school staff and teachers, can have a lasting positive impact on the participants. As posited by Elias et al., (1997) schools will be most successful when they promote children’s academic, social, and emotional learning in an integrated and systematic manner. Thus, as evidenced in this study and others, an integrated outdoor-education programme can play a critical role in improving children’s school engagement, family relations, and social well-being.

Researchers have concluded that pro-social behaviour is linked with positive intellectual outcomes (Diperna & Ellis, 1999; Pasi, 2001 & Ben-Avie & Esign, 2003; Ben-Avie et al, 2003) and anti-social behaviour with poor academic performance (Cobb, 1972; Cobb & Yackel, 1996; Cobb et al, 1993; Wentzel, 1993; Malecki et al, 2000; Malecki & Elliott, 2002; Wentzel, 1993; Wentzel & Asher, 1995). This study provided

further evidence that a structured approach to building trust, effective communication, problem-solving skills, emotional regulation, and group cohesion can have a powerful impact on participants.

This investigation provides support that MABL programmes can improve global self-concept, trust, group cohesion, and improved social interactions with peers, school staff, and family members. Therefore, it can be argued that through the implementation and delivery of mediated- learning activities delivered through outdoor-education-based adventure programming, group-based social competence may be improved. As evidenced in this study, social interactions, trust, and group cohesion can be enhanced through challenges delivered using a controlled, systematic, social-constructivist approach to help children engage more productively and competently with peer groups, school, and family. Thus, children given the opportunities to partake in an outdoor-education programme designed specifically to build trust, group cohesion, and social competence within a learning environment that is both challenging and supportive can be a powerful tool to meet the Every Child Matters mandate (2003).

However, it should be noted that it may be difficult to provide all school-aged children with properly conceived MABL programmes, as doing so is time consuming and costly; the per-student cost of the MABL Programme was approximately £1000. This cost in time and monetary resources may leave schools unable to effectively implement an adventure-based learning programme for the entire school community, leaving it only accessible to those with targeted or intensive intervention needs. Therefore, to provide structured programmes within the UK's Personal, Social and Health Education (PSHE) curriculum, along with promoting citizenship, and social and emotional intelligence of all students, a more cost-effective on-site programme may be required. Therefore, the focus needs to move toward investigating the facilitation of MABL in innovative ways more

readily available to the entire student population and delivered by mainstream classroom teachers. These innovative ways should focus on developing programming that can be implemented by all schools to all children and adolescents as part of a universal initiative specifically designed to build social competence and a cooperative disposition in an accessible and cost-effective manner. It is these considerations that led to a further refining of this investigation to focus on the development of a comprehensive programme to support social competence and cooperation rooted in a socio-cultural understanding of pro-social development. The above findings informed the second experiment of this study, which is discussed in the following chapter.

Chapter 6: Mediated Activity-Based Cooperative Learning

This chapter discusses an experiment conducted to investigate the impact of mediated activity-based cooperative learning (MABCL) using group problem-solving challenges on cooperative communication and on-task behaviour.

6.1 Introduction

The second experiment of this study assessed whether MABCL activities could effectively enhance the cooperative disposition of pupils as part of an in-school activity-based cooperative learning experience using an experimental pre-test/post-test random-control design.

6.1.1. Using MABCL to build trust, group cohesion, and social competence.

From the outset of the emerging theme that led to the development of the MABCL programme, a primary goal of the programme's activities was overcoming school-based marginalization, both physical and emotional. It was hypothesised that to address the inhibitors to the development of social competence, it was important that the programme provide opportunities for the participants to develop social competence within a trusting and supportive environment. Therefore, activity-based cooperative challenges were seen to have the potential to be most effective delivered prior to any mediated learning to assess the level of social competence within the group and each individual. Therefore, it was considered appropriate to gather baseline data on current levels of social competency, problem-solving, and trust within the group before the challenges were undertaken by the group.

With the above in mind, it was hypothesised that the programme would be most effective if it was designed so that the activities were followed by the provision of MABCL activities focused specifically on overcoming barriers to peer collaboration and social interaction. It was hypothesized at this stage of the study that (a) once trust had

been developed and barriers overcome, the group would be able to experience positive results through challenge, and (b) that by investigating group dynamics and the development of social competence, an understanding of the learning processes associated with MABCL activities could provide a robust understanding of the mechanisms supporting the active construction of responsible and respectful peer relationships. Therefore, this study hypothesized that the provision of MABCL activities would increase social competence, trust, group cohesion, learning (through reflective dialogue generalizable to the home and school environment), and engagement at school and in the family.

6.2 Method

6.2.1 Participants. Sixty-six Year 8 (Grade 7) students, with a mean age of 13 (SD = 5 months), were randomly selected and divided as discussed in detail below into a pilot group, a control group, and an experimental group, each of which consisted of 11 girls and 11 boys ($n = 22$ per group). The study was conducted at a large ($n > 1,500$) multicultural suburban secondary school in East Anglia, England that provides a seven-year education for students between 11 and 18 years of age. The head teacher and head of year asserted that to their knowledge the students had never participated in a school-facilitated activity/adventure-based cooperative learning experience designed to promote trust building and team building through activity-based problem solving. This assertion was later confirmed by the students during the information session when none reported having previously participated in an outdoor-education or adventure-based-education programme.

6.2.2 Coding scheme. Recognizing that a coding scheme was needed during observation of participants' interaction, Hewes et al (1985) method for evaluating how groups use their discussion procedures to make decisions during problem-solving tasks

was reviewed. In their study, Hewes et al. taught groups a version of “reflective thinking” that he had developed from Scheidel and Crowell’s (1979) conception of the “problem-management sequence”, evaluated how the groups used his version, and coded the groups’ discussions according to a scheme consisting of the following major steps in the problem-management sequence:

1. Clarification of the problem
2. Specification of symptoms
3. Appraisal of the scope of the problem
4. Identification of causes
5. Establishment of criteria
6. Presentation of solutions
7. Evaluation of solutions

To enhance the coding scheme, Hewes et al. (1985) added three additional categories: (a) simultaneous presentation/evaluation of solution or misuse of a procedure, (b) maintenance statements, and (c) procedural statements. Hewes et al. (1985) examined the statements that groups made and matched them to the seven categories listed above, determining whether the groups were following the procedural steps of the problem-management sequence by determining the extent to which their statements occurred in the same numerical order as the categories. Hewes et al. (1985) found that training helped the groups use the procedure more correctly.

However, Hewes et al. (1985) code proved difficult to employ during the real-time observations conducted during the activity-based problem-solving of a classroom-size group ($n = 22$) in this study. Therefore, Bales’ (1953) research demonstrating that the tension that groups build up when they perform task functions is dissipated by positive reactions was reviewed. The process that groups use to relieve tensions takes place on

two levels, these being (1) actions and (2) interactions, both of which can be positive or negative. Positive actions and interaction relieving tension by providing possible solutions to the problem and negative actions and interactions consisting of distractions that do not provide solutions to the problem and lead to a breakdown in group cooperation. On the level of actions, Bales (1953) claimed that successful groups make many more positive reactions than negative ones. Although somewhat tautological, this statement highlights the fact that successful groups use positive reactions to lessen the tension that comes through task work and negative reactions. These positive messages or interactions help maintain/restore motivation and favourable (cooperative) dispositions. In contrast, unsuccessful groups do not employ many positive reactions, without which they are unable to overcome their anxieties, limiting their success as cooperation breaks down. Bales (1953) detailed the processes in terms of interactions that groups use to alleviate anxiety and tension. First, tension builds when members make negative reactions. Second, to begin to lessen the tension, members often use a suggested solution or answer to the problem to complete the task. Finally, when one member attempts an answer or solution, another member often responds with a positive reaction. This cycle of messages completes the relief of tension, allowing the group to continue with task work while using questions or attempted answers to alleviate stress and promote or maintain cooperation.

Both Bales' (1953) theory and research findings imply that a successful group's output is based on the proper proportion and sequence of on- and off-task communicative functions. Group members need to know how to balance and coordinate their statements if they want their group to do well. Bales' research also supports the need for pupils to learn how to effectively communicate to enhance success during problem-solving through mediated experiences. Following preliminary testing of the coding scheme with a

randomly selected group of Year 8 students, the coding scheme was simplified into four categories according to Bales' (1953) principles of actions and interactions during group tasks: on-task verbal, on-task non-verbal, off-task verbal and off-task non-verbal. This coding scheme was formulated into a checklist that the observers could use during the observations of the participants during the problem-solving activities to record both on-task and off-task verbal and non-verbal communication. In addition, the observers were able to record the number of tasks completed during the one-hour activity-based problem-solving exercise at both pre- and post-test time intervals.

6.2.3 Activity materials. A variety of materials, including ropes, blocks, balls, balloons, and hoola-hoops, were selected to organize and conduct the activity-based problem-solving activities and facilitate the challenges. The tasks were selected on the basis that they had not been components in the pupils' previous peer-collaborative problem-solving tasks, thus providing novelty; that they could offset any confounding properties related to pre-test circumstances; and that they required group rather than individual completion, a high level of lateral thinking, and group communication.

6.2.4 Procedures and design. After obtaining school administrative consent for the study, a letter was sent home with all Year 8 students apprising their parents of the intent of the study and requesting a letter of objection if they did not want their child to participate in the study. After allowing two weeks for parents to return letters of objection, during which none did so, an assembly was held with all Year 8 students. This session provided full details of the study to the students so that they could make an informed decision whether to participate. Following a brief question-and-answer session, interested students were asked to place their names on a card. The cards were collected and placed in two bags marked "boys" and "girls", then randomly selected in order to

assign each participant to either the control or experimental group. Once the participants had been selected, a letter was sent home to their parents to gain their full consent.

Following the development of a functional coding scheme, the control and experimental groups were brought together for a 30-minute briefing to explain the process and schedule of the research. Upon the completion of a question-and-answer session designed to address any final concerns, the study began by separating the groups and conducting a one-hour activity-based problem-solving activity session, first with the control group then the experimental group. The first task introduced was the “electric fence” (Ronke, 1989) in which a rope is tied between two points and the objective is to move all participants from one side of the rope to the other without touching or going under the rope. Following a discussion concerning the importance of maintaining safety and physical contact during this activity, the group engaged in the activity. At this stage, the activity data were used to gain baseline information in relationship to the level of on- and off-task communication within the control and experimental groups.

During the next three days, the experimental group gathered in the afternoon for a one-hour MABCL session involving trust-building activities, effective communication, and group-cohesion exercises. On the first day, a scaffolded, step-by-step approach to the construction of trust delivered the activities “running free”, “willow in the wind”, “trust lean”, and “blind crossing” to first enhance one-to-one trust and then whole-group trust. The second day of the study focused on developing effective communication through completion of tasks such as “hoola-hoop pass”, “elephants”, “cows and giraffes”, “speed pass”, and “human knot” (for a full description of the trust and communication activities used, see www.wilderdom.com/games). During these exercises, the facilitator engaged in guided discussions to resolve any conflict when communication broke down or obstacles to task progress experienced. At the end of each activity, the students were guided

through a dialogue session to debrief them on the cooperative process and develop understanding and avenues for the transference of knowledge from one experience to the next.

On the third day, the experimental group participated in the “mine field” and “all aboard” activities, novel activity-based problem-solving tasks that focused on trust and the further development of effective communication. After the participants were guided through these activities and provided guidance when difficulties in trust or communication arose, they were debriefed using a dialogical approach to promote the transfer of knowledge for classroom purposes. To conclude the final day of the study, both the control and experimental groups participated in separate non-mediated peer-cooperative problem-solving task sessions. The participants were provided with a briefing of the task but no further assistance or directions during the activity. The aim of the “toxic waste” task, the first activity, was for the participants to use the props provided to transport a bucket of water from one end of the gymnasium to the other. Upon completion of this task, the students participated in the “nitro crossing” activity, which required them to transport the bucket of water from one side of a “gorge” to the other side using a swing rope without spilling a drop of “nitro”. Two researchers including the author attended the pre-test and post-test activities and independently coded the participants’ interactions during the tasks as either on-task communication or off-task communication. Using the rating sheets, agreement between raters was calculated using the Kappa statistic.

6.3 Results and Analysis

The MABCL experience consisted of a one week investigation that was designed to assess the efficacy of mediated activity based initiatives to enhance cooperative learning. The week involved two one hour sessions with the control group and four one hour sessions with the experimental group. The first and last sessions with both the

experimental and control group were conducted to observe and record unassisted on-task cooperative communication. The three middle sessions provided to the experimental group only were facilitated to investigate the efficacy of mediated group on-task communication to understand the influence these activities might have on increasing cooperation during peer group problem solving (for a full description of the programme and activities used see appendix B).

Table 6.1 shows that the pre-test on-task and off-task interactions did not differ significantly ($\chi^2 = 6.42$, $df = 1$, $p < 0.0113$, Cramer's $V = 0.1628$) between the control and the experimental group. However, the experimental group showed a statistically significant difference in the proportion of on-task interactions from pre- to post-test interactions as compared to the control group (see Table 6.2; $\chi^2 = 111.09$, $df = 1$, $p < 0.001$, Cramer's $V = 0.5263$). In particular, the percentage of on-task interactions increased from 34% of total interactions during the pre-test to 83% of total interactions during the post-test for the experimental group.

Reviewing within-group comparisons, a statistically significant difference was identified between pre-test and post-test on-task interactions for the experimental group (see Table 6.3; $\chi^2 = 94.83$, $df = 1$, $p < 0.0001$). In contrast, no statistically significant difference was found for the control group (see Table 6.4; $\chi^2 = 0.07$, $df = 1$, $p < 0.7913$, Cramer's $V = 0.0203$). Both the pre-test and post-test within- and between-group comparisons indicate that MABCL experiences structured to develop trust, effective communication, and group cohesion increase on-task communication during peer cooperative problem-solving exercises worked.

Table 6.1

Pre-Test Comparison of On- and Off-Task Interaction during Peer Cooperative Problem-Solving Activities

Interactions	Experimental group (E) pre-test	Control group (C) pre-test
Percentage and number of on-task interactions	34% (54)	33% (55)
Percentage and number of off-task interactions	66% (104)	67% (120)

Note. $\chi^2 = 0.17$, $df = 1$, $p < 0.68$, Cramer's $V = 0.11$. For $df = 1$, the chi-square value reported is the Yates chi-square corrected for continuity. The difference between groups is not considered statistically significant by conventional criteria ($p < .05$)

Table 6.2

Post-Test Comparison of On- and Off-Task Interaction during Peer Cooperative Problem-Solving Activities

Interactions	Experimental group (E) post-test	Control group (C) post-test
Percentage and number of on-task interactions	83% (195)	31% (54)
Percentage and number of off-task interactions	17% (40)	69% (120)

Note. $\chi^2 = 111.09$, $df = 1$, $p < .0001$, Cramer's $V = 0.5263$. For $df = 1$ the chi-square value reported is the Yates chi-square corrected for continuity. The difference between groups is considered extremely statistically significant by conventional criteria ($p < .05$)

Table 6.3

Experimental Group On- and Off-Task Interaction during Peer Cooperative Problem-Solving Activities

	Percentage and number of on-task interactions	Percentage and number of off-task interactions
Pre-test	34% (54)	66% (104)
Post-test	83% (195)	17% (40)

Note. $\chi^2 = 94.83$, $df = 1$, $p < .0001$, Cramer's $V = 0.4966$. For $df = 1$ the chi-square value reported is the Yates chi-square corrected for continuity. The difference between pre and post test outcomes is considered extremely statistically significant by conventional criteria ($p < .05$)

Table 6.4

Control Group On- and Off-Task Interaction during Peer Cooperative Problem-Solving Activities

	Percentage and number of on-task interactions	Percentage and number of off-task interactions
Pre-test	33% (55)	67% (112)
Post-test	31% (54)	69% (120)

Note. $\chi^2 = 0.07$, $df = 1$, $p = 0.79$, Cramer's $V = 0.0203$. For $df=1$ the chi-square value reported is the Yates chi-square corrected for continuity. The difference between pre and post test outcomes is not considered statistically significant by conventional criteria ($p < .05$)

Table 6.5

Comparison of Task Completion during Activity-Based Problem-Solving Session

Task completion	Experimental group (E)	Control group (C)
Before intervention	0	0
After intervention	2	0

Note. This table indicates that improvement in communication had a direct influence on group performance as indicated by task completion.

6.4 Discussion

The primary focus of this study was to assess the level of on- and off-task communication among Year 8 students before and after they had participated in MABCL that focused on the teaching of effective cooperative/pro-social skills. To this end, 44 Year 8 students were randomly selected to participate in either the control or experimental group. Based on observations of the communication among the members of the control and experimental group, the intra-group and inter-group effect size was calculated. In addition, novel problem-solving tasks were introduced during the first and second observations to control for practice effects. As indicated in the above tables; communication differences pre- and post-mediated cooperative learning provides evidence that a structured learning session focused on developing cooperative

communication may lead to an increase in on-task communication, thereby increasing the success of cooperative learning. These results suggest that MABCL may increase cooperative skills development, thereby enhancing peer cooperation and task performance during novel problem-solving activities. After participating in the mediated activities, students showed an increase in on-task communication, effective communication during conflict, and the willingness to support each other in task completion. In other words, they engaged in more positive (i.e., on-task) interactions, which allowed for effective and cooperative communication to be sustained, compared to the control group.

The study has important implications for educational practices requiring peer cooperation. First, MABCL appears beneficial in developing effective peer cooperative skills, but further investigation is required to fully understand its potential. Second, peer cooperation should not be expected but developed. Finally, teachers should be encouraged to explore alternative approaches to developing a classroom-based ethos of cooperation prior to implementing peer cooperative learning. However, little research has been conducted regarding the relationship between MABCL and Vygotsky's (1978) conceptualization of the ZPD. Therefore, while it remains to be fully explored, the implications are clear: Pupils can benefit from experiences designed to develop cooperative skills as part of a holistic cooperative learning experience.

6.5 Limitations

The primary limitation of this study is its small scale, which limits the generalizability of the findings. An additional limitation is that it did not account for possible differences in peer or friendship status among the participants, posing the possibility that friendship pairs were inadvertently selected and failing to account for the fact that wider peer networks may play a role in determining how well groups of students cooperate. Furthermore, all participants were selected from the same year group attending

the same secondary school. Thus, the study did not examine the length of time students knew each other or how this could have influenced the findings of the study. It is also important to note that the problem-solving tasks were activity based and group oriented. Therefore, even though the same outcomes may occur within the naturalistic setting of classrooms, it would be prudent to undertake further research to investigate the transference of skills from activity-based tasks to classroom-based tasks in maths, science, history, and other subjects.

Another limitation was a violation of an assumption associated with the analysis of data: the observations were not strictly independent. In other words, the observations were repeated measures of the same group by non-independent raters. This violation can be avoided in the future by having independent raters rate each performance measure independently, which could be accomplished by having one rater observe and record on-task communication, another record off-task communication, and a third record task completion. In this manner, the raters would be independent. In addition, it should be highlighted that although actions here were assumed to be unrelated, this is not right and therefore future observations need to consider the relationship between actions during the coding process.

6.6 Conclusion

The present study differed from past efforts in that its major aim was to examine the impact of MABCL on problem-solving task communication among a classroom-size group ($n > 20$) of students. Whereas other studies (e.g., Johnson & Johnson, 1992; Maher, 1995; Slavin, 1990) failed to determine why peer cooperation is more effective among some participants than others, the results of this study suggest that effective peer cooperation can be increased by using structured MABCL experiences focusing on social development. This may indicate that the disparity of effect size as reported in previous

research may be an indication of the level of prior cooperative learning experiences and that the higher the effect, the higher the level of effective communication and trust among the participant existed prior to the experiment. In other words, cooperative learning is directly affected by the social competence and cooperative disposition of learners.

The opportunity for research in the area of peer cooperative learning remains virtually limitless. Researchers have demonstrated an understanding of the effectiveness of peer cooperation in relationship to learning, yet have not investigated possible means of increasing consistency in outcomes in relationship to cooperative learning. Therefore, research into developing an understanding of how MCLEs can enhance positive peer cooperation among classroom-sized groups and how these experiences might appear to educators is encouraged. Education is beginning to be realized as not only a social but also a cooperative process, moving through cycles of formation, development and maintenance. Greater understanding of how to develop and enhance peer cooperation may contribute to increased readiness to learn and an ongoing engagement with education for many students.

This investigation provides some insight into the importance of developing effective peer cooperation. Groups participating in communication-focused MCLEs may experience an increase in on-task effort during problem-solving tasks, suggesting that peer cooperation may be most effective when children are instructed by a knowledgeable adult on how to share their opinions in a climate that promotes an acceptance of different viewpoints, and are motivated to take chances, think critically, and effectively propose solutions to problems. In multicultural schools, classroom and community peer cooperation may give all students a stronger voice and the confidence to respect all members of their community, classroom, and school. Following Mills' (1959) argument that research should lead the way for action, the results of this cycle of the investigation

suggest that the action required is the development of peer cooperative skills through MCLEs. Therefore, it necessary for the next cycle of this investigation to progress from developing an understanding of what is happening to an understanding of what could be happening if an emphasis is placed on the learning resulting from a holistic approach to facilitating pro-social development among school-aged children within the school setting.

The main shortcoming of the use of MCLEs is that the teaching of cooperation through group challenges fails to meet the standard of a holistic programme designed to facilitate pro-social development while decreasing anti-social behaviour. Although the mediated-learning activities in this experiment are seen as able to be delivered by mainstream school staff to all children at all schools, and are therefore universal, they are not holistic. In other words, even though the findings suggest that MABCL may promote cooperative communication, it does not provide explicit tools to address inappropriate or anti-social behaviour if it arises. Therefore, it is necessary to design a more holistic programme based on the findings from the first two experiments along with the themes from the literature review. The programme that emerged from this engagement with the data from the first two experiments and literature led to the development of the next stage of this investigation, which is discussed in the following chapter.

Chapter 7: Building Schools of Character Pilot Study

7.1 Introduction

The Building Schools of Character (BSC) Programme was developed following the integration of the findings from the two investigations described in Chapters 4 and 5 and the understanding of the role of personality and resilience in educational and life outcomes obtained from the review of the literature. This research provided the foundation for understanding how mediated experiences might play a role in developing the “strength of character” that assists an individual in becoming socially competent and developing a cooperative disposition, the two key goals of the BSC Programme.

7.2 Method

The research design of this pilot study was based on Tashakorri and Teddlie’s (1998) cycle of scientific research and used a qualitative-quantitative-qualitative sequence of investigation to obtain a thick description of the human experiences underpinning the quantitative findings as discussed previously.

7.2.1 Participants. The case for this investigation was a primary school situated in an education action zone (EAZ) in East Anglia, England, 14.1% of whose 234 pupils are on the special-education needs register without statements and 0.4% on the register with statements. Key Stage 2 test results indicate that 70% of the pupils achieved level 4 or above in English, 53% in mathematics, and 67% in science, all of which are below the national averages of 79%, 75%, and 86%, respectively. The school value-added measure is 100.9 indicating greater than expected progress. Socio-economically, the school is a mix of working and middle-class families, among whom 17% are eligible for the free school lunch programme (Ofsted, 2007) with the national average of pupils eligible for the free lunch programme in England being 15.9%.

7.2.2 Procedure and design. Prior to commencing the pilot investigation of the BSC Programme, a meeting was scheduled by the researcher with the primary school's head teacher (principal) and the deputy head teacher (vice principal), the latter also being the Special-Education Needs Coordinator (SENCO). This meeting was conducted as a formal semi-structured interview to develop an understanding of the setting and the needs and desires of the senior management team to address the real concerns of the school. This meeting was followed by a second meeting in which the researcher discussed the BSC Programme and the research requirements of the project. After senior management consented to BSC implementation, a schedule was agreed upon. The second stage of implementation commenced with a two-hour staff meeting, conducted by the researcher, with all school personnel to develop their understanding of the BSC Programme and gain support from and the full consent of the staff. At an additional meeting with parents, the senior staff and researcher explained the project and gained full consent from participating parents. Additional letters were sent home to all parents to inform them of the project and provide them with an opportunity to voice any concerns. As no objections were raised, the project began.

Following the informational meeting and after obtaining staff consent to participate in the research, baseline data were collected from pupil, staff, and parental questionnaires; observations; and semi-structured interviews with a random selection of pupils and all staff. In addition, archival data regarding exclusions, behavioural referrals/actions, absenteeism, and truancy were collected. Training was then conducted by the researcher, with the teachers and support staff receiving one full day of professional development regarding the BSC Programme. One week later, the researcher modelled whole-class character education lessons for Years 1 to 6. Three weeks following these lessons, an additional day of training was provided by the researcher for

the SENCO and three teaching assistants who had volunteered to take primary responsibility for the facilitation of the restorative processes and the school support centre (SSC). Six months following implementation, pupil, staff, and parental questionnaires were administered; observations of and random semi-structured interviews with pupils and all staff were conducted; and tracking data concerning office referrals were collected to conduct a pre-/post- intervention comparison.

7.3 Results

The BSC programme is a three component initiative. The first component is Character Education that focuses on developing routines, habits and attitudes related to thinking and acting within prosocial standards of conduct. The second aspect of the programme involves using restorative processes within a procedure justice framework designed to ameliorate conflict and resolve unacceptable behaviour. The third component consists of establishing an onsite school support centre. The centre is designed to provide intensive support to pupils experiencing ongoing difficulties or disaffection within the main classroom and broader school community. (for a more detailed description of the BSC programme see appendix C).

7.3.1 Qualitative data. Semi-structured interviews were conducted with senior management, teaching and support staff, and a random selection of pupils from Key Stage 2 (aged 8 to 11) prior to implementing the BSC Programme to gain a deeper understanding of the situation from the perspective of the administration, front-line staff, and pupils. The data collected from the interviews provided insight into the climate of the school prior to and following the intervention under investigation. Throughout these interviews, field notes were taken and all discussions were recorded. Following the collection of the data, a thorough engagement with the data was conducted following

Strauss and Corbin's (1987) recommendations for ground theory research, as discussed in Chapter 3. Following the coding, sorting, and recoding of the data, several themes emerged that reflected the views of the situation by all stakeholders. Based on the themes that emerged the quotes in the following sections were selected to present the participants' perspectives in a succinct manner.

As discussed in Chapter 4 coding was conducted based on Braun and Clarke's (2006) recommendations and in consideration for how a Grounded theory analysis needs to provide extracts that are illustrative of the analytical points established from the data. Therefore, it should be restated here that the coding process should neither result in a collection of extracts strung together with little or no analytical narrative nor a selection of extracts with analytical comment that simply or primarily paraphrases their content. Rather, the extracts need to be illustrative of the analytical points that the researcher makes about the data, and, as suggested by Braun and Clark (2006), should be used to illustrate or support an analysis that goes beyond their specific content, makes sense of the data, and tells the reader what the data do or might mean.

Considering the above the coding process used here to extract illustrative support for the themes developed from the data following steps were taken during the analysis of the qualitative data. In the first steps of coding I used extensive memoing to become familiar with the data: Reading and re-reading the data and recording initial ideas. This process was continued until initial codes were generated. This involved coding interesting features of the data in a systematic fashion across the entire data set and collating the data relevant to each code. Once these initial codes were established they were used to search for themes. The search for data at this stage involved collating codes into potential themes and gathering all data relevant to each potential theme. Once the themes were developed and supported a more rigorous review began. The reviewing of

the potential themes focused on determining if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2). To make this determination a thematic map of the analysis was generated to provide more readily accessible visual interpretation of the data and the leading themes developed from the data. This map facilitates the ability to look at the themes and their supporting extracts from multiple directions. As the themes emerged and support collected from the data a further process was conducted to define and name the prominent themes. The process of defining and naming of the themes involved conducting an ongoing analysis of the data to refine the specifics of each theme, developing the overall story that the analysis tells, and generating clear definitions and names for each theme. In the final stage of this coding a detailed map emerged of the themes with succinct informant comments selected to provide vivid, compelling extracts as provided below. Once these extracts were confirmed a final analysis of selected extracts was conducted for the purpose of relating the analysis to the research question and literature and producing a synthesis of the analysis as highlighted in the discussion section of this chapter.

