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*The Effectiveness in Measuring Character  
Development Outcomes in Singapore Schools Through  
the Character Development Award*

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# CHAPTER 1: INTRODUCTION

## 1.1 Background

In 2006, Singapore's Ministry of Education (SMOE) started the Character Development Award to give "public recognition to schools for quality effort in developing good character in their students" (SMOE, 2006: 1). According to SMOE (SMOE, 2008), there were a total of 191 schools in primary and secondary levels and in junior colleges that had received this award in recognition for their character development initiatives between 2006 and 2008. The overall aim intended by SMOE in giving this award is to recognise the effort of schools in producing holistic students who are both competent in their academic studies and possess good character. This is also to further reinforce the desired outcomes of Singapore's education to produce citizens who are to "be morally upright, be culturally rooted yet understanding and respecting differences, be responsible to family, community and country" (SMOE, 2009a). SMOE wants to produce pupils who are not only equipped with knowledge, skills and competences to thrive and succeed in life but also to be anchored in good moral values and character in making responsible decisions (Kam & Gopinathan, 1999).

Given the long hours that students in Singapore spend in school, it is imperative for the education system to play a vital part in shaping and moulding the values and behaviours of students. This is crucial for the future of Singapore given that these students will be leaders of the future where

their character development will contribute in one way or another to the nation's progress. Furthermore, given that Singapore's only resource is human capital, the impetus to produce capable leaders who have good character is of critical concern for SMOE (SMOE, 2001). Although there are already different forms of character development strategies instituted both formally and non-formally by SMOE in schools, the Character Development Award measures character development more extensively than what SMOE has stipulated. The award strives to recognise the various initiatives and efforts taken by schools to promote prosocial and ethical behaviours. In order to fully appreciate the intended purpose of the Character Development Award to generate greater ownership of character development by schools, a brief explanation of the historical and current programmes implemented by SMOE in character education will be provided.

The history of Singapore's formal character education can be traced to the subject called Ethics in 1959 (Chew, 1998). This was part of the active experimentation effort by the government at that period to have a formal education programme for good moral values with a slant towards nation building. Later in 1963, it was replaced by Civics at the secondary school level with the same emphasis. In 1973, a new interdisciplinary programme for values education, Education for Living, was introduced to all primary schools where the curriculum developed included an emphasis on showing the children how to put into practice the moral values that they had learnt in class.

However, a review of this interdisciplinary programme in 1978 led to a strong support to revamp the moral education programme. A new programme, *Being and Becoming*, was introduced after 1980. Ten years later, another revision took place and resulted in the birth of the Civics and Moral Education Programme in 1992. Since the launch of the Civics and Moral Education Programme until now, SMOE has involved many curriculum writers, top government officials and educators to craft and vet the materials written for moral education (Lim & Gopinathan, 1990). The reason for the involvement of both governmental officials and curriculum writers was because of the various objectives that were to be achieved through the Civics and Moral Education Programme. It incorporated three critical agendas that were cultural, political and economical (Tan, 1994). It was both cultural and political in nature given the various ethnic groups within Singapore that had diverse cultures and backgrounds. The Civics and Moral Education Programme was meant to unite the different ethnic groups through fostering shared values among them towards nation building. It was economical in nature given the desire to produce citizens who were useful and contribute to the nation's development. After examining the various modules written for the Civics and Moral Education Programme, Chew (1998) commented that it originated with the intent for citizenship training through the formal education system in Singapore rather than for the sole purpose of moral education. Currently, both secondary and primary schools have formal classes in the Civics and Moral Education Programme conducted to inculcate six core values identified by

SMOE as important for nation building (SMOE, 2007). These core values are respect, responsibility, resilience, integrity, care and harmony. Besides these six core values that are to be inculcated among the students, the Civics and Moral Education Programme addresses other issues such as sexuality education, building healthy relationships with members of the opposite sex, marriage and parenting.

In 2005, the Social and Emotional Learning framework was introduced to assist schools in the development of good qualities in students' social and personal domains. SMOE defines Social and Emotional Learning as the "acquisition of skills to recognise and manage emotions, develop care and concern for others, make responsible decisions, establish positive relationships, and handle challenging situations effectively" (SMOE, 2009a). The key objective of using Social and Emotional Learning is to produce students who are resilient to handle changes around them in a responsible manner. The Social and Emotional Learning framework comprises five key competencies and they are: Self Awareness, Social Awareness, Self Management, Relationship Management and Responsible Decision Making. The aim is to empower students to first be aware of themselves and their surroundings before they are able to make the right decisions in life. Schools are expected and encouraged to use this framework to design new programmes or interweave existing programmes to promote character development and instil citizenship among students. Although schools are

given this framework, SMOE does not determine the exact nature and type of programmes that will be used within schools. This gives both flexibility and creativity to the design of programmes that will be specially tailored to the needs of the students within schools.

Besides formal curricula and programmes, schools are to use non-formal programmes outside of academic time to inculcate and develop good character in students. These non-formal programmes include Co-Curricula Activities, Community Involvement Project and other school organised activities. The Co-Curricula Activities include outside formal classroom activities such as sports, uniform groups and other learning and activity clubs that are not part of the formal academic curricula but are compulsory components for all students to participate. The Community Involvement Project facilitates student involvement in community service projects as volunteers with the intent to serve and contribute back to the community. Such projects provide the opportunities for students to experience and become aware of the needs of the community where they can contribute back to the society in a meaningful way. Students who participated in Co-Curricula Activities and Community Involvement Project are awarded participation points that can contribute to their overall points and use these points for entry to the next level of education. Although these programmes are never formally labelled as Character Development programmes, the intention for them is to develop students' character collectively (SMOE, 2007). SMOE believes that

through Co-Curricula Activities, Community Involvement Project, Social and Emotional Learning framework and the classroom lessons of the Civics and Moral Education Programme, schools will provide an environment within the school community to nurture positive character development among students.

These initiatives by SMOE may not always produce the intended result of character development given that they are part of the stipulated activities that all schools are compelled to have. Students are involved in these activities because it is enforced as part of their informal curricula to earn points that will assist them for entry into higher institutions of learning for their future education. Such motivation for involvement in community services may not achieve the original purpose to cultivate a genuine concern for the needy (Hart, Atkins & Donnelly, 2006). Furthermore, these SMOE initiatives have been criticised by some as more for nation building rather than for students' character development (Tan & Chew, 2004). This can be especially seen through the Civics and Moral Education Programme where the goal set for primary school students is to “nurture a whole and balanced person, with a strong sense of moral values, good interpersonal relationships, one who will contribute to the well-being of society and the nation” (SMOE, 2000a). Even in the secondary school's Civics and Moral Education Programme it is also stated that the goal of the Civics and Moral Education Programme is to “nurture a person of integrity who acts responsibly with the welfare and interests of others and the nation in mind” (SMOE, 2000b). It is not surprising

that the content for the Civics and Moral Education Programme follows the order of self, family, community and culminates to the nation with the slant of “statecraft” in mind (Tan & Chew, 2004:601). Although the Social and Emotional Learning framework was launched a few years ago to assist schools in developing students in their social and emotional skills, one of the end goals was to develop students who would become good citizens for the country.

Given the overarching purpose of the Civics and Moral Education Programme and part of the end objectives for the Social and Emotional Learning framework are both intended for nation building, SMOE introduced an award to further encourage schools to design their own character development programmes to complement these existing initiatives. This will provide another impetus for schools to embrace the thrust and importance for character education as one of the desired outcomes of education. This will encourage schools to use their own resources to develop tailored character development programmes that will cater to the specific needs of their students.

With the launch of the Character Development Award, SMOE intends for character development efforts to go beyond what are stipulated in the standard framework set by SMOE to the place where schools will truly embrace character education to design tailored programmes and initiatives to

achieve holistic development of students. In order to recognise the quality of schools' character development programmes, SMOE awards two categories of recognition under the Character Development Award to affirm the effort given in this area. The two categories are namely, Development Award and Outstanding Development Award (SMOE, 2006). The Development Award (DA) is presented to schools that have put in place sound systems and processes for the development of character. The Outstanding Development Award (ODA) is the highest level award presented to recognise schools that have shown outstanding innovative, sustainable and exemplary approaches to character development. The validity period is three and five years for DA and ODA respectively. Schools that have obtained the DA can apply for subsequent evaluation from SMOE during the second year of the award duration.

According to the Character Development Award Handbook (SMOE, 2006), there are three main criteria used by SMOE to evaluate schools for the Character Development Award. These criteria are the same for primary schools, secondary schools and pre-university colleges. They are:

**(a) Leadership**

This criterion evaluates two areas within the school. Firstly, the long-term vision of the school for character development and the commitment of the

school's leadership towards this vision. Secondly, the specific goals that will be setup by the school to translate the vision into reality.

**(b) Culture**

This criterion evaluates two areas within the school community, namely, the culture of care among teachers and students, and the shared responsibility among the school's stakeholders towards the character development of students.

**(c) Processes, Systems and Structures**

This criterion evaluates three areas of the school community. Firstly, school's efforts to identify the needs of the students for character development and the processes to meet these needs. Secondly, school's allocation of overall resources, priority and training of personnel towards character development. Thirdly, the school's attempts in designing current and effective formal and non-formal curricula for character development that will meet the needs of students.

The criteria (a) to (c) provide a framework for SMOE to assess the character development programmes in schools. The evaluation of schools will be carried out by a panel of appointed Character Development Award assessors that comprises proven leaders in the educational field. Through the submission of applications from schools, the panel will short-list potential

award winning schools for a half-day onsite visit. Schools that have demonstrated high quality character development programmes during the first onsite visit will be given another full day onsite visit so as to be evaluated for the ODA (SMOE, 2008). The evaluation visits carry out qualitative enquiry into the schools' character development programme based on interviews of various stakeholders in the school community.

According to the SMOE's Character Development Award website accessed on the 30<sup>th</sup> June 2009, it is stated that there were already 191 schools that had been awarded the DA and ODA since 2006. Out of which 85 were primary schools, 90 were secondary schools, 4 were full schools and 12 were pre-university colleges. The number of schools that had won the DA and ODA were 166 (87%) and 25 (13%) respectively out of the 191 award winning schools.

## **1.2 Statement of the Problem**

Although the criteria set by SMOE provides a possible framework for the assessment of character development in Singapore's schools, there are certain areas that require further investigation to verify the validity of the content and assumptions stated in SMOE Character Development Award Handbook and its Character Development Award 2009 website. The following

will examine the main idea and thinking behind the criteria formulated to evaluate schools from the extracts below.

The Character Development Award Handbook (SMOE, 2006:1) states the following:

“Hence, the Award focuses on schools’ efforts, that is, the processes, systems and structures that are put in place in a school to develop good character in their students. It does not evaluate if students display traits of good character as they are still changing, learning and growing.”

The Character Development Award 2009 website (SMOE, 2008) states the following:

“The CDA recognises schools that have placed emphasis on character development and have developed structures and processes to purposefully and systematically develop students’ character. The focus is in the structure and processes. With strong structures and processes in place, outcomes should be achieved over time.”

“The award focuses primarily on the approach to character development rather than outcomes (i.e. student behaviour). The character development framework was designed with this focus in mind. Therefore, schools which demonstrate that they have planned and developed an approach intended to meet the needs of the pupils and have implemented this approach well will stand an equal chance to attain the award.”

It is apparent from the information derived from both the Character Development Award Handbook and Character Development Award 2009

website that the criteria used are not solely meant to evaluate the nature and content of the character development programmes in schools given that a major emphasis of the criteria is in evaluating the processes, systems and structures in implementing the character development programmes. The Character Development Award Handbook and Character Development Award 2009 website both state very clearly the assumption that as long as the processes, systems and structures are in place, the outcome of good character development in students will follow thereafter. Although this assumption is repeatedly found in SMOE's publications, there seems to be a lack of academic citation and support from empirically proven sources for embracing this assumption. By placing a high emphasis on Process, Systems and Structures in its evaluation, it presupposes that such strict adherence to Processes, Systems and Structures will predict the future success and certainty of character formation. Schools that are applying for the Character Development Award will then put their efforts into ensuring that processes, systems and structures are in place for the evaluators to inspect during the evaluation process. Such emphasis may lead to a compromise in the content of the character development programmes, which is a critical factor that determines the outcomes of character development (Berkowitz & Bier, 2006).