7.3.1.1 Interviews prior to BSC implementation.

7.3.1.1a Theme 1: Deteriorating behaviour. In the following statements, the senior staff depicts the setting as having progressively deteriorated until the school had reached a state of chaos and crisis:

Head teacher: “The teachers are completely demoralized and the behaviour-management approach of rewards and sanctions has become completely unmanageable.”

Deputy Head teacher/SENCO: “When we ask for assistance they [county support staff, behaviour support teachers, and educational psychologists] just blame us, saying it’s not working because you’re not doing it right... what help is that... I mean what can you do and feel when people just keep criticizing and not offering a different way and the same old way isn’t working.”

7.3.1.1b Theme 2: *Need for a holistic approach.* The following statements describe the crisis and chaos faced by the school and speaks directly to the need for a more holistic plan to address the school climate:

Head teacher: "The behaviour just keeps getting worse... the rewards have no value... the sanctions have no value... it is at the point where children now just run out of the classroom when the teacher tries to redirect them."

Deputy Head teacher/SENCO: "At this point I'm just running from crisis to crisis in the classroom on the playground. All I do is deal with aggressive angry behaviour."

6.3.1.1c Theme 3: *Teacher disillusionment.* The teachers depicted a similar atmosphere of disillusionment and crisis:

Teacher 1: "Sometimes I just don't want to come to school in the morning... I'm so tired... it is a constant struggle... I used to love teaching when I first started [17 years ago]; now it is just a constant struggle."

6.3.1.1d Theme 4: *Teacher demoralization.* The demoralization of the teachers was further evidenced when another teacher discussed her experiences:

Teacher 5: "The classroom... the whole school has become tense, angry, noisy... there's no laughter.... There used to be laughter but now it is just pushing and shoving, shouting and the language, my word [clicks her tongue and shakes her head], the appalling language makes my skin crawl."

6.3.1.1e Theme 5: *Need for targeted and consistent behaviour management.*

Another teacher's statements highlighted the need for more targeted and consistent programming to help pupils not coping well within the classroom and around the school:

Teacher 2: "Pupils are just not responding... to the reward and sanction system... and now I am told to ignore the inappropriate stuff and just 'catch' [uses hand gesture] the good behaviour and give lots of stickers.... Now kids look at you and say what will I get if I do my work.... It has become so intense and not just with the disruptive pupils but with everyone... and now the sanctions or the rewards are not helping at all with the ones who are constantly disrupting.... It's just become horrible."

7.3.1.1f Theme 6: *Need for a radical overhaul.* The pupils agreed with the teachers and staff that their school needs a radical overhaul of its ethos and behaviour-management system:

Pupil 23: "The focus is all on the bad kids; they get tons of stickers, play on the computer, and even get someone to write all of their work.... What is that?"

Pupil 17: "There's fights every day on the playground."

Pupil 5: "Lessons are boring.... There's always someone messing about."

Pupil 9: "We never do fun stuff.... There's too much messing about... my mum says they [disruptive pupils] should just be kicked out."

Pupil 31: "I [don't] care about no stickers anyway. It's more fun to watch everyone when I run around."

Pupil 15: "I hate school anyway, so who cares what they [teachers] do.... When I get excluded, I do what I want... so who cares?"

7.3.1.1g Theme 7: School-wide apathy. Pupils 15's statement reflects a perspective of both the pupils and school staff: A feeling of apathy or "Who cares?" The truism that children do not care what you know until they know that you care was supported by these pupils, who clearly demonstrated that their school's reward-and-sanction approach was not instilling a belief in care for their learning and welfare. This feeling of apathy was also voiced by school staff when they discussed how current county directives were not meeting the needs of the school, leaving them disillusioned and demoralized.

The qualitative coupled with the quantitative data shown in Tables 7.1 and 7.2 reflect the disillusionment of the staff and pupils and the resulting negative outcomes. The teachers feel disempowered after repeatedly seeking guidance but receiving no assistance. They feel that they can do nothing to meet their pupils' needs, watching helplessly as the only strategies available to them are ineffective at addressing the increasing level of disruptive, disrespectful, and anti-social behaviour, leading to feelings of apathy similar to those felt by their pupils, who feel that their teachers' attention is misdirected.

7.3.2 Quantitative data. The data in Tables 7.1 and 7.2 were collected through observation and analysis of school behavioural records six months prior to and six months

after BSC implementation. Observations were conducted for one hour both pre- and post-BSC implementation during maths lessons for children aged 5 to 11 to code teacher talk into one of three categories: (a) content delivery, (b) behaviour management, and (c) relationship building. For coding purposes, each teacher-initiated sentence was recorded into one of the categories and the totals from all classrooms observed ($n = 6$) were added together for analysis. In addition, pre- and post-observations were conducted to record disruptive incidences, defined as any pupil action that disrupted the teaching and learning process, and pupil on- and off-task behaviour. These figures were also added together from each observed classroom for analysis. School records were searched to collate information regarding office referrals related to anti-social behaviour in the classroom and around the school.

A chi-square analysis of data pertaining to types of teacher talk (see Table 7.1) and pupil on- and off-task behaviours (see Table 7.2) was conducted to ascertain whether there had been a statistically significant change. As shown in Table 7.1, significant post-implementation changes in all measures were observed ($\chi^2 = 561.2$, $df = 2$, $p < 0.0001$). Teacher content delivery increased from 29% (311) to 66% (814), behaviour management in the classroom decreased from 66% (704) to 18% (215), and relationship building between teachers and pupils during the academic lesson increased from 5% (52) to 16% (197), with a large effect size associated with these post-implementation changes ($\chi^2=561.21$, $df = 2$, $p < 0.0001$). As shown in Table 7.2, a higher proportion of pupils engaged in post-implementation classroom curricular activities (28% or 323 vs. 49% or 604) and a smaller proportion of pupils refused to engage in on-task behaviour (72% or 838 vs. 51% or 618). A chi-square analysis ($\chi^2 = 46.5004$, $df = 1$, $p < 0.0001$, Cramer's $V = 4.82$) of these data indicates a strong relationship between these variables.

Table 7.1

Type of Teacher Talk During Lessons

	Content delivery	Behaviour management	Relationship building	Total
Pre-implementation	311 (29%)	704 (66%)	52 (5%)	1067
Post-implementation	814 (66%)	215 (18%)	197 (16%)	1226

Note. $\chi^2 = 561.21$, $df = 2$, Cramer's $V = 0.49$, $p < 0.0001$. The differences are considered extremely statistically significant by conventional criteria ($p < .05$).

Table 7.2

Average Number of Pupil On- and Off-Task Behaviours During Lessons

	On-task behaviours	Off-task behaviours	Total
Pre-implementation	323 (28%)	838 (72%)	1161
Post-implementation	604 (49%)	618 (51%)	1222

Note. $\chi^2 = 116.03$, $df = 1$, Cramer's $V = 0.22$, $p < 0.0001$. The differences are considered extremely statistically significant by conventional criteria ($p < .05$).

In the above tables paired *t*-tests were used to calculate the means and the standard deviations of pre- and post-implementation disruptive incidences and office referrals for inappropriate pupil behaviour, with Cohen's *d* determining the effect size. Using the Wilcoxon signed rank test the mean number of disruptive incidences during academic lessons decreased after programme intervention (2.3 post-implementation compared to 17.8 pre-implementation) as shown in Table 7.3. In addition, this same test shows that the mean number of office referrals for disruptive events and inappropriate behaviour (0.6 post-implementation compared to 12.2 pre-implementation) also decreased as shown in table 7.4. The effect sizes associated with both the disruptive incidences and office referrals indicate a large effect. In summary, the results suggest that the implementation of a socio-culturally inspired character- education programme can have

positive effects on pupil behaviour, classroom climate, and curricular delivery and engagement.

Table 7.3

Average Number of Disruptive Incidences During Lessons

	Pre-implementation	Post-implementation
Classroom 1	22	4
Classroom 2	8	1
Classroom 3	25	5
Classroom 4	11	1
Classroom 5	13	1
Classroom 6	28	1

Note. The Wilcoxon signed rank test was used here. $W_+ = 21$, $W_- = 0$, $n = 6$, $p \leq 0.03$. The differences in all classrooms pre and post test are considered statistically significant by conventional criteria ($p < .05$).

Table 7.4

Average Number of Office Referrals

	Pre-implementation	Post-implementation
Classroom 1	10.6	0.3
Classroom 2	5.8	0.7
Classroom 3	22.5	1.4
Classroom 4	7.5	0.3
Classroom 5	9.4	0.6
Classroom 6	17.8	0.4

Note. The Wilcoxon signed rank test was used here. $W_+ = 21$, $W_- = 0$, $n = 6$, $p \leq 0.03$. The differences in all classrooms pre and post test are considered statistically significant by conventional criteria ($p < .05$).

7.3.3 School climate after implementation. Six months after BSC

implementation, interviews were conducted and archival tracking data collected (see Tables 7.3 and 7.4) that indicated the emergence of different perspectives, attitudes, and behaviours.

7.3.3.1 Theme 1: School transformation. During a semi-structured interview, the head teacher and deputy head teacher described a transformed atmosphere:

Head teacher: "There is a complete climate of respect... of calm staff and pupils."

Deputy Head teacher/SENCO: "Morale has just sky-rocketed."

The teachers supported this perspective of transformation:

Teacher 1: "It is remarkable... pupils are smiling, happy... laughter has returned."

Teacher 6: "Every aspect of school is better... lunchtime, playtime, class time... everything".

Teacher 3: "Assemblies are great and the playground is a fun place again.... I haven't had one of my little ones complain about being picked on or bullied in nearly four months now, and that is great."

Behaviour support teacher 1: "I can't believe this is the same school, the kids are smiling... everyone is so relaxed... just can't believe it is the same school."

Behaviour support teacher 2: "If I didn't know, I would agree we came to a different school.... It is like night and day... the enthusiasm is striking."

7.3.3.2 Theme 2: The storm before the transformation. The deputy head teacher and teaching assistants, who were responsible for operating the SSC, described the first weeks of operation as difficult and warned of the difficulties associated with breaking a cycle of anti-social behaviour.

Teaching assistant 1: "I have to say that the first two or three weeks were very challenging."

Teaching assistant 2: "I think the word is hellish.... The pupils were used to doing what they wanted, and when they were assigned to the support and not allowed to have playtime at the same time as their [class]mates, they thought they would have none of that.... They were downright foul.... The language was just appalling."

Deputy Head teacher/SENCO: "I really didn't think we were going to be able to do it.... I mean the staff were really dreading it and it just kept getting worse.... In the regular classroom it became much better.... The teachers thought everything was great.... What they didn't know is how bad it was in the support centre.... I was really starting to doubt the decision to put the most disruptive pupils all in one place."

Teaching assistant 3: “About three weeks into it began to change.... I think they [pupils] realized we were not going to go back to the way it is...and it started to calm down.... Don’t get me wrong, it wasn’t an instant change, but bit by bit we could see that it was starting...it was calming down...they were starting to work.”

Deputy Head teacher: “Yes, it was like we felt we were turning a corner.... Every day we started with one of the words [respectful, responsible, trustworthy, fairness, caring, and honest] and we talked about what it meant and what it looked like, and then when something was off, we would refer to that word and ask...is it that respectful, or is that honest, or is that fair?....It seemed to start sinking in.”

Teaching assistant 2: “I think it was because we also were making the adjustment.... I mean the lesson plans were better and we came up with plans to deal with the behaviour better, and I think trust is what started first.... They [the pupils] knew we weren’t giving in and if they wanted to return to their main classroom they needed to start acting with respect and being responsible.... Their bad language and tantrums weren’t going to get them what they wanted.... I think that is what started the change.”

Deputy Head teacher: “Yes, I would have to agree with that... and when we felt that change we knew it was worthwhile.... Three months following that all of them [pupils assigned to the SSC] were back in their classrooms.”

7.3.3.3 Theme 3: Improvement in staff and student morale.

Teacher 6: “It is so much easier to teach now.... I actually feel like I can teach again instead of just policing....The kids are much more confident to participate during class.... I can cover more of the curriculum.... Pupils listen.... It is easier to change pace and style... it is so different... I think I forgot why I liked teaching and now I know again.”

The pupils also described an improved morale and atmosphere.

Pupil 15: “It is a lot easier to make friends now.... I think because ... there’s a lot less bullying and learning is more fun... and like we get to do cool stuff.... The SSC really helped... and now I know what it means to be part of a team.”

Pupil 27: “There is a lot less noise now and less kids messing about.”

Pupil 33: “Learning is more fun.... Focus is on the good kid so others stop messing about because we all get to say we don’t like it.”

Pupil 12: “More focus on learning.... A lot less fighting at play time.”

Pupil 7: “School’s harder... you can’t really mess about and stuff and you have to work.” When asked to explain further, the pupil replied, “I mean it [messing around] just isn’t right anymore and it hurts everyone.... It isn’t what a hero would do, is it?”

The pupil's reference to a "hero" reflects the strategy of teaching with movies (www.teachingwithmovies.org), which the BSC Programme encourages teachers just learning how to discuss the valued personality traits of respect, responsibility, trustworthiness, honesty, fairness, and caring to use. Another aspect of the programme uses activities during physical education lessons to develop character by building trust and effective teamwork. Both the quantitative and qualitative data, particularly those regarding pupil on-task behaviour and teacher talk associated with behaviour management; indicate that a humanistic approach to constructing a school of character within a socio-cultural perspective may address ongoing concerns regarding academic engagement, pro-social development, and anti-social behaviour.

7.4 Discussion

7.4.1 Logistics of delivering character education. The pilot study supports the incorporation of two hours of character education per week into short-term, medium-term, and long-term classroom planning at the individual teacher level. In addition, the pilot study suggests that classroom delivery in conjunction with the implementation of a whole-school approach involving assemblies dedicated to pro-social character development underpinned by an emphasis on pro-social standards of conduct can be effective. Within this structure one hour was devoted to classroom-based lessons involving storytelling, discussion, or assignments delivered in a cooperative learning environment to develop the students' experiences of heroic acts. The second hour was devoted to character education situated within physical education classrooms and incorporating group-based activities (e.g., trust or group challenges) designed to provide opportunities for pupils to feel what it means to be trusted and responsible (for more detail of these activities visit www.wilderdom.com/activities).

In addition, the pilot study indicates that by using high-impact movie clips to support the depiction of the hero in contrast to the self-serving nature of the villain, a highly evocative discussion can be facilitated to support a voluntary commitment from students to be of good character (i.e., “heroes”) and display behaviour associated with this commitment.

One film found particularly effective in facilitating this dialogue and eventual commitment is the first *Harry Potter* film. As it is a film with which the majority, if not all, children eight years and older are familiar, it allows for the use of short clips based on an understanding of the outcome of the story. For younger children, the original cartoon version of Dr. Seuss’ *Horton Hears a Who* was found effective in eliciting the commitment to be responsible and respectful to others, even when it is not popular to do so. Other movies found effective were *The Grinch Who Stole Christmas*, *White Squall*, *Lord of the Flies* (the original version), and the first *Spider-Man* movie. It is recommended by this researcher following the pilot study of the BSC programme that facilitators use films with which they feel a connection, as a genuine connection to what one is teaching increases the engagement of the learners and allows facilitators to bring their personality into the learning environment (for more film ideas see www.teachwithmovies.com).

It is further suggested at this stage of the investigation that it is important that all decisions regarding resources (e.g., films, stories, and narratives) be based on age/developmental appropriateness so that children will be able to connect with the message and not be overwhelmed by content with which they cannot fully engage. Furthermore, it should be noted that if familiar plots are chosen, the entire film does not need to be watched prior to the character education lesson. The pilot research indicated that this process is most effective if short clips of 30 to 180 seconds are used judiciously

throughout the mediated dialogue to emphasize each character trait when the facilitator is seeking voluntary commitment from the pupils to embrace the ideals of pro-social standards of conduct.

In conclusion, it is argued here that to address growing concern over the increase in inappropriate behaviour in UK schools and the increasing awareness of academic disaffection, alternative approaches to the traditional system of rewards and punishments should be considered, particularly a systematic approach to developing the inner character of children so that they can internalize and embrace the benefits of a democratic and orderly society. As Vygotsky (1978) argued, learning precedes development, and development must be fortified from within, not controlled from without. This study demonstrated the possible beneficial effects of a humanistic-inspired learning programme to build character underpinned by the six universally valued personality traits of respect, responsibility, trustworthiness, honesty, fairness, and caring. As evidenced in this modest study, through learning and appropriate reinforcement, children can intrinsically come to value self-management and social cooperation.

Countless initiatives to address child and adolescent problems, from bullying to sexual promiscuity to academic achievement, have been proposed and implemented with little effect, leading many to claim that social cohesion is being continually undermined and that we have become a “broken society”. Although these initiatives may have failed because they lacked a unified theoretical perspective or relied on a relativist perspective of human nature, they most likely failed because they did not address the underlying cause of irresponsible and disrespectful behaviour: A character not properly enculturated to engage in rational and ethical decision-making, problem-solving, and conflict resolution. As the findings of the study suggest, by delivering mediated-learning activities and restorative process to promote the development of a conscientious, agreeable

personality and a resilient character open to new experiences, many of these growing concerns can be addressed without resorting to ad-hoc and fragmented educational initiatives or laws.

The use of a mixed-methods approach in the pilot study was essential because quantitative and qualitative methods inform each other when investigating complex research topics and life events, such as those experienced by pupils on the special-education needs registers. The pilot study findings suggest that the implementation of a whole-school pro-social development programme based on empirical evidence from psychological and educational research may have a positive effect on schools' ability to meet the social, emotional, and cognitive needs of their pupils. Although this multi-method case study provided valuable data that deepened understanding of the impact of a whole-school approach on the teaching, learning, and pro-social development of pupils, it would be inappropriate to generalize its findings because it did not include the use of RCTs. However, the findings regarding the potential impact of a holistic character education programme on school climate, pupil behaviour, and school morale are sufficiently compelling to warrant further investigations using RCTs to provide a broader base of evidence concerning the impact of character education on school climate, learner engagement and behaviour, and staff morale.

In particular, mixed-methods research using RCTs that explores the strategies associated with the implementation and sustainability of character education across a broader community of schools may produce findings sufficiently robust to generalize to all schools. As Merrell et al. (2007) reported many initiatives that showed promise in their early stages failed shortly after large-scale governmental funding had been utilized for large-scale implementation. Therefore, the cycle of scientific research must be fully realized before the findings are considered more than preliminary. To address this

consideration, a follow-up investigation using an RCT was conducted to determine whether the findings of the pilot study would be replicated in a larger number of schools. This experiment is discussed in detail in the following chapter.

Part III

Chapter 8: Investigation 4—BSC Multiple Case Study

8.1 Introduction

Considering Yin's (2003:47) assertion, "When one discovers significant findings from a single case (i.e., a single experiment), the immediate reaction would be to replicate this by conducting several experiments." a 10-month multiple case-study investigation of five schools was conducted to determine whether the pilot study findings regarding the BSC Programme would be replicated in other settings. Following the pilot study investigation, it was concluded that further experimentation was warranted to develop a more robust understanding of the efficacy of the BSC Programme before large-scale implementation and funded investigations were proposed. As Merrell et al. (2007) warned many initiatives that showed promise in their early stages failed shortly after large-scale governmental funding had been utilized for large-scale implementation.

This phase of the investigation utilized in-depth real-world case studies over a period of one full academic year (from September 2007 to July 2008) to simultaneously collect both quantitative and qualitative data sets. The data from semi-structured interviews, observations, and archival resources were used to gain a further understanding of the role of mediated cooperative learning on behaviour, learning, and teaching. Following a failed attempt at an RCT involving 10 schools, as discussed in Chapter 3, a case study design was again applied to complete this cycle of the investigation, with the five schools assigned to the experimental group of the RCT serving as the case studies. This approach was considered the most appropriate approach, within limited resources, to collect enough data to achieve data saturation (Strauss & Corbin, 1987) and achieve the overall aims of the study. Achieving data saturation would allow for a robust discussion

of the findings in order to recommend abandoning, modifying, or implementing the programme with some degree of confidence.

8.2 Methods

8.2.1 Participant recruitment. Following the pilot study, the Behaviour Support Services of the Local Educational Authority (LEA) arranged an information session for interested school senior-management teams to both answer their questions about the BSC Programme and recruit new schools for the next phase of the study. During this session, both the head teacher from the pilot study and the researcher introduced the BSC Programme. Following the introduction and question-and-answer session, 10 of the 15 attending schools volunteered to participate in the study. The names of the 10 schools were written on pieces of paper and placed in a hat to be drawn for random assignment to either the control or experimental group.

The experiment began with the collection of baseline data. However, due to the amount of data collection required by an investigation funded, managed, and conducted by one PhD student, as well as the cross contamination that had occurred within the control schools because they had implemented several aspects of the BSC Programme, it was decided that conducting a 10-school RCT was beyond the reach of this study. Therefore, data collection from the five schools in the control group was suspended and the five experimental schools were used to facilitate a multiple case-study investigation of the BSC Programme.

8.2.2 Multiple case-study procedure. Following the information session and recruitment of schools, separate meetings were scheduled and conducted by the researcher with each school's head teacher, deputy head teacher, and SENCO. The meetings were conducted as formal semi-structured interviews to develop an understanding of the setting and the needs and desires of the senior management team to

address the concerns of each school. The second stage of implementation began with a two-hour meeting, facilitated by the behaviour support manager for the county and the researcher, with all school personnel from each school to develop their understanding of the BSC Programme and gain their full support and consent. A meeting was then held with participating parents in which the senior staff and researcher explained the project to them and gained their full consent. Letters were also sent to all parents to inform them of the project and provide them with an opportunity to voice any concerns. After finding that no objections had been raised, the project began. During the process of gaining the consent and support of the governing board of the school, the schools' behavioural policy was rewritten so that the BSC Programme was fully incorporated within it, and a letter with the new behavioural policy was then sent home to all parents.

Following completion of the logistical aspects of introducing a new programme within the school, the research project began with baseline data being collected from pupils and school staff. Semi-structured interviews with a random selection of Key Stage 2 pupils (aged 8 to 11) and all school staff were also conducted by the researcher. In addition, archival data regarding exclusions, behavioural referrals and actions, absenteeism, and truancy were collected. All baseline data were collected by the researcher prior to providing staff training so that the data would not be affected by a change in behaviour-management practice prior to collection.

8.2.3 Staff training for the BSC Programme. Following the collection of baseline data, the researcher provided training to six county Behaviour Support Teachers. All six staff received one full day of professional development on the BSC Programme. One week later, the researcher in conjunction with the Behaviour Support Teachers modelled the character education component of the BSC Programme for all year groups in all schools over a one-week period. This was seen as an important process in helping

teachers gain a deeper understanding of the facilitation techniques associated with the character education component of the BSC Programme. Three weeks later, an additional day of training was provided by the researcher and Behaviour Support Teachers for the SENCO and the three teaching assistants from each participating school who had volunteered to take primary responsibility for the facilitation of the restorative processes and the SSC.

The implementation of the BSC Programme followed a sequential plan of introduction into the daily routines of the school. Character education, the first component of the programme introduced to the pupils, consisted of a one-hour class that introduced the six words (respect, responsibility, trustworthiness, fairness, caring, and honesty) that form the foundation of the discourse associated with building pro-social attitudes within the BSC Programme. During this lesson, the pupils engaged in a discourse that introduced, defined, and demonstrated these words with the use of emotive film clips and a dialogue that discussed who the hero was and what characteristics the hero displayed in contrast to the villain. This process continued until all the key words had been explored, and concluded with exploration of how the pupils' choices lead to their actions and how their choices and actions shape who they are and how they appear to others. The conclusion focused on making a commitment to being the "star" of their own stories (i.e., the hero) and helping others be the heroes of their own stories by signing a full-value contract, which states clearly that they have agreed to become a person of good character (Ronke, 1989). The full value contract clearly stated the expectations of those involved in a cooperative learning experience in age-appropriate language. Prior to their signing of the contract, the teachers discussed the meaning of the full-value contract to ensure that all pupils understood what standards of behaviour they are agreeing to uphold. As

previously discussed, this commitment to good character plays an important role in establishing self-regulation and order in the classroom and throughout the school.

Following a definition of the key words and introduction of the discourse of the hero into the dialogue of the classroom and school, the second component of the programme consisting of restorative processes and justice was implemented. As indicated by the evidence collected from the single-case pilot study, a three- to four-week period is warranted between starting character-education lessons and the implementation of the restorative processes to provide time for children to learn and begin to internalize the keywords so that the dialogue of restorative processes can be more effectively facilitated.

As previously discussed, the discourse used in the restorative process within the BSC Programme focuses on acknowledgement and the subsequent management of shame facilitated through a guided discourse that allows offenders to accept responsibility for the harm done by their actions. This acceptance is followed by a discourse that facilitates the development of sincere regret, followed by an apology for causing harm and the acceptance of a logical consequence for disrespectful actions. To facilitate this discourse, a knowledgeable adult or more competent peer should always refer to the commitment to be of good character; that is, to be a hero. This process provides a space for children to acknowledge how their actions have not only hurt others but caused them to break their commitment. The discourse then focuses on how they can redress this harm and what actions they must take in the future to ensure that they do not break their commitment again (see appendix C for a fuller description of the restorative processes).

Upon completion of the implementation of both the character-education and restorative-justice components of the programme, the SSC was opened. As this occurred two months after the introduction of the BSC Programme, it provided time for pupils and staff to become familiar with the expectations of the BSC Programme and understand the

responsibility placed on them to maintain their commitment to adhere to pro-social standards of conduct. Pupils experiencing difficulty in maintaining this commitment were assigned to the SSC so that they could receive intensive character-development and remedial academic programming in smaller ($n < 12$) groups.

All SSC programming should focus on becoming socially competent and cooperative within the learning environment. The SSC provides an opportunity for schools to assure those experiencing difficulties that the staff maintain their unconditional commitment to assist them in overcoming any obstacles that may be preventing them from reaching their full potential. In addition, the SSC provides schools with the ability to assure all pupils and staff that the disruption of teaching and learning will not be accepted without breaking their commitment to meet the needs of all pupils within an inclusive framework.

8.2.4 Post-implementation data collection. Six months following the full implementation of the BSC Programme, data were collected from classroom observations of and semi-structured interviews with randomly selected pupils and staff. In addition, tracking data concerning behavioural referrals to senior staff were collected to conduct a pre/post intervention comparison.

8.2.5 Participants.

8.2.5.1 School 1. School 1 is a primary school situated in an Education Action Zone (EAZ) in East Anglia, England. Of its 123 pupils, 24.7% are on the Special Educational Needs (SEN) register without statements compared to the national average of 16.1%. There are no children on the SEN register with statements compared to the national average of 1.6%. The 2006 Key Stage 2 test results indicate that 48% of pupils achieved level 4 or above in English, 85% in mathematics, and 89% in science, compared to the national average of 79% in English, 76% in mathematics, and 87% in science. The

school value-added measure is 100.4 compared to the average of 100 for all schools in the United Kingdom. The 2007 Ofsted report for this school indicates that the school is located in an area of mixed private-sector accommodation and social housing and that the immediate catchment area of the school has a higher level of social and economic disadvantage than the national average. Most pupils come from White British backgrounds, with few speaking English as an additional language, and a higher than average percentage of pupils joins or leaves the school partway through their primary schooling (mobility indicator = 57%).

8.2.5.2 School 2. School 2 is a primary school situated in the same EAZ in East Anglia, England as school 1 and places these two schools in close proximity of each other. Of its 171 pupils, 18.1% are on the SEN register without statements and 2.3% with statements. The 2006 Key Stage 2 test results indicate that 47% of pupils achieved level 4 or above in English, 44% in mathematics, and 34% in science. The school value-added measure is 99.4. The 2005 Ofsted report for this school indicates that this EAZ is an area of some socio-economic disadvantage, with many children beginning school with poor social skills. The report states that the main needs associated with pupils on the SEN register within the school are social, emotional, and behavioural. The report also highlights that 25% of pupils are eligible for free school meals, which is slightly higher than the national average; that 5% of pupils speak a first language other than English; and that pupil mobility is high (mobility indicator = 81%), shown by the fact that 50% of Year 6 pupils began their schooling at a different school.