The assumption that the desired outcomes of character development will be a direct result of implementing Processes, Systems and Structures needs further validation to verify its claim. Such validation can be done through

literature review of empirical research studies in character education and moral development. Validation can also be provided through an actual empirical research study among Singapore schools that have obtained the various awards to verify the assumption behind the evaluation criteria. Given that some of the award winning schools had received their award in 2006, it provides a good time frame to revisit some of these schools to determine if the desired outcomes of character development have indeed been achieved or some visible progress has been made towards the desired outcomes.

Therefore, given the increasing importance of character development in the education landscape of Singapore, the awards given by SMOE will validate the effort of the schools and the quality of their programmes for character development. However, if the awards do not accurately represent what they are meant for in recognising high quality character development programmes, the emphasis for character development in schools may be trivialised. In order to ensure that character development efforts are not being discredited in the long run, the assumption currently being held within the evaluation criteria for the awards must be validated. The need for this validation provides a good basis for a research study to be conducted by the author on the various schools that have received the awards given by SMOE.

### **1.3 Purpose of the Study and Research Questions**

The purpose of the current research study was to determine if there were significant differences in character development outcomes between schools in Singapore that had been awarded the ODA as compared to schools that had been given the DA and schools that had no award.

If the assumption of the evaluation criteria were true, schools awarded the ODA would have higher significant differences in character development outcomes when compared with schools awarded with DA or no award. Similarly, schools awarded with the DA would have higher significant differences in character development outcomes when compared with schools with no award.

Given the purpose of the research study, the guiding research questions will be as follows:

1. Would students from the ODA school rate the character development of their school more positively than students from DA schools?
2. Would students from DA schools rate the character development of their schools more positively than students from the no award school?
3. Would students from the ODA school rate the character development of their school more positively than students from the no award school?

4. Would staff from a higher award school rate the students' character development of their school more positively than staff from schools with lower or no award?

5. Would parents from a higher award school rate their children's character development more positively than parents from schools with lower or no award?

Given the purpose and research questions as seen above, the two hypotheses that were used throughout the research study were as follows:

Hypothesis 1:

Any ODA school would have statistically significant higher character development outcomes than schools with DA or no award.

Hypothesis 2:

Any DA school would have statistically significant higher character development outcomes than schools with no award.

The outcomes as mentioned in the two hypotheses can be defined as possible expressions that will allow one to see the end results of the character development efforts and initiatives.

## **1.4 Significance of the Study**

Since the inception of the Character Development Award in 2006, more than 190 schools had received recognition for their character development efforts through receiving the ODA and DA. However, there has not been any formal publication or research work done with a particular focus on the Character Development Award and its effectiveness in evaluating schools efforts in character development. With more than 190 schools that have received the Character Development Award and a period of more than three years since the start of the awarding process, research work with a focus on the Character Development Award and its effects in schools will be beneficial for SMOE to measure the overall progress in character education. Given that one of the outcomes of Singapore's education system is to produce morally upright and responsible citizens, this research study would verify the progress made towards this educational outcome. Furthermore, the research findings could be used by SMOE to further fine-tune its current evaluation criteria or to formulate new evaluation criteria that might better serve its needs to recognise high quality character development programmes in schools, should this be deemed appropriate. As of November 2009, SMOE had not done any formal review or evaluation publication on the Character Development Award and its criteria and this research might be able to serve as one of the possible sources for SMOE's reference. This information was confirmed during the researcher's presentation to the SMOE's Character Development Branch on the 16<sup>th</sup> November 2009. Educators and character development curriculum

planners could also use the study to identify possible schools that had shown promising character development programmes and learn from them. This research study might even provide the impetus for more research work to be carried out in character development within the context of Singapore's schools, especially with the emphasis of SMOE on providing holistic education for students.

## **1.5 Overview of Methodology**

A quantitative research methodology was used to measure students, staff and parents evaluations in the character development inputs and outcomes within schools. The survey instrument that was used is called the Collective Responsibility for Excellence and Ethics (CREE) version 2.7 Short (see Appendix C, D, E) designed by Khemelkov and Davidson (2008a). The instrument was designed to capture the inputs and outputs of these stakeholders in the life of the school community towards character development. Given the important roles that these stakeholders play in the development and formation of students, the survey instrument has three different survey questionnaires that were used to capture the critical information from the stakeholders. All the data was collected anonymously and the presentation of the data does not identify any of the participating schools. During the data collection process, random sampling method was used to administer the surveys to students, teachers and parents. The data

gathered from the survey instrument was used to generate findings through SPSS for further analysis.

## **1.6 Outline of the Research Study**

The research study is presented in this thesis in six chapters. Chapter 1 is the introductory chapter that describes the introduction of the research study with an overview of the background to Singapore's education emphasis in character development and how this emphasis led to the research proposal, research questions and the hypotheses for the research. Chapter 2 is the literature review chapter that critiques the various major character development theories that had evolved over the last few decades in character education. The review would also highlight the definitional issues involved in character education and how character development could be measured through a proper process in defining constructs. Chapter 3 gives the details of the survey instrument and its three major surveys for students, parents and teachers. The various constructs used in the respective surveys are explained to provide a better understanding of the overall usage of the survey instrument to measure the outcomes of character development as per defined. Chapter 4 provides the details of the research methodology used throughout the research study, the profile of the respondents, validity and reliability of the research instrument and the various processes that were required to conduct a research work in Singapore's schools. Chapter 5 presents the statistical

analysis of the findings from the research study in response to the research questions formulated in Chapter 1. Chapter 6 discusses the verification of the hypotheses, educational implications for character education and recommendations for improvements to the current research study for potential researchers who would desire to conduct similar research in the context of Singapore's schools.

## **1.7 Limitations**

Although the research study was conducted smoothly in the various schools, there were several research limitations encountered which did not allow the research to be conducted in the most ideal conditions.

Firstly, the study was limited to schools that were willing to be part of the research and the availability of certain ideal schools that met the criteria was not accessible for the research.

Secondly, the study was limited to the accuracy of data generated by the survey questionnaires. While this research used a proven survey instrument, the researcher had to ensure the reliability and validity of the data collected.

Lastly, it was unfortunate that the period of the data collection was during the peak season of the Avian H1N1 influenza virus where schools did not allow

any external visitor to enter into their premises given the infectious nature of this virus. As a result of this unexpected pandemic that took place in Singapore, the researcher could not personally conduct the surveys and had to depend on the appointed staff members to conduct them. The researcher took time to ensure that the appointed staff members had understood the surveys before conducting them. Given that the surveys were deemed to be easily understood by the stakeholders, the appointed staff members did not face any difficulty in conducting the surveys with the various stakeholders.

## **1.8 Summary**

Character education has always been an important goal in the education landscape in Singapore. The different initiatives and thrusts undertaken by SMOE such as the Civics and Moral Education Programme, Social and Emotional Learning and Character Development Award showed the increasing emphasis in character development as one of the key outcomes in education. With increasing number of schools receiving recognition for their quality programmes in Character Development through the Character Development Award since 2006, this study attempted to determine if the current criteria in evaluating schools are fulfilling its objectives in recognising schools with high quality character development programmes. Given that the Character Development Award has been in operation for more than three years since its inception in 2006, this study would provide additional findings

to further strengthen the endeavour for holistic education in Singapore's education scene.

With the background of the research study being provided in this chapter, the next chapter will examine the theoretical framework for character education and the empirical support for character development.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter provides the literature review of the development in character education and the various major theories involved in character development. The definitional issues involving character education will be discussed and the definition used for the research study will also be identified. One of the areas that will be discussed and vital to the understanding of character development is the measurability of outcomes in character development programmes. In order to provide common understanding of the various concepts that are important for this research study, this chapter will be organised into several sections to facilitate this. Section 2.2 will begin the discussion of definitional issues involved in character education and the definition of character that will be used throughout the research study. Once the definitions of character and its constructs are determined, Section 2.3 will discuss the major theories in character education and how the various theories have been integrated with each other to strengthen the process of character education in schools. With the understanding of character development theories, Section 2.4 will investigate the validity of character education and highlight various empirical studies that have been conducted to determine what consists effective character development programmes. From these empirically proven character development programmes, the content

and strategies of character development that are used will then be discussed in Section 2.5 and 2.6 respectively.

## **2.2 Definitions & Standardisation of Terms**

The issues of character and moral development are not new where earlier writings on this topic can be found in the first three decades of the twentieth century (e.g. Dewey, 1909; Durkheim, 1925; Haviland, 1921; MacCunn, 1920). However, it is only in the last forty years that contemporary researchers have placed their concentration and resources to character and moral education research (Berkowitz & Bier, 2006). In order to facilitate greater clarity on the different important concepts that will be used in the research study, it is imperative for the definitions of character and its constructs in this research study to be stated and the usage of terms to be standardised in order to bring a unified reference and understanding whenever these terms are used.

It is common to find in literatures that the two words *character* and *moral* are often used interchangeably when used with terms such as Character/Moral Development, Character/Moral Education or Character/Moral Programmes (Berkowitz & Fekula, 1999; Berkowitz, 2004; Lapsley, 2008; Schwartz, 2008; Vessels & Huitt, 2005). Some authors would even use the phrase Moral Character to give a greater emphasis to the reference of morality in character. Given that the context of research is Singapore, it will be more beneficial in

the research process to use terms that are already familiar among the different stakeholders of Singapore's education system. This reduces the unnecessary explanation of terms and to ensure that the stakeholders involved in the research process have the same understanding when these terms are used.

The terms that are frequently used in Singapore's schools because of the Character Development Award are Character Education and Character Development rather than Moral Education and Moral Development though the latter terms are more frequently used in the United Kingdom. Given the greater familiarity with the word *character* than *moral*, it is more appropriate and less confusing in the research process and throughout the study to standardise the usage of the word *character* rather than *moral* when referencing Character Development and Character Education. In this study it is assumed that Moral Education carries the same concept as Character Education and Moral Development is referring to the same process of Character Development. With this standardisation, the definition will have to be determined to ensure that the same meaning is used throughout the research process.

In the field of Character Education research, there exists a myriad of definitions for terms such as Character, Character Education and Character Development (Berkowitz, 1997; Smagorinsky & Taxel, 2005). The various

definitions exist because different researchers are referring to the different elements and dimensions in the study of character. Some even used different terms to refer to the same constructs, resulting in more complications in the process of having clear definitions for the various terms (Berkowitz & Bier, 2006). Berkowitz and Bier (2007:30) highlighted that “character education is part of a semantic minefield”, where many terms are “complicated by historical changes, political affiliations, public connotations, and turf battle over established terms” (cf Howard, Berkowitz & Schaeffer, 2004). Although it is almost impossible to have unified definitions for the terms being used among researchers in field of Character Education, it is still required within the framework of this research study to determine an appropriate standardised definition for character and its constructs. The constructs will eventually be operationalised and used to collect data for the quantitative survey among the school’s stakeholders. The process of determining a standardised definition will be carried out by first examining the definition used by SMOE in Section 2.2.1, followed by listing the various definitions used by experts in the field in Section 2.2.2 and thereafter, a recommendation of the definition that will be used throughout this research study.

### **2.2.1 Definition by Singapore Ministry of Education**

With the launch of the Character Development Award, Singapore Ministry of Education (SMOE) has defined character as such:

“Character can be defined as moral excellence or firmness in a person. It involves making and acting on ethical judgments in a social context, and includes positively held dispositions and qualities.” (SMOE, 2006: 2)

“Given that character consists of the three inter-twining strands of values, skills and behaviour, character development, simply put, is the teaching of sound values and social-emotional skills, and provision of opportunities for pupils to demonstrate behaviour consistent with these values through the use of social-emotional skills taught.” (SMOE, 2006: 4)

SMOE has defined character as possessing positive qualities and demonstrating moral excellence in making ethical decisions in social context. It believes that character development can take place through the teaching of moral values and social emotional skills, and the provision of platforms for students to demonstrate these moral values and skills in a consistent manner.

### **2.2.2 Definitions by Experts in Character Education**

There are many definitions that can be derived from publications of recognised character education researchers. Some have defined character as a simple series of things that one should do and should avoid, while others

have defined character as a complex set of psychological functions of human thinking, affection and cognition. Instead of examining all of the definitions that can be found, the following discussion will analyse grouping of definitions that carried similar constructs of character. Although the following discussion is not exhaustive in the possible list of definitions in character, it provides a good overview of the numerous definitions that have been used to define character.

Wayne and Walberg (1984) give a simple definition of character as “engaging in morally relevant conduct or words, or refraining from certain conduct or words”. In their views, character deals with the aspects of saying and doing what is morally right and not doing and saying what is morally unacceptable. Character is seen from one’s behaviours through words and deeds.

Another group of definitions goes beyond the outward behaviours and is used by Baumrind (1998), Hay, Castle, Stimson & Davies (1995), Huitt (2000) and Lickona (1997) and organisation such as Character Education Partnership (Berkowitz, 1999). This group of definitions carried similar constructs of character where character is defined as the possession of virtues where virtues comprise moral knowledge, moral affections and moral behaviours that are consistently lived out for the good of others. Character in this group of definitions is a set of moral virtues that are consistently demonstrated in

one's thinking, affections and behaviours when dealings with others in social settings. This set of moral virtues distinguishes one from others through the prosocial qualities that would consider the welfare of others before self.

A third group of definitions used by Berkowitz (1997), Pritchard (1988) and Vessels and Huit (2005) defines character as a multi-faceted, complex and consistent set of psychological and behavioural qualities that allow one to be a responsible and good moral agent when encountering life events. Berkowitz (2002) even elaborated this complexity by identifying seven psychological components that will affect character, namely: moral behaviour, moral values, moral emotion, moral reasoning, moral identity, moral personality and metacharacteristics.

Another interesting definition by Schwartz (2005) defines character as a form of self development in preparation for social and moral responsibilities to others and to further develop others to reach higher levels of morality and accomplishment. This definition differs from others given that it includes the expression of helping others to reach higher levels of morality besides attaining them by the individual.

Therefore, it can be seen from the various definitions that it is an insurmountable task to find a common definition for character given the different constructs that the different definitions have. However, it can be

deduced from the numerous definitions that there are various elements commonly found in them. These elements include the mastery of self and one's emotions, the ethical treatment of others, the possession of moral knowledge, and the ability to engage moral reasoning and demonstrating moral behaviours. One important point to highlight is that in most of these definitions, it appears that character is expressed through one's behaviour and conduct in relating with others in a social community. Both Baumrind and Schwartz seemingly give more comprehensive definitions to include the ability to perform tasks that will benefit one self and others.

The inclusion of the ability to perform tasks together with the ability to demonstrate ethical behaviour towards others fit very well into the definition of Davidson, Lickona and Khmelkov (2008) where they proposed that character comprised both moral character and performance character. This definition by Davidson *et al.* has been derived and validated after:

- a review of more than one thousand four hundred books, articles and reports
- full day site visits of twenty-four character award winning high school in America
- input and feedback from a National Experts Panel of thirty-three experts in adolescent development and character education
- interviews with other high schools' stakeholders

Davidson *et al.* (2008:373) define character as “two essential and connected parts: performance character and moral character”. When one uses the term character, it consists of two essential interrelated parts which are performance character and moral character.

Performance character refers to a mastery orientation where “it consists of qualities needed to realise one’s potential for excellence in any performance environment” (Davidson *et al.*, 2008: 373). This list of possible qualities for performance character can be seen through self-discipline, perseverance, diligence, a positive attitude, not afraid to try and fail, and ingenuity. This is not an exhaustive list but serves as a good reference for performance character traits. As for moral character, it refers to a relational orientation where “it consists of qualities needed for successful interpersonal relationships and ethical conduct” (Davidson *et al.*, 2008: 374). This list of possible qualities for moral character can be expressed through integrity, justice, care, trust-worthiness and cooperation. Moral character allows one to treat others with respect and live with ethical integrity. These two essential parts of character are closely related where performance character allows one to do well in one’s work and moral character ensures that one also does it in an ethical way within society. This definition of having the components of moral and performance within character allows one to possess good moral reasoning ability and to live out moral behaviours in harmony with one’s beliefs. The other advantage for using this definition is that it allows character

to be defined and operationalised in a clear manner where it permits moral qualities to be quantified and measured.

The strength of this definition by Davidson *et al.* (2008) is in its inclusion of performance orientation towards task accomplishment that is coupled with the moral orientation in accomplishing the task in an ethical manner. This definition prevents the dichotomy of academic achievements and moral excellence in schools where one can have both without compromising each other. Teachers and students do not need to struggle to balance the need to excel in moral behaviour and performing well in their studies since this definition encompasses both. This definition is also suitable for the context of Singapore given SMOE's emphasis on academic achievements and the latest focus to ensure that character development takes place among its students through the schools.

This research study would use the definition of character crafted by Davidson *et al.* (2008) given its holistic approach in encompassing the two key elements of performance character and moral character for students in schools. With the definition and constructs of character being determined, the next section will explore the different theories of moral and character education.

### **2.3 Theories of Moral and Character Education**

Many educators and academic researchers believe that the purpose of schooling cannot be confined to only knowledge transmission between teachers and students. The reason is because teaching by itself is a moral act of reflecting teachers' personal moral character and values regardless of the subject content (DeVries & Zan, 1994; Fenstermacher, 1990; Hansen, 1995; Lasley, 1997; Schewartz, 2005, 2008; Sockett, 1993; Tom, 1984). This takes place through the way teachers interact with students on a regular basis where students will invariably observe, imitate, discuss and even model after teachers' responses. Given the authoritative role that teachers hold in the eyes of the students, it is inevitable for teachers to serve as moral agents or moral exemplars of students' moral character development (Campbell, 2008; Fenstermacher, 2001; Katz, Noddings & Strike, 1999; Reitz, 1998; Sizer & Sizer, 1999). That is why many educators and education researchers are convinced that it is an undeniable fact that moral character formation of students is one of the foundational goals of formal education (Berkowitz & Fekula, 1999; Dewey, 1909; Goodman & Lesnick, 2001; McClellan, 1999). Furthermore, given the long hours that students spend with teachers within the school community, there is an expectation on teachers to play a critical role in the moral character formation of students besides helping them to learn academic content (Watson, 2008).

Given the awareness and importance of moral character formation in the educational journey of students, educators and educational psychologists have developed various moral and character education theories to assist them in implementing their curriculum which will be discussed in the following sections (Section 2.3.1 to 2.3.4).

### **2.3.1 Two Approaches: Moral Education versus Character Education**

Different scholars and researchers have used the term “moral education” and “character development” interchangeably and the latest book published by Routledge in this area has the title of Handbook of Moral and Character Education (Nucci & Narvaez, 2008) to show that both character and moral education are referring to the same process of character formation in students. Some would even merge the two terms together and call it moral character education to bring a greater emphasis to this process (e.g. Lapsley & Lasky, 2005; Nucci, 2006; Vessels & Huitt, 2005).

However, some scholars have differentiated moral education from character education as two different approaches achieving the same aim as highlighted by Narvaez (2006) and Snarey and Samuelson (2008). The two approaches are namely, the Traditional Character Education and Rational Moral Education. The understanding of these two approaches will bring clarity to the

different definitions that are currently used in different publications concerning character development.

### **2.3.2 Traditional Character Education**

Traditional Character Education approach believes in “the inculcation of virtuous traits of character as the proper aim of education” (Narvaez, 2006:703). This approach emphasises the importance of content in morality and the environment in shaping the behaviours of students (Bennett, 1991; Durkheim, 1925; Wynne, 1991; Wynne & Ryan, 1993). The content of morality is delivered through the direct teaching of “virtues and exemplary character traits, role modelling and reinforcement of good behaviours” (Snarey & Samuelson, 2008:55). The agents of delivery will most probably be parents, teachers and recognised moral authorities in the lives of students. Inherent in this approach is the usage of cultural socialisation or cultural transmission where social norms are used to influence one’s thinking, feeling and behaviour towards what is socially acceptable. These social norms are formed and maintained through communities such as families, schools and even religious organisations through verbal instruction, role modelling and group reinforcement. Through these communities, social norms are accepted and lived out without being coerced (Coser & Rosenberg, 1964). Durkheim, who was one of the earliest leading advocates for collective moral socialisation in the late nineteenth century, did distinguish the importance of personal autonomy from blind submission to social norms. He emphasised

the need for one to be in full knowledge of the consequences of different courses of actions and not mere following of moral instructions (Durkheim, 1925; Snarey & Samuelson, 2008). Durkheim did not advocate indoctrination but emphasised the importance of explanation so that one could be part of the socialisation process with the full understanding of its benefits and not blindly following or being coerced into the following of these social norms.

Durkheim (1925) identified three elements of morality as the possible end goals for character education:

- Spirit of discipline

It is the consistent conduct and reliable behaviour that couple with the respect for social norms and having a reverence for authority.

- Attachment to social groups and the spirit of altruism

Morality takes place within a group or society where it is a social and interpersonal activity. The extent that one is a moral being is when one is a social being within one's community. Morality is not meant for a self-serving individual who is not attached to or belongs to a group. Conversely, morality takes place within one's community where collective responsibility is central to moral development.

- Autonomy and self-determination

Although the society is the final authority for the child, the decision whether to follow the society's rules must be determined by the child albeit the social and relationship pressures surrounding the child to conform. This is to prevent any form of blind allegiance that does not come from one's convictions.

Given the importance of social relationships in the formation of one's autonomy, adults would serve as mentors and determine the correct set of values that children would have in order to possess appropriate behaviours and attitudes that are acceptable in the given society. Therefore, the roles of parents, teachers and communities at large are very important and significant to maintain an appropriate environment in the shaping of students' character development within the Traditional Character Education approach (Wynne and Ryan, 1993).

In one of SMOE's current compulsory programmes for all schools, Civics and Moral Education, the Traditional Character Education approach is used in the direct teaching of desired values and behaviours for students to exhibit towards each other and the country. Besides the direct teaching by moral authority figures like teachers, there is also the usage of the school community to build social norms and behaviours for the desired values and conduct as espoused by the programme's outcomes. Durkheim's three elements of morality can be found in the way that Civics and Moral Education

is currently conducted in schools given the objective for building cohesion and racial harmony among its citizens. In many ways, Singapore schools have been using Durkheim's approach for its current citizen education but there is a growing trend towards using different approaches for effective character education among schools.

Many scholars disputed the lasting effectiveness of Traditional Character Education stating that its methodologies were superficial, outdated and inappropriate (Kohn, 1997a, 1997b; Leming, 1997; Nash, 1997). Kohlberg (1981, 1984) opposed it because of its overemphasis in specific set of virtues and character traits, resulting in moral absolutism where one set of virtues was more important than others. Furthermore, the true meaning of each virtue might not be fully understood given the emphasis on behaviour as the evident outcome rather than the understanding of each virtue. He labelled the process as tantamount to indoctrination where the system of rewarding and punishing students by the community with a set of adult's rules and beliefs were not acceptable. He criticised the usage of the concept of community as equivalent to submission to authorities where children were indirectly being forced to take on beliefs that would not truly personalise. Kohn criticised the use of exhortations, memorisations and punishments to enforce the learning of a set of virtues given that these methods would not enhance one's learning (Anderson, 1989). Kohn (1997a) berated this approach given its underlying premise that human nature was inherently self-centred and aggressive,

instead of human nature being good. The approach might provide short term compliance by the students but it had no lasting effects in advancing their moral reasoning and motivation (Solomon, Watson & Battistich, 2002). Given these criticism, many turned towards other forms of character and moral education theories. One of the more acceptable and popular alternatives was the Rational Moral Education.