8.2.5.3 School 3. School 3 is a junior school in East Anglia, England that admits pupils between the ages of seven and 11. Of its 221 pupils, 14.5% are on the SEN register without statements and 0.9% with statements. The 2006 Key Stage 2 test results indicate that 84% of pupils achieved level 4 or above in English, 63% in mathematics, and 76% in

science. The school value-added measure is 99.9. The most recent Ofsted report (2004) indicates that pupils come from a very wide range of social backgrounds, including some from families with low incomes; that 12% of pupils receive free school meals; that the school has a relatively high level of pupil mobility (mobility indicator = 86%), with approximately 20% of pupils in Year 6 having registered in the school after the age of 9; and that many pupils enter the school with an attainment level well below average.

8.2.5.4 School 4. School 4 is a Church of England Aided junior school in East Anglia, England. Of its 306 pupils, 8.5% are on the SEN register without statements and 0.3% with statements. The 2006 Key Stage 2 test results indicate that 99% of pupils achieved level 4 or above in English, 97% in mathematics, and 99% in science. The school value-added measure is 101.5. The recent most Ofsted report (2008) indicates that this is a popular school that is often oversubscribed. The report highlights that the school has strong links with the local community and that the majority of pupils attended the adjacent infant school even though most live outside of the immediate vicinity of the school. Additionally, the report indicates that attainment on entry has been historically above average and is now exceptionally high, and that the percentage of pupils eligible for free school meals is low, as is the percentage of pupils from a minority ethnic background.

8.2.5.5 School 5. School 5 is a Church of England (voluntary controlled) primary school in East Anglia, England. Of its 190 pupils, 13.7% are on the SEN register without statements and 1.1% with statements. The 2006 Key Stage 2 test results indicate that 75% of pupils achieved level 4 or above in English, 68% in mathematics, and 89% in science. The school value-added measure is 99.2 and mobility indicator is 75%. The 2007 Ofsted report indicates that although the pupils come from a wide range of social backgrounds, the majority are of White British heritage; that student skill levels on entry are below the

national average; that the percentage of pupils eligible for free school meals is slightly below average at 11.9%; that the proportion of pupils whose first language is not English is close to the national average; that the proportion of pupils with learning difficulties or disabilities, including those with statements, is above the national average; and significantly more pupils than average leave or enter the school between Years 1 and Year 6, giving the school a mobility indicator of 75%.

8.3 Results

8.3.1 Pre-implementation interview data. After conducting the information sessions and gaining participant consent yet prior to implementing the BSC Programme, semi-structured interviews were conducted with senior management, the teaching and support staff, and a random sample of Key Stage Two (aged 8 to 11) students to gain an understanding of their views in relationship to behaviour and the school community. These data provided insight into the climate of the schools prior to the implementation of the BSC Programme. Throughout the interviews, field notes were taken and all discussions were recorded. Following the collection of data, a thorough engagement with the data was conducted in the same manner described for the pilot case study. Through the coding, sorting, and recoding of the data, several themes emerged that reflected the views held by all stakeholders in relationship to their current perspectives on school climate and pupil behaviour. Once these themes emerged and the data sorted into the selected codes through constant reading and comparison of the data, participant quotes were extracted to present the situation most succinctly.

8.3.1.1 Theme 1: Administration and teaching staff dissatisfied with current strategy. The senior staff across all schools indicated that current behaviour-management and social-emotional learning strategies left them less than satisfied with current outcomes. Although there were variations in the strength of feeling between schools in

relationship to this dissatisfaction all Head teachers expressed their concerns about needing an approach that focuses on lasting change.

Head teacher school 1: "The teachers are dissatisfied and overburdened with the current behaviour- management approach of rewards and sanctions."

Head teacher school 4: "Our ability to address disruptive behaviour is good but needs to be improved to decrease the need to intervene and focus on changing behaviour instead of continually responding to inappropriate behaviour."

Head teacher school 2: "I feel that the sticker system places too much focus on the kids that are causing the most disruption. I mean it always seems that I see the same kids day after day for the same reasons. It just isn't changing anything."

Head Teacher School 3: "I have a line at my door most every day, so even though we feel as a staff we have implemented the suggested behaviour- management strategies promoted by the LEA, we just aren't getting to where we want to be with behaviour in the school."

Head teacher school 5: "We as a staff have spent most of our meetings discussing how to move forward in addressing behaviour instead of continually dealing with the same ongoing disruptive and very disrespectful behaviour, and we get little support or direction. It seems like we just continually barely keep the cap on."

The following statements highlight the stress that teachers are feeling and speak directly to how most teachers are experiencing dissatisfaction with current approaches to improving school behaviour. These comments indicate a need to move toward a more assertive style of behaviour management focused on learning experiences designed to help children acquire a higher level of social competency and cooperation to resolve conflict and embrace pro-social behaviour in the classroom and throughout the school.

Teacher 1: "Sometimes I dread coming to school in the morning... it is a constant uphill battle it seems."

Teacher 17: "It is the constant background disruption and low-level disturbances and bad behaviour on the playground that wears me down."

Teacher 8: "The main issue that gets me is that what we are doing isn't changing anything.... The same child with severe behavioural difficulties isn't really getting what he needs, and it goes on and on day after day with no change in behaviour.... It really wears one down."

Teacher 5: "It is the unfairness in the system...a system not meeting the needs of each child."

Teacher 12: “It is that the same children continue to display the same behaviour time and time again. They know the right thing to do and to say but don’t do it.”

As in the pilot study, many teachers expressed dissatisfaction with current behaviour- management strategies. The following statements most succinctly depict how the vast majority of teachers in all the schools felt about the school climate and how they continually struggled to meet the behavioural demands within their schools.

Teacher 17: “I have pupils who just don’t care, parents who don’t care, and I just feel like this approach of ignoring the bad and ‘catching’ [makes hand gestures] them [students] doing good and giving them stickers or time on the computer is really just making the behaviour get worse and worse. Like the more I try, the harder it gets.”

Teacher 13: “Children just won’t accept responsibility or ownership for their behaviour....They don’t share...they don’t recognize how others are feeling...absolutely no empathy.”

Teacher 3: “A lot of children often express that they feel some children are let off lightly when displaying negative or inappropriate behaviour.... It is the unfairness that they see that gets to me.”

Teacher 7: “What we are doing now is too inconsistent ...different adults dealing with situations in different ways. There needs to a consistent approach by all staff and management to support all staff addressing behaviour or the same lack of respect and ignoring adults will continue... children being unkind to one another will just continue.”

Dissatisfaction with existing behaviour-management policies was further reflected by several teachers who described the need to provide targeted and consistent programming to enhance the social competence and self-regulatory skills of pupils not coping well within the classroom and around the school.

Teacher 7: “Yes, pupils like to get stickers and rewards, absolutely, but just because they like it doesn’t mean it changes anything. I give stickers, fill up marble jars, praise them, and what do they do? The same thing they did the day before. It just goes on and on, and no matter what we seem to do the bad behaviour doesn’t change, and now it seems like more and more are joining in. It’s endless and getting worse.”

Teacher 9: “We have circle time, we have golden time, we give reward after reward, and the behaviour remains the same, and when some of them kick-off, the words they can string together is appalling. But does anyone care how this affects the teachers? No! We are supposed to take it even though you read signs even in

other workplaces that state abusive behaviour will not be tolerated, but we have to on a daily basis. I will ask you something: What other professional would be treated the way teachers are treated, and I don't mean just by the kids day after day?"

The following comments from several head teachers and teachers support the widely held concern over current behaviour-management practices and the need to adopt other approaches:

Head teacher school 1: "The lack of fairness that is inherent in the current approach and the ineffectiveness of it. The other issue is that the current approach does nothing to increase learner engagement or address low-level disruption."

Teacher 12: "A number of children are continually rewarded in order to keep their behaviour under control ... and other children become aware of how unfair this is. The only behaviour that is changed are more good pupils become disruptive and the bad kids just get worse."

Teacher 5: "My major concern with the current behaviour-management plan is that it does not change behaviour; they [pupils] just repeat the same thing no matter how many stickers they get, or they change for the moment and then are back to the same old patterns a day later, or, for that matter, moments later."

Teacher 4: "My primary concern is how really unfair our system is right now. I mean we give stickers and other rewards, but really a lot of them [pupils] are working hard but getting really no recognition, and all of the focus is on trying to get the disruptive ones to behave."

However, not every teacher felt there was a need to change current practice. A few teachers expressed their feelings that the current stickers system was appropriate within the primary school setting.

Teacher 2: "I think the sticker system I am using in my classroom works well and I feel a little uncomfortable about teaching something that not all parents agree is my place to teach."

Teacher 21: "I really do not see the need to change the current system; I am not sure what it will accomplish"

Teacher 13: "I like my reward system and it has worked well for my class. I like giving my little ones stickers and they like getting the stickers. I think I will miss this part if we change it."

8.3.1.2 Theme 2: Need to change behaviour-management approach. All head teachers and most teachers indicated that they were interested in adopting a behaviour-

management approach that instils intrinsic regulation. The following answers were given to the question, “What would you like to see changed about your approach to behaviour management and helping children engage in more pro-social standards of conduct?” Once again, the answers reflected a consensus across the schools of the need for children to develop and display an intrinsic desire to engage with the learning process in a cooperative and democratic manner.

Teacher 8: “I would love to see all children wanting to learn not because of stickers or rewards but because they really want to.”

Teacher 11: “Taking control of behaviour and children having a say in what they would like to see happen.”

Question: “What do you hope the BSC Programme will accomplish?”

Head teacher school 5: “That all children feel that they are being treated fairly and the school's approach is consistent.”

Teacher 6: “A general atmosphere of calm....teachers not having to shout or belittle children in frustration to get them to behave.”

Teacher 22: “Motivated learners and a whole-school, consistent approach. My job made a whole lot easier.”

Teacher 15: “Consistency throughout the school, children think about what type of person they want to be.”

As indicated in the statements above, the majority of teachers but not all teachers in the five schools have similar feelings and concerns related to behaviour management. Many expressed disillusionment with current practices and others a growing sense of helplessness, feelings echoed by a variety of stakeholders. The majority of teachers’ desire to address these concerns in a constructive manner was evidenced throughout this phase of data collection.

8.3.2 Quantitative results. The final two tables for each school display the data collected from observations and archival records. All observations of the morning numeracy or literacy classes were conducted six months prior to and six months

following programme implementation and were matched by day, class, and teacher (e.g., if the pre-implementation observation was of a Monday numeracy class with Teacher 1, the post-implementation observation was of a Monday numeracy class with Teacher 1). The tables display the data sets gathered from all classrooms and all disciplinary records from each school. These data sets were then subjected to statistical analysis to determine statistical significance and compute the effect size. The final set of tables displays the results of the collation of data sets from each school to represent the findings across the different schools, providing further statistical analysis to calculate a combined effect size.

8.3.2.1 School 1.

Table 8.1

School 1: Type of Teacher Talk during Lesson

	Content delivery	Behaviour management	Relationship building	Total
Pre-implementation	318	765	47	1132
Post-implementation	698	201	260	1153

Note. $\chi^2 = 618.93$, $df = 2$, $p < 0.0001$, Cramer's $V = 0.52$. The difference is considered extremely statistically significant by conventional criteria.

Table 8.2

School 1: Number of Pupil On- and Off-Task Behaviours during Lesson

	On-task behaviours	Off-task behaviours	Total
Pre-implementation	637	543	1170
Post-implementation	1067	210	1277

Note. $\chi^2 = 250.95$, $df = 1$, $p < 0.0001$, Cramer's $V = 0.3205$. The difference from pre to post test in all measures is considered extremely statistically significant by conventional criteria.

In testing for statistical significance and calculating the effect size for disruptive incidences and office referrals for all schools, the Wilcoxon Matched-Pairs Signed-Rank

Test was employed, as it was the most appropriate test for determining whether the paired data sets differ at a statistically significant level.

Table 8.3

School 1: Number of Disruptive Incidents during Lesson

	Pre-implementation	Post-implementation
Classroom 1	22	4
Classroom 2	8	1
Classroom 3	25	5
Classroom 4	11	1
Classroom 5	13	3
Classroom 6	28	2

Note. W+ = 21, W- = 0, n = 6, p <= 0.03. These differences in all classrooms from pre to post test are considered statistically significant by conventional criteria.

Table 8.4

School 1: Number of Office Referrals

(The numbers represent the average number of anti-social behaviour incidences being referred to senior staff per week for the six month before and six months after programme implementation)

	Pre-implementation	Post-implementation
Classroom 1	5.6	0.3
Classroom 2	8.8	0.7
Classroom 3	11.5	1.4
Classroom 4	7.5	0.3
Classroom 5	9.4	0.6
Classroom 6	13.8	0.4

Note. W+ = 21, W- = 0, n = 6, p <= 0.03. These differences in all classrooms are considered statistically significant by conventional criteria.

$P < .05$: The null hypothesis can be rejected on all measures for this school.

8.3.2.2 School 2.

Table 8.5

School 2: Type of Teacher Talk during Lesson

	Content delivery	Behaviour management	Relationship building	Total
Pre-implementation	438	669	64	1169
Post-implementation	629	293	176	1098

Note. $\chi^2 = 231.31$, $df = 2$, $p < 0.0001$, Cramer's $V = 0.3193$. The differences on all types of teacher talk for pre to post test measures are considered extremely statistically significant by conventional criteria.

Table 8.6

School 2: Number of Pupil On- and Off-Task Behaviours during Lesson

	On-task behaviours	Off-task behaviours	Total
Pre-implementation	565	566	1130
Post-implementation	884	363	1085

Note. $\chi^2 = 108.31$, $df = 1$, $p < 0.0001$, Cramer's $V = 0.2143$. These differences are considered extremely statistically significant by conventional criteria.

Table 8.7

School 2: Number of Disruptive Incidents during Lesson

	Pre-implementation	Post-implementation
Classroom 1	13	2
Classroom 2	12	1
Classroom 3	7	1
Classroom 4	9	3
Classroom 5	11	5
Classroom 6	18	2

Note. $W^+ = 21$, $W^- = 0$, $n = 6$, $p \leq 0.03$. These differences are considered statistically significant by conventional criteria.

Table 8.8

School 2: Number of Office Referrals

(The numbers represent the average number of anti-social behaviour incidences being referred to senior staff per week for the six month before and six months after programme implementation)

	Pre-implementation	Post-implementation
Classroom 1	4.9	0.1
Classroom 2	7.2	0.3
Classroom 3	11.6	0.7
Classroom 4	8.4	0.2
Classroom 5	12.1	1
Classroom 6	12.3	0.5

Note. $W^+ = 21$, $W^- = 0$, $n = 6$, $p \leq 0.03$. These differences are considered statistically significant by conventional criteria.

$P < .05$: The null hypothesis can be rejected on all measures for this school.

8.3.2.3 School 3.

Table 8.9

School 3: Type of Teacher Talk during Lesson

	Content delivery	Behaviour management	Relationship building	Total
Pre-implementation	298	839	62	1198
Post-implementation	406	533	62	998

Note. $\chi^2 = 67.54$, $df = 2$, $p < 0.0001$, Cramer's $V = 0.1752$. These differences are considered extremely statistically significant by conventional criteria.

Table 8.10

School 3: Number of Pupil On- and Off-Task Behaviours during Lesson

	On-task behaviours	Off-task behaviours	Total
Pre-implementation	496	711	1207
Post-implementation	509	522	1031

Note. $\chi^2 = 15.06$, $df = 1$, $p < 0.0001$, Cramer's $V = 0.0829$. These differences are considered extremely statistically significant by conventional criteria.

Table 8.11

School 3: Number of Disruptive Incidents during Lesson

	Pre-implementation	Post-implementation
Classroom 1	24	11
Classroom 2	26	16
Classroom 3	18	10
Classroom 4	17	11
Classroom 5	25	14
Classroom 6	28	9

Note. $W+ = 21$, $W- = 0$, $n = 6$, $p \leq 0.03$. These differences are considered statistically significant by conventional criteria.

Table 8.12

School 3: Number of Office Referrals

(The numbers represent the average number of anti-social behaviour incidences being referred to senior staff per week for the six month before and six months after programme implementation)

	Pre-implementation	Post-implementation
Classroom 1	5.4	3.8
Classroom 2	7.3	5.3
Classroom 3	11.6	8.7
Classroom 4	9.4	6.9
Classroom 5	11.2	8.2
Classroom 6	13.4	9.4

Note. $W+ = 21$, $W- = 0$, $n = 6$, $p \leq 0.03$. These differences are considered statistically significant by conventional criteria.

$P < .05$: The null hypothesis can be rejected on all measures for this school.

8.3.2.4 School 4.

Table 8.13

School 4: Type of Teacher Talk during Lesson

	Content delivery	Behaviour management	Relationship building	Total
Pre-implementation	422	791	89	1235
Post-implementation	638	198	205	1041

Note. $\chi^2 = 421.5$, $df = 2$, $p < 0.0001$, Cramer's $V = 0.4241$. These differences are considered extremely statistically significant by conventional criteria.

Table 8.14

School 4: Number of Pupil On- and Off-Task Behaviours during Lesson

	On-task behaviours	Off-task behaviours	Total
Pre-implementation	558	582	1141
Post-implementation	1027	181	1208

Note. $\chi^2 = 346.21$, $df = 1$, $p < 0.0001$, Cramer's $V = 0.3849$. These differences are considered extremely statistically significant by conventional criteria.

Table 8.15

School 4: Number of Disruptive Incidents during Lesson

	Pre-implementation	Post-implementation
Classroom 1	17	4
Classroom 2	22	9
Classroom 3	15	7
Classroom 4	20	5
Classroom 5	16	9
Classroom 6	27	8

Note. $W+ = 21$, $W- = 0$, $n = 6$, $p \leq 0.03$. These differences are considered statistically significant by conventional criteria.

Table 8.16

School 4: Number of Office Referrals

(The numbers represent the average number of anti-social behaviour incidences being referred to senior staff per week for the six month before and six months after programme implementation)

	Pre-implementation	Post-implementation
Classroom 1	4.6	0.3
Classroom 2	6.1	0.7
Classroom 3	5.2	0.2
Classroom 4	7.8	0.7
Classroom 5	9.4	0.4
Classroom 6	11.6	1.2

Note. $W^+ = 21$, $W^- = 0$, $n = 6$, $p \leq 0.03$. These differences are considered statistically significant by conventional criteria.

$P < .05$: The null hypothesis can be rejected on all measures for this school.

8.3.2.5 School 5.

Table 8.17

School 5: Type of Teacher Talk during Lesson

	Content delivery	Behaviour management	Relationship building	Total
Pre-implementation	371	690	70	1132
Post-implementation	589	211	199	999

Note. $\chi^2 = 359.22$, $df = 2$, $p < 0.0001$, Cramer's $V = 0.4107$. These differences are considered extremely statistically significant by conventional criteria.

Table 8.18

School 5: Number of Pupil On- and Off-Task Behaviours during Lesson

	On-task behaviours	Off-task behaviours	Total
Pre-implementation	443	663	1105
Post-implementation	973	243	1216

Note. $\chi^2 = 387.06$, $df = 1$, $p < 0.0001$, Cramer's $V = 0.4092$. These differences are considered extremely statistically significant by conventional criteria.

Table 8.19

School 5: Number of Disruptive Incidents during Lesson

	Pre-implementation	Post-implementation
Classroom 1	15	7
Classroom 2	22	9
Classroom 3	8	2
Classroom 4	12	3
Classroom 5	19	9
Classroom 6	24	5

Note. $W+ = 21$, $W- = 0$, $n = 6$, $p \leq 0.03$. These differences are considered statistically significant by conventional criteria.

Table 8.20

School 5: Number of Office Referrals

(The numbers represent the average number of anti-social behaviour incidences being referred to senior staff per week for the six month before and six months after programme implementation)

	Pre-implementation	Post-implementation
Classroom 1	4.6	0.1
Classroom 2	7.9	0.6
Classroom 3	6.4	1.4
Classroom 4	11.3	0.9
Classroom 5	8.7	0.3
Classroom 6	12.6	0.7

Note. $W+ = 21$, $W- = 0$, $n = 6$, $p \leq 0.03$. These differences are considered statistically significant by conventional criteria.

8.3.2.6 All data from all schools combined for analysis.

Table 8.21

All Schools: Type of Teacher Talk during Lesson

	Content delivery	Behaviour management	Relationship building	Total
Pre-implementation	1847	3754	332	5933
Post-implementation	2960	1436	842	5238

Note. $\chi^2 = 1477.01$, $df = 2$, $p < 0.0001$, Cramer's $V = 0.3636$. These differences are considered extremely statistically significant by conventional criteria.

Table 8.22

All Schools: Number of Pupil On- and Off-Task Behaviours during Lesson

	On-task behaviours	Off-task behaviours	Total
Pre-implementation	2699	3065	5764
Post-implementation	4460	1519	5979

Note. $\chi^2 = 949.8$, $df = 1$, $p < 0.0001$, Cramer's $V = 0.2846$. These differences are considered extremely statistically significant by conventional criteria.

Table 8.23

All Schools: Number of Disruptive Incidents during Lesson

	Pre-implementation	Post-implementation
Classroom 1	22	7
Classroom 2	8	9
Classroom 3	25	2
Classroom 4	11	3
Classroom 5	13	9
Classroom 6	28	5
Classroom 7	13	4
Classroom 8	12	1
Classroom 9	7	5
Classroom 10	9	1
Classroom 11	11	3
Classroom 12	18	2
Classroom 13	24	2
Classroom 14	26	1
Classroom 15	18	1
Classroom 16	17	3
Classroom 17	25	5
Classroom 18	28	2
Classroom 19	17	11
Classroom 20	22	16
Classroom 21	15	10
Classroom 22	20	11
Classroom 23	16	14
Classroom 24	27	9
Classroom 25	15	4
Classroom 26	22	9
Classroom 27	8	7
Classroom 28	12	5
Classroom 29	19	9
Classroom 30	24	8

Note. Wilcoxon single rank test: $W+ = 463.50$, $W- = 1.50$, $n = 30$, $p < .0002$. These differences are considered statistically significant by conventional criteria.

Table 8.24

All Schools: Number of Office Referrals

	Pre-implementation	Post-implementation
Classroom 1	5.6	0.3
Classroom 2	8.8	0.7
Classroom 3	11.5	1.4
Classroom 4	7.5	0.3
Classroom 5	9.4	0.6
Classroom 6	13.8	0.4
Classroom 7	4.9	0.1
Classroom 8	7.2	0.3
Classroom 9	11.6	0.7
Classroom 10	8.4	0.2
Classroom 11	12.1	1
Classroom 12	12.3	1.2
Classroom 13	5.4	3.8
Classroom 14	7.3	5.3
Classroom 15	11.6	8.7
Classroom 16	9.4	6.9
Classroom 17	11.2	8.2
Classroom 18	13.4	9.4
Classroom 19	4.6	0.3
Classroom 20	6.1	0.7
Classroom 21	5.2	0.2
Classroom 22	7.8	0.7
Classroom 23	9.4	0.4
Classroom 24	11.6	1.2
Classroom 25	4.6	0.1
Classroom 26	7.9	0.6
Classroom 28	11.3	0.9
Classroom 29	8.7	0.3
Classroom 30	12.6	0.7

Note. Wilcoxon single rank test: $W_+ = 465$, $W_- = 0$, $n = 30$, $p < .0001$. These differences are considered statistically significant by conventional criteria.

When the data from all schools are combined for analysis, the null hypothesis can be rejected on all measures at $p < 0.0002$.

Although the results of the data analysis indicate variations in outcomes among the schools, the results are statistically significant, leading the null hypothesis to be rejected on all measures in all schools. As the tables above indicate, when the data from all the schools are combined, the results are extremely statistically significant for three of the four measures ($p < 0.0001$) and very statistically significant for the remaining measure by conventional criteria ($p < 0.0002$).

8.3.3 Post-implementation qualitative data. After six months of delivering the BSC Programme, interviews were conducted and tracking data collected from all of the schools. Once again, the interview data were read, coded, reread, recoded, sorted, and recoded into themes. After the themes emerged from repeated comparison of the data, participant statements that most accurately described the experimental situation were selected for presentation. The following statements indicate that the schools experienced similar results from implementation of the BSC Programme.

8.3.3.1 Theme 1: A transformation in behaviour management. The data collected from all the head teachers describe how both the staff and pupils were beginning to experience a different climate within the school.

Head teacher 3: "The restorative approach has really helped not only with the pupils when they get in a scrum at school but we have also used it when the issues in school, or for that matter that started outside the school involving families."

Head teacher 1: "I have noticed a real difference both in the staff and students; it is much more relaxed."

Many teachers supported the changing atmosphere in their schools, a transformation that has led to a more inspired outlook as expressed by the comments below:

Teacher 9: "Pupils are smiling, teachers are smiling, mid-days are smiling, the playground is happy, classrooms are happy."

Teacher 13: "Throughout the school it is like a different place. I have been teaching for over 15 years and I wonder why we haven't done this from the start."

Teacher 5: "The classroom is fun again, not just for me. I am having parents come to me and tell me that their children are so much happier."

Teacher 6: "I can do so much more now. Everyone participates, and when we have something go wrong, we all address it. Responsibility is taken and everyone feels it's been fair; that is really the big difference I think, kids feel it is fair."

8.3.3.2 Theme 2: Increased self-regulation and learner engagement. Many

pupils across the schools expressed similar feelings and perspectives in relationship to increased self-regulation and improved behaviour.

Pupil 7: "I used to never really like outdoor play, but now we have lots of things to do, and if something happens we know we can talk about it."

Pupil 31: "I find it much easier to work; there is a lot less noise and running about."

Pupil 23: "If someone is trying to wind someone up, we can say we don't like it. Others have stopped bullying because we say we don't like it and it is not the right thing to do, and we all like doing the right thing."

Pupil 12: "We can play a lot more during playtime. People play without getting into fights and ruining it for everyone."

Pupil 9: "I like the support centre. It helps me when I have problems in class."

8.3.4 Individual perspectives. Several comments obtained during the final stage of the data collection indicated that many members of the school community experienced positive outcomes from the BSC Programme. Four of the five head teachers reported significant improvements in pupil behaviour and teacher morale. The one head teacher who reported a slight improvement attributed the majority of the improvement from the programme's restorative process, and stated that she will continue to use the programme as a primary component of her School Improvement Plan (SIP).

8.4 Merging the Quantitative and Qualitative Data

The primary aim of this study was to investigate the role of mediated cooperative learning in enhancing pro-social development and decreasing anti-social behaviour in order to develop a programme for decreasing the level of inappropriate behaviour within schools. The first phase of the evaluation cycle consisted of a mixed-methods investigation that focused on gaining an understanding of the current circumstances within each school participating in this multi-case study. Data from interviews conducted with and questionnaires completed by school administrators, teachers, support staff, and pupils revealed a similar narrative across the different schools. The school staff were concerned with the increase in disruptive, disrespectful, and persistently irresponsible behaviour displayed by pupils. The administrative staff were concerned with the ever-increasing number of pupils being removed from the classroom or playground for inappropriate behaviour, forcing them to spend much of their time on behavioural issues and leaving them little time to improve learning. Many teachers expressed similar demoralization regarding the fact that current behaviour-management plan, as summarized by one Year 6 teacher; “just do not change the behaviour... It is constantly the same struggle day after day”.