### **2.3.3 Rational Moral Education**

Rational Moral Education approach is defined as the process “to facilitate the development of autonomous moral judgement and the ability to resolve disputes and reach consensus according to canons of fairness” (Narvaez, 2006:703). This approach is strongly influenced by Jean Piaget and Lawrence Kohlberg’s cognitive development approach where the emphasis is on the development of personal reasoning and autonomy (Piaget, 1947, 1970; Kohlberg, 1981, 1984). The belief is that every child is a philosopher and will actively construct and make sense of one’s own world.

For Piaget, he identified that every person’s moral development would move from heteronomous to autonomous morality although he did not elaborate how one would move from the heteronomous to autonomous stage. Although Piaget was cautious not to use the term ‘stages’ for the movement from heteronomous to autonomous, the cognitive development process from one state to another could be clearly seen in his theory. The main difference is

that a person with heteronomous morality will only see consequence as a direct cause and effect of one's conduct and behaviours. On the other hand, a person with autonomous morality will work with the surrounding environment and people to achieve the best outcomes for oneself and those around (cf. Snarey & Samuelson, 2008).

It was Kohlberg who later expanded Piaget's theory and further developed a Six-stage Moral Development Model that brought a major contribution to the development of moral psychology (Lapsley, 2008). In his model, Kohlberg believed that everyone would undergo an evolving structure of cognitive developmental stages when one encountered disequilibrium in the understanding of moral issues. The disequilibrium experienced at one level would provide the impetus to move to another level of cognitive moral stage, resulting in a more adequate ability to handle complex reasoning and perspective taking (Narvaez, 2006). It was believed that through such reflective reasoning process, students' behaviours could be positively influenced towards appropriate moral judgements and actions in their daily lives (Blatt & Kohlberg, 1975; Rest, 1986; Oser, 1991), albeit the need for more significant and convincing evidence towards this claim.

The process of moral cognitive development can take place through "moral dilemma discussion, role play, collaborative peer interaction and a democratic classroom and school culture" (Snarey & Samuelson, 2008: 55). The role of

teachers is not to teach the virtues directly but to facilitate the learning process for students to develop reflective reasoning in justice and fairness through moral discussions. It is a form of indirect approach to moral development as compared with Traditional Character Education. Through moral dilemma discussions with peers, students learn to set aside egoism to be impartial towards the issues being discussed and use universal principles to make moral point of views that would benefit the welfare of everyone (Frankena, 1973). The end objective of using these dilemma discussions to engage students is to move them to a higher level of moral reasoning as theorised by Kohlberg.

Kohlberg's Six-stage Moral Development Model comprised the following stages (Kohlberg, 1981, 1984, 1987; Siddle Walker & Snarey, 2004):

- Stage 1: Obedience and punishment orientation

This is the stage where morality is egocentric and heteronomous where one at this stage is not aware of the interests of others. The motivation is to meet one's needs and to avoid punishment.

- Stage 2: Instrumental purpose and exchange

This is the stage where morality is to follow the rules as long as they benefit one's immediate interest as express through pragmatic exchanges with like-minded others.

- Stage 3: Mutual interpersonal expectations, good relations

This is the stage where morality is to conform to the expectations of people within one's social community in order to be part of the community. The focus is towards the community and being part of the community.

- Stage 4: Social system and conscience maintenance

This is the stage where morality is to uphold and maintain the social order and rules of the society. The focus is to contribute to the good of one's society, community or institution.

- Stage 5: Prior rights and social contract

This is the stage where morality is prior to social conventions and legal regulation and when conflict arises between moral principles and legality, the former must be upheld.

- Stage 6: Universal ethical principles

This is the stage where morality is governed by universal ethical principles where human dignity is of utmost importance.

Kohlberg further classified the first two stages as being the Pre-conventional Level, stage 3 and 4 as the Conventional Level and the last two stages as the Post-conventional Level. At the Pre-conventional Level, an individual focus is egocentric where the concern is for one's self-interest through pragmatic

exchanging with like-minded people (Lapsley, 2006; Snarey & Samuelson, 2008). At the Conventional Level, an individual treasures group membership and understands the value of community relationships where one needs to think beyond the egocentric perspective to include the perspectives of others. At the Post-conventional level, an individual is no longer limited by rules, laws, expectations or conventions of others but one's decision making process is determined solely by moral principles.

Kohlberg also recommended three proven pedagogical methods that would promote one's moral stage from one level to another. These methods are namely:

- Moral exemplars – the usage of real life human persons who have lived their lives embracing moral principles in their thoughts and behaviours where their lifestyle can inspire others to do likewise (Kohlberg, 1981, 1984).
- Dilemma discussions – the usage of real life moral dilemma issues to generate discussions among students where such peer level engagements have been proven to bring about significant gains in moral reasoning ability (Higgins, 1980; Kruger, 1992; Walker & Taylor, 1991). It is also shown through research studies that students with higher moral stage reasoning will help to advance peers with lower moral stage reasoning to the next higher stage through peer level discussions of moral

issues (Blatt & Kohlberg, 1975; Enright, Lapsley, Harries & Shawver, 2001; Walker, 1982; Walker & Taylor, 1991).

- Just Community schools – the usage of school community where its culture and environment provide the opportunities for students to practice democratic governance and see the consequence of implementing decisions made by consensus of the community (Power, Higgins & Kohlberg, 1989). The Just Community approach provides and promotes moral development and group responsibilities through the culture and practices of the school community (Power, Higgins-D'Alessandro, 2008).

Given the political involvement in education and the desired outcome towards nation building, the current moral education materials used in Singapore's schools may face certain challenges in using the Rational Moral Education approach. This is because the current materials used in the Civics and Moral Education have a very definite specific political and social agenda where the desired outcomes may not encourage students to move beyond Stage 4 of Kohlberg's Model of Moral Development. Secondly, the methodology currently adopted in Singapore's schools is through direct teaching of specific moral values and behaviours and this opposes the ideal method of facilitating students to develop reflective reasoning in justice and fairness through moral discussions. Unless there is a major shift in SMOE's approach in conducting its Civics and Moral Education, it is very unlikely that a Rational Moral

Education approach will be utilised in the schools. However, with the slew of character development programmes that are self-crafted and designed by schools without the intervention of SMOE, there may be a high possibility for schools to adopt a Rational Moral Education approach to meet the needs of their students.

Although Kohlberg has contributed significantly in the area of cognitive moral development, his theories and Rational Moral Education are not without their critics. Given that the nature of Kohlberg's theory as being child centred, Rational Moral Education has been criticised as disregarding proven Traditional Character Educational methods such as direct teaching of good and unacceptable behaviours (cf. Benninga, 1991; Bennett, 1991; Kilpatrick, 1992). This resulted in the lack of explicit teaching content in morality and ethical virtues, and giving of too much power to children by allowing them to make decisions that are meant for adults to enforce such as punishments for rule violations (Wynne, 1991). The main crux of the issue is whether children possess the moral ability and maturity to make decisions that are originally meant for adults. Power without maturity can be detrimental to both children's moral development and the school environment where teacher's authority may risk being undermined.

The other criticism of Rational Moral Education is the lack of convincing empirical evidence between moral reasoning and moral action (Blasi, 1980).

Although there is a positive relationship between moral reasoning and moral action, moral reasoning does not always result in moral action and behaviour due to other mediating factors (cf. Bebeau, 2002; Palmer 2003; Thoma, 1994). Kohlberg recognised this gap and the many other factors that would determine moral behaviour besides that of moral reasoning and judgment (Kohlberg, Levine & Hwer, 1983). This led Kohlberg to re-examine Durkheim's concept of moral development through the socialisation process within a community and included it as one of the critical components of his theory of moral development as seen through the Just Community approach mentioned earlier.

Both Traditional Character Education and Rational Moral Education have contributed significantly towards the theories of character development. However, the last two decades have seen the combining of both the Traditional Character and Rational Moral Education approaches into one single approach – the Integrative Approach, which will be the focus of the next section.

### **2.3.4 Integrative Approaches**

In order to harness the best of both the Traditional Character and Rational Moral Education approaches, contemporary character development researchers have merged the strengths of both approaches into an integrative approach. Even Kohlberg himself moved towards an integrative approach as he realised that moral reasoning alone would not always result in moral action (Blasi, 1980). Kohlberg's integrative approach included the dimension of community involvement in the process of moral development through modelling and collective socialisation of the moral content. Kohlberg's integrative approach comprises the usage of moral exemplars (Kohlberg, 1984), dilemma discussions (Kohlberg & Lickona, 1987) and Just Community Schools (Power *et al.*, 1989). Besides Kohlberg, many leading character researchers such as Berkowitz (1997), Lickona (1991a, 1991b) and Schaps, Battistich & Solomon (1997) have also integrated both the Traditional Character Education and Rational Moral Education to form their respective integrative approaches.

There is a growing trend among leading researchers to use integrative approaches as they bring about "an intentional, holistic, comprehensive, empirically derived approach to character development" (Narvaez, 2008: 316). It is not surprising that the latest assessment instruments recommended by leading character education institution such as Character Education Partnership in America are usually integrative in nature. A few examples of

such instruments are Character in Action Survey (Khmelkov & Davidson, 2006), Collective Responsibility for Excellence and Ethics (Khmelkov & Davidson, 2008) and Character Education Quality Standards (Character Education Programme, 2008). The overall aim of these assessment instruments is to evaluate students' demonstration of both moral reasoning ability and moral behaviours through their interactions within the school community.

Given SMOE's aim to provide holistic education with the special focus to promote character education, the usage of integrative approach in character development will increase in schools. As schools have the autonomy to create their own programmes, various and diversified means will be used to engage students through dialogues and interactions rather than solely using Traditional Character Education where direct teaching methods are mainly used. The researcher's research study with the various schools in Singapore confirmed the findings that schools are using integrative approaches in their character education. The trend in using integrative approaches will continue to grow as SMOE encourages schools to craft effective character development programmes for their students.

Narvaez (2006) proposed a theoretical model for the Integrative Approach that attempted to reconcile the differences raised earlier in the Traditional Character and Rational Moral Education approaches. He named this model

as the Integrative Ethical Education. His theoretical model will be discussed here as it contains and summarises many of the components found in the various integrative approaches used in many current character development programmes. There are three foundational ideas that formed Narvaez's Integrative Ethical Education model and they are:

- Moral development is developing expertise

The concept of expertise is defined as “a refined, deep understanding that is evident in practice and action” (Narvaez, 2006:716). This means that moral development is developing the moral knowledge and understanding of a person that results in a definite moral behavioural action. The first implication that can be derived from this foundational idea for educators is to include the teaching of processes and skills of moral behaviour in the school's curriculum. This is to enable students to translate moral knowledge and understanding into moral behaviours through step by step processes and skills taught to them, living out in reality what they know cognitively. The intent is to remove possible gaps between knowing the content of morality to the point of acting on the content through their behaviours. The second implication for educators is to teach both moral virtues and moral reasoning to the students. The teaching of both moral virtues (Traditional Character Education approach) and moral reasoning (Rational Moral Education approach) is to ensure that students know the content of morality and also the ability to make moral

judgments with the daily issues that they will face (Gutmann & Thompson, 1996).

- Education is transformative and interactive

Firstly, education is transformative and interactive because children transform themselves based on the environment that they are responding to and acting upon (Varela, Thompson & Rosch, 1991). Secondly, education is transformative and interactive because children flourish and become highly motivated when their needs for belonging, competence and autonomy are met in the environment that they are put into (Deci & Ryan, 1985; Eccles, 2004). The educational implication for this idea is that educators should set up well-structured environments that encourage acceptable moral ethical intuitions. These intuitions are formed through perceptions received in the school culture through interactions with staff and peers of the students. The second implication is to design curriculum that integrates with academic instruction where teachers use every possible opportunity in the class settings to facilitate character education.

- Human nature is cooperative and self-actualising

Moral expertise is by nature, relational. It is also human nature to be social beings and live in cooperative and communal manner (Fiske, 2004; Ridley, 1996). Therefore, for one to demonstrate virtues and to exercise moral judgments, one has to live in a community in order to achieve them. The

educational implication for this idea is that educators should help students build community within and outside of the school (Strike, 2008). These communities that students are involved in will provide the needed environment and role models to coach them in their character development. Secondly, these communities provide the place for the skills of character to be practiced and lived out (Benson, 2003; Lickona, Schaps & Lewis, 2007; Lies, Bronk & Mariano, 2008; Narvaez, Bock, Endicott & Lies, 2004).

As we can see from the model of Integrative Ethical Education, the advantage of the integrative approach is having the combined strengths of both the Traditional Character and Rational Moral Education. The introduction of the Character Development Award by SMOE can be seen as a progressive step forward to recognise effective character development programmes that goes beyond the current moral and civics education programmes that used Traditional Character Education approach to one that is integrative in nature. However, as with any approach in character education, there will still be issues and challenges that need to be addressed in order for it to be effective in shaping the character formation of students. Some of these issues involve the leadership implementation processes (Berkowitz & Bier, 2006; DeRoche & Williams, 2001), the skills of teachers in carrying out the character development initiatives with the students (Berkowitz, 1998; Lickona, 1993; Ryan & Bohlin, 1999), the support of the stakeholders in the schools (Lickona *et al.*, 2007) and whether the character development programmes are truly

meeting the objectives that they are set out to do. It is because of these issues that have led some educators to doubt the true effectiveness of character development programmes. In the next section, the effectiveness of character development programmes will be examined through the various empirical studies conducted to validate their claims.

## **2.4 Effectiveness of Character Development Programmes**

Many scholars oppose character development programmes because the true effectiveness of such programmes is doubted and some even overrated (Davis, 2003; Hartshorne & May, 1930). Mosher (1980) criticised the popularity of character development programmes as very little strong evidence of their effects and long term merits existed. The lack of empirical data to validate the outcomes of character development programmes seems to be the missing component for greater endorsement from the academic community (Leming, 2008). This missing component will directly determine if character development programmes are indeed effective in producing the desired outcomes in students, especially when there are many such programmes commercially available today. The central question that needs to be answered in the quest for empirical evidence to support the effectiveness of character development programmes is whether we can measure character development outcomes. Many critics of character development programmes will only be convinced of their effectiveness when the character development

outcomes can be measured from students (Leming, 1993). This question is also pertinent to this research study because if the outcomes cannot be measured, it may imply that the Character Development Award criteria determined by SMOE may not be measuring what it proposes to do. Furthermore, this question will need to be answered in order for this research study and its research questions to be research worthy and valid respectively.

From the literature review on character education and development, there is empirical evidence that shows the possibility for character development outcomes to be measured as long as the constructs for measurement are well defined (see Corrigan, Grove, Vincent, Chapman & Walls 2007; Berkowitz & Bier, 2007; Flay, Alfred, Ji, Segawa, Burns & Campbell 2005; Hendrix, Luedtke & Barlow, 2004; Rudd & Stoll, 2004). There are attempts by various character development researchers to document procedures for conducting empirical research studies that measure character development outcomes through one's reasoning, feeling of self and outward behaviours. Furthermore, there is an increasing awareness for the need to have empirically measurable outcomes in current character development programmes given that much empirical research work had been done in the past by proponents of Rational Moral Education (cf. Blatt, 1969; Blatt & Kohlberg, 1975; Lawrence, 1980; Schaeffli, Rest & Thoma, 1985). Given that most contemporary character development researchers use integrative approaches in their character development programmes, latest empirical research work is needed to

validate the effectiveness of these programmes. There is a general consensus among researchers that effective character education must be accompanied by an eventual change in the behaviours of students where this change will benefit students in both their moral formation and academic performance (Berkowitz & Bier, 2007; Davidson *et al.*, 2008; Skaggs & Bodenhorn, 2006).

In the recent years, there has been meta analysis done to compile empirically proven character development programmes that are found to be effective in their outcomes. An example of such an effort is the compilation carried out by Berkowitz and Bier (2006) in their major research project, What Works in Character Education (WWCE), which compiled a list of character education programmes that were proven by scientific means for their effectiveness. The process of selection and validation involved the following:

- Expert advisory panel's review and recommendation of programmes within the last four decades
- Electronic literature reviews from electric databases
- Review of chapters and articles from seven hundred and sixty documents
- Direct contacts with character programmes developers and evaluators of these programmes after the initial review and recommendation

A total of one hundred and nine studies were reviewed, and after a series of programme effectiveness assessments, thirty-three programmes were found

to satisfy the criteria for a scientifically-based character development programme and that each of these programmes had to be cited in at least one academic journal article. The effectiveness of these programmes was proven through outcomes stated and measured with scientifically acceptable methods. Therefore, from the rigorous empirical reviews and compilation conducted by Berkowitz and Bier, they concluded that the effectiveness of character education could indeed be measured as long as two criteria were found. The first criterion is to state the definition of character and its constructs, and the second criterion is to determine the set of outcomes for the character development programmes before the implementation of the programmes (Berkowitz, Battistich & Bier, 2008). These two criteria are closely related as the definition of character will determine its constructs and the eventual expected outcomes when the programmes are implemented (Berkowitz, 1999).

From the thirty-three empirically proven character development programmes, Berkowitz and Bier also listed both the most commonly found content elements and pedagogical implementation strategies in effective character development programmes. The former comprised three content elements, namely, Explicit Character Education Programmes, Social and Emotional Curriculum, and Academic Curriculum Integration. The latter comprised five strategies, namely, Professional Development for Implementation, Interactive Teaching and Learning Strategies, Direct Teaching Strategies,

Family/Community Participation and Modelling/Mentoring. The details of the content elements and implementation strategies will be further elaborated in Section 2.5 and 2.6 respectively.

Besides the findings by Berkowitz and Bier (2006), Davidson *et al.* (2008) have also affirmed the possibility to measure the effectiveness of character development programmes. They have even derived four possible implementation strategies for character development programmes after studying nearly a hundred promising practices for character development in a two year grounded theory research and called them the 4 KEYS for Developing Performance Character and Moral Character (Lickona & Davidson, 2005). The details of the 4 KEYS can be found in Appendix A.

A careful study of the findings by Berkowitz and Bier (2006) and Davidson *et al.* (2008) reveals many areas of similarity. These similarities reinforce the findings that are reported by two separate groups of researchers in evaluating the characteristics of effective character development programmes. An example of this is in community involvement in character education such as school communities and families to enhance the character development initiatives among students.

Another leading researcher in character development, Lickona (1996), listed eleven principles that serve as a possible list to evaluate effective character

development programme. The eleven principles can be found in Appendix B. The Eleven Principles of Effective Character Education are currently used as the evaluation criteria by Character Education Partnership in awarding the National Schools of Character since 1997 in America (Lickona *et al.*, 2007). The nature of this award is very similar to SMOE's Character Development Award as it similarly recognises high quality character development programmes. Although the evaluation criteria for National Schools of Character formulated by Lickona are in the form of eleven principles, many of these principles are found in various findings of Berkowitz and Bier (2006) and Davidson *et al.* (2008). These overlapping strategies and principles will be further discussed in Sections 2.5 and 2.6.

It can be concluded from the various research efforts to identify and recognise effective character development programmes in schools that it is possible to measure the outcomes of character development. Having ascertained the possibility to measure character development outcomes, Sections 2.5 and 2.6 will be used to review the different effective character development content and implementation strategies used to ensure the desired character development outcomes respectively. Although this research study focuses on the outcomes of character development and does not examine the specific contents of character development and implementation strategies of Singapore schools, there is still a need for these two areas to be discussed given that they will affect the eventual outcomes of character

education. Furthermore, these two areas will be visited and discussed in the concluding chapters.

## **2.5 Review of Effective Character Development Content**

Under Berkowitz & Bier (2006)'s research in WWCE, there are three content elements that are commonly found in the thirty-three scientifically proven programmes. These three content elements are namely, explicit character education programmes, social and emotional curriculum, and academic curriculum integration. The following will highlight the key characteristics of the three content elements and their contributions to effective character development programme.

### **2.5.1 Explicit Character Education Programmes**

Explicit character education programmes refer to character development programmes that explicitly focus on a set of values or ethics that students are to learn and practice. The educators will have pre-determined a set of values or ethics that students are to learn through the different initiatives driven by the programme. The strength of explicitly stating the values and ethics to be taught will allow both teachers and students to be aware of what they are to learn as the explicitness provides a certain focus and highlight the importance throughout the school community. It also allows the outcomes to be easily determined based on the desired values and ethics to be seen. Although it is

good to focus on teaching students a set of moral values or ethics that can be purposely reinforced by the different stakeholders in the school, it may cause students to treat other moral values and ethics as less important than those that are emphasised in the school as was highlighted earlier in Section 2.3.2. Many of the weaknesses of Traditional Character Education programmes may also be limitations of explicit character development programmes if this is the only method that is used for character education. Given Singapore schools familiarity to Traditional Character Education approach because of the current Civics and Moral Education programme, schools involved in character development will need to harness the strengths of Traditional Character Education approaches without neglecting the strengths of Rational Moral Education approaches. This will involve the training of teachers to utilise and maximise the two approaches to obtain the desired outcomes.

## **2.5.2 Social and Emotional Curriculum**

Social and emotional curriculum is the most popular among the thirty-three validated programmes. In general, the different programmes' content includes personal improvement, self-management and awareness, problem solving, inter-personal communication, goal settings, relaxation techniques and decision making skills. This approach is also well known as Social and Emotional Learning programmes. The Social and Emotional Learning approach has been well researched for the last three decades under various research areas and names such as social intelligence (Goleman, 1995;

Mayer, 2001), emotional intelligence (Bar-On, Maree & Elias 2007; Goleman, 1995; Mayer, 2001), and intrapersonal and interpersonal intelligence (Gardner, 1993). It is documented that once young people are equipped with the right skills and healthy attitudes and beliefs, they will be more likely to make decisions that are ethical and responsible where they will avoid behaviours that will bring negative consequences and harm to themselves and others around them (Elias, Zins, Weissberg, Frey, Greenberg & Haynes, 1997; Lemerise & Arsenio, 2000). Social and Emotional Learning programmes aim to help students to develop a set of skills that can assist them improve on the management of their own emotional state and relationship with others in the school environment so as to facilitate an enjoyable learning journey (Elias, Kress & Hunter, 2006a; Elias, Parker, Kash, Weissberg & O'Brian, 2008). It is also found that effective Social and Emotional Learning curriculum not only has positive effects on school-related behaviours and attitudes, it is also found to increase students' academic achievements (Zins, Bloodworth, Weissberg & Walberg, 2004).