All the schools in this study used rewards to promote positive behaviour (e.g., stickers, golden time, etc.), but all the teachers felt that ignoring “bad” behaviour and trying to “catch” good behaviour and giving rewards to pupils for doing “what they should be doing” was not improving behaviour, nor was it fair to the large majority of children who were “good” students. The teachers’ concerns over the lack of fairness inherent in the sticker system to address inappropriate behaviour was echoed by many pupils, who stated that the focus was always on the “bad” kids. One pupil summarized their frustration by asserting, “I don’t get it. A lot of us work hard and get nothing, and

some do nothing and get everything, or at least don't have to hardly do anything to get computer time. I want computer time but I never get it." This concern over rewarding pupils for doing what they should be doing and rewarding pupils who do little with special privileges was echoed across all of the schools by both pupils and school staff. Many staff argued that the current increase in disruptive behaviour was a direct result of these unfair practices, and felt that they had lost the professional respect necessary to address behaviour in an effective manner. Administrators cited similar concerns as the main reasons for deciding to implement the BSC Programme.

The second phase of the evaluation cycle of the research consisted of the collection of quantitative data sets prior to implementation of the BSC Programme. Six months prior to and six months after BSC Programme implementation, observations were conducted to obtain data on types of teacher talk, the number of pupil on- and off-task behaviours, and the number of disruptive incidences during an observed lesson and archival records were reviewed to obtain data on the number of office referrals per day for inappropriate behaviour to conduct a pre-test/post-test analysis of the results. All quantitative data sets suggest that the BSC Programme had a positive influence on teaching and learning within the schools who participated in this study. Teachers were able to significantly increase the amount of time that they could devote to content delivery and decrease the amount of time that they were forced to spend on behaviour management, while students significantly increased their on-task interactions and significantly decreased their disruptive behaviours during group learning.

8.4.1 Overview of behavioural changes. The overall climate of the schools was reflected most succinctly by a head teacher's description of "a climate of respect...of calm staff and pupils." All schools experienced a statistically significant decrease in disruptive behaviour, with all but one also experiencing a statistically significant decrease in office

referrals for inappropriate behaviour. However, caution is warranted in the interpretation of the office referral data, as this decrease could be the result of several factors. First, the decrease in inappropriate behaviour could be attributed to a decrease in teacher talk focused on behaviour management and a decrease in disruptive behaviour during lessons. A second possible factor could be that as the teachers became more confident in taking an assertive role within the classroom and around the school, they may have begun addressing inappropriate behaviour directly instead of referring it to senior staff. A third possible influence could be that following the training and implementation of the programme, the teachers felt uncomfortable referring pupils to senior staff. As this third interpretation was not confirmed during interviews, it should be more fully explored in future studies.

The pupils also recognized an improved climate within their schools, with one Year 4 pupil summarizing, “There is a lot less noise now and less kids messing about.” Another important aspect of the change in behaviour was reflected by a Year 6 pupil who stated, “Learning is more fun.... Focus is on the good kids so others stop messing about because we all get to say we don’t like it.” This empowering statement was further confirmed by another pupil who asserted that there is “more focus on learning... [a] lot less fighting at playtime.” When asked how this made him feel, he replied, “Great!”

8.4.2 Pupil on-task behaviour during lessons. The results indicate that all schools participating in the study experienced increased pupil on-task behaviour during academic lessons, which likely led to an increase in pro-social conduct and a positive impact on academic outcomes over time. As positive academic outcomes have positive impacts on life outcomes, a behaviour-management programme that increases pupil on-task behaviour is seen to not only increase the teacher’s ability to provide increased levels

of content delivery during lessons but also improves the pupil's ability to engage in meaningful and cooperative learning. This contention was supported by the data collected in follow-up semi-structured interviews with both pupils and teachers.

8.4.3 Disruptive incidences during lessons. Disruptive incidences were decreased across all participant schools, which likely decreased levels of anxiety among both pupils and staff, thus providing a learning climate conducive to building and maintaining effective relationships and attachments. The ability to form more supportive attachments was in turn likely responsible for increasing pro-social conduct. As previous research indicates, secure attachments with teachers and schools are protective factors in educational outcomes that lead to increased levels of effective teaching and learning, which in turn decrease the incidence of disruptive incidences. These findings may also support the argument that pupils are less likely to show disrespect by disrupting teaching and learning when a behaviour-management strategy focuses on the development of pro-social attitudes toward learning through the development of pro-social character adaptations, which, completing the learning cycle, provide a more cooperative environment for forming secure attachments with teachers and peers.

8.4.4 Office referrals for inappropriate behaviour. As indicated by the semi-structured interviews, all the head teachers considered the decrease in office referrals a very beneficial outcome of the programme. They indicated that this outcome not only increased the time that they could devote to improving teaching and learning but also allowed them to build more positive relationships with both staff and pupils, as a greater proportion of their interaction was now focused on relationship building and learning rather than behaviour management.

8.4.5 Teacher talk during lessons. Prior to implementing the BSC Programme, a large percentage of teacher talk during lessons was expended on behaviour management,

which, as indicated during the semi-structured interviews, increased the teachers' levels of anxiety and dissatisfaction with their teaching experience, leading to demoralization and strained relationships with pupils. Follow-up interviews and observations indicated that the majority of teachers had decreased the amount of time spent on behaviour management and increased the amount of time spent on building relationships and delivering content. This change in teacher talk from an instructional discourse embedded in a constant regulatory discourse to a regulatory discourse embedded in a constant instructional discourse improved cooperative and on-task engagement during academic lessons. The teachers' increased sense of effectiveness and the pupils' increased level of engagement in turn improved both school climate and staff and pupil morale.

8.4.5 Programme Fidelity. The school that reported the least improvement in pro-social behaviour did not fully implement the programme and was operated by a head teacher who used a more detached managerial style of implementation. Specifically, the head teacher (a) showed little interest in assuming a leadership role in delivering any aspect of the character-education programme, (b) did not become involved in the restorative process when conflict arose, and (c) did not maintain the SSC. When asked why the SSC was not maintained, the head teacher stated budgetary constraints, although all the other schools had fully implemented all components of the initiative despite receiving no additional funding.

Upon further investigation of the failure to maintain the SSC, it was discovered that the SSC had only been staffed by teaching assistants (TAs) who had received no oversight by senior team members or teachers, which led to both the TAs and the students becoming frustrated and "burned out". After experiencing burnout, the TAs refused to continue working in the SSC and the students became bored, which created an untenable environment. This experience indicates that for the BSC Programme to achieve its full

potential, the following implementation strategies should be considered: (a) All components should be implemented with equal attention, (b) senior staff should provide integrated leadership to promote school wide programme outcomes, and (c) the SSC should not function as a “sin bin” where both students and staff are “dumped” without support.

Chapter 9: General Discussion and Conclusion

This chapter discusses the limitations of the study and describes the relationship between the theoretical perspectives previously discussed and the findings of the study. It concludes by discussing the possible role of mediated cooperative learning in increasing pro-social development and decreasing anti-social behaviour within schools.

9.1 Limitations

In highlighting the limitations of this investigation a brief definition of internal and external validity is first required. Internal validity is the degree to which the intervention makes a difference in (or causes change in) the specific settings under investigation. External validity is the degree to which the intervention effect can be generalized across populations, settings, treatment variables, and measurement instruments. As described By Campbell and Stanley (1966), factors that threaten internal validity are: history, maturation, pre-test effects, instruments, statistical regression toward the mean, differential selection of participants, mortality, and interactions of factors (e.g., selection and maturation). Threats to external validity include: interaction effects of selection biases and treatment, reactive interaction effect of pretesting, reactive effect of experimental procedures, and multiple-treatment interference.

With the above in mind, it should be clearly stated that all investigations conducted throughout the cycle of research in this study have limitations that must be described and discussed. One important limitation of all the investigations was their scale. As previously highlighted, all phases of this investigation were conducted in one county in East Anglia, England, which led to cross contamination of data in the final experiment, forcing the researcher to abandon the RCT. This in turn led the researcher to replicate the pilot study by conducting a multiple case-study investigation with the original RCT experimental group serving as the cases of the study. A broader longitudinal RCT project

consisting of a larger number of schools located in several geographical areas should be conducted to determine whether this study's findings can be attributed to MABCL in general and the BSC Programme in particular.

A second limitation is that this investigation delivered MCLEs and a character-education initiative designed specifically to meet the needs of the participants, as ascertained by the collection of baseline data, and focused on the language and activities used to mediate the outcomes. This mediation was targeted at providing experiences to promote group cohesion and trust through the development of self-regulated social competence and a cooperative disposition toward classroom-based learning, problem-solving, decision-making, and conflict resolution. Therefore, it would be an overgeneralization to claim that all MCLEs or character-education activities would produce the same results or that all schools would deliver the same level of programming as that delivered by the schools that served as the case studies.

A third limitation in relationship to external validity and the limited generalizability of the findings is related to the fact that an RCT proved to be beyond the resources of this investigation. Therefore, a multiple case study was conducted and a pre-test/post-test design for control was used thus limiting the ability to generalize the findings across all school populations.

In relationship to the limitations of the study in regards to internal validity the following needs to be clarified. As discussed above I failed to complete a successful RCT and therefore for all but one of the investigations in this study a pre-test post-test design was used. Therefore, each school in the final investigation acted as their own control. With this in mind, it needs to be noted that the observations were repeated measures of the same group, and thus an assumption associated with chi-square analysis of data—that all observations are independent—was violated as well as . Therefore, the case-study

results of this investigation may not be generalizable and are difficult to test for validity without the full realization of a rigorous RCT. This limitation reflects Yin's (1989) observation that "the case study has long been stereotyped as the weak sibling among social science methods," often being criticized as too subjective or even pseudo-scientific to the extent that "investigators who do case studies are often regarded as having deviated from their academic disciplines, and their investigations as having insufficient precision (that is, quantification), objectivity and rigor" (Yin, 1989).

Additionally, a fourth limitation is that the observations upon which many of findings were based could only provide a "snap-shot" of what occurs in the classroom on a daily basis. Therefore, it should be recognized that the findings from the observational data may be more related to the activity of the day rather than any specific programme delivered within the school. A fifth limitation is the possibly confounding factor of student maturity. During the six months that elapsed between the collection of the baseline and the follow-up data, the students may have matured in a manner that led to behavioural improvement independent of any influence of the programme. Regardless of whether all the results regarding behaviour can be credited to the BSC Programme, the impact of natural maturation or any other completely independent variable cannot be fully determined at this time.

While recognizing these limitations and the need to engage in scientifically rigorous approaches to researching educational practice, this self-funded PhD investigation faced budgetary and time constraints that prevented the execution of a large-scale RCT. Therefore, with the aim of discovering promising avenues for enhancing teaching and learning that are appropriate to share with practitioners and generalizable across all relevant settings, the above limitations need to be considered in relationship to future implications for research. This consideration is particularly salient to this study, as

relying on one or a few cases for extrapolations runs the risk of inferring too much from what might be more related to circumstance rather than the effectiveness of the intervention under investigation. Although attempts were made to minimize these limitations, such as by using a mixed- method approach for data collection and triangulation, a properly funded and completed RCT is required before the findings of this investigation can be considered more than preliminary.

In addition to the limitations discussed above, inherent biases may have influenced the study outcomes. The study researcher, who was primarily responsible for developing and introducing the BSC Programme into the schools, attempted to decrease the effect of his presence on study outcomes by several measures, such as recruiting local educational behaviour-support teachers to deliver follow-up training for school staff during the multiple case-study phase of the research cycle. However, all support staff and teachers formed a professional relationship with the researcher that might have made them more inclined to report positive behavioural changes and less inclined to report negative changes. Similarly, the pupils might have more readily credited the BSC Programme for changes in their behaviour than other factors because they were aware of the researcher's involvement in the programme. Although the researcher attempted to report the findings in an unbiased manner and took steps to lessen his influence by distancing himself from programme training and implementation, the potential for bias could not be entirely eliminated because of the intense involvement of the researcher in the development of the BSC Programme and his ongoing work to promote the role of schools in the pro-social development of children.

9.2 General Discussion

Previous research into the impact of character-education programmes has yielded neither a clear guideline regarding what character education should provide (see Arthur,

2005) nor discussed how a character-education programme can be effectively implemented school wide to promote pro-social development among school-aged children. The data collected from school staff and pupil interviews, observations, and school records in this study indicate that following the implementation of the BSC Programme in five primary schools, pupil behaviour and school climate improved. The theoretical underpinnings of this school-wide approach to pro-social development were explored and all components of the educational innovation were rooted in empirical evidence, providing a unified theory for the development of pro-social standards of conduct through the delivery of mediated- learning activities designed to assist children in engaging in ethical and rational decision-making, problem-solving, and conflict resolution.

9.2.1 Role of personality in educational and life outcomes. As discussed throughout this study, a growing body of evidence supports the view that personality traits influence educational outcomes, emotional well-being, and the ability to overcome adversity. This research is reflected in the Five Factor Model (FFM) of personality development, which provides a framework for the development of character-education programming. The synthesis of literature and the studies conducted within this investigation indicate that there is a bi-directional influence between educational outcomes, problem-solving, and conflict resolution that leads to the development of pro-social behaviour within the school setting. However, this bi-directional relationship is underappreciated in the current drive to reach targets based solely on academic achievement. Additional research suggests that similar traits are beneficial in the development of both educational outcomes and resiliency, which provides a robust framework for implementing learning opportunities targeted at developing social competence and a cooperative disposition. Within the FFM, the traits of

conscientiousness, agreeableness, and openness to new experiences are particularly beneficial in developing the strength of character necessary to achieving positive educational outcomes and strengthening intrapersonal resiliency.

As argued in this study, both intrapersonal and interpersonal resiliency are required for maintaining educational achievement when exposed to risk. Intrapersonal resiliency can be translated into the characters traits of respect, responsibility, trustworthiness, and kindness for the purpose of developing mediated-learning activities to enhance social competence, rational and ethical decision- making, problem-solving skills, and pro-social conflict resolution, attributes necessary to increase access to and benefit from school-developed interpersonal resiliency.

9.2.2 Role of resilience, social competence, and a cooperative disposition in life outcomes. Intrapersonal and interpersonal resilience underpinned by the development of social competence and a cooperative disposition have been shown to be beneficial to children as they progress through the challenges associated with academic attainment, emotional well-being, and modern society. The current research provides considerable evidence that teachers and schools can serve as significant protective factors in the lives of children by providing programming that meets the pro-social developmental needs of the whole child as well as mediated-learning activities facilitated by authentically caring adults within the school setting.

9.3 Recommendations for Future Research

This study examined the role of personality and character adaptation in life outcomes, learning, and pro-social development within culturally constructed environments. As such, it serves as a strong foundation for further research into the process by which personality traits and character adaptations shape functioning over time, guided by the recommendations proposed in this section. First, future research should use

statistical techniques that permit analysis of change over time (Duncan et al, 1999).

Second, future research should develop a more robust understanding of how personality traits develop and express themselves at all stages in the life course. Third, future research should be designed to develop a greater understanding of the relationship between personality and character adaptations and social and environmental factors. Furthermore, a robust RCT should be conducted to address the limitations of the current study. A fully realized RCT could provide the quality data required to fully investigate the efficacy of the BSC programme. Future research could also consider variation of the programme to enhance efficacy of the approach.

In conclusion, the findings of this study raise fundamental questions about how schools and other culturally constructed environments (e.g., families, youth clubs, and mental health institutions) influence personality development and life outcomes and how these environments should address prevention and intervention efforts to provide the most beneficial outcomes for children. Future research should pursue a cycle of investigation that fully captures the complexity of all these factors by implementing the above recommendations as part of a robust interdisciplinary investigation.

9.4 Practical Implications

In a recent longitudinal study, Duckworth and Seligman (2005) found that highly self-disciplined pupils outperform their more impulsive peers on every academic performance variable, including teacher-assessed grades, standardized-test scores, and attendance. Their research further indicated that whereas self-regulation predicted which students would improve their academic performance over the course of the school year, IQ did not, indicating that self-discipline has a more dominant role in educational outcomes than does IQ and that a primary factor in the failure to reach full potential is the failure to exercise self-discipline.

This study found that a socio-culturally framed behaviour-management programme facilitated through the delivery of mediated cooperative-learning activities and designed to enhance responsibility, respect, trustworthiness, fairness, caring, and honesty can have a positive impact on pupil behaviour and self-regulation. This finding, coupled with an understanding of the importance of self-regulation, suggests that future school-based behaviour-management programmes and socio-emotional learning initiatives should consider the role of mediated cooperative-learning activities in developing beneficial character adaptations that promote self-regulation and positive educational and life outcomes. Such educational initiatives should include the design and delivery of professional development courses for school administrators, teachers, and support staff to facilitate the implementation of behaviour-management programming grounded in a socio-cultural framework that targets character development.

9.5 Conclusion

The results of the investigations conducted as part of this study suggest that mediated cooperative-learning activities have a direct impact on pupil behaviour, teacher talk, and school climate within learning environments. This study presented both a unified theoretical base to a school-wide approach to enhancing pro-social development among school-aged children through the delivery of mediated cooperative-learning activities and a practical solution for addressing anti-social behaviour within the classroom and wider school community. The data collected were analyzed to examine (a) the role of personality and character adaptation in educational and life outcomes, (b) the role of mediated cooperative learning in the pro-social development of school-aged children, (c) the form that a character-education programme might take, (d) strategies for implementing a character-education programme, and (e) the effectiveness of the BSC Programme in Year 1 to Year 6 classrooms.

In general, all the schools investigated reported an increase in pro-social behaviour and an equally significant decrease in anti-social behaviour six months following BSC Programme implementation. All schools experienced an increase in pupil on-task behaviour and teacher talk focused on content delivery during classroom lessons and a decrease in disruptive incidents, office referrals, and teacher talk focused on behaviour management during academic lessons. However, some schools achieved more gains than others. The schools that achieved the most significant changes have one main factor in common: a highly involved head teacher who fully supported the programme, worked directly in the delivery of the character-education component and the restorative process, and implemented all three components of the BSC Programme.

The findings of this study suggest that a holistic approach to character education framed within a socio-cultural perspective may lead to an effective behaviour-management strategy that promotes the development of a cooperative-learning environment that improves both staff and student pro-social engagement with education. Further research is required to fully understand the role of the BSC Programme in developing social competence and a cooperative disposition among school-aged children. Although the results of this investigation are encouraging, future research based on an RCT of a geographically diverse group of schools sufficiently scaled to stringently investigate the efficacy of the intervention should be conducted before broad-scale implementation is undertaken.

References

- Ackerman, P. L., & Goff, M. (1994). 'Typical intellectual engagement and personality: reply to Rocklin (1994)', *Journal of Educational Psychology*, 86: 15&153.
- Ahmed, E., Harris, N., Braithwaite, J., & Braithwaite, V. (2001). *Shame Management through Reintegration*. Cambridge, UK: Cambridge University Press.
- Ainsworth, M., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the Strange Situation*. Hillsdale, NJ: Erlbaum.
- Alexander, H. B. (1935). 'Intelligence, concrete and abstract', *British Journal of Psychology, Monographs Supplement*, 19.
- Allport, G. W. (1937). *Personality: A Psychological Interpretation*, Holt, New York.
- Allport, G. W. (1965). *Letters from Jenny*. (1965) New York: Harcourt Brace Jovanovich.
- Allport, G. W., & Odbert, H. S. (1936). Trait-names: A psycho-lexical study. *Psychological Monographs*, 47(I, Whole No. 211).
- American Psychiatric Association. (2000). *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*, Fourth Edition, Washington DC, APA.
- Ames, G. J., & Murray, F. B. (1982). When two wrongs make a right: Promoting cognitive change by social conflict. *Developmental Psychology*, 18(6), 894-897.
- Angleitner, A., & Ostendorf, F. (1989). *Personality factors via self- and peer-ratings based on a representative sample of German trait descriptive terms*. Paper presented at the first European Congress of Psychology, Amsterdam, The Netherlands.
- Aronson, E. (1968). Dissonance theory: Progress and problems. In R. Abelson, E. Aronson, W. McGuire, T. M. Newcomb, M. J. Rosenberg, & P. H. Tannenbaum (Eds.), *Theories of Cognitive Consistency: A sourcebook* (pp. 5–27). Chicago, IL: Rand-McNally.
- Aronson, E., & Carlsmith, J. M. (1962). Performance expectancy as a determinant of actual performance. *Journal of Abnormal and Social Psychology*, 65, 178–182.
- Aronson, E., & Mills, J. (1959). The effects of severity of initiation on liking for a group. *Journal of Abnormal and Social Psychology*, 59, 177–181.
- Aronson, J., Blanton, H., & Cooper, J. (1995). From dissonance to disidentification: Selectivity in the self-affirmation process. *Journal of Personality and Social Psychology*, 68, 986–996.
- Arthur, J. (2005). The Re-emergence of Character Education in British Education Policy. *British Journal of Educational Studies*, 53, 239-254.

Asendorpf, J. B., Banse, R., & Muecke, D. (2002). Double dissociation between implicit and explicit personality self-concept: The case of shy behaviour. *Journal of Personality & Social Psychology*, 83, 380–393.

Astington, E. (1960). 'Personality assessment and academic performance in a boys' grammar. *Annual Review of Psychology* 13, 371-414.

Atkinson, M. & Hornsby, G. (2002) *Mental Health Handbook for Schools*. London. Routledge Falmer. Ausubel, D. P. (1968). *Educational Psychology: A Cognitive View*, Holt, Rinehart and Winston, New York.

Bakhtin, M. (1981). "Discourse in the Novel." *The Dialogic Imagination: Four Essays*. Edited and translated by M. Holquist and Caryl Emerson. Austin: University of Texas Press. 259-422.

Bakhtin, M. (1984). *Problems of Dostoevsky's Poetics*. Edited and translated by Caryl Emerson. Minneapolis: University of Minnesota Press.

Bakhtin, M. (1986). *Speech Genres and Other Late Essays*, C. Emerson and M. Holquist (eds), Texas: University of Texas Press.

Bakhtin, M. (1990). *Art and Answerability*. Ed. Michael Holquist and Vadim Liapunov. Trans. Vadim Liapunov and Kenneth Brostrom. Austin: University of Texas Press [written 1919–1924, published 1974-1979].

Bales, R. F. (1953). The equilibrium problem in small groups, in T. Parsons, R. F. Bales and E. A. Shils (eds.), *Working Papers in the Theory of Action*, Free Press, 111-61.

Bandura, A. (1993). 'Perceived self-efficacy in cognitive development and functioning', *Educational Psychologist*, 28: 117-148.

Bandura, A., Ross, D., & Ross, S. (1963). Imitation of film-mediated aggressive models. *Journal of Abnormal and Social Psychology*, 66, 3-11.

Bardoliwalla, N. (2002). Promotion of social change: A conceptual framework. *American Journal of Community Psychology*, 30(3), 415-427.

Barkley, R. (1997). Behavioral inhibition, sustained attention, and executive functions: Constructing a unifying theory of ADHD. *Psychological Bulletin*, 121, 65-94.

Barron, B. (2000a). Achieving coordination in cooperative problem-solving groups. *The Journal of the Learning Sciences*, 9(4), 403-436.

Barron, B. (2000b). Problem solving in video-based microworlds: cooperative and individual outcomes of high-achieving sixth-grade students. *Journal of Educational Psychology*, 92(2), 391-398.

Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology Monograph*, 4 (Pt. 2), 1–103.

- Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *Journal of Early Adolescence*, 11(1), 56-95.
- Beaumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, pp. 497–529.
- Bell, C. C., & Jenkins, E. J. (1993). 'Community Violence and Children on Chicago's Southside', *Psychiatry: Interpersonal and Biological Processes*, 56 (1) 46 -54.
- Ben-Avie, M., & Ensign, J. (Eds.). (2003). 'How social and emotional development add up: Getting results in math and science education. New York: Teacehr College Press.
- Ben-Avie, M., Haynes, N. M., White, J., Ensign, J., Steinfeld, T. R., Sartin, L. D., et al. (2003). Youth development and student learning in math and science. In N. M. Haynes, M. Ben-Avie, & J. Ensign (Eds.), *How social and emotional learning add up* (pp. 9-35). New York: Teachers College Press.
- Bendig, A. W. (1957). 'The validity of two temperament scales in predicting student achievement in introductory psychology', *Journal of Educational Psychology*, 50: 571-580.
- Bendig, A. W. (1958). 'Objective measures of needs and course achievement in introductory psychology', *Journal of General Psychology*, 59: 51-57.
- Bendig, A. W. (1960). 'Extraversion, neuroticism, and student achievement in introductory psychology', *Journal of Educational Research*, 53: 263-267.
- Bendig, A. W., & Sprague, J. L. (1954). 'The Guilford Zimmerman Temperament Survey as a predictor of achievement level and achievement fluctuation in introductory psychology', *Journal of Applied Psychology*, 38: 409-413. *General*, 117: 288-318.
- Benet-Martinez, V., & John, O. P. (1998). *Los cinco grandes* across cultures and ethnic groups: Multitrait multimethod analyses of the Big Five in Spanish and English. *Journal of Personality and Social Psychology*, 75, 729-750.
- Bergman, T. G. (2001). 'To test comprehension of a translation by those of a different speech.' *Notes on Sociolinguistics* 6: 89-92.
- Berkowitz, M. W. (2003). The science of character education. In *Bringing in a new era in character education*, edited by W. Damon, 43-63. Palo Alto, CA: Hoover Institution Press.
- Bierman, D. J., & Radin, D. I. (1997). Anomalous anticipatory response on randomized future conditions. *Perceptual and Motor Skills*, 84, 689-690.
- Bierman, K. L., & Smoot, D. L. (1991). Linking family characteristics with poor peer relations: The mediating role of conduct problems. *Journal of Abnormal Child Psychology*, 19, 341–356.

- Birenbaum, M., & Montag, I. (1986). On the location of the sensation seeking construct in the personality domain. *Multivariate Behavioral Research, 21*, 357-373.
- Black, S. (2003). An ongoing evaluation of the bullying prevention program in Philadelphia schools: Student survey and student observation data. Paper presented at Centers for Disease Control's Safety in Numbers Conference, Atlanta, GA.
- Bland, J. M. (1986). Altman DG. Statistical methods for assessing agreement between two methods of clinical measurement. *Lancet*;i:307-10.
- Blasi, A. (1980). Bridging moral cognition and moral action: A critical review of the literature. *Psychological Bulletin, 88*, 1-45.
- Block, J. H., & Martin, B. (1955). Predicting the behavior of children under frustration. *Journal of Abnormal and Social Psychology, 51*, 281-285.
- Bloom, B. S. (1976). *Human characteristics and school learning*. New York: McGraw-Hill.
- Bloom, M. (1990). The psychosocial constructs of social competency. Gullotta, T. P., Adams, G. R., & Montemayor, R. (eds.). *Developing social competency in adolescence*, (pp. 11-27). Newbury Park, CA: Sage Publications.
- Blum, R. W., & Libbey, H. P. (2004). School Connectedness Strengthening health and education outcomes in teenagers. *Journal of School Health, 74*(7), 231-234.
- Bohart, A. C., & Greening, T. (2001). Humanistic psychology and positive psychology. *American Psychologist, 56*, 67 -82.
- Bond, M. H., Nakazato, H. S., & Shiraishi, D. (1975). Universality and distinctiveness in dimensions of Japanese person perception. *Journal of Cross-Cultural Psychology, 6*, 346-355.
- Bond, L., Carlin, J., Thomas, L., Rubin, K., & Patton, G. (2001). Does bullying cause emotional problems? A prospective study of young teenagers. *British Medical Journal, 323*(7311), 480-484.
- Bond, M. H., Kwan, V. S. Y., & Li, C. (2000). Decomposing a sense of superiority: The differential social impact of self-regard and regard-for others. *Journal of Research in Personality, 34*, 537-553.
- Borkenau, P., & Ostendorf, F. (1992). Social desirability scales as moderator and suppressor variables. *European Journal of Personality, 6*, 199-214.
- Botvin, G. J. (1996). Substance abuse prevention through life skills training. Peters, R. D., & McMahon, R. J. (eds.). *Preventing childhood disorders, substance abuse, and delinquency*, (pp. 215-240). Thousand Oaks, CA: Sage Publications.