Besides influencing students directly through the various content elements, Social and Emotional Learning will be most effective when the entire school environment encourages and reinforces the desired social and emotional skills (Elias *et al.*, 2008). A whole school approach will generate a high ownership and participation from staff and students across all levels towards character development initiatives. Formal training will be required for all staff

members to be proficient with the various skills to be taught and also provide possible avenues for teachers to first manage their own personal social and emotional areas before engaging the students in the classes (Elias, 2001; Elias, O'Brien & Weissberg, 2006b; Elias, Zins, Weissberg, *et al.*, 1997). Staff members need to be given time for training because Social and Emotional Learning approach relies heavily on the school environment and the modelling by everyone around the students, both the students' peers and staff of the school. However, Elias *et al.* (2008) differentiated Social and Emotional Learning from character education as it focuses on skills and attitudes whereas the latter deals with values. As such, the Social and Emotional Learning approach requires very directed effort as maladaptive direction can also bring about negative and harmful effects. Hence, the Social and Emotional Learning approach must be based upon good moral values for it to be beneficial to schools.

It is not surprising for SMOE to introduce Social and Emotional Learning in 2005 to Singapore schools given its popularity among overseas' schools. Schools are given the option to decide whether to include Social and Emotional Learning as part of their character development programmes or it can be a different programme that runs parallel to the existing programmes. However, given the strong empirical findings that support the Social and Emotional Learning framework for character development, SMOE may want to give a stronger mandate for schools to use this framework to craft their

character development programmes. This may provide a very good direction for schools that are new in crafting character development programmes and save many hours of research to design effective character development programmes.

### **2.5.3 Academic Curriculum Integration**

It is found that some character development programmes are integrated into the school's academic curriculum in different degrees. This is achieved through integrating the teaching of character values into academic Social Science and language subjects. A possible example is using the study of History to provide opportunities to discuss major world events and decisions that were made that had ramifications on the history of countries. Some schools would dedicate entire class session in the explicit teaching of character values and treat such session as part of their academic hours. This is the case for Singapore's schools where class sessions are allocated for the explicit teaching of moral values. It will be ideal for schools to consider integrating their character development programmes into the formal academic curriculum so as to make character education more meaningful and engaging for the students.

### **2.5.4 Summary of Character Development Content**

It is apparent from the short list of content elements reviewed in Section 2.5.1 to 2.5.3 that it is not an easy task to find many common content elements

among the thirty-three character development programmes. The reason is because various programmes would define character differently from each other. Once the definition for character is different, the content emphasis will vary, resulting in various outcomes depending on the individual programme's focus (Berkowitz & Bier, 2008). This is not surprising as Smagorinsky and Taxel (2005) and Berkowitz (1997) have highlighted the insurmountable challenge to determine and accept a common domain definition for character education given the many fields of research that cover the different aspects and constructs of character. Given this reason, there may be other effective content elements for character development which may not be highlighted in the research work of WWCE.

Besides having good content elements in character development programmes, the implementation strategies to carry out the character development programmes are also critical to achieve the desired outcomes. This will be discussed in the next section.

## **2.6 Review of Effective Character Development Implementation Strategies**

Besides effective character development content, the WWCE project also highlighted five effective character development implementation strategies which will be discussed separately from Section 2.6.1 to 2.6.5. Similar findings by Davidson *et al.* (2008) and Lickona (1996) will also be highlighted in the respective sections.

### **2.6.1 Professional Development for Implementation**

For any programme to be effectively implemented and successful at the classroom level, the involvement of qualified teachers is imperative (Hinde, 2003). Without trained and qualified teachers to carry out the daily activities required in the various character development initiatives, it is almost certain that the programme will eventually become a failure. Therefore, staff development is critical for the programme's success (Berkowitz & Bier, 2004).

There are various reasons for staff to have professional development before and during the implementation stages of the character development programme. Using Kohlberg's model in cognitive moral development, it is believed that in order to help students to move up the moral stages, the teachers must be at least one level ahead of the students (Snarey & Samuelson, 2008). Naturally, because of age maturity and higher educational level, teachers are usually at a higher level of moral stages as compared with

the much younger students (Cummings, Harlow & Maddux 2007). However, this may be true for primary school children but it may not be the case for upper secondary or junior college students. Research has shown that teachers who teach higher standard students have lower efficacy for character education than teachers who teach primary standard students (Milson, 2003; Milson & Mehlig, 2002). Therefore, professional training is to ensure that teachers can be given the opportunity to experience the different character development initiatives so as to advance their moral stages as a result. Furthermore, such professional development will assist teachers to be competent to execute the character initiatives as many teachers do not have sufficient training in character education during the pre-service teacher training course (Williams & Schaps, 1999; Jones, Ryan & Bohlin 1998). Berkowitz (1998), Lickona (1993) and Ryan and Bohlin (1999) have sounded their observations that teachers are not prepared for the heavy expectation placed on them to execute and implement character development programmes as teacher training institutions do not fully equip them with the necessary knowledge and skill for this area. In-service teachers will need professional development to help them with the knowledge and understanding of character development processes, and also the skill to facilitate character development lessons in classes (Schwartz, 2008). Teachers in Singapore schools face the same challenge given the lack of training in character development during their pre-service teacher training course. Many have to learn character development from colleagues on a

personal basis or in schools that organise special training sessions for teachers to implement the character development programmes.

The professional development is not just needed before the implementation process, it is also required for staff training during the implementation process. This is to provide the continuous training to reinforce the skill sets, introduce new initiatives or skills, share success stories, and to re-envision the importance of character development with the staff to sustain their commitment towards character education (Berkowitz & Bier, 2004). It is also proven that character development programme is more effective when implemented accurately with fidelity (Berkowitz & Bier, 2006; Kam, Greenberg & Walls, 2003; Solomon, Battistich, Watson, Schaps & Lewis, 2000). Such professional development platforms will ensure that staff will continue to maintain a high standard in executing the various character development initiatives accurately and thoroughly.

A detailed study of the Eleven Principles of Effective Character Education (Lickona, 1996) will also surface the importance of school's staff involvement at every level of any character development programme. Most of the principles stated will involve the staff in some ways and professional development is vital for these eleven principles to be enforced. In particular, Principles 3, 4, 5, 7 and 8 will require specialised staff training and

development before these principles can be seen and found in the school environment.

As for the 4 KEYS to implement character development (Davidson *et al.*, 2008), in order for one of the KEYS, Ethical Learning Community, to take place in the classroom in its proper form and philosophy, school staff members play a key role to ensure its formation. Therefore, professional development through staff training is vital before the Ethical Learning Community can take place with students and among the staff.

### **2.6.2 Interactive Teaching and Learning Strategies**

The three most common forms of interactive teaching strategies found in the thirty-three scientifically-based character development programmes are: peer discussion, role-playing opportunities and cooperative learning.

Peer discussion sessions have been proven in psychology research to be an effective method to promote student learning and development (Berkowitz & Bier, 2006). It is during such sessions that students are given the opportunity to discuss class issues, set group goals, problem solve, build unity through consensus and take responsibilities within the class or school community. Such peer discussion sessions can also occur in the class' academic curriculum time in which the same principle of allowing every student to have a voice and role to contribute to the growth and development of a community.

Some character development programmes would use moral dilemmas as discussion topics and teachers would facilitate classroom peer discussions on moral and ethical issues. This concept is very much the same as the Just Community approach that Kohlberg advocated (Power, Higgins & Kohlberg, 1989; Power, Higgins-D'Alessandro, 2008). It is in such an open environment that students are allowed to voice their respective views and hear the perspectives of their peers with the freedom to agree or disagree. This environment will help students realise that there are differing views in every issue and they can raise them in a safe place. Students are also allowed to change their stand after hearing the various views so as to facilitate the process of personal growth and development in their moral judgement. It is also believed that such peer discussions allow students with lower moral stages to develop their moral thinking to level up to higher moral stages of their peers (Snarey & Samuelson, 2008).

Another proven effective interactive teaching and learning strategy for students to understand the complexity of moral issues and perspective is through role-playing. Role-playing techniques allow students to immerse themselves and act out another person's role and personality. This may require students to research and write scripts to become someone else in different social events. Such role-playing techniques provide opportunities for students to explore the world of another person and thereby facilitating learning opportunities to different moral perspectives.

Cooperative learning is the third effective interactive teaching and learning strategy highlighted by Berkowitz and Bier (2006). Through cooperative learning opportunities, students are able to learn and share their differing viewpoints and come to a common understanding in order to work together as a team. The intent is to create a context to resolve conflicts constructively and seek mutual goals to benefit the entire group. This learning strategy allows students to put aside their personal preferences, hear the views of others before deciding what is best for all the members in the group. This will enable students to move beyond their egotistical needs to fulfil the needs of the group, hence, providing valuable opportunities for everyone to feel that they belong to a group.

From the three effective interactive teaching and learning strategies that have been discussed, Principles 3 to 6 of the Eleven Principles of Effective Character Education (Lickona, 1996) can be seen operating in these three strategies as well.

### **2.6.3 Direct Teaching Strategies**

The direct teaching strategies are found in many of the thirty-three programmes as direct teaching explicitly address the virtues that will be emphasised in the character development programmes. These strategies are classified under the Traditional Character Education approach and the effectiveness for such strategies has been well documented and researched

(Bennett, 1991; Kilpatrick, 1996; Ryan, 1996; Wynne & Ryan, 1993). The teaching can be conducted through a class instruction by a teacher or by students who are assigned to present the moral virtues. Students can present historical figures who were moral heroes or share on social emotion skills that they have learnt in the class. Direct teaching can also take place through other non-Social Science subjects such as Mathematics or Science as long as teachers are able to creatively integrate character development teaching content into these subjects. Although many have written against this approach (Kohlberg, 1981; Kohn, 1997a, 1997b; Leming, 1997; Nash, 1997), the strategies are still used by many programmes because they directly address the virtues at hand and students are immediately made aware of them.

The involvement of students to teach the assigned virtues to the class is also found in one of the 4 KEYS to effective character development implementation (Davidson *et al.*, 2008), that of Public Performance/Presentation. When students are given the opportunity to present their findings to their peers and teachers, they usually do their best in their research work and presentation to the class. Such motivation will help students strive for excellence in what they do and thus help them to improve and better their performance character.

#### **2.6.4 Family/Community Participation**

The fourth common strategy that is often used in character development programmes is the involvement of family participation. The family unit can be considered as the most important moral centre for character development (Ponzetti, 2005). It is the seedbed for character development in terms of moral thinking, moral affection and moral behaviours (Dunn, 2006). It is in the family context that children observe, learn and model after the beliefs, attitudes and behaviours of parents. This is where the transmission of moral values occur (Berkowitz, 2002; Halstead, 1999). The family not only allows children to experience the transmission of values, it is also the place for moral reasoning to be developed, especially between parent and children (Walker & Taylor, 1991; Smetana, 1999). The development for moral reasoning takes place during conversation, discipline and even in the process of negotiation within the family. If the family is not taken into consideration by the school in their character development programme, it may be the very place that works against the character development efforts of the school especially if the home environment is not a nurturing one (Berkowitz & Bier, 2006). It is paramount for parents and guardians to be involved in the character development programme if the school wants to ensure that the family supports the character development initiatives. Lorion and Sokoloff (2003) have pointed out that in order for young people to experience a lasting change in their behaviours, family involvement is paramount. Lickona *et al.* (2007) have made similar emphasis to engage parents as full partners in the character

development programme as the family community is too important and influential in the lives of students to be neglected. Therefore, it will be even better to move beyond merely informing parents of the character development programmes to training parents to reinforce the character development initiatives at home (Berkowitz & Grych, 1998). However, the reality of involving parents is not easily achieved as parents in Singapore rely heavily on the school system for education and character development. This will be further discussed in later chapters as seen from the research findings.

Some educators have also advocated for other communities to be involved in character development programme besides that of family. These communities include religious institutions, communities around the school, media and governmental leaders (Lickona, 1996; Lies *et al.*, 2008). However, the family will still remain as the predominant influence in lives of most students.

The involvement of family is also mentioned in the Eleven Principles of Effective Character Education (Lickona, 1996) as seen in Principle 10. Therefore, for any character development programme to be successful, schools will need to consciously involve the family of the students to reinforce their efforts.

### **2.6.5 Modelling/Mentoring**

Besides the role of teaching students to discover new knowledge, there is an inseparable ethical responsibility of a teacher to be a moral agent and moral exemplar (Campbell, 2008; Fenstermacher, 2001; Katz *et al.*, 1999; Reitz, 1998; Sizer & Sizer, 1999). This is inevitable given that teachers live out their actions, attitudes and virtues through their daily interactions with students as moral educators in the schools (Borba, 2001; Goodman & Lesnick, 2004; Noddings, 2002; Nash, 1997; Ryan & Bohlin, 1999; Wynne & Ryan, 1997). There are significant empirical studies verifying that the daily practices of teachers are demonstrating moral dimensions of teaching (Campbell, 2003; Richardson & Fenstermacher, 2000; Richardson & Fallona, 2001; Simon, 2001). Every interaction and discussion can be used as a possible avenue for the discussion of ethics, morals, values and virtues. Every action carried out by a teacher is observed by students as a measure of fairness, integrity, kindness, openness to differing views, consistency to uphold rules and respect for the students (Sizer & Sizer, 1999). Therefore, teaching is a moral act (Schwartz, 2008). Boostrom, Hansen & Jackson (1993) even stated that teacher's daily behaviours have greater moral effect than the occasional moral lessons taught explicitly in class. Inevitably, teachers serve as models for students to observe and learn for their character development (Goodman & Lesnick, 2004; Simon, 2001; Watson, 2003). This is the fifth strategy commonly used by effective character development programmes. This strategy encourages teachers to be aware of their influential role in the school

environment to inspire students to exhibit moral reasoning and moral behaviours through their daily interactions with students.

The strategy of modelling is also found in another of the 4 KEYS for effective character development implementation (Davidson *et al.*, 2008), namely, Other Study. The strategy of Other Study has the same concept that we have just discussed where teachers can serve as moral exemplars for students. Therefore, this strategy is proven to be essential in effective character development programmes.

#### **2.6.6 Summary of Effective Character Development Implementation Strategies**

The five strategies listed by Berkowitz and Bier (2006) are not exhaustive given that they are derived from only thirty-three proven effective programmes and may have missed out many other good scientifically acceptable programmes that have yet to receive attention by the academic community. Berkowitz and Bier have also mentioned that for effective character to take place in schools, multiple strategies must be used concurrently to bring about maximum effects on students. For schools to devise effective character development programmes, the leadership of the schools will need to consider the usage of multiple strategies concurrently to bring about the desired change in students' character formation. Besides having good character

development content elements, using appropriate implementation strategies will enhance the success of schools' efforts in character education.

## **2.7 Conclusion**

This chapter has provided the literature review for the development of character education, the theoretical basis and empirical research on effective character development programmes. One of the critical factors in determining the effectiveness of character development programmes is to first define the meaning and constructs for character that will be used in the programmes. Once the definition and constructs of character are determined, the outcomes for the character development can be quantified and measured.

Secondly, this chapter has also provided the theoretical basis to examine the character development programmes in Singapore schools. Since character development outcomes could be measured as discussed, this research study attempted to measure the outcomes of schools with different awards and no award, and determined if the outcomes were consistent with the evaluation criteria used by SMOE to evaluate schools. This research would serve as a possible reference for policy makers in character education and character educators to understand the factors that should be considered for the evaluation and recognition of effective character development programmes within schools. Furthermore, this research study would also highlight the need

for more empirical research work to be conducted for character development within Singapore schools. The support of such empirical research studies would provide validation to SMOE's desired outcomes in producing morally upright students through its holistic education.

With the theoretical framework being set in place for the research study, the next chapter will present the survey instrument that was used among the key stakeholders of the schools that participated in the research study.

## CHAPTER 3: THE SURVEY INSTRUMENT

### 3.1 Introduction

Given that the research depended heavily on the data collected from the survey instrument used during the research study, this chapter will provide the detailed information and explanation required to understand the various constructs found within the instrument. This will allow readers of the research study to understand the reason for the decisions to use the various constructs to answer the research questions in the later chapters.

There were various reasons for using this instrument for the research. Firstly, the research instrument uses the same definition of character as defined in this research study in which character is “two essential and connected parts: performance character and moral character” (Davidson *et al.*, 2008: 373). Performance character refers to one’s mastery orientation towards excellence in any performance environment such as self-discipline, perseverance, diligence, a positive attitude, not afraid to try and fail and ingenuity. Moral character refers to one’s relational orientation towards successful interpersonal relationships and ethical conduct. Secondly, the constructs of the surveys included the involvement of the communities of students, parents and teachers where these stakeholders play pivotal roles in shaping the formation of character (Campbell, 2003; Richardson & Fenstermacher, 2000; Richardson & Fallona, 2001; Simon, 2001; Smetana, 1999; Walker & Taylor,

1991; Wynne and Ryan, 1993). Lastly, the instrument was able to measure both the inputs and outcomes of character development which were vital for this quantitative research. Without the ability to measure character development outcomes, this research study would not achieve its research objective.

Given that the CREE surveys were designed for the context of American schools, the researcher had to amend some minor portions of the surveys to accurately reflect the ethnic groups that were commonly found in Singapore schools and the terms used for the different academic standards appropriate for Singapore's education system. The researcher also took time to go through the surveys with the principals and appointed staff members of the participating schools to ensure that the local stakeholders would not face any difficulty in understanding and using them. All the staff members expressed confidence that the surveys would be appropriate for usage within the Singapore context.

### **3.2 The Instrument Overview**

The survey instrument used is called Collective Responsibility for Excellence and Ethics (CREE) version 2.7 Short designed by Khemelkov and Davidson (2008a) where this short version consists of fewer items in the various surveys.

The CREE is designed to measure school outcomes in both performance and moral character, and also school inputs in character development. The school inputs include “school and classroom academic and social climate and culture, intentional and unintentional practices of faculty, staff and parents, as well as student own behaviours, experiences and interactions with peers and adults that impact their learning and socio-moral development” (Khmelkov & Davidson, 2008a: 4). The instrument can be used for a one time assessment or an over-time monitoring of the various inputs and outcomes of the character development programmes.

The three major components in the CREE are CREE Student Survey (Appendix C), CREE Staff Survey (Appendix D) and CREE Parent Survey (Appendix E). One of the strengths of CREE is that it can facilitate the process of triangulation of the key constructs from different sources in the schools. These surveys provide the 360-degree view for comparing and contrasting results of the constructs being assessed. The following sections will explain the details of the various constructs found in the three surveys and the individual items that formed the constructs.

### **3.2.1 CREE Student Survey**

The CREE Student Survey is a survey used to gather information from students with regards to their perception of their school’s character development programmes and initiatives. This survey has 70 items that

comprise four major constructs in character development as seen in the following:

- School Climate
- Ethical Learning Community
- Experiences of Learning the Strengths of Character
- Student's Character

The survey uses 5-point Likert-type scales to measure the various constructs as seen from Appendix C. Three of the constructs, School Climate, Ethical Learning Community and Experiences of Learning the Strengths of Character measure the various inputs into the student's character development whereas the construct, Student's Character, measures the outcomes of the various character development initiatives. These four major constructs and what they intend to measure are elaborated as follows (Khmelkov & Davidson, 2008a):

#### **3.2.1.1 School Climate (Items 18 to 22, 34 to 39)**

This construct comprises 11 items that measure two areas within the school community. The first area is the extent to which students feel safe in the school environment and the exposure to peer cruelty or violence. The second area is the social capital that is generated by the school's staff among the student community through the staff's daily interactions with students. An example is Item 19 which measures if students see someone verbally abusing or harassing another student. If such abuses occur on a regular

basis, it will affect the school climate and students' perception towards safety within the school environment. Another example is Item 36 which measures students' perception of fairness towards staff enforcement of rules in the school community. The staff's practice of fairness in enforcing school rules will have a definite contribution to the school's environment as well.

### **3.2.1.2 Ethical Learning Community (Items 23 to 33)**

This construct comprises 11 items that measure two main areas. The first area is the acceptance of differences among students and their attachment to the school community. An example is Item 25 which measures students' perception towards those who are not part of the popular groups, and whether they will get picked on or excluded. The second area is the collective responsibility towards the school community and the commitment to challenge others towards excellence and do their best. An example is Item 32 which measures students' perception towards the belief that working together can bring change in their school.

### **3.2.1.3 Experiences of Learning the Strengths of Character (Items 40 to 70)**

This construct comprises 31 items that measure two areas. The first area measures students' perceptions of the opportunities created by the staff in the school in developing both performance character and moral character. The second area measures the interactions with fellow students in developing

both performance character and moral character. One example is Item 48 where students are asked to measure their perception towards staff's efforts in teaching students how to resolve conflict fairly and peacefully. Such attempts by the staff clearly indicate their efforts in teaching the strengths of character to students.

#### **3.2.1.4 Student's Character (Items 1 to 17)**

This construct comprises 17 items that measure students' commitment and self-discipline to challenge themselves towards excellence in performance environment (academics, extracurricular activities) and ethical conduct. In another words, it is a measurement of students' own perception of their performance character and moral character. An example is Item 12 which measures students' perception of themselves in doing the right thing no matter what others might think. Such action by students will indicate their desire to do what is morally right regardless of their friends' opinions.

#### **3.2.2 CREE Staff Survey**

The CREE Staff Survey is a survey used to gather information from staff with regards to their perception of their school's character development programmes and initiatives. This survey has 70 items that comprises four major constructs as follows:

- Professional Ethical Learning Community
- Assessment of Ethical Learning Community

- Teaching the Strengths of Character
- Assessment of Student's Character

This survey uses the 5-point Likert-type scales to measure the various constructs as seen from Appendix D. Two of the constructs, Professional Ethical Learning Community and Teaching the Strengths of Character measure the perceptions of staff contributing to character development programmes and initiatives in the school. The other two constructs, Assessment of Ethical Learning Community and Assessment of Student's Character, measure the staff's perception of the student community's Ethical Learning Community and Student's Character. The latter two constructs can be used to triangulate the findings with two of the constructs, Ethical Learning Community and Student's Character found in the Student Survey.

These four major constructs of the Staff Survey and what they intend to measure are elaborated as follows (Khmelkov & Davidson, 2008a).

#### **3.2.2.1 Professional Ethical Learning Community (Items 48 to 70)**

This construct comprises 23 items that measure staff's perceptions of colleagues' commitment and professional practice towards excellence and ethics for the school community. This can be seen from staff's efforts in developing shared purpose and identity, aligning practices with desired outcomes, having a voice and taking a stand, grappling with tough issues,

practicing personal responsibility for continuous self-improvement and collective responsibility for excellence and ethics. An example is Item 55 which measures staff's evaluation of each other's work and provide constructive criticism. Such a practice will enhance the professional standard of teaching among the staff.

#### **3.2.2.2 Assessment of the Ethical Learning Community (Items 18 to 28)**

This construct comprises 11 items that measure staff's perceptions of students' commitment and practice towards excellence and ethics for the school community. An example is Item 20 which measures staff's perception on whether students pick on or exclude those who are not part of the popular groups.

This construct is the same as 3.2.1.2 but now it is the staff members who are making the assessment on the students' Ethical Learning Community within the school community. This measurement can be used to triangulate with the measurement obtained from 3.2.1.2.

#### **3.2.2.3 Teaching the Strengths of Character (Items 29 to 47)**

This construct comprises 19 items that measure staff's efforts in promoting both performance character and moral character with students. In the area of performance character, this can be seen from staff's interactions with

students on issues related to their performance and attitude in their school work, projects, class presentations and extracurricular activities. An example is Item 33 which measures staff's perception in their efforts in helping students to reach their goals. Such efforts by the staff will contribute significantly to students' performance character.