- Bouchard, T., & McGue, M. (2003). in Bergvall, N., Iliadou, A., Tuvemo, T., and Cnattingius, S. (2006) Birth Characteristics and Risk of Low Intellectual Performance in Early Adulthood: Are the Associations Confounded by Socioeconomic Factors in Adolescence or Familial Effects? *Paediatrics* 117, 714-721.
- Bowlby, J. (1969). *Attachment and loss, Vol. 1: Attachment*. New York: Basic Books.
- Bowlby, J. (1973). *Attachment and loss, Vol. 2: Separation*. New York: Basic Books.
- Bowlby, J. (1980). *Attachment and loss, Vol. 3: Loss, sadness and depression*. New York: Basic Books.
- Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. New York: Basic Books.
- Boyatzis, R. (1998). *Transforming qualitative information: Thematic analysis and code development*. Thousand Oaks, CA: Sage Publications.
- Braithwaite, J. B. (1989). *Crime, Shame and Reintegration*. Cambridge, UK: Cambridge University Press.
- Braithwaite, J. B. (2001). Youth Development Circles. *Oxford Review of Education* 27: 239–252.
- Braithwaite, J. B. (2002). *Restorative Justice and Responsive Regulation*. Oxford, UK: Oxford University Press.
- Braken, B. (1992). *Multidimensional Self Concept Scale: Examiner's Manual*. Texas: Pro-ed.
- Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3: 77-101.
- Braun, K. A., Ellis, R., & Loftus, E. F. (2002). Make my memory: How advertising can change our memories of the past. *Psychology & Marketing*, 19, 1–23.
- Brehm, J. W. (1956). Postdecision changes in the desirability of alternatives. *Journal of Abnormal and Social Psychology*, 52, 384–389.
- Brehm, J. W. (1962). Motivational effects of cognitive dissonance. In M. R. Jones (Ed.), *Nebraska Symposium on Motivation*. Lincoln, NE: University of Nebraska Press.
- Brehm, J. W., & Cohen, A. R. (1962). *Explorations in Cognitive Dissonance*. New York: John Wiley & Sons.
- British Medical Association. (2006). *Child and adolescent mental health: A guide for mental health professionals*.
- Broadbent, D. E. (1958). *Perception and Communication*, Pergamon, London.

- Brody, N. (1988). *Personality: In Search of Individuality*. Academic Press, New York.
- Brooks, R. (1994). Coherent Behavior from Many Adaptive Processes, *Proceedings of the Third International Conference on Simulation of Adaptive Behavior (SAB-94)*.
- Brooks-Gunn, J., Berlin, L. J., Leventhal, T., & Fuligni, A. (2000). Depending on kindness of strangers: Current national data initiatives and developmental research. *Child Development*, 71, 257-267.
- Brown, A. (1992). Design Experiments: Theoretical and Methodological Challenges in Creating Complex Investigations in Classroom Setting. *Journal of the Learning Sciences*, 2(2) 141-171.
- Brugman, D., Podolskij, A. I., Heymans, P. G., Boom, J., Karabanova, O., & Idobaeva, O. (2003). Perception of moral atmosphere in school and norm transgressive behavior in adolescents: An Intervention Study. *International Journal of Behavioral Development*, 27, 289-300.
- Bruner, J. S. (1960). *The Process of Education*. Cambridge, MA: Harvard University Press.
- Bruner, J. S. (1966). *Toward a Theory of Instruction*, Cambridge, Mass.: Belkapp Press.
- Bruner, J. S. (1971). *The Relevance of Education*, New York: Norton.
- Bruner, J. (1977). *The Process of Education*. Cambridge, Massachusetts: Harvard University Press.
- Bruner, J. (1983). *Child's Talk: Learning to Use Language*. Oxford: Oxford University Press.
- Bruner, J. (1987). Life as narrative. *Social Research*, 54(1), 11-32.
- Burton, D. (2000). Questionnaire Design. In D. Burton (Ed.), *Research Training for Social Scientists : a Handbook for Postgraduate Researchers* (pp. 335-345). London: Sage.
- Byrne, B. M. (1996). *Measuring Self-Concept Across the Life Span*. Boston: American Psychological Association.
- Cacioppo, J. T., & Petty, R. E. (1982). 'The need for cognition', *Journal of Personality and Social Psychology*, 42: 116-131.
- Cairns, R. B., Cairns, B. D., & Neckerman, H. J. (1989). Early school dropout: configurations and determinants. *Child Development*, 60, 1437-1452.
- Cameron, D. (2008). On a Glasgow estate, David Cameron has hard words for broken society. Elliott, F. (Eds) Times On-Line. www.timesonline.co.uk; Accessed 8 July 2008.

Campbell, D. T., & Stanley, J. C. (1966). *Experimental and Quasi-Experimental Designs for Research*. Chicago: Rand McNally.

Caplan, G. (1974). *Support Systems and community mental health: Lectures on concept development*. New York: Behavioral Publications.

Caplan, M. Z., & Weissberg, R. P. (1988). Promoting social competence in early adolescence: Developmental considerations. Schneider, G. H., Attili, G., Nadel, J., & Weissberg, R. P. (eds.). *Social competence in developmental perspective*, (pp. 371-386). Boston, MA: Kluwer Academic Publishers.

Cason, D., & Gillis, H. L. (1994). A meta-analysis of outdoor adventure programming with adolescents. *Journal of Experiential Education*, 17, 40-47.

Catalano, R. F., Berglund, M. L., Ryan, J. A. M., Lonczak, H. S., & Hawkins, J. D. (2002). Positive youth development in the United States: Research findings on evaluations of positive youth development programs. *Prevention and Treatment*, 5, article 15.

Cattell, R. B. (1933). 'Temperament tests: I. Temperament', *British Journal of Psychology*, 23:308-329.

Cattell, R. B. (1943). 'The description of personality: basic traits resolved into clusters', *Journal of Abnormal and Social Psychology*, 38: 476-507.

Cattell, R. B. (1965). *The Scientific Analysis of Personality*, Penguin, Harmondsworth.

Cernkovich, S. A., & Giordano, P. G. (1992). School bonding, race, and delinquency. *Criminology*, 30, 261-290.

Child, D. (1964). 'The relationships between introversion-extraversion, neuroticism and 308-329. *Journal of Abnormal and Social Psychology*, 38: 476-507.

Child, D. (1990). *The essentials of factor analysis*. London: Cassell.

Children's Act 1989 Report 2004 and 2005: Department for Education and Skills (DfES). (2006). London, HMSO.

Church, A. T., & Katigbak, M. S. (1989). Internal, external, and self-report structure of personality in a non-Western culture: An investigation of cross-language and cross-cultural generalizability. *Journal of Personality and Social Psychology*, 57, 857-872.

Clarke-Stewart, K. A. (1973). Interactions between mothers and their young children: Characteristics and consequences. *Monographs of the Society for Research in Child Development*, 38(153), 6-7.

Clausen, J. A. (1975). The social meaning of differential physical and sexual maturation. In S. E. Dragastin & G. H. Elder, Jr. (Eds.), *Adolescence in the life cycle: Psychological change and the social context* (pp. 25-47). New York: Halsted.

Clausen, J. (1995) Gender, contexts and turning points in adult lives in Moen, P., Elder, G. and Luscher, K. (Eds). *Examining Lives in Context-Perspectives on the Ecology of Human Development* (pp. 51-58), Washington DC, American Psychological Association.

Clausen, J. S. (1991). Adolescent competence and the shaping of the life course. *American Journal of Sociology*, 96(4), 805-42.

Cobb, J. A. (1972). Relationship of discrete classroom behaviors to fourth-grade academic achievement. *Journal of Educational Psychology*, 63, 74-80.

Cobb, P., Wood, T., & Yackel, E. (1993). Discourse, mathematical thinking, and classroom practice. In Forman, E., Minick, N. & Stone, C. (Eds.) *Education and mind: Institutional, social, and developmental processes* (pp. 91-119) New York: Oxford University Press.

Cobb, P., & Yackel, E. (1996). Constructivist, emergent and sociocultural perspectives in the context of developmental research. *Educational Psychologist*, 31, (3/4), 175-190.

Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (second ed.). Lawrence Erlbaum Associates.

Cohen, J. (1992). "A power primer". *Psychological Bulletin* 112: 155–159.

Cohen, E. G. (1994). Restructuring the classroom: Conditions for productive small groups. *Review of Educational Research*, 64, 1-35.

Cohen, J., & Manion, T. (1981). *Perspectives on classrooms and schools*, London: Holt, Rinehart, & Winton.

Cohen, L., & Manion, L. (2000). *Research methods in education*. Routledge. p. 254. (5th edition).

Cohen, G. L., & Prinstein, M. J. (2006). Peer contagion of aggression and health-risk behavior among adolescent males: An experimental investigation of effects on public conduct and private attitudes. *Child Development*, 77, 967-983.

Coie, J. D., Dodge, K. A., & Kupersmidt, J. B. (Eds.). (1990). *Peer group behavior and social status*. New York: Cambridge University Press.

Conover, W. J. (1980). *Practical Nonparametric Statistics* (2nd ed.), New York: John Wiley.

Cooper, J. (2007). *Cognitive dissonance: 50 years of a classic theory*. London: Sage publications.

Costa, P. T., Jr., & McCrae, R. R. (1976). 'Age differences in personality structure: a cluster analytic approach', *Journal of Gerontology*, 31: 564-570.

- Costa, P. T., Jr., & McCrae, R. R. (1985). *The NEO Personality Inventory Manual*, Psychological Assessment Resources, San Diego, CA.
- Costa, P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five Factor Inventory (NEO-FFI) Professional Manual* Odessa, FL: Psychological Assessment Resources.
- Costa, P. T., & McCrae, R. R. (1993). Bullish on personality psychology. *The Psychologist*, 6, 302-303.
- Costa, P. T., Jr., & McCrae, R. R. (1995). Solid ground in the wetlands of personality: A reply to Block. *Psychological Bulletin*, 117, 216-220.
- Costa, P. T., Jr., McCrae, R. R., & Siegler, I. C. (1999). Continuity and change over the adult life cycle: Personality and personality disorders. In C. R. Cloninger (Ed.), *Personality and psychopathology* (pp. 129–154). Washington, DC: American Psychiatric Press.
- Costa, P. T., & McCrae, R. R. (1998). Six approaches to the explication of facet-level traits: Examples from conscientiousness. *European Journal of Personality*, 12, 117–134.
- Cowen, E. L. (1994). The enhancement of psychological wellness: Challenges and opportunities. *American Journal of Community Psychology*, 22, 149-179.
- Creswell, J. W. (2003). *Research design. Qualitative, quantitative and mixed methods approaches*. Thousand Oaks, CA: Sage.
- Crick, N. R., & Grotpeter, J. K. (1995). Relational aggression, gender, and social-psychological adjustment. *Child Development*, 66(3), 710-722.
- Cronbach, L. J. (1977). *Educational Psychology*, Harcourt Brace Jovanovich, New York.
- Cronback, L. J., & Snow, R. E. (1977). *Aptitudes and Instructional Methods; a Handbook for Research on Interactions*, Irvington, New York.
- Danish, S. (1996). Interventions for enhancing adolescents' life skills. *Humanistic Psychologist*, 24, 365-381.
- Darlington, R. B., Weinberg, S., & Walberg, H. (1973). Canonical variate analysis and related techniques. *Review of Educational Research*, 453-454.
- Deary, I. J. (1996). 'A (latent) Big Five personality model in 1915?: a re-analysis of Webb's, *Journal of Personality and Social Psychology*, Vol. 71, NO. 5. 992-1005.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (1999). *Handbook of qualitative research*, second edition. Sage, 69-802.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2003). *Collecting and interpreting qualitative materials* (2nd Ed.). Thousand Oaks, CA: Sage.

- De Raad, B., Hendriks, A. A. J., & Hofstee, W. K. B. (1992). 'Towards a refined structure of personality traits', *European Journal of Personality*, 6: 301-319.
- De Raad, B., & Van Hock, G. L. (Eds.). (1994). The fifth of the Big Five [Special issue]. *European Journal of Personality*, 8 (4).
- Dewey, J. (1910/1991). *Principles of moral education*. Boston: Houghton Mifflin.
- Dewey, J. (1932). *Democracy and Education*. Westport: Greenwood.
- Dewey, J. (1933). *How We Think. A restatement of the relation of reflective thinking to the educative process* (Revised edn.), Boston.
- Department for Education and Employment (DfEE). (1997). *Excellence in Schools*. London: The Stationary Office.
- Department for Education and Employment (DfEE). (1999). *Values, Aims and Purpose of the National Curriculum for England*. London: The Stationary Office.
- Dienre, C. L., & Dweck, C. S. (1978). Analysis of learned helplessness: Continuous change in the performance, strategy and achievement cognitions following failure, *Journal of Personality and Social Psychology*, 36, 451-462.
- Dillenbourg, P. (1999). What do you mean "cooperative learning"? In P. Dillenbourg (Ed.), *Cooperative learning: Cognitive and computational approaches* (pp. 1-19). Oxford: Elsevier.
- DiPerna, J. C., & Elliott, S. N. (1999). The development and validation of the Academic Competence Evaluation Scales. *Journal of Psychoeducational Assessment*, 17, 207-225.
- Dodge, K. A., & Murphy, R. (1984). The assessment of social competence in adolescents. Karoly, P., & Steffen, J. J. (eds.). *Adolescent behavior disorders: Foundations and contemporary concerns*, (pp. 61-96). Lexington, MA: Lexington Books.
- Duckworth, A. L., & Seligman, M. E. P. (2005). Self-discipline outdoes IQ predicting academic performance in adolescents. *Psychological Science*, 16, 939-944.
- Duffy, M. E. (1987). Methodological triangulation: a vehicle for merging quantitative and qualitative research methods. *IMAGE: Journal of Nursing Scholarship* 19(3):130-133.
- Duncan, T. E., Duncan, S. C., Stryker, L. A., Li, F., & Alpert, A. (1999). *An introduction to latent variable growth curve modeling: Concepts, issues, and applications*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Dweck, C. S. (1975). The role of expectations and attributions in the alleviation of learned helplessness. *Journal of Personality and Social Psychology*, 31, 674-685.
- Dweck, C. S. (1986). Motivational processes affecting learning, *American Psychologist*, 41:1040-1 048.

- Dweck, C. S. (1999). *Self Theories: Their Role in Motivation, Personality and Development*. Hove, East Sussex: Psychology Press.
- Dweck, C. S., & Leggett, E. I. (1988). A social-cognitive approach to motivation and personality, *Psychological Review*, 95: 256-273.
- Dweck, C. S., & Repucci, N. D. (1973). Leaned helplessness and reinforcement responsibility in children. *Journal of Personality and Social Psychology*, 25, 109-116.
- Dwyer, O. J. (2004). Symbolic Accretion and Commemoration. *Social and Cultural Geography*, 5(3):419-436.
- Eber, L., Sugai, G., Smith, C., & Scott, T. (2002). Wraparound and positive behavioral interventions and supports. *Journal of Emotional Behavioral Disabilities*, 10, 171–180.
- Eisenberg, N. (1979). Development of children's prosocial moral judgement. *Developmental Psychology*, 15, 128-137.
- Eisenberg, N. (1982). The development of reasoning regarding prosocial behavior. In N. Eisenberg (Ed.), *The development of prosocial behavior* (pp. 219–249). New York: Academic Press.
- Eisenberg, N., & Fabes, R. A. (1998). Prosocial development. *Handbook of child psychology* (5th ed., Vol. 3, pp. 701-778). New York: Wiley and Sons.
- Eisenberg, N., Fabes, R. A., Karbon, M., Murphy, B. C., Wosinski, M., Polazzi, L., Carlo, G., & Juhnke, C. (1996). The relations of children's dispositional prosocial behavior to emotionality, Regulation, and social functioning. *Child Development*, 67, 974-992.
- Eisenberg, N., & Miller, P. A. (1992). The development of prosocial moral reasoning in childhood and mid-adolescence. In J.M.A.M. Janssens & J.R.M. Gerris (Eds.), *Child rearing: influence on prosocial and moral development* (pp.31–56). Amsterdam: Swets & Zeitlinger.
- Eisenberg, N., & Mussen, P. (1989). *The roots of prosocial behavior in children*. Cambridge, England: Cambridge University Press.
- Elias, M. J., Zins, J. E., Weissberg, R. P., Frey, K. S., Greenberg, M. T., Haynes, N. M., et al. (1997). *Promoting social and emotional learning: Guidelines for educators*. Virginia: Association for Supervision and Curriculum Development.
- Elliott, S. N., Kratochwill, T. R., Littlefield, J., & Travers, J. F. (1996). *Educational psychology: Effective teaching, effective learning*. Madison, WI: Brown and Benchmark.
- Ellsworth, P. C., & Gross, S. R. (1994). Hardening of the attitudes: Americans' view on the death penalty. *Journal of Social Issues*, 50, 19-52.
- Elster, J. (1999). *Alchemies of the Mind*, Cambridge: University Press.

- Elton Report. (1989). *Discipline in Schools*, UK: OFSTED
- Entwistle, N. J. (1981). *Styles of Learning and Teaching*, Wiley, Chichester.
- Eron, L. D., & Huesman, L. R. (1984). The relation of prosocial behavior to the development of aggression and psychopathology. *Aggressive Behavior* 10:201-211.
- Eysenck, H. J. (1947). *Dimensions of Personality*, Kegan Paul, Trench, Trubner & Co, London.
- Eysenck, H. J. (1952). 'The scientific study of personality', University of London, 94-98.
- Eysenck, H. J. (1970). *The Structure of Human Personality*, 3rd Edn, Methuen, London. (Original work published 1953).
- Eysenck, H. J. (1990). *Rebel With A Cause (an Autobiography)*, London: W. H. Allen & Co.
- Eysenck, H. J., & Cookson, D. (1969). 'Personality in primary school children: ability and achievement', *British Journal of Educational Psychology*, 39: 109-122.
- Eysenck, H. J., & Eysenck, S. B. G. (1969). *Personality structure and measurement*. London: Routledge and Kegan Paul.
- Eysenck, S. B. G., Eysenck, H. J., & Barrett, P. (1985). A revised version of the Psychoticism scale. *Personality and Individual Differences*, 6, 21-29.
- Farnham, M., & Mutrie, N. (1997). The potential benefits of outdoor development for children with special needs, *British Journal of Special Education*, v. 24(1), p. 31-38.
- Farrington, D. P. (1993). Understanding and preventing bullying. In Tonry, M. and Morris, N., (Eds), *Crime and Justice* (Vol.17) Chicago: University of Chicago Press.
- Farrington, D. P. (Ed.). (1991). *Childhood aggression and adult violence*. Hillsdale, NJ: Erlbaum.
- Feshbach, N. D. (1975). The relationship of child-rearing factors to children's aggression, empathy and related positive and negative social behavior. In J. de Wit & W.W. Hartup (Eds.), *Determinants and origins of aggressive behavior* (pp. 427-436). The Hague: Mouton.
- Feschbach, N. D., & Feshbach, S. (1987). Affective processes and academic achievement. *Child Development*, 58, 1335-1347.
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7, 117-140.
- Festinger, L. (1957). *A Theory of Cognitive Dissonance*. Stanford, CA: Stanford University Press.

- Festinger, L. (1964). *Conflict, Decision, and Dissonance*. Stanford, CA: Stanford University Press.
- Festinger, L., & Carlsmith, J. M. (1959). Cognitive consequences of forced compliance. *Journal of Abnormal and Social Psychology*, 58, 203–210.
- Festinger, L., Riecken, H. W., & Schachter, S. (1956). *When Prophecy Fails*. Minneapolis, MN: University of Minnesota Press.
- Feuerstein, R., Klein, P., & Tannenbaum, A. (Eds.). (1991). *Mediated Learning Experience*. London: Freund.
- Finlayson, D. S. (1970). A follow-up study of school achievement in relation to personality, *The British Journal of Educational Psychology*, 40: 344-349.
- Finney, J. (2006). The possibility of richer learning, poetic thinking and musical understanding. *National Association of Music Educators Magazine* No.18.
- Fitz-Gibbon, C. T., & Morris, L. L. (1987). *How to analysis data*. Sage Publications.
- Fitzpatrick, K. M., & Boldizar, J. P. (1993). The prevalence and consequences of exposure to violence among African-American youth. *Journal of the American Academy of Child and Adolescent Psychiatry*, 32, 424 -430.
- Fonagy, P., & Target, M. (1994). The efficacy of psychotherapy for children with disruptive disorders, *Journal of American Academic Child and Adolescent Psychiatry*, vol. 33, no. 1, pp. 45-55.
- Fonagy, P., Target, M., Cottrell, D., Phillips, J., & Kurtz, Z. (2002). *What works for whom? A critical review of treatments for children and adolescents*. New York: Guilford Publications.
- Forman, E. A., & Cazden, C. B. (1985). Exploring Vygotskian perspectives in education: the cognitive value of peer interaction', In: Wertsch, J. V., (Ed), *Culture, Communication and Cognition*, Cambridge University Press.
- Fox, P., & Avramidis, E. (2003). An evaluation of an outdoor education programme for students with emotional and behavioural difficulties. *Emotional and Behaviour difficulties* 8((4)), 267-283.
- French, J. R. P., & Raven, B. (1959). The bases of social power. In D. Cartwright and A. Zander (Eds.), *Group dynamics*. New York: Harper & Row.
- Freud, S. (1961). The ego and the id, In S. Strachey (Ed. and Trans.), *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 19, pp. 3- 66). London: Hogarth Press. (Original work published 1923).

- Friedman, R. M., Kutash, K., & Duchnowski, A. J. (1996). The population of concern: Defining the issues. In B. A. Stroul (Ed.), *Children's mental health: Creating systems of care in a changing society* (pp. 69-96). Baltimore: Paul H. Brookes Publishing Company.
- Frith, H., & Gleeson, K. (2004). Clothing and embodiment: Men managing body image and appearance. *Psychology of Men and Masculinity*, 5(1), 40–48.
- Furneaux, W. D. (1957). Report to Imperial College of Science and Technology.
- Gage, N., & Berlinger, D. (1991). *Educational psychology* (5th ed.). Boston: Houghton, Mifflin.
- Galton, F. (1907). *Inquiries into Human Faculty and its Development*, Duttin, New York.
- Garmezy, N. (1983). Stressors of Childhood. In N. Garmezy & M. Rutter (Eds.), *Stress, coping, and development in children* (pp. 43-84). New York: McGraw-Hill.
- Garmezy, N., Masten, A. S., & Tellegen, A. (1984). The study of stress and competence in children: A building block for developmental psychopathology. *Child Development*, 55, 97–111.
- Garmezy, N. (1993). Children in poverty: Resilience despite risk [Special issue: Children and violence]. *Psychiatry: Interpersonal & Biological Processes*, 56(1), 127–136.
- Garnett, J. C. M. (1919). General ability, cleverness and purpose. *British Journal of Psychology*, 9, 345-366.
- Glaser, B. G. (1978). *Theoretical Sensitivity: Advances in the methodology of Grounded Theory*. Sociology Press.
- Glaser, B. G., & Strauss, A. (1967). *Discovery of Grounded Theory. Strategies for Qualitative Research*. Sociology Press.
- Goff, M., & Ackerman, P. L. (1992). 'Personality-intelligence relations: assessment of typical intellectual engagement', *Journal of Educational Psychology*, 84: 532-552.
- Goldberg, L. R. (1981). 'Language and individual differences: The search for universals in personality lexicons'. In: L. Wheeler (Ed.), *Review of Personality and Social Psychology*, Vol. 2, pp. 141-165, Sage, Beverly Hills.
- Goldberg, L. R. (1990). 'An alternative "description of personality": the Big-Five Factor structure', *Journal of Personality and Social Psychology*, 59, 1216-1229.
- Goldberg, L. R. (1992). 'The development of markers of the Big-Five factor structure', *Psychological Assessment*, 4, 26-42.
- Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American Psychologist*, 48, 26-34.

- Goldstein, K. (1963). *The Organism: A holistic approach to biology*. NY: The American Book Co. (Original work published 1939).
- Good, T. L., Reys, B. J., Grouws, D. A., & Mulryan, C. M. (1990). Using work groups in mathematics instruction. *Educational Leadership*, 47(4), 56 -62.
- Gott, J. (2003). The school: the front line of mental health development? *Pastoral Care*, (December), 5-13.
- Grooms, R. R., & Endler, N. S. (1960). 'The effect of anxiety on academic achievement', *Journal of Educational Psychology*, 51: 299-304.
- Grusec, J. E. (1982). The socialization of altruism. In N. Eisenberg (Ed.), *The development of prosocial behavior* (pp. 139–165). New York: Academic Press.
- Grusec, J. E., & Lytton, H. (1988). *Social Development. History, theory and research*. New York: Springer.
- Guilford, J. P., & Braly, K. W. (1930). 'Extroversion and introversion', *Psychological Bulletin*, 27: 96-107.
- Guilford, J. P., & Guilford, R. B. (1934). 'An analysis of the factors in a typical test of introversion-extroversion', *Journal of Abnormal and Social Psychology*, 28: 377-399.
- Guilford, J. P., & Guilford, R. B. (1936). 'Personality factors S, E, and M, and their measurement', *The Journal of Psychology*, 2: 109-127.
- Gullotta, T. P. (1990). Preface. Gullotta, T. P., Adams, G. R., & Montemayor, R. (eds.). *Developing social competency in adolescence*, (pp. 7-8). Newbury Park, CA: Sage Publications.
- Hahn, J. (1998). On the Role of the Propensity Score in Efficient Semiparametric Estimation of Average Treatment Effects, *Econometrica*, Econometric Society, vol. 66(2), 315-332.
- Haney, C., & Zimbardo, P. G. (1998). The Past and Future of U.S. Prison Policy. Twenty-Five Years After the Stanford Prison Experiment. *American Psychologist*, Vol. 53, No. 7, pp. 709-727.
- Harlow, H. F. (1961). The development of affectional patterns in infant monkeys. In B. M. Foss (Ed.), *Determinants of infant behaviour* (pp. 75-97). London: Methuen.
- Harlow, H. F., & Zimmermann, R. R. (1958). The development of affective responsiveness in infant monkeys. *Proceedings of the American Philosophical Society*, 102, 501 -509.
- Harmon-Jones, E. (1999). Toward an understanding of the motivation underlying dissonance effects: Is the production of aversive consequences necessary? In E. Harmon-

Jones & J. Mills (Eds.), *Cognitive Dissonance: Progress on a Pivotal Theory in Social Psychology* (pp. 71–99), Washington, DC: American Psychological Association.

Hattie, J., Marsh, H. W., Neill, J. T., & Richards, G. E. (1997). Adventure education and outward bound: Out-of-class experiences that make a lasting difference. *Review of Educational Research*, 67, 43-97.

Hawker, D. S. J., & Boulton, M. J. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. *Journal of Child Psychology and Psychiatry*, 41, 441-455.

Hawkins, D. J., & Weiss, J. G. (1985). The social development model: An integrated approach to delinquency prevention. *Journal of Primary Prevention*, 6, 73–97.

Hawkins, J. D., & Lishner, D. (1987). Etiology and prevention of antisocial behavior in children and adolescents. In D. H. Crowell, I. M. Evans, & C. R. O'Donnell (Ed.), *Childhood aggression and violence: Sources of influence, prevention, and control. Applied clinical psychology* (pp. 263–282). New York: Plenum Press.

Hawkins, J. D., Lishner, D. M., Catalano, R. F., & Howard, M. O. (1985). Childhood predictors of adolescent substance abuse: Toward an empirically grounded theory [Special issue: Childhood and chemical abuse: Prevention and intervention]. *Journal of Children in Contemporary Society*, 18(1/2), 11–48.

Hawkins, J. D., von Cleve, E., & Catalano, R. F. (1991). Reducing early childhood aggression: Results of a primary prevention program. *Journal of the American Academy of Child & Adolescent Psychiatry*, 30(2), 208–217.

Haydon, T., Mancil, G. R., & Van Loan, C. (2009). *Using Opportunities to Respond in a General Education Classroom: A Case Study* Education and Treatment of Children, vol 32, (2), 267-278.

Haynes, N., Ben-Avie, M., & Ensign, J. (Eds.). (2003). *How Social and Emotional Development Add Up: Getting Results in Math and Science Education*, New York: Teachers.

Hedges, L. V., & Olkin, I. (1985). *Statistical Methods for Meta-Analysis*. Academic Press, Orlando, FL.

Hewes, D. E., Graham, M. L., Doelger, J., & Pavitt, C. (1985). "Second-guessing": Message interpretation in social networks. *Human Communication Research*, 11, 299-334.

Hill, G. W. (1982). Group versus individual performance: Are N + 1 heads better than one? *Psychological Bulletin*, 91(3), 517-539.

Hinshaw, S. P. (1992). Externalizing Behaviour problems and academic underachievement in childhood and adolescence: Causal relationships and underlying mechanisms. *Psychological Bulletin*, 111,127-155.

Hinshaw, S. P., & Anderson, C. A. (1996). Conduct and oppositional defiant disorders. In E. Mash & R. Barkley (Eds.), *Child Psychopathology* (pp. 113-154). New York: Guilford.

Hitchcock, G., & Hughes, D. (1995). *Research and the Teacher: A Qualitative Introduction to School-based Research*. (2nd Edition). London: Routledge.

Hoffman, M. L. (1970). Moral development. In H.P. Mussen (Ed.), *Carmichael's handbook of child psychology* (Vol. 2, pp. 261–359). New York: Wiley.

Hoffman, M. L. (1975). Altruistic behavior and the parent–child relationship. *Journal of Personality and Social Psychology*, *11*, 937–943.

Hofstee, W. K. B. (2002). Types *and* variables: Towards a congenial procedure for handling personality data. *European Journal of Personality*, *16*, 89-96.

Hofstee, W. K. B., De Raad, B., & Goldberg, L. R. (1992). 'Integration of the big five and circumplex approaches to trait structure', *Journal of Personality and Social Psychology*, *63*:146-163.

Hogan, K., Nastasi, B. K., & Pressley, M. (1999). Discourse patterns and cooperative scientific reasoning in peer and teacher-guided discussions. *Cognition and Instruction*, *17*(4), 379-432.

Hogan, R. T. (1983). 'A socioanalytic theory of personality'. In: Page, M. (Ed), *Nebraska Symposium on Motivation-Current Theory and Research*, Vol. 30, pp. 58-89, University of Nebraska Press, Lincoln, NB.

Holquist, M. Translated by Caryl Emerson and Michael Holquist. University of Texas Press Slavic Studies 1. (1975). (Russian). Austin: University of Texas Press, 1981. 259-422.

Hornsby

Holtz, L. (2008) Half Time Report. ESPN America.

ICM Research. (2005). www.icmresearch.co.uk/index.html. accessed 09/02/2006

Jackson, D. N. (1976). *Jackson Personality Inventory Test Manual*, Research Psychologists Press, Goshen, NY.

Jang, K. W., Livesley, J., & Vernon, P. (1996). Heritability of the Big Five Personality Dimensions and Their Facets: A Twin Study. *Journal of Personality* *63*, 577-591.

John, O. P. (1990). The "Big Five" factor taxonomy: Dimensions of personality in the natural language and in questionnaires. In L. A. Pervin (Ed.), *Handbook of personality: Theory and research* (pp. 66-100). New York: Guilford.

- Johnson, D. W., & Johnson, R. T. (1992). Positive interdependence: Key to effective cooperation. In R. Hertz-Lazarowitz & N. Miller (Eds.), *Interaction in cooperative groups: The theoretical anatomy of group learning* (pp. 174-199). Cambridge, England: Cambridge University Press.
- Kant, I. (1781). Translated by Meiklejohn, J. M. D., (1990/2003). *Critique of Pure Reason*. NY: Dover Publication Inc.
- Kelman, H. C., & Hamilton, V. L. (1989). Crimes of obedience: Toward a social psychology of authority and responsibility. New Haven, CT: Yale University Press.
- Kemmis, S., & Wilkinson, M. (1998). Participatory action research and the study of practice. In B. Atweh, S. Kemmis & P. Weeks (Eds). *Action research in practice: Partnerships for social justice in education*. (pp.21-36). London: Routledge.
- Kneser, C., & Ploetzner, R. (2001). Collaboration on the basis of complementary domain knowledge: observed dialogue structures and their relation to learning success. *Learning and Instruction, 11*, 53-83.
- Kohn, A. (1999). *Punished by Rewards: the trouble with gold stars, incentives plans, A's, praise, and other bribes*. Boston & New York: Houghton Mifflin Company.
- Kokko, K., Tremblay, R. E., Lacourse, E., Nagin, D. S., & Vitaro, F. (2006). Trajectories of prosocial behavior and physical aggression in middle childhood: Links to adolescent school dropout and physical violence. *Journal of Research on Adolescence, 16* (3), 403-428.
- Koko, K., & Pulkkinen, L. (2000). Aggression in childhood and long-term unemployment in adulthood: A cycle of maladaptation and some protective factors. *Developmental Psychology, 36*, 463-472.
- Kottak, C., & Kozaitis, K. (2003). *On being different: Diversity and multiculturalism in the North American mainstream* (2nd ed.). New York: McGraw Hill.
- Kozulin, A. (1990). *Vygotsky's psychology: A biography of ideas*. Cambridge, MA: Harvard University Press.
- Kozulin, A., & Rand, Y. (Eds.). (2000). *Experience of Mediated Learning: An Impact of Feuerstein's Theory in Psychology and Education*. Elsevier Science.
- Kozulin, A., Gindis, B., Ageyev, V. S., & Miller, S. M. (Eds). (2003). *Vygotsky's Educational Theory in Cultural Context*. Cambridge: Cambridge University Press.
- Kozulin, A. (2000). Diversity of instrumental enrichment applications. In Kozulin, A. & Rand, Y. (Eds.), *Experience of mediated learning: An impact of Feuerstein's theory in education and psychology* (pp. 257-273). Oxford: Pergamon.
- Kristjánsson, K. (2006). *Justice and desert based emotions*. Aldershot: Ashgate.

- Lacan, J. (1999). *The Seminar of Jacques Lacan, Book VII, The Ethics of Psychoanalysis*. London: Routledge.
- Ladd, G. W. (1990). 'Having friends, keeping friends, making friends, and being liked by peers in the classroom: predictors of children's early school adjustment?', *Child Development*, 61: 321-333.
- Larson, R. W. (2000). Toward a psychology of positive youth development. *American Psychologist*, 55(1), -183.
- Laubschagne, A. (2003). Qualitative research – airy fairy or fundamental? *Qualitative Report* 8, 100 – 103.
- Lavin, D. E. (1965). *The Prediction of Academic Performance: A Theoretical Analysis and Review of Research*, Sage, New York.
- Lazarus, R., & Folkman, S. (1984). *Stress, appraisal and coping*. New York: Springer Publishing Company.
- Leary, T. (1957). *Interpersonal diagnosis of personality*. New York: Ronald Press.
- Leffert, N., Benson, P. L., Scales, P. C., Sharma, A. R., Drake, D. R., & Blyth, D. A. (1998). Developmental assets: Measurement and prediction of risk behaviors among adolescents. *Applied Developmental Science*, 2, 209-230.
- Lember, S. P. (2004). Implementation of the Olweus Bullying Prevention Program: Lessons Learned from the Field. In D. Espelage & S. Swearer (Eds.) *Bullying in American Schools: A Social-Ecological Perspective on Prevention and Intervention* (pp. 351-363). Mahwah, NJ: Lawrence Erlbaum.
- Leming, J. S. (1997). Research and practice in character education: A historical perspective. In A. Molnar (Ed.), *The construction of children's character* (pp. 31-44). Chicago: University of Illinois Press.
- Lerner, R. (2002). *Liberty: Thriving and Civic Engagement Among America's Youth*. CA: Sage Publications.
- Lerner, R., Cornelia, B. E., & Anderson, P. (2002). Positive youth development: thriving as the basis of personhood and civil society. *New directions for youth development* 2002;(95):11-33.
- Lester, D. F., Dinerstein, H. L., Werner, M. W., Harvey, P. M., Evans, N. J., II, & Brown, R. L. (1985). *ApJ*, 296, 565
- Lewin, K. (1936). *Principles of Topological Psychology* Translated by Hieder, F and Heider, G.; New York: McGraw-Hill.

- Lewin, K. (1943). Defining the "Field at a Given Time." *Psychological Review*. 50: 292-310. Republished in *Resolving Social Conflicts & Field Theory in Social Science*, Washington, D.C.: American Psychological Association, 1997.
- Lewin, K. (1946). Action research and minority problems. *Journal of Sociology*. Issues 2(4): 34-46
- Lewin, K. (1951). *Field Theory in Social Science*. New York: Harper.
- Lickona, T. (1976). Moral development and behavior: Theory, research, and social issues. NEW York: Holt, Rinehart and Winston
- Lickona, T. (1991). Educating for character: How our schools can teach respect and responsibility. New York: Bantam Books.
- Lind, E., & Tyler, T. (1988). "The social psychology of procedural justice", Plenum Press, New York.
- Lindsay, P. H., & Norman, D. A. (1972). *Human Information Processing; an Introduction to Psychology*, Academic, New York.
- Lindsay, P. H., & Norman, D. A. (1977). *Human Information Processing*. New York: Academic Press.
- Loeber, R., & Stouthamer-Loeber, M. (Eds.). (1986). *Family factors as correlates of juvenile conduct problems and delinquency* (Vol. 7). Chicago, IL: University of Chicago Press.
- Loehlin, J. C., McCrae, R. R., Costa, P. T., Jr., & John, O. P. (1998). Heritabilities of common and measure-specific components of the Big Five personality factors. *Journal of Research in Personality*. 1998; 32: 431-453.
- Lynn, R. (1957). 'Temperamental characteristics related to disparity of attainment in reading and arithmetic', *British Journal of Educational Psychology*, 27: 62-67.
- Lynn, R. (1959). 'Two personality characteristics related to academic achievement', *The British Journal of Educational Psychology*, 29: 213-216.
- Lynn, R., & Gordon, I. E. (1961). 'The relation of neuroticism and extraversion to intelligence and educational attainment', *The British Journal of Educational Psychology*, 31:194-203.
- Maccoby, E. E., & Martin, J. A. (1983). Socialization in the context of the family: Parent-child interaction. In P.H. Mussen (Ed.), *Handbook of child psychology: Vol. 4. Socialization, personality, and social development* (pp. 1-101). New York: Wiley.
- MacCoun, R. J. (1993). Drugs and the law: A psychological analysis of drug prohibition. *Psychological Bulletin*, 113, 497-512.

- Maher, N. (1995). *The guided construction of knowledge: Talk amongst teachers and learners*. Clevedon, Multilingual Matters.
- Malecki, C. K., Demaray, M. K., & Elliott, S. N. (2000). *The child and adolescent social support scale*. DeKalb, IL: Northern Illinois University.
- Malecki, C. K., & Elliott, S. N. (2002). Children's social behaviors as predictors of academic achievement: A longitudinal analysis. *School Psychology Quarterly*, *17*, 1-23.
- Maslow, A. (1954). *Motivation and personality*. New York: Harper.
- Maslow, A. (1971). *The farther reaches of human nature*. New York: Viking Press.
- Maxwell, G. (2006a). 'Restorative Justice for Young People in New Zealand: Lessons from Research' *Beyond Retribution: Advancing the Law and Order Debate*, Prison Fellowship of New Zealand National Conference, 12 - 14 May.
- Maxwell, G. (2006b). 'Commentary on Day Two: What Values and Concepts Underpin Restorative Justice?' *Beyond Retribution: Advancing the Law and Order Debate*, Prison Fellowship of New Zealand National Conference, 12 - 14 May.
- Maxwell, G., & Hayes, H. (2006). Restorative Justice Developments in the Pacific Region: A Comprehensive Survey. *Contemporary Justice Review*, *9*(2), 127-154.
- Mayer, M., & Leone, P. (1999). A structural analysis of school violence and disruption: implications for creating safer schools. *Education and Treatment of Children*, *22*(3), 333-56.
- McCloy, C. H. (1936). A factor analysis of personality traits to underlie character education, *Journal of Educational Psychology*, *27*: 375-387.
- McCrae, R. R., & Costa, P. T. (1985). Comparison of EPI and Psychoticism scales with measures of the five-factor model of personality. *Personality and Individual Differences*, *6*, 587-597.
- McCrae, R. R., & Costa, P. T., Jr. (1990). *Personality in adulthood*. New York: Guilford.
- McCrae, R. R., & Costa, P. T., Jr. (1996). Toward a new generation of personality theories: Theoretical contexts for the five-factor model. In J. S. Wiggins (Ed.), *The five-factor model of personality: Theoretical perspectives* (pp. 51-87). New York: Guilford.
- McCrae, R. R., & Costa, P. T., Jr. (2003). *Personality in adulthood: A five-factor theory perspective* (2nd ed.). New York: Guilford Press.
- McCrae, R. R., & John, O. P. (1992). An introduction to the five-factor model and its applications. *Journal of Personality*, *60*, 175-215.

- McDonald, J., & Moore, D. B. (2001). Community Conferencing as a Special Case of Conflict Transformation. in H. Strang and J. Braithwaite *Restorative justice and Civil Society*, Cambridge: University Press.
- McFadyen-Ketchum, S. A., Bates, J. A., Dodge, K. A., & Petit, G. S. (1996). Patterns of change in early childhood aggressive- disruptive behavior: Gender differences in predictions from early coercive and affectionate mother-child interactions. *Child Development*, 67, 2417-2433.
- McLaughlin, T., & Halstead, J. M. (1999). Education in character and virtue. In M. Halstead and T. McLaughlin (eds.), *Education in morality* (pp. 132-163). London: Routledge.
- McNeely, C. A., Nonnemaker, J. M., & Blum, R. W. (2002). Promoting School connectedness: Evidence from the National Longitudinal Study of Adolescent Health. *Journal of School Health*, 72(4).
- Meares, R. (2000). *Intimacy and Alienation: Memory, Trauma and Personal Being*. Brunner-Routledge.
- Meehan, M., & Pugnetti, L. (2000). Peripheral responses to a mental-stress inducing virtual environment experience. *International Conference on Disability, Virtual Reality and Associated Technologies*. Sardinia, Italy.
- Meltzer, H., Gatward, D., Corbin, T., Goodman, R., & Ford, T. (2000). The mental health of young people looked after by local authorities in Scotland. UK, National Statistics.
- Mental Health Foundation. (1999). *Psychotherapy for Child Sexual Abuse Update*.
- Merrell, C., Tymms, P., & Jones, P. (2007). *Changes in Children's Cognitive Development at the Start of School in England 2000-200*. Paper presented at the EARLI conference in Budapest.
- Messick, S. (1979). Potential uses of noncognitive measurement in education, *Journal of Educational Psychology*, 71: 281-292.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook*, 2nd edn. Thousand Oaks, Calif.: Sage.
- Miller, S. A., & Brownell, C. A. (1975). Peers, persuasion, and Piaget: Dyadic interaction between conservers and nonconservers. *Child Development*, 46, 992-997.
- Mills, C. W. (1959). *The sociological imagination*. New York: Oxford University Press.
- Phelps, E., & Damon, W. (1989). Problem solving with equals: peer cooperation as a context for learning mathematics and spatial concepts. *Journal of Educational Psychology*, 81, 639-646.
- Mills, C. W. (1960). *Listen, Yankee: The Revolution in Cuba*. New York: Ballantine Books.

- Mills, J. (1965). The effect of certainty on exposure to information prior to commitment. *Journal of Experimental Social Psychology*, 1, 348–355.
- Mills, J. (1968). Interest in supporting and discrepant information. In R. P. Abelson, E. Aronson, W. J. McGuire, T. M. Newcomb, M. J. Rosenberg, & P. H. Tannenbaum (Eds.), *Theories of Cognitive Consistency: A Sourcebook* (pp. 771–776). Chicago, IL: Rand-McNally.
- Mills, J. (1999). Improving the 1957 version of dissonance theory. In E. Harmon-Jones & J. Mills (Eds.), *Cognitive Dissonance: Progress on a Pivotal theory in Social Psychology* (pp. 25–42). Washington, DC: American Psychological Association.
- Minick, N. (1985). L.S. Vygotsky and Soviet activity theory; New perspectives on the relationship between mind and society. Unpublished doctoral dissertation, Northwestern University.
- Moffitt, T. E., & Caspi, A. (2001). Childhood predictors differentiate life-course persistent and adolescence-limited antisocial pathways, among males and females. *Development & Psychopathology*, 13, 355-375.
- Monro, J. (1999). Learning more about learning improves teacher effectiveness, *School Effectiveness and School Improvement*, 10(2), 151-171.
- Morris, A. and Maxwell, G. (2001). ‘Implementing Restorative Justice: what works’. In A. Morris and G. Maxwell (Eds.), *Restorative Justice for Juveniles: conferencing, mediation and circles*. (pp. 267-282). Portland, Oregon: Hart Publishing.
- Morrison, G. M., Laughlin, J., Smith, D., Ollansky, E., & Moore, R. (1992). Preferences for sources of social support of Hispanic male adolescents with mild learning handicaps. *Education & Training in Mental Retardation*, 27(2), 132–144.
- Morrison, G. M., Robertson, L., Laurie, B., & Kelly, J. (1997). Early risk and resiliency indicators of school and behavioral maladjustment: The role of students ratings. Unpublished manuscript.
- Morrison, B. E. (2001). Developing the schools capacity in the regulation of civil society. In H. Strang and J. Braithwaite (Eds.), *Restorative Justice and Civil Society*. Cambridge, UK: Cambridge University Press.
- Morrison, B. E. (2003). Regulating Safe School Communities: Being Responsive and Restorative. *Journal of Educational Administration*, 41:6, pp. 689–704.
- Morrison, B. E. (2005). *Building Safe School Communities: Being Responsive and Restorative*. Sydney: Federation Press.
- Morrison, B. E. (2006). ‘Bullying and victimisation in schools: Toward an integrated understanding of shame-management and identity-management’. *Journal of Social Issues*.

- Morrison, B. E. (2002). Bullying and victimisation in schools: A restorative justice approach. *Trends and Issues in Crime and Criminal Justice*, # 219 (February). Canberra, UK: Australian Institute of Criminology.
- Nagin, D. S. (1999). "Analyzing Developmental Trajectories: A Semi-Parametric, Group-Based Approach." *Psychological Methods* 4:139-77.
- Nagin, D., & Paternoster, R. (1991). The Preventive Effects of the Perceived Risk of Arrest: Testing an Expanded Conception of the Deterrence Doctrine, *Criminology* 29:561-588.
- National Center for Educational Statistics. (1988). *National Educational Longitudinal Study: 1988–1994*. Washington, DC: Office of Educational Research and Improvement.
- Neill, J. T., & Richards, G. E. (1998). Does outdoor education really work? A summary of recent meta-analyses. *Australian Journal of Outdoor Education*, 3(1), 2-9.
- Newman, K. S. (2004). *Rampage: The Social Roots of School Shootings*. New York: Basic Books.
- Noddington, N. (1995). *Philosophy of Education*, Colorado: Westview.
- Nonnemaker, J. M., & Blum, R. W. (2002). Promoting School Connectedness: Evidence for the National Longitudinal Study of Adolescent Health. *Journal of School Health*, 72(4), 138–146.
- Oakeshott, M. (1975). *On Human Conduct*, Oxford, England: Oxford University Press.
- Oakley, A. (2000). A historical perspective on the use of randomised trials in social science settings. *Crime and Delinquency* 46: 315-329.
- Olweus, D. (1993). *Bullying at school: What we know and what we can do*. Oxford: Blackwell.
- Oppenheimer, L. (1988). The nature of social action: Social competence versus social conformism. Schneider, B., Attili, G., Nadel, J., & Weissberg, R. P. (eds.). *Social competence in developmental perspective*, (pp. 41-70). Boston, MA: Kluwer Academic Publishers.
- Organisation for Economic Co-operation and Development (OECD). (2007). 'Education at a glance': www.oecd.org accessed 03/11/2008.
- Oswald, H., & Suss, K. U. (Eds.). (1994). *The influence of parents and peers on misconduct at school: Simultaneous and synergistic effects*. New York: Springer-Verlag.
- Owens, W. A., & Johnson, W. C. (1949). 'Some measured personality traits of collegiate underachievers', *Journal of Educational Psychology*, 40: 41-46.

Paris, S. G., & Byrnes, J. P. (1989). 'The constructivist approach to self-regulation and learning in the classroom'. In: Zimmerman, B. J. and Schunk, D. H. (Eds), *Self-regulated Learning and Academic Achievement: Theory, Research, and Practice*, pp. 169-200, Springer, New York.

Pasi, R. (2001). *Higher expectations: Promoting social emotional learning and academic achievement in your school*. New York: Teachers College Press.

Paternoster, R. (1987). The Deterrent Effect of the Perceived Certainty and Severity of Punishment: A Review of the Evidence and Issues, *Justice Quarterly*. Vol. 4 No. 2 pp. 173-218.

Paternoster, R. (1989). Decisions to Participate In and Desist From Four Types of Common Delinquency: Deterrence and the Rational Choice Perspective, *Law and Society Review* 23:501-534.

Paternoster, R., & Iovanni, L. (1989). The Labeling Perspective and Delinquency: An Elaboration of the Theory and Assessment of the Evidence, *Justice Quarterly* 6: 359-394.

Patterson, G. R., Reid, J., & Dishion, T. (1992). *Antisocial boys*. Eugene, OR: Castalia Press.

Patton, M. Q. (1990). *Qualitative Evaluation and Research Methods* (2nd ed.). Newbury Park, CA: Sage Publications, Inc.

Peabody, D., & Goldberg, L. R. (1989). 'Some determinants of factor structures from personality-trait descriptors', *Journal of Personality and Social Psychology*, 57: 552-567.

Pennington, B. (2002). *The Development of Psychopathology: Nature and Nurture*. New York, The Guilford Press.

Pennington, B. F., & Ozonoff, S. (1996). Executive functions and developmental psychopathology. *Journal of Child Psychology and Psychiatry*, 37, 51-87.

Perkins, D. D., & Zimmerman, M. A. (1995). Empowerment theory, research, and application. *American Journal of Community Psychology* 23: 569-579.

Peterson, C. (Ed.). (2004). Positive development: Realizing the potential of youth [Special Issue]. *The Annals of the American Academy of Political and Social Sciences*, 591.

Peterson, G. W., & Leigh, G. K. (1990). The family and social competence in adolescence. Gullotta, T. P., Adams, G. R., Montemayor, T. (eds.). *Developing social competency in adolescence*, (pp. 97-138). Newbury Park, CA: Sage Publications.

Phelps, E., & Damon, W. (1989). Problem solving with equals: Peer collaboration as a context for learning mathematics and spatial concepts. *Journal of Educational Psychology*, 81(4), 639-646.

- Piaget, J. (1951). *The origin of intelligence in children*. New York: International Universities Press.
- Piaget, J. (1954). *The construction of reality in the child*. New York: Basic Books.
- Piaget, J. (1977). *The language and thought of the child*. New York: Harcourt, Brace, & World.
- Pidgeon, N. F., & Henwood, K. L. (1996). Grounded theory: practical implementation. In J.T.E. Richardson (Ed.) *Handbook of Qualitative Research Methods for Psychology and the Social Sciences*, Leicester, British Psychological Society Books, p 86-101.
- Popay, J., Rogers, A., & Williams, G. (1998). 'Rationale and standards for the systematic review of qualitative literature in health services research.' *Qualitative health Research*, 8(3), 341-351.
- Pring, R. (2004). *Philosophy of Education: Aims, Theory, Common Sense and Research*, London: Continuum.
- Pulkinen, K. A., & Tremblay, R. E. (1992). Patterns of boys social adjustment in two cultures at different ages: A longitudinal perspective. *International Journal of Behavioral Development*, 15, 527-53.
- Ragsdale, C. E. (1932). *Modern Psychologies and Education*, MacMillan, New York.
- Reddrop, S. (1997). Outdoor programs for young offenders in detention : an overview. Hobart, Tas. : National Clearinghouse for Youth Studies.
- Rest, J. R. (1986). *Moral Development: Advances in Research and Theory*. New York, NY: Praeger.
- Rest, J., Narvaez, D., Bebeau, M. J., & Thomas, S. J. (1999). *Postconventional moral thinking: A neo-Kohlbergian approach*. New Jersey: Laurence Erlbaum.
- Riessman, C. K. (1993). *Narrative Analysis*. Qualitative Research Methods Series, No. 30. Newbury Park, CA: Sage.
- Rigby, K. (2002). *New Perspectives on Bullying*. London and Philadelphia: Jessica Kingsley Publishers.
- Rigby, K. (2004). Addressing bullying in schools: theoretical perspectives and their implications, *School Psychology International*, 23, 2.
- Rigby, K., & Slee, P. T. (1999). Suicidal ideation among adolescent school children, involvement in bully/victim problems and perceived low social support, *Suicide and Life-threatening Behavior*, 29, 119-130.
- Robinson, P. H., & Darley, J. M. (1995). *Justice, liability and blame: Community views and criminal laws*. Boulder, CO: Westview Press.

- Robson, C. (2002). *Real World Research*, 2nd edition, Blackwell, Oxford.
- Rocklin, T. (1994). Relation between Typical Intellectual Engagement and Openness: comment on Goff and Ackerman (1992), *Journal of Educational Psychology*, 86: 145-149.
- Rogers, C. R. (1961). *On becoming a person*. Boston: Houghton Mifflin.
- Rogoff, B. (1998). Cognition as a collaborative process, in D. Kuhn and R. S. Siegler (Eds.), *Handbook of Child Psychology*, Vol, 2, 5th edn. New York: John Wiley, pp. 679-744.
- Rogoff, B., & Werscht, J. (Eds.). (1984). *Children learning in the Zone of proximal development*. San Fransico: Jossey-Bass.
- Rollins, B., & Thomas, D. (1979). 'Parental Support, Power, and Control Techniques in the Socialization of Children.' In Wesley Burr, Reuben Hill, F. Ivan Nye, and Ira Reiss eds., *Contemporary Theories about the Family*. New York: Free Press.
- Ronke, K. (1989). *Silver bullets: A guide to initiative problems, adventure games and trust activities*. MA: Kendall/Hunt Publishing Company.
- Rutter, M. (1985). Resilience in the face of adversity: Protective factors and resistance to psychiatric disorder. *British Journal of psychiatry*, 147, 598–611.
- Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American Journal of Orthopsychiatry*, 57, 316-331.
- Rutter, M. (1990). Psychosocial resilience and protective mechanisms. In J. Rolf, A. S. Masten, D. Cicchetti, K. H. Nuechterlein & S. Weintraub (Eds.), *Risk and protective factors in the development of psychopathology* (pp. 181-214). Cambridge, UK: Cambridge University Press.
- Rutter, M., Andersen-Wood, L., & Beckett, C. (1999). Quasi-autistic patterns following severe early global privation. *Journal of Child Psychology and Psychiatry*, 40, 537-549.
- Ryan, R. M., Connell, J. P., & Deci, E. L. (1985). A Motivational Analysis of Self-Determination and Self-Regulation in Education. In *Research on Motivation in Education*, vol. 2, *The Classroom Milieu*, edited by C. Ames and R. Ames. Orlando, Fla.: Academic Press.
- Ryans, D. G. (1938). 'The meaning of persistence', *Journal of General Psychology*, 19: 79-96.
- Ryans, D. G. (1939). 'The measurement of persistence: an historical review', *Psychological Bulletin*, 36: 715-739.
- Sacks, J. (1997). *The Politics of Hope*, London: Jonathan Cape.

Salvador, D. S. (2003). 'Anger management and the development of prosocial behavior', *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 63 (8), 8 – 13.

Sameroff, A. J., Seifer, R., Baldwin, A., & Baldwin, C. (1993). Stability of Intelligence from Preschool to Adolescence: The Influence of Social and Family Risk Factors. *Child Development* 64:80–97.

Saucier, G., Hampson, S. E., & Goldberg, L. R. (2000). Cross-language studies of lexical personality factors. In S. E. Hampson (Ed.), *Advances in personality psychology*, Vol. 1. (pp. 1-36). Philadelphia, PA, US: Psychology Press.

Saulsman, L. M., & Page, A. C. (2004). The five-factor model and personality disorder empirical literature: A meta-analytic review. *Clinical Psychology Review*, 23, 1055-1085.

Savage, R. D. (1962). Personality factors and academic performance, *The British Journal of Educational Psychology*, 32: 251-253.

Savage, T. D. (1992). A review of Walker's research. In Eugene H. Casad (ed.), *Windows on bilingualism*, 89-115.

Schauble, L., Leinhardt, G., & Martin, L. (1997). A Framework for Organising a Cumulative Research Agenda in Informal Learning Contexts. *Journal of Museum Education*, 22, 3-8.

Scheff, T. J. (1994). *Bloody Revenge: Emotions, Nationalism and War*. Boulder, Colorado, USA: Westview Press.

Scheidel, T., & Crowell, L. (1979). *Discussing and Deciding*. New York: Macmillan

Scheier, M. F., & Carver, C. S. (1982). 'Self-consciousness, outcome expectancy, and persistence', *Journal of Research in Personality*, 16, 409-418.

Schinke, S. P., McAlister, A. L., Orlandi, M. A., & Botvin, G. J. (1990). The social environmental constructs of social competency. Gullotta, T. P., Adams, G. R., & Montemayor, R. (eds.). *Developing social competency in adolescence*, (pp. 28-42). Newbury Park, CA: Sage Publications.

Schmeck, R. R. (1988). 'Individual differences and learning strategies'. In: Weinstein, C.E., Goetz, E. T. and Alexander, P. A. (Eds), *Learning and Study Strategies: Issues in Assessment, Instruction, and Evaluation*, pp. 177-191, Academic, San Diego, CA.

Schwab-Stone, M., Ayers, T., Kaspro, W., Voyce, C., Barone, C., Shriver, T., & Weissberg, R. P. (1995). No Safe Haven: A Study of Violence Exposure in an Urban Community. *Journal of the American Academy of Child and Adolescent Psychiatry*, 34:1343-1352.

Schwartz, B. B., Neuman, Y., & Biezuner, S. (2000). Two wrongs may make a right...if they argue! *Cognition and Instruction*, 18(4), 461-494.

- Seale, C. (1999). Quality in qualitative research. *Qualitative Inquiry*, 5(4), 465-478.
- Seligman, M. E. P. (2002). *Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment*. New York: Free Press.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, -14.
- Sherman, L. (1993). 'Defiance, Deterrence, and Irrelevance: A Theory of the Criminal Sanction.' *Journal of Research in Crime and Delinquency* 30:445-73.
- Sherman, L. W., Gottfredson, D., MacKenzie, D., Reuter, P., Eck, J., & Bushway, B. (1997). Preventing crime: what works, what doesn't, what's promising. A report to the U.S. Congress. Washington, D.C.: U.S. Department of Justice.
- Sherman, L. W. (2003). Reason for emotion: Reinventing justice with theories, innovations and research. *Criminology*, 41, 1–37.
- Shiner, R. L. (1998). How shall we speak of children's personalities in middle childhood? A preliminary taxonomy. *Psychology Bulletin*, 124, 308–32.
- Shiner, R. L., & Caspi, A. (2003). Personality differences in childhood and adolescence: measurement, development, and consequences. *Journal of Child Psychology and Psychiatry*, 44, 2–32,
- Silverman, D. (2004). *Qualitative research: Theory, method and practice (2nd.Ed.)*. Thousand Oaks, CA: Sage Publications.
- Slavin, R. E. (1990). *Cooperative learning: Theory, research, and practice*. Englewood Cliffs, NJ:Prentice Hall.
- Slavin, R. E. (2002). Evidence-based education policies: Transforming educational practice and research. *Educational Researcher*, 31(7), 15-21.
- Smetana, J., & Braeges, J. (1990). The development of toddlers' moral and conventional judgements. *Merrill-Palmer Quarterly*, 36, 329–346.
- Smith, P. K., Pepler, D. K., & Rigby, K. (Eds.). (2004). *Bullying in schools: How successful can interventions be?* Cambridge, UK: Cambridge University Press.
- Snyder, C. R., Feldman, D. B., Shorey, H. S., & Rand, K. L. (2002). Hopeful choices: A school counselor's guide to hope theory. *Professional School Counseling*, 5(5), 298-307.
- Sockett, H. (Ed.). (1980). *Accountability in the English educational system*. London: Hodder and Stoughton.
- Sockett, H. (1988). Education and will: aspects of personal capability, *American Journal of Education*, 96: 195-214.

- Soldz, S., & Vaillant, G. E. (1999). The Big Five personality traits and the life course: A 45-year longitudinal study. *Journal of Research in Personality*, 33, 208-232.
- Solomon, D., Watson, M., Battistich, V., Schaps, E., & Delucchi, K. (1996). Creating classrooms that students experience as communities. *American Journal of Community Psychology*, 24, 719-748.
- Solomon, J., George, C., & DeJong, A. (1995). Children classified as controlling at age six: Evidence for disorganized representational strategies and aggression at home and at school. *Development and Psychopathology*, 7, 447-63.
- Solomon, D., Battistich, V., Kim, D., & Watson, W. (1997). Teacher practices associated with students' sense of the classroom as a community. *Social Psychology of Education* 1:235-67.
- Spearman, C. (1904). "General intelligence" objectively determined and measured. *American Journal of Psychology*, 15, 201-293.
- Spearman, C. (1927). *The Abilities of Man*, MacMillan, London.
- SPSS Reference Guide*. (1990). Chicago: SPSS Inc.
- Srivastava, S., John, O. P., Gosling, S. D., & Potter, J. (2003). Development of personality in early and middle adulthood: Set like plaster or persistent change? *Journal of Personality and Social Psychology*, 84, 1041-1053.
- Stattin, H., & Magnusson, D. (1996). Antisocial development: A holistic approach. *Development and Psychopathology*, 8, 617-645.
- Staub, E. (1979). *Positive social behavior and morality: Socialization and development* (Vol.2). New York: Academic Press.
- Stevens, R. J., & Slavin, R. E. (1995). 'The cooperative elementary school: effects on students' achievement, attitudes, and social relations', *American Educational Research Journal*, 32: 321-351.
- Strauss, A. (1987). *Qualitative research for social scientists*. Cambridge: Cambridge University Press.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Thousand Oaks, CA: Sage Publications.
- Sunshine, J., & Tyler, T. (2003a). 'Moral solidarity, identification with the community, and the importance of procedural justice: the police as a prototypical representative of a group's moral values', *Social Psychology Quarterly* 66(2): 153-165.
- Sunshine, J., & Tyler, T. (2003b). 'The role of procedural justice and legitimacy in shaping public support for policing', *Law and Society Review* 37(3): 513-548.

- Tappan, M. B. (1991a). Narrative, authorship, and the development of moral authority. In M. B. Tappan & M. J. Packer (Eds.), *Narrative and Storytelling: Implications for Understanding Moral Development*. San Francisco: Jossey-Bass.
- Tappan, M. B. (1991b). Texts and contexts. Language, culture, and the development of moral functioning. In L. T. Winegar & J. Valsiner (Eds.), *Children's Development within Social Contexts: Metatheoretical, Theoretical, and Methodological Issues*. Hillsdale, N.J.: Erlbaum.
- Tappan, M. B. (1997). Language, culture, and moral development: A Vygotskian perspective. *Developmental Review*, 17(5), 78–100.
- Tashakorri, A., & Teddlie, C. (1998). *Mixed Methodology: Combining qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.
- Tashakorri, A., & Teddlie, C. (2003). *Handbook of mixed methods in social and behavioral research*. Thousand Oaks, CA: Sage.
- Teasley, S. D., & Roschelle, J. (1993). Constructing a joint problem space: The computer as a tool for sharing knowledge. In S. P. Lajoie & S. J. Derry (Eds.), *The computer as a cognitive tool* (pp. 229-258). Hillsdale, NJ: Erlbaum.
- Tharp, R. G., & Gallimore, R. (1988). *Rousing minds to life: Teaching, learning, and schooling in social context*. Cambridge, MA: Cambridge University Press.
- Thomasgard, M., & Metz, W. (2004). Promoting child social-emotional growth in primary care settings: using a developmental approach, *Clinical Pediatrics*, 43(2), 119-27.
- Thurstone, L. L. (1934). The vectors of mind. *Psychological Review*, 41, 1-32.
- Topping, K. (2000). *Tutoring: Educational practices series, Booklet #5*. Available from <http://www.ibe.unesco.org>
- Tremblay, R. E., Loeber, R., Gagnon, C., Charlebois, P., Larivee, S., & LeBlanc, M. (1991). Disruptive boys with stable and unstable high fighting behavior patterns during junior elementary school. *Journal of Abnormal Child Psychology*, 19 (3), 285-300.
- Trinke, S., & Batholomew, K. (1997). 'Hierarchies of Attachment Relationships in Young Adulthood', *Journal of Social and Personal Relationships*, 14, (5) 603-625.
- Tseng, V., Chesir-Teran, D., Becker-Klein, R., Chan, M. L., Duran, V., Roberts, A., et al. (2002). Promotion of social change: A conceptual framework. *American Journal of Community Psychology*.
- Tudge, J. (1989). When cooperation leads to regression: Some negative consequences of sociocognitive conflict. *European Journal of Social Psychology*, 19, 123-138.
- Tyler, T. R. (1990). *Why people obey the law: Procedural Justice, Legitimacy and compliance*. Connecticut: Yale University Press.

- Tyler, T. R. (1997). Citizen discontent with legal procedures. *American Journal of Comparative Law*, 45, 869-902.
- Tyler, T. R. (1998). Public distrust of the law. *University of Cincinnati Law Review*, 66, 847-876.
- Tyler, T. R. (2003a). Procedural justice, legitimacy and the effective rule of law. In M. Tonry (ed), *Crime and justice: A review of research* (pp. 283-358). Illinois: University of Chicago Press.
- Tyler, T. R. (2004). Procedural justice, In A. Sarat (Ed), *The Blackwell companion to law and society* (pp. 435-452). MA: Blackwell.
- Tyler, T. R. (2006). Legitimacy and legitimation. *Annual Review of Psychology*, 57, 375-400.
- Tyler, T., & Blader, S. (2000). *Cooperation in Groups: Procedural Justice, Social Identity and Behavioral Engagement*. Philadelphia: Psychology Press.
- Tyler, T., & Blader, S. (2005). Can businesses effectively regulate employee conduct? The antecedents of rule following in work settings, *Academy of Management Journal*, Vol. 48 pp.1143 - 1158.
- Tyler, T. R., & Huo, Y. J. (2002). Trust in the law: encouraging public cooperation with the police and courts. York, NY: Russell Sage.
- Tyler, T. R., & Lind, E. A. (1992). *A Relational Model of Authority in Groups* In M. Zanna (Ed.), *Advances in Experimental Social Psychology*, New York, Academic Press.
- United Nations Children's Fund (UNICEF) Innocenti Research Centre. (2007). UNICEF, Child poverty in perspective: An overview of child well-being in rich countries, *Innocenti Report Card 7*, Florence.
- U.S. Department of Education. (2003). *About comprehensive school reform*. Retrieved March 18, 2007, from www.ed.gov/offices/OESE/compreform/2pager.html
- U.S. Department of Health and Human Services. (1999). *Mental health: A report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health.
- U.S. Department of Health and Human Services. (2001). *Trends in the well-being of America's children and youth, 2001*. Washington DC: U.S. Government Printing Office.
- U.S. Department of Health Services. (1999). *Mental health: A report of the surgeon general (executive summary)*. Rockville, MD: Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health.

- Valsiner, J. (ed). (1986). *The Individual Subject and Scientific Psychology*. NY: Plenum.
- Vincent, P. (1999a). *Developing Character in Students: A Primer*, 2nd ed., North Carolina: Character Development Publishing.
- Vincent, P. (1999b). *Promising Practices in Character Education, Volume II: More Success Stories From Around the Country*. North Carolina: Character Development Publishing.
- Vincent, P. (1999c). *Rules & Procedures for Character Education: The First Step Toward School Civility*. North Carolina: Character Development Publishing.
- Vygotsky, L. (1987). *Speech and Thinking*. In L.S. Vygotsky, *Collected Works, Vol 1* (pages 39-285). Reiber, R. and Carton, A. (eds), Minick, N., Transaltion. New York, Plenum. (originally publisher in 1934).
- Vygotsky, L. (1978). *Mind in Society*. Ed. Michael Cole et al. Cambridge, MA: Harvard University Press. (originally published in 1938)
- Walker, H. M., Colvin, G., & Ramsey, E. (1995). *Antisocial behavior in school: Strategies and best practices*: Pacific Grove, CA: Brooks/Cole.
- Walker, H. M., & Rankin, R. (1983). Assessing the behavioral expectations and demands of less restrictive settings. *School Psychology Review*, 12, 274–284.
- Wang, C. K. A. (1932). ‘A scale for measuring persistence’, *Journal of Social Psychology*, 3:79-90.
- Wang, M. C., Haertel, G. D., & Walberg, H. J. (Eds.). (1994). *Educational resilience in inner cities*. Hillsdale, NJ: Erlbaum.
- Waters, E., & Deane, K. (1985). Defining and assessing individual differences in attachment relationships: Q-methodology and the organization of behavior in infancy and early childhood. in I. Bretherton & E. Waters (Eds.), *Growing points of attachment theory and research, Monographs of the Society for Research in Child Development*, 50(1-2, Serial No. 209), 41-65.
- Webb, E. (1915a). Character and intelligence. *British Journal of Psychology Monographs* 3, 1-99.
- Webb, E. (1915b). *Character and Intelligence: An Attempt at an Exact Study of Character*, Cambridge, Cambridge Press.
- Webb, N. M., & Palincsar, A. S. (1996). Group processes in the classroom. In D. C. Berliner & R. C. Calfee, (Eds), *Handbook of educational psychology* (pp. 841-873). New York, NY, USA: Macmillan Library Reference USA; London, England UK: Prentice Hall International.

- Weber, M. (1968). *On charisma and institution building: Select papers*, ed. Eisenstadt, S. N. Chicago: University of Chicago Press.
- Wechsler, D. (1943). 'On-intellective factors in general intelligence', *Journal of Abnormal and Social Psychology*, 38: 101-103.
- Weissberg, R. P., Barton, H. A., & Shriver, T. P. (1997). The social competence promotion program for young adolescents. Albee, G. W., & Gullotta, T. P. (eds.). *Primary prevention works*, (pp. 268-290). Thousand Oaks, CA: Sage Publications.
- Wentzel, K. R. (1993). Motivation and achievement in early adolescence: The role of multiple classroom goals. *Journal of Early Adolescence*, 13 (1), 4-20.
- Wentzel, K. R., & Asher, S. R. (1995). The academic lives of neglected, rejected, popular, and controversial children. *Child Development*, 66, 754-763.
- Werner, E. E. (1987). Vulnerability and resiliency in children at risk for delinquency: A longitudinal study from birth to young adulthood. In J. D. Burchard & S. N. Burchard (Eds.), *Prevention of delinquent behavior* (pp. 16-43). Newbury Park, CA: Sage.
- Werner, E. E. (1989). High-risk children in young adulthood: Alongitudinal study from birth to 32 years. *American Journal of Orthopsychiatry*, 59(1), 72-81.
- Werner, E. E. (1982). *Vulnerable but invincible: Alongitudinal study of resilient children and youth*. New York: McGraw-Hill.
- Werner, E., & Smith, R. (1992). *Overcoming the odds: High risk children from birth to adulthood*. Ithaca, NY: Cornell University Press.
- Wertsch, J. V. (1985). *Culture, communication and culture: Vygotskian perspectives*. New York; Cambridge University Press.
- White, R. (2007). Adventure Based Learning Experiences, *Journal of the American Association of Special Educational Professionals*, Winter, 2007.
- White, R. & Dinos, S. (2010). Investigating the Impact of Mediated Learning Experiences on Cooperative Peer Communication During group Initiatives, *Journal of Experiential Education*, Vol 23 No 3: 226-238.
- White, R. & Warfa, N. (in press). Building Schools of Character, *Journal of Applied Social Psychology*, (in press).
- Williams, T., Kirst, M., & Haertel, E. (2005). Similar Students, Different Results: Why Do Some Schools Do Better? A large-scale survey of California elementary schools serving low-income students. Mountain View, CA: EdSource.
- Winne, P. H. (1995). Inherent details in self-regulated learning, *Educational Psychologist*, 30: 173-187.

- Winter, R. (1989). In O. Zuber-Skerritt (ed), *New Directions in Action Research*, pp.13-27. London: Falmer Press.
- Wittrock, M. C. (Ed). (1986). *Handbook of Research on Teaching*, 3rd Edn, MacMillan, New York.
- Wolfe, D. (1942). Factor analysis in the study of personality, *The Journal of Abnormal and Social Psychology*, 37: 393-397.
- Yang, K., & Bond, M. H. (1992). Exploring implicit personality theories with indigenous or imported constructs: The Chinese case. *Journal of Personality and Social Psychology*.
- Yardley, L. (2000). Dilemmas in qualitative health research. *Psychology and Health* 15, 215-228.
- Yin, R. (1994). *Case study research: Design and methods* (2nd ed.). Beverly Hills, CA: Sage Publishing.
- Yin, R. K. (2003). *Case study research, design and methods*, 3rd ed. Newbury Park: Sage Publication.
- Zehr, H. (1995). *Changes Lenses*. Scottsdale: Herald Press.
- Zimmerman, B. J. (1990). 'Self-regulated learning and academic achievement: an overview', *Educational Psychologist*, 25, 3-17.
- Zimmerman, M. A., & Arunkumar, R. (1994). Resiliency research: Implications for schools and policy. *Social Policy Report: Society for Research in Child Development*, 8(4), 1-17.
- Zins, J., Weissberg, R. P., Wang, M. C., & Walberg, H. J. (2004). *Building academic success on social and emotional learning*. NY: Teachers College Press.
- Zuckerman, M. Z., Kuhlman, D. M., & Camac, C. (1988). What lies beyond E and N? Factor analyses of scales believed to measure basic dimensions of personality, *Journal of Personality and Social Psychology*, 54: 96-107.

Appendix A

Mediated Adventure Based Learning (MABL)

Qualities of Outdoor Educational Programs

1. Promoting Human Strengths

- “Signature strengths”: Individual areas of proficiency that are important for young people to develop and nurture.

2. Promoting Psychological Wellness

- Fostering early attachments, age-appropriate competencies, adaptive environments, empowerment, and coping skills in young people.

3. Promoting Social Change

- A focus on systemic rather than individual change
- Continuing critical analysis of our programs
- Explicit acknowledgement of the values we are supporting
- Understanding the impact of the language we use
- Adapt programs based on the context of time, culture, and power differentials in society
- Encouragement of divergent thinking (multiple viewpoints rather than one)

4. Promoting Spirituality

- Spirituality can play an important role in the lives of young people
- Adults can encourage and support spiritual development in ways that are “non-punitive”

5. Promoting Initiative

- Make programs personally relevant to young people to foster intrinsic motivation
- Activities should be structured, goal-oriented, and voluntary
- Programs should be developmentally appropriate and sustained over time

6. Promoting Self-Discipline

- Involves setting up goals that young people value and find adequately challenging
- Young people need to be given the means to achieve their goals

7. Promoting Social Emotional Learning

- Young people have both internal and external factors that lead to success
- Social & Emotional self-regulation is correlated with better academic success & decreased violence

Strategies toward Using a Psychoeducational Approach within Outdoor Education

1. The above qualities of promotion- focused programs can be used as criteria to evaluate the effectiveness of existing Outdoor Education programs.
2. Any or all of the qualities listed above can be used as frameworks toward designing new outdoor educational programs.
3. Any new or existing outdoor education program must be feasible. This idea includes issues of affordability, portability and sustainability.
4. Outdoor Education can be incorporated into existing educational programs to increase and broaden the context of their effectiveness. Existing school based programs that involve intervention or prevention are useful, but not enough to make lasting change. Outdoor Educational approaches can help to improve such programs.

Program Procedure & Design

To begin this study school consent was sought by meeting with the Head Teacher, Pastoral Support Manager and Head of Year 8. A synopsis of the study was presented and discussed, providing a full detail of the study and its primary focus. Following school administrative consent a letter was sent home with all year 8 students apprising the

parents on the intent of the study and requesting return of letter if any parents did not want their child to participate. After allowing two weeks for parents to return letters of objection an assembly was conducted providing full details of the study. Following a short question and answer session those interested were asked to place their name on a card, if they consented to participate. The cards were collected and placed in two bags marked boys and girls, then randomly selected and assigned to either the control or experimental group. Once the participants were selected a letter was sent home to the parents for the purpose of gaining full consent. The three month multi-component Mediated Adventure Based Learning (MABL) programme was conducted in England. The first stage of this programme consisted of four two hours weekly sessions facilitated at the participating secondary school by the researcher and one outdoor education instructor. Within these sessions a constructivist approach was taken to develop trust and build effective communication. Typical activities included trust games, group challenges and group initiatives followed by debriefings. The second stage involved a five day residential component at the Outdoor Education Centre facilitated by the researcher and two outdoor education instructors. Activities in this stage entailed initiative tasks, cultural studies, obstacle course, cross-country hike, canoeing, high ropes course, wall climbing, all followed by feedback sessions and debriefings. The third stage consisted of a three and a half day wilderness trip to the Brecon Beacons of Wales guided by the researcher and four outdoor education instructors. The wilderness phase incorporated a backpacking trip over rugged terrain where the participants were responsible for all meal preparation, pitching camp and meeting all other group needs. The trip concluded with a group discussion and debriefing facilitated by the outdoor education instructors.

Self Concept was measured one week before the start of the Adventure Based Learning Experience program and one week after the end of the program. Furthermore, a qualitative corpus of data was collected and coded to develop an understanding of trust and group cohesion. This was facilitated by recording and videotaping all discussions and interviews. These were then coded and analysed using the processes as discussed in Chapter 4. Semi-structured interviews were conducted at the start, and throughout the programme, including one parent and child interview one month after the completion of the MABL programme. These interviews were recorded and coded. Observations were conducted throughout all aspects of the project; all notes and video tapes were coded for analysis.

Appendix B

Mediated Activity-based Cooperative Learning (MABCL)

Programme Procedure & Design

This project involved five one-hour sessions over a five day week. The first session introduced the participants to activity based problem solving tasks. During this session data was collected in relationship to on and off task communication to gain baseline data on the participants' ability to communicate effectively within a classroom size group ($n > 20$) for pair collaborative problem solving tasks. Following this first session the students participated in 3 one hour mediated learning sessions over the following three days. These sessions focused on building trust, and effective communication and group cohesion. After participating in this mediated learning experience the participants were once again provided activity based problem solving tasks and they're on and off task communication was coded. The primary focus of this design is to compare on and off task communication during problem solving tasks within a peer collaborative setting before and after pupils participated in a mediated learning experience focused on developing effective peer collaboration.

Materials

The primary materials for this project included a revised coding scheme and a variety of "props" to carry out the activity based problem solving tasks. These included climbing ropes and webbing, blocks, balls, balloons and hoola-hoops. These items were selected in relationship to providing novel activity based problem solving tasks. These tasks being selected because of their unfamiliarity in relationship to the pupils' previous experiences in peer collaborative problem-solving tasks. The activity based tasks were selected for this project to offset any confounding properties related to pre-test circumstances. Furthermore, the problem solving tasks selected could not be completed individually and which required a high level of lateral thinking and communication.

Procedure

The first of the project consisted of school consent. This involved a meeting, conducted by the researcher, with the head teacher, pastoral support manager and head of Year 8. A synopsis of the project was presented and discussed. Providing a full detail what the project consists of and its primary focus. Following school administrative consent a letter was sent home with all year 8 students apprising the parents on the intent of the project and requesting return of letter if any parents did not want their child to participate. After allowing two weeks for parents to return letters of objection an assembly for Year 8 students was conducted in which all students were provided with full details of the

project. Following a short question and answering session the researcher asked those interested to place their name on a card. These cards were then collected and placed in a bag. The cards were then randomly selected and assigned to group one, (e.g. pilot project participants) and group two, (e.g. Project participants). Once the participants were selected another letter was sent home to the parents of these children for the purpose of gaining full consent for their participation.

The first day of the project was spent with the pilot project group. This consisted of a one hour session, facilitated by an outdoor education instructor, involving the group working together on an activity based problem-solving task known as the 'electric fence'. This task consists of a piece of rope tied between two points in described as either an electric fence or a laser beam. The objective is to move all the participants from one side of the group to the other side without touching or going under the rope. During this task the participants were observed by the researcher and another outdoor education instructor who had been trained on how to use the coding scheme. The communication was coded using the pre-planned coding scheme as previously discussed. This session provided the necessary data to further develop and refine a coding scheme which is much easier to use during observation.

Following the pilot the control group and experimental group participants were brought together to explain the process and schedule of the study. Following this 30 minute brief and addressing any final concerns of the participants the project began with a one hour activity based problem solving activity session facilitated by one outdoor education instructor. The first task introduced was the electric fence. This was chosen to gain baseline information compared to the pilot project group and to check the ease of implementing the redefine coding scheme. In addition, observation of on and off task communication was conducted by the researcher and the outdoor education instructor who had previously been trained for coding purposes.

During the next three days the participants were brought together in the afternoon for one hour mediated learning experience involving trust activities, effective communication and group cohesion exercises. The activities were chosen based on the researcher years of experience in delivering outdoor leadership programming. The first day involved a scaffolding approach to the construction of trust. the trust activities therefore were delivered in a step-by-step approach to enhance first one to one trust followed by the development of a whole group trust. The second day of the mediated learning experience consisted of developing effective communication. During this session the students were given tasks such as: hoola-hoop pass; Elephants, Cows and Giraffes; Speed Pass and Human Knot During these exercises the students were provided with assistance by the outdoor education instructor when communication was breaking down or the participants encounter roadblocks in task progress for completion. In addition, at the end of each activity the students were guided through a dialogue session by the outdoor educator to debrief the activity process and to develop understanding and avenues for the transference of activity gain knowledge from one experience to the next.

On the third day of the mediated learning experience the session focused on redressing trust and developing effective communication. This session was also facilitated by the outdoor education instructor and introduced to students to novel activity based problem-solving task which consisted of; levitation, blind man's bluff trust activities followed by

the spider's web group challenge. Once again the participants were guided through these activities and provided with mediation when difficulties in trust or communication arose. Furthermore, following each activities a dialogical approach was followed to debrief activity and promote the transference of gained knowledge for classroom purposes.

On the final day of the project the participants participated in a non-mediated peer collaborative problem solving task session. In other words, the participants were provided with a briefing of the task at hand but provided no further assistance or directions during the activity. The first activity consisted of the 'toxic waste' task. This task consists of a bucket of water placed in the middle of the circle at one end of the gymnasium and the object is to use the ropes provided to transport the bucket to the other end of the gymnasium and place it in the middle of a circle. During this task the communication of the participants was coded following the pre-set coding scheme. Upon completion of this task the students participated in a task known as the 'nitro crossing'. This activity consists of a bucket of water and a swing rope. The object of this task is to transport the bucket of water from one side of a 'gorge' to the other side without spilling a drop of 'nitro'. Once again during this activity the participants on and off task communication was coded by the researcher and the outdoor education instructors.

Group Initiatives that can be used during a Mediated Activity-based Cooperative Learning Experience

TRUST GAMES

I) Blindfold Trust Run

Group of 10-12 people stand in 2 lines about 8' apart with 6' between people. Everyone holds their hands up to spot. The last 2 people are "stoppers".

The performer stands blindfolded at the start, and with hands up, tries to run between the lines.

The "stoppers" touch (catch) them at the waist to finish. Side spotters push from the shoulders or move away from the performer while protecting their passage.

II) Rush Hour Traffic

This is a great adaptation to the traditional "trust walk!"

Everyone partners up and has one blindfold. The person who is the car puts on the blindfold and holds hands up as "bumpers" right in front of shoulders, thumbs almost touching. The driver stands behind the car, placing hands on their shoulders.

The facilitator plays policeman calling for “traffic rolling,” “slow for school area,” “red light,” “freeways,” etc. The drivers respond by steering their cars through the other traffic without touching or bumping anyone else. After awhile groups change roles.

“Beep beeping” is encouraged. (This is an excellent tool to relocate the group!)

NOTE: Special emphasis should be placed on caring for your car. Avoid holes, curbs, rocks, roots as well as other people.

III) Broom Twizzle

Description

10-12 people stand in a circle. One volunteer goes in the centre, holds the broom over head and spins 15 times to the group’s counting while watching the broom head. After 15 turns the broom is placed on the ground and the participant attempts to step over it.

NOTE: The people in the circle must SPOT carefully. Everyone holds onto the performer for 10-15 seconds at the conclusion.

Requirements

1 thatched broom or foam noodle

IV) Who Was My Guide?

Another great trust walk variation!

The group divides in half. One half is blindfolded. The other half chooses a partner who is blindfolded, but may not talk to them at any time.

They take their blindfolded person on a trust walk by allowing them to hold their arm. Only the blindfolded person may talk - the guide must stay silent.

At the end of the walk, the guide returns to their group. The blindfolded person then removes the blindfold and the roles are reversed.

The guides then choose a blindfolded partner. Before taking off blindfolds, they separate.

At the end of the game each person tries to identify their guide and say how they knew!!

V) Cookie Machine

The group forms 2 lines shoulder to shoulder, facing each other, and about 2 feet apart. Everyone lifts their arms out in front of them, alternating arms with people in the other line.

The first person then runs and dives on to the bed of hands. The group then bounces and flips (rolls) the person to the end groaning "cookie-cookie."

Assistant helps the person off the line.

Group Challenges

VI) Thumbs Up, Down, Middle

This activity is a very valuable way to encourage participation in the debriefing part of your teambuilding activity for a couple of reasons:

It allows participants to see how opinions of a particular experience vary greatly in the group.

It provides the facilitator with an opportunity to focus the group discussion on a particular topic.

- 1) Have the group stand in a circle, facing each other.
- 2) Instruct them to place one hand behind their backs.
- 3) On the count of three, they will make a "Thumbs Up", "Thumbs Down", or "Thumb in the Middle" sign with their hand.

In this example, the signs represent "how the group worked together as a whole."

Thumbs up means the group functioned perfectly: took time plan, listened to everyone's ideas, no one argued, and everyone participated in a positive fashion, etc.

Thumbs down means that the group did not function well as a team at all: there were lots of arguments, no planning, inappropriate communication, etc.

Thumbs in the Middle means that the group did well, but there is room for improvement.

- 4) Once you explain the "thumbs" scale, count to three, and have everyone present their

thumbs and keep them in front of their bodies.

5) Ask the group to go around the circle and discuss one specific example why they chose the way they did.

Communication Initiatives

I) Hula Hoop Pass

Description

Have the group form a circle holding hands. Ask two people to let go of their grip long enough for them to place their hands through a hula hoop before rejoining them.

The team task is to pass the hula hoop around the circle in a specified direction until it returns to the starting point.

Another way to play is to use two hoops and have them go around the circle in opposite directions.

You can also use loops of rope (about hula hoop size).

Requirements

Hula hoop

Objective

To pass a hula hoop along a circle of people.

II) Human Knot

Description

The group stands in a circle shoulder to shoulder. At this point, you may wish to hand each participant a buddy rope (they will help to keep heads from bumping each other). Each participant will reach across the circle and hold hands, or the ends of a buddy rope, with two different people (one with the right hand and one with the left). The group task is to get free of the knot without letting go of each other's hands.

Requirements

Optional: Buddy ropes (lengths of rope about a foot long)

Objective

Building Teamwork Strategies

III) Elephants, Cows and Giraffes

Get into a circle with one person in the centre. This person will then call out elephant, cow, or giraffe. The person that is pointed out, as well as the person on each side of him/her will have to coordinate their actions and make each animal as described.

Elephant: centre will stick both hands in front of their nose in a cylinder to form a trunk. On each side of them they will form the ears by leaning over placing one hand by the centre person's hips and the other by their head.

Cow: centre person will enter lock their fingers and turn them upside down so that the thumbs point down forming udders. The outside people will then milk the udders.

Giraffes: centre places their hands directly over their head and together forming the neck, while the outside two arch their backs touching the middle person's toes to form the legs.

If they do not get into this position by the count of 5 by the pointer then the last to get into position will become the centre person.

IV) Speed Pass

Description

The goal of this activity is to give a group an opportunity to work together to achieve a simple goal.

The task is to pass an object so that each member of the group, one at a time, physically touches it.

Allow for group planning time. This can be a timed event.

Requirements

A tennis ball or any object that can easily be passed by hand.

Objective

To see how fast a group can get everyone to touch the tennis ball.

Problem Solving Tasks / Group Challenges

I) Toxic Waste

This is a popular, engaging small group initiative activity which always "works", providing a rich teamwork challenge for about 30-45 minutes. Involves thinking, imagination, action, fantasy, risk and an attractive solution. The challenge is to move the toxic waste contents to the neutralization container using minimal equipment and maintaining a safe distance within a time limit.

Can be done indoors or outdoors; outdoors is more dramatic because water can be used as the "toxic waste" instead of balls.

Set-Up

Use the rope to create a circle at least 8 ft in diameter on the ground to represent the toxic waste radiation zone. The larger the radiation zone, the more difficult the activity.

Place the small bucket in the centre of the radiation zone and fill it with water or balls to represent the toxic waste.

Place the neutralization bucket approximately 30 to 50 feet away. The greater the distance, the more difficult the activity.

Put all other equipment (i.e., bungee, cords, and red herring objects (optional)) in a pile near the rope circle.

Directions

The challenge is for the group to work out how to transfer the toxic waste from the small bucket into the large bucket where it will be "neutralized", using only the equipment provided and within a time frame. The waste will blow up and destroy the world after 20 minutes if it is not neutralized.

Anyone who ventures into the radiation zone will suffer injury and possibly even death, and spillage will create partial death and destruction. Therefore, the group should aim to save the world and do so without injury to any group members.

The rope circle represents the radiation zone emanating from the toxic waste in the bucket. Emphasize that everyone must maintain a distance (circle radius) from the toxic waste wherever it goes, otherwise they will suffer severe injury, such as loss of a limb or even death.

Give the group some planning time with no action e.g. 5 mins, then start the clock and indicate its time for action, e.g., 15 or 20 mins.

Facilitator Notes

Toxic Waste is not an easy exercise and most groups will benefit from some coaching along the way.

The solution involves attaching the cords to the bungee loop, then guiding the bungee with the strings to sit around and grab the toxic waste bucket. Then with everyone pulling on their cord and with good coordination and care, the toxic waste bucket can be lifted, moved and tipped into the empty neutralizing bucket.

If someone breaches the toxic waste zone, indicated by the circle, enforce an appropriate penalty e.g., loss of limbs (hand behind back) or function (e.g., blindfolds if a head enters the zone) that lasts for the rest of the game. If a whole person enters the zone, they die and must then sit out for the rest of the activity.

If the group struggles to work out what to do, freeze the action and help them discuss.

If the group spills the waste entirely, make a big deal about catastrophic failure (everyone dies), invite them to discuss what went wrong and how they can do better, then refill the container and let them have another go.

Ideas for varying the level difficulty of the activity:

- Adjust the time frame

- Adjust distance between the buckets

- Include obstacles between the buckets

- Include red herring objects in available equipment

Processing Ideas

There are invariably plenty of key communications and decisions during the exercise that provide for fruitful debriefing.

The exercise will tend to naturally expose processes and issues related to many aspects of teamwork, including cooperation, communication, trust, empowerment, risk-taking, support, problem-solving, decision-making, and leadership.

Can be videoed for subsequent analysis and debriefing.

How successful was the group? e.g. consider:

- How long did it take?

- Was there any spillage?

Were there any injuries? (Often in the euphoria of finishing participants will overlook their errors and seem unconcerned about injuries and deaths caused by carelessness along the way. Make sure there is an objective evaluation of performance - it is rarely 'perfect'.)

How well did the group cope with this challenge? (e.g., out of 10?)

What was the initial reaction of the group?

What skills did it take for the group to be successful?

What would an outside observer have seen as the strengths and weaknesses of the group?

How did the group come up with its best ideas?

What did each group member learn about him/her self as a group member?

What lessons did the group learn from this exercise which could be applied to future situations?

Variations

Can be used a staff selection or group assessment exercise.

Can be used with large groups with multiple kits and divided into small groups.

The toxic waste bucket can be used upside down, with a ball balanced on top.

The activity can be framed in many different ways, e.g., instead of waste, it could be presented as a desirable substance, such as a life saving serum which needs to be carefully transported

Divide the group into leaders and workers. Leaders can talk but not touch equipment. Workers cannot talk but can touch equipment.

For added drama, the toxic waste can be floated on a platform in a swimming pool

A chemical reaction can be created by putting baking soda in the neutralization container and vinegar in the toxic waste container. When combined, they froth.

Object Retrieval is a variation in which a group needs to retrieve a heavy object from the middle of a circle, without touching the ground in the surrounding circle

All Aboard!

This activity requires working together in close physical proximity in order to solve a practical, physical problem. It tends to emphasize group communication,

cooperation, patience and problem solving strategy, as well as issues related to physical self and physical proximity.

The activity can be run in many different ways.

Basic method: Ask the whole group to try to fit inside a small area which can be marked by:

Circle of rope, or tarpaulin or blanket

When the group succeeds, decrease the area (e.g., changing platforms, shrinking the circle, or folding the tarp) and challenge the group again. How far can the group go?

Cautions: Obviously people are going to need to feel physically comfortable in order to get physically close and be supportive of one another. So make sure people are warmed up and preferably have removed excessive jewellery, watches, etc.

Variations

Tarp Flip Over: With a group standing on a tarp, challenge them to turn the tarp over without anyone touching the ground in the process. Can add a time limit e.g., 15 minutes for this activity.

Framing, e.g., "The group must work together to ensure everyone manages to get aboard the new management structure. As time goes by, the team must become closer to deal with shrinking margins and increased competition."

Name game: The activity can be used as a name game by setting the rule that every communication to another person must include that person's name.

Equipment

10ft of rope for a circle or a tarpaulin

Team building variation of Tarp Flip Over: The group discusses the present state of the team and a future desired state for the team. One side of the tarp represents the present state, the other side the future.

II) Mine Field

A popular, engaging game involving communication and trust. Works for groups of various types and sizes. Moderately complex. The task is very flexible.

The goal is to traverse, with eyes closed or blindfolded, a designated area full of obstacles without touching any obstacle or any person.

Select a "playing field". Go outside, if possible. But can be done inside, even in rooms with fixed furniture (which can become objects to be avoided).

Establish a concentrating and caring tone for this activity. Trust exercises require a serious atmosphere to help develop a genuine sense of trust and safety.

Participants can begin by trying to cross the field by themselves. In a second round, participants can then ask someone else to help them traverse the field by "talking" them through the field.

Participants operate in pairs. Consider how the pairs are formed - its a chance to work on relationships. One person is blind-folded (or keeps eyes closed) and (optional) cannot talk. The other person can see and talk, but cannot enter the field or touch the person.

The challenge is for each blind-folded person to walk from one side of the field to the other, avoiding the mines, by listening to the verbal instructions of their partners.

Be wary of blindfolded people bumping into each other. The instructor(s) can float around the playing area to help prevent collisions.

Decide on the penalty for hitting a mine. It could be a restart (serious consequence) or time penalty or simply a count of hits, but without penalty.

Allow participants a short period (e.g., 3 minutes) of planning time to decide on their communication commands. It can help participants if you suggest that they each develop a unique communication system. When participants swap roles, give participants some review and planning time to refine their communication method.

Allow participants to swap over and even have several attempts, until a real, satisfied sense of skill and competence in being able to guide a partner through a minefield develops.

The activity can be conducted one pair at a time (e.g., in a therapeutic situation), or with all pairs at once (creates a more demanding exercise due to the extra noise/confusion).

Can be conducted as a competitive task - e.g., which pair is the quickest or has the fewest hits?

The facilitator plays an important role in creating an optimal level of challenge, e.g., considers introducing more items or removing items if it seems too easy or too hard. Also consider coaching participants with communication methods (e.g., for younger students, hint that they could benefit from coming up with clear commands for stop, forward, left, right, etc.).

Be cautious about blind-folding people - it can provoke trust and care issues and trigger post-traumatic reactions. Minimize this risk by sequencing Mine Field within a longer program involving other get-to-know-you and trust building activities before Mine Field.

Variations

Minefield in a Circle: Blindfolded people start on the outside of a large rope circle, go into middle, get an item ("treasure", e.g., a small ball or bean bag), then return to the outside; continue to see who can get the most objects within a time period).

Metaphorical Framing: Some set ups for minefield get very elaborate and metaphor-rich, e.g., hanging objects which metaphorically reflect the participants' background and/or issues. For example, items which represent drugs, peer pressure, talking with parents about the problem, etc. have been used in a family adventure therapy program (Gillis & Simpson, 1994).

Processing Ideas

How much did you trust your partner (out of 10) at the start?

How much did you trust your partner (out of 10) at the end?

What is the difference between going alone and being guided by another?

What ingredients are needed when trusting and working with someone else?

What did your partner do to help you feel safe and secure?

What could your partner have done to help make you feel more safe/secure?

What communication strategies worked best?

III) The Electric Fence

Equipment: Rope or Webbing

Object: To transport a group over an "electrified" wire or fence using only themselves and a conductive beam.

Rules: If a participant touches the fence (rope) he is "dead" and must attempt the crossing again. Any person touching the individual as he touches the wire must also return for another crossing. If the conductive beam touches the wire all those in contact with that beam are dead and must attempt another crossing. An electric field extends from the wire to the ground and cannot be penetrated. The trees or other supports which hold up the "wire" cannot be safely touched and so cannot be of assistance in the problem.

Caution: Be careful not to let the more enthusiastic people literally throw other participants 7'- 8' in the air over the rope.

IV) NITRO CROSSING

Nitro crossing is a mind game. The object of nitro crossing is to transport a group and bucket of nitro (water) across an open area using a swing rope. There are a few rules for Nitro Crossing.

Players must swing over a "trip wire" at the start and finish of the opening area without making either obstacle fall off. If either obstacle falls the group must go back and start again.

No knots may be tied in the rope. If help is needed for less adapt students some may be allowed to use the loop.

The Nitro must be transported in a way so that not a drop of water is spilled. If any is spilled the entire group must start over.

The players are allowed to only use themselves and their clothing to get the swing rope.

The players may not touch ground in between the trip. The game may also be played indoors.

Coding Scheme for Peer Collaboration on Problem Solving Tasks used during the MABCL investigation.

CODE	DEFINITION	EXAMPLES
<i>On-Task Active (OA)</i>	Making a task related contribution	(a) Asking/commenting on problem solving task (b) Initiating/participating in problem solving discussion (c) Working with others to solve task
	OR	
	Smiling or laughing in response to an on-task conversation	
<i>On-Task Passive (OP)</i>	non-verbal related activities	(a) physically assisting (b) non-verbal agreement/support (e.g. head shaking, or other supportive body language)
<i>Off-Task Active (XA)</i>	Disruption to group related activities	(a) Interfering with others on-task work (b) Making remarks unrelated to class topic (e.g. jokes) (c) Smiling or laughing in response to off-task conversation
<i>Off-Task Passive (XP)</i>	non-verbal related activities	(a) non supportive body language (b) Looking away group (or person speaking on problem solving topic) (c) Looking at peer speaking or working on something that is off-task

This coding scheme can be used in real time or in conjunction with Video recordings.

Appendix C

Building Schools of Character (BSC)

Character Education

Character education in the classroom and around the school

In understanding the Building Schools of Character programme's character education component it is necessary to understand the importance of enculturating children into a commitment to pro-social standards of conduct. As discussed in the Chapter 3 the voluntary commitment to a belief, value or ideal is a necessary condition/mechanism for dissonance and its eventual reduction to occur. The primary aspect of the building schools of character implementation is to achieve this commitment from the students of the school before the subsequent components (i.e. Restorative Processes and School Support Centres) are implemented. Therefore, the BSC programme espouses that this may best be achieved by facilitating a highly emotive and powerful use of dialogue to discuss the characteristics of the heroes in contrast to the characteristics of villains. This dialogue is engaged within the discourse of heroes and villains and can use entire films, film clips, short stories or books to introduce the students to the characteristics associated with being a hero (i.e. a person who is respectful, responsible, trustworthy, caring, fair and honest) and then contrasting these with the characteristics of the villain (i.e. disrespectful, irresponsible, untrustworthy, dishonest, unfair and/or and caring). In developing this program I have found that by using high impact film clips to support the depiction of the hero ideals in contrast to the self-serving nature of the villain a highly evocative discussion can elicit a volunteer commitment from students to be of good character (i.e. a hero) and enact behaviour associated with this commitment.

One particular film I have found to be effective in facilitating this dialogue and eventual commitment is the first Harry Potter film. Moreover, this appears to be a commonly known film with the majority, if not all, children eight years and older are familiar with and therefore the entire film does not need to be revisited for the clips to be effective. This allows short clips to be used and still having a class that understands the outcome of the film. For younger children I found that Dr. Seuss' Horton hears a Who (the original cartoon version) is effective in eliciting the commitment to be responsible and respectful to others even when it is not a popular thing to do. Other films that I have found to be effective in this approach are; the Grinch stole Christmas, White Squall, Lord of the Flies (the original black and white version), and the first Spider-Man movie. These are just a few movies that could be used and I would suggest that facilitators find movies they are most connected with as this genuine connection to what one is teaching increases the engagement of the learners and allows the facilitator to bring their own personality to the learning environment. Of course it needs to be remembered that movies should be chosen based on age/developmental appropriateness so that children will be able to connect with the message and not be overwhelmed by content they cannot engage with in an effective manner. Furthermore, if familiar movies are chosen the whole movie does not need to be watched prior to the character education lesson. In my research experiences it has been

seen to be most effective in facilitating the discussion if short clips (i.e. 30-180 seconds) are used judiciously throughout the mediated dialogue to emphasize each character trait when the teacher is seeking a voluntary commitment from the pupils to embrace the ideals of pro-social standards of conduct.

for example, to shift the students reliance on incentives to promote engaging in pro-social behaviour I use the scene in Harry Potter where Dudley comes bounding down and stomping on the stairs yelling "Wake up Harry" and then entering the kitchen demanding to know how many birthday presents there are for him. This has been seen to be an ideal short scene that highlights how often overindulgence and bribery does not promote respectful, caring attitudes. This scene also highlights a sense of self-centeredness that results in demands for more and more. These demands for more and more tangible rewards become the normal attitude of overindulged or spoiled children. In addition, when Dudley begins to show a tendency toward tantrums for not receiving more presents than he did the previous year the parents respond in a fearful way. This leads them to offer an even further reward for negative self-centred behaviour by bribing him further with the trip to the zoo. I feel this is an effective short clip not only for the pupils but for helping the teachers understand how rewards can often designate into bribery that result in increased anti-social behaviour until the tangible reward is increased, which leads to an ever broadening demand for more. This scene leads to a discussion based around why we do the right thing because it's the right thing do and that negative actions should never be rewarded with positive consequences as they undermine the development of respectful and responsible behaviour. Others scenes within this movie which are beneficial in introducing and discussing the traits of respect, responsibility, trustworthiness, honesty, and caring and fairness include; the scene when Harry and Ron first arrive at Hogwarts and Meet Malfoi on the stairs. This scene can be used to discuss respect and being a good judge of character by choosing friends who will also be a hero when we need support. Another scene that has shown to be effective to discuss bullying and supporting your friends when they're in trouble is the scene where the troll is in the bathroom and is threatening Harminy. This scene is ideal for discussing bullying and the importance of standing together to confront and eliminate anti-social behaviour within the school community. In furthering the discussion about friendship and how the commitment to pro social standards of conduct underpin the development of supportive and caring relationships I use the following two scenes; the first highlights the importance of choosing the right friends because you don't you may be left alone when you are in most need and the second scene highlights the altruism of true and trustworthy friendship. The first seen involves Harry, Ron, Harminy and Malfoi meeting Haggrad at night to investigate who/what is killing the unicorns in the forest. Harry, Malfoi and Fang (Haggrad's dog, referred to by Haggrad as a 'big coward') go into the forest. During this adventure harry, Malfoi and Fang come across something drinking the blood of a Unicorn. First Fang runs away and then Malfoi runs away leaving Harry alone to face the evil thing drinking the blood of a unicorn., I use this scene to once again discuss the importance of knowing who your real friends are and why it is important to choose the right sort (i.e. responsible and trustworthy) of people to be your friend. I also use this opportunity to remind the class that Fang was referred to earlier as a coward and I ask them what fang did in the scene. Of course they say he ran away and then I discuss who else ran away. The conversation continues to discuss how it is important to know who

will help you stay safe when there are bullies around and how important it is to have trustworthy, caring and honest friends in time of need. Also this scene shows another creature coming to Harry's aid and this provides the opportunity to discuss that it is ok to be afraid and accepting help from others is the brave and responsible thing to do when you feel threatened. The second scene I use to continue the discussion on the importance of committed and trustworthy friendship is the scene near the end of the movie where Harry, Ron and Hermione are trying to get through the maze. They must play wizard's chess and Ron sacrifices himself so Harry can get through. This is ideal for contrasting the two scenes and depicting the; we can accomplish much more when we are committed to work together. The above is an example of how one might facilitate and mediate a learning experience designed for the pupils to vicariously experience the role of heroes, villains, cowards, and bullies. The focus being on the facilitator mediating the discussions so that pupils can fully engage with the meaning and definitions of being respectful, responsible, trustworthy, fair, caring and honest people who can establish supportive and caring friendships. When this process is delivered in a powerful and thought-provoking way the facilitator can then solicit the commitment from the class to live up to these valued pro social character traits. It is this volunteer commitment that is seen as a crucial factor in the successful implementation of all components of the Building Schools of Character programme. Cognitive dissonance to promote the shift in attitude from antisocial to pro social standards of conduct beyond the undermining affect of incentives is a crucial factor in this program's conceptualization of character education and it is through the emotive discussions enhanced by either lived experiences or vicarious experiences through the use of film clips that dissonance is heightened. The continuation of character education lessons delivered in the classroom and around the school has been shown to be beneficial in reinforcing this commitment and for developing routines and habits that support the adoption of a pro social attitude. The character education lessons delivered in a systematic and scaffolded process helps children learn what it means to be respectful, responsible, trustworthy, fair, caring and honest and provides the opportunities to put these character traits into action so they can in turn feel what it means to be a trusted member of a community committed to the ideals of good character.

Logistics of delivering character education lesson plans

The building schools of character program ideally envisioned would have two hours a week plan to facilitate character education lessons. Furthermore, a whole school approach would involve assemblies dedicated to prosocial character development messages and all dialogue with children would be underpinned by an emphasis on pro social character development. The classroom based lesson plans would include one hour for storytelling, discussion or assignments delivered in a cooperative learning environment to further develop the students' experiences of heroic acts of caring, respect, responsibility, trustworthiness, honesty and fairness. The second hour of the week dedicated to character education would be situated within physical education classrooms a news activity based (i.e. trust or group challenges) to provide opportunities for pupils to feel what it means to be trusted, responsible, etc. (for more detail of these activities see appendix---- or visit www.wilderdom.com/activities).

As the students, teachers and support staff develop a commitment to facilitating the development of character traits that are beneficial in promoting a cooperative learning environment all teachable moments will become underpinned by character education, cognitive dissonance and vicarious experiences. In other words, when a pupil displays disrespectful, unfair, dishonest, untrustworthy, and caring for error responsible behaviour these are immediately addressed by the classroom or school community in a respectful manner to remind pupils and their commitment to be of "Good character". The language used to mediate the discourse around this inappropriate behaviour utilizes the six words which underpin all character education lessons (i.e. respect, responsible, trustworthy, fair, caring and honest) with the aim being to move from an interpersonal guidance of this discourse to an intrapersonal(i.e internalized) discourse of self regulation to bring one's behaviour into accord with one's commitment. This dialogue is underpinned by principles associated with restorative Justice and guides the school wide approach for overcoming persistent displays of disrespectful, irresponsible, untrustworthy, unfair, dishonest and/or uncaring behaviour.

Restorative Justice

The objective here is to; 1) build and strengthen relationships, 2) heighten the sense of responsibility to all members of the school community, 3) support and strength, in all children, a commitment to become self regulated, socially competent and cooperative members of the school community, and 4) to maintain a connection between action and consequence (i.e. negative actions have negative consequences and positive actions have positive consequences). The dissonance created and mediated through Restorative Processes is recognized to facilitate the development of effective shame management and works to support the attitudes of good character by developing routines, habits and connection to logical consequences when one fails to maintain the accepted standards of conduct valued by the school community.

Restorative Justice continues the empowerment process of character development by fostering accountability and responsibility for one's actions. To achieve the intrinsic motivation of self responsibility the program seeks to reduce dissonance by mediating the process of reparation and healing through interpersonal dialogue mediated in the first instance by a knowing adult or more competent peer and eventually internally through intrapersonal self regulating discourse. This process leads to both social and emotional resolutions that promote healing, reparation and reintegration for both the offender(s) and the offended. The mediated reduction of dissonance both for the offended and the offender(s) aims to ameliorate efforts to prevent further harm, disengagement and disaffection.

The first challenge, however, for many educators may be the acceptance of recognizing conflict as teachable moments and points of growth. The second challenge may be in

understanding the theoretical relevance of social and emotional responses, such as; shame and pride in understanding the underlying social and emotional mechanisms of the restorative process. By addressing the second challenge first the first challenge may become self-evident.

The Process

When children experience conflict or engage in unacceptable behaviour a restorative conference is conducted. This conference is conducted so that a dialogue is facilitated by a knowing adult to resolve the conflict and provide alternative strategies of behaviour. To mediate the discussion the knowing adult facilitates a restorative conference between the offender(s) and the offended. This restorative conference could be facilitated between two individuals, a group of individuals, and the whole class or in certain instances the entire school. It should be noted however as the size of the restorative conference grows in number of participants the complexity of the situation increases and the knowing adult should be fully competent in facilitating problem based conflict resolutions and in mediating complex and highly emotional discussions. The facilitator should mediate the discussion to focus on the harm that occurred and avenues for repairing the harm. In other words, it should not be seen as necessary to focus on what was done, the focus should be placed on feelings and what harm occurred in the relationship between the offender(s), the offended, the classroom community and the school community. As the discussion progresses the facilitator should mediate the discussion so emotions such as pride and shame are shared within the restorative conference. Once these emotions are shared and discussed the focus should turn toward managing these emotions in an effective, constructive and pro-social manner. As the discussion leads to the management of pride and shame and these are effectively addressed the discussion then needs to focus on resolution through acceptance of responsibility and a consensus for reparation to dismiss the shame and maintain pride in one's commitment to be of good character. Once the consensus is formed and the offender(s) make a verbal or written commitment to fulfilling the aspects of reparation the conference is concluded and focus returns to a further building of pro-social communication, ethical decision making, problem solving and conflict resolution.

School Support Centre(s)

The role of School Support Centres (SSC) within the BSC programme is to establish on-site centres to meet the needs of the learning community within the framework of inclusive practice. The SSCs are also envisioned to support teaching, targeted and intensive character education, self directed learning and parenting. The role of the SSC is one of support and challenge and should be seen by all members of the school community as a highly regarded component of a cooperative learning environment. Therefore, the building schools of character support centres should be established as a key component in developing innovative learning opportunities involving cross curricular cooperative experiences with the focus on lessons designed to stretch all children's abilities. The

primary focus of the SSC is directed toward intensive character education program for the disengaged and/anxious pupils experiencing difficulties developing social competence and a cooperative disposition. This is accomplished by providing small group experiences designed to facilitate the development of respect, responsibility, trustworthiness, fairness, caring and honesty in supportive yet challenging ways, the goal being at this stage to assist these pupils in returning to their primary classroom in a timely manner.