In the area of moral character, this can be seen from staff's interactions with students in issues related to their development as socially and emotionally skilled person, responsible and ethical in their thoughts and actions. An example is Item 38 which measures staff's efforts in ensuring that students help other students to solve conflicts fairly and peacefully. Such efforts by the staff will contribute significantly to students' moral character in relating with others.

#### **3.2.2.4 Assessment of Student's Character (Items 1 to 17)**

This construct comprises 17 items that measure staff's perceptions of students' commitment and self-discipline to challenge themselves towards excellence in performance environment (academics, extracurricular activities) and ethical conduct. In other words, it is a measurement of staff's perception towards students' performance character and moral character. An example is Item 14 which measures staff's perception on whether students do what is morally right no matter what their peers might think.

This construct is the same as 3.2.1.4 but now it is staff members who are making the assessment on students' performance character and moral character within the school community. This measurement can be used to triangulate with the measurement obtained from 3.2.1.4.

### **3.2.3 CREE Parent Survey**

The CREE Parent Survey is a survey used to gather information from parents with regards to their perception of the school's character development programmes and initiatives. This survey has 50 items that comprise three major constructs:

- School-Family Partnership
- Parent Practices Promoting Character
- School Focus on Excellence and Ethics

The survey uses the 5-point Likert-type scales to measure the various constructs as seen from Appendix E. These three major constructs and what they intend to measure are elaborated as follows (Khmelkov and Davidson, 2008a).

#### **3.2.3.1 School-Family Partnership (Items 13 to 30)**

This construct comprises 18 items that measure two areas between school and family partnership in character development. The first area is that of parents' or guardians' perceptions of school's efforts to involve, communicate and educate parents in developing both their children's performance

character and moral character. An example is Item 26 which measures parents' perception towards schools' attempt to teach parents how to monitor their children's progress in school.

The second area is that of parents' or guardians' own action to initiate communication with school, volunteer to serve the school and participate in making decisions on school issues. An example is Item 15 which measures parents' perception towards their willingness to volunteer at school or in their children's classrooms.

#### **3.2.3.2 Parent Practices Promoting Character (Items 1 to 12)**

This construct comprises 12 items that measure parents' or guardians' focus on the development of performance character and moral character in their children. This can be seen through parents' or guardians' involvements and expectations in their children's school work, family activities and relationships with others. An example is Item 9 which measures parents' perception towards their efforts in helping their children to resolve conflicts fairly and peacefully. Parents' involvement in such matters will promote character development in their children.

### **3.2.3.3 School Focus on Excellence and Ethics (Items 31 to 50)**

This construct comprises 20 items that measure parents' or guardians' perceptions of school's efforts and commitment to build the ethical learning community in the school and develop students' performance character and moral character. An example is Item 40 which measures parents' perception towards school's effort in teaching their children to make ethical decisions.

### **3.2.4 Summary of the Major Constructs**

The major constructs of the three surveys are summarised in Table 3.1. Both the Student and Staff Survey have four major constructs and the Parent Survey has three.

For the Student Survey, three of them measure the inputs and one of them measures the outputs of character development. For the Staff Survey, two of constructs measures staff's contribution to character development inputs and the other two assess students' character development inputs and outputs. For the Parent Survey, it has three constructs that measure school's attempt to partner with parents, parents' efforts in character development at home and parents' perception of school's efforts in character development.

With the understanding of the major constructs within the survey instrument, the next chapter will focus on the research methodology and processes that were used for the research study.

**Table 3.1: Summary of CREE Major Constructs**

<b>No.</b>	<b>Student Survey</b>	<b>Staff Survey</b>	<b>Parent Survey</b>
1	School Climate (inputs)	Professional Ethical Learning Community (staff)	School-Family Partnership
2	Ethical Learning Community (inputs)	Assessment of the Ethical Learning Community (students' inputs)	Parent Practices Promoting Character
3	Experiences of Learning the Strengths of Character (inputs)	Teaching the Strengths of Character (staff)	School's Focus on Excellence and Ethics
4	Student's Character (outputs)	Assessment of Student's Character (students' outputs)	

## **CHAPTER 4: RESEARCH METHODOLOGY**

### **4.1 Introduction**

The purpose of the research was to use a quantitative research methodology to determine if there were significant differences in character development outcomes among schools in Singapore which had been awarded the Outstanding Development Award (ODA), Development Award (DA) and schools that had no award. In order to fulfil the research objective, the research processes, procedures and methodology would be discussed in detail in this chapter. The chapter will begin with a clear research direction set by the research questions which are meant to guide the entire research study. The research procedures from the beginning to the end of the research study will be outlined so as to facilitate a good understanding of the entire research study process. The involvement of the key stakeholders' of the school community and the selection criteria for the schools involved in the research study are important information that will also be discussed. Thereafter, the validity, data analysis, limitations and ethical considerations for the research study will be discussed. With this overview, the next section will begin detailing the research process by stating the research questions.

## 4.2 Research Questions

The research questions that were used to guide the research process are as follows:

1. Would students from an ODA school rate the character development of their school more positively than students from the DA schools?
2. Would students from the DA schools rate the character development of their schools more positively than students from the no award school?
3. Would students from an ODA school rate the character development of their school more positively than students from the no award school?
4. Would staff from a higher award school rate the students' character development of their school more positively than staff from schools with lower or no award?
5. Would parents from a higher award school rate their children's character development more positively than parents from schools with lower or no award?

With these research questions in place to provide the direction for the research study, the research procedures will be examined in the next section.

### **4.3 Research Procedures**

There were two levels of permission that were required before any research work could be carried out in Singapore's schools. Firstly, permission must be sought from the Singapore Ministry of Education (SMOE) before approaching the selected schools to request the conduct of the research. The Planning Division within SMOE would handle research requests and give approval before any research work could be carried out in schools. Information such as research objective, duration, the total number of students, staff, parents and schools would need to be given as part of the application process (see Appendix F). Upon satisfying the SMOE officials with the necessary information, a first level general approval was given for the research work to be carried out, conditioned upon the second level approval of the school's principal before any actual research work could be carried out in any school (see Appendices G and H).

With the first level permission given by SMOE, selected schools were chosen for the research work based on the research criteria stated in Section 4.4.1. With the selected list of schools, a letter of intent for research was sent to these schools through either email or posted mail to determine their interest to participate in the research work (see Appendix I). Schools that responded with interest were visited by the researcher to further explain the research objectives, processes involved and the survey instruments that would be used. Once the schools' principals were satisfied with the research purpose

and processes, detailed arrangements were made and the dates for the conduct of research were finalised with assigned staff members. Before the conduct of the surveys, the correct number of questionnaires had to be printed and the assigned staff members had to be briefed by the researcher on the administration of the questionnaires. This was to ensure that a standard procedure was observed in the conduct of the surveys and clarify any other questions that might arise during the actual conduct of the various surveys.

Each participating school was asked to conduct a random survey for at least 150 students who were from Secondary 2 to 5 (14 to 17 years old) so as to ensure that they had at least one year of experience in the different character development programmes and initiatives within the school. At the same time, it would be ideal to have students from different standards within the school to participate in the survey to capture the character development information across different standards. The appointed staff members of the schools conducted the Student Survey during one of the classroom lessons and collected the survey immediately upon completion.

For schools that had wanted to involve their teachers and parents to be part of the research, a random survey was asked to be conducted for at least 50 teachers and 50 parents. These teachers and parents had to be teaching students in Secondary 2 to 5 and related to these students respectively. For

the Staff Survey, the appointed staff members either conducted them during one of the Staff Meetings or distributed them individually to the staff concerned. For those schools that conducted the survey during the Staff Meeting, the forms were collected immediately upon completion. For those schools that distributed the forms individually, they were collected back individually. For the Parent Survey, all of the schools gave the survey form to the students to bring back home for the parents to fill in. This option was not the most ideal but given the pandemic outbreak situation of Avian H1N1 influenza virus, this was the best option available as most parents would not be allowed into the premises of the schools during that period. A total number of at least 750 students, 200 staff and 200 parents were expected to take part in the survey.

The data collection duration took nine months from April 2009 and January 2010. The return of surveys took longer than expected for some schools, especially those that involved parents in the research. When all the forms were returned and tabulated, there were a total of 1266 students, 210 staff and 396 parents who took part in the research.

The data collected were keyed into SPSS software by research assistants and used by the researcher for data analysis. Individualised reports were also generated and sent to the principals of the various schools that participated in

the research. The researcher also presented the findings to the key personnel of the schools upon the requests of the principals.

With the procedures of the research study being explained, the next section will elaborate the selection criteria and the profiles of the participating schools.

## **4.4 Participants**

### **4.4.1 Selection Criteria**

The researcher sent letters of intent to seventeen Secondary Schools with five that responded positively to the research request. The seventeen schools were selected based on the following criteria:

- Two schools were selected from the list of ODA schools
- Ten schools were selected from the list of DA schools
- Five schools were selected from the list of schools that had yet to obtain an award
- Schools selected were preferably non elite schools that had consistently good academic results

The reason for not selecting elite schools that consistently performed well in national examination was to allow a fair comparison between schools, especially among the students. The overall aim was to have at least one school to represent schools under the award winning category of ODA, DA and no award respectively.

The list of award schools was obtained from the SMOE's Character Development Award website (SMOE, 2008). The reason for only approaching two schools from the ODA schools was because most of the schools found in the list were elite schools with consistently good academic results with only one that was identified to be a neighbourhood school and the other a mission school, both of which met the criteria of selection.

Out of the five that responded positively to the research request, one school had not obtained an award, three schools had obtained the DA and one school had obtained the ODA. Four of the schools had requested for all three of the key stakeholders of students, teachers and parents to be involved in the research. However, one school had given permission for only the students to be involved in the research.

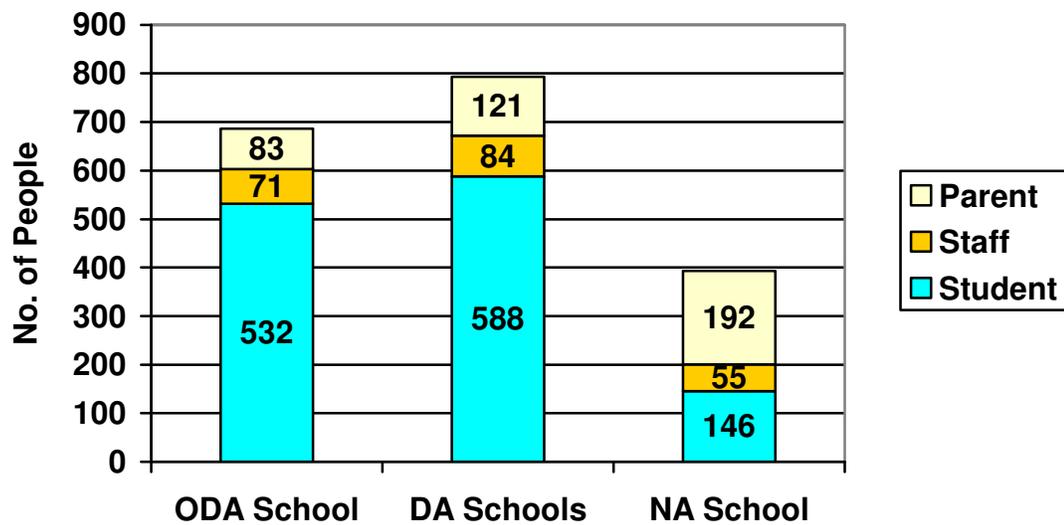
#### **4.4.2 Profile of Participants**

The overall breakdown of the valid respondents from the various stakeholders can be seen from Table 4.1 and Figure 4.1. The total valid entries used in the data analysis were 1872 and the breakdown was as follows: 1266 students, 210 staff and 396 parents.

**Table 4.1: Breakdown by Student, Staff & Parent**

	ODA School	DA Schools	NA School	Total
Student	532	588	146	1266
Staff	71	84	55	210
Parent	83	121	192	396
Total	686	793	393	1872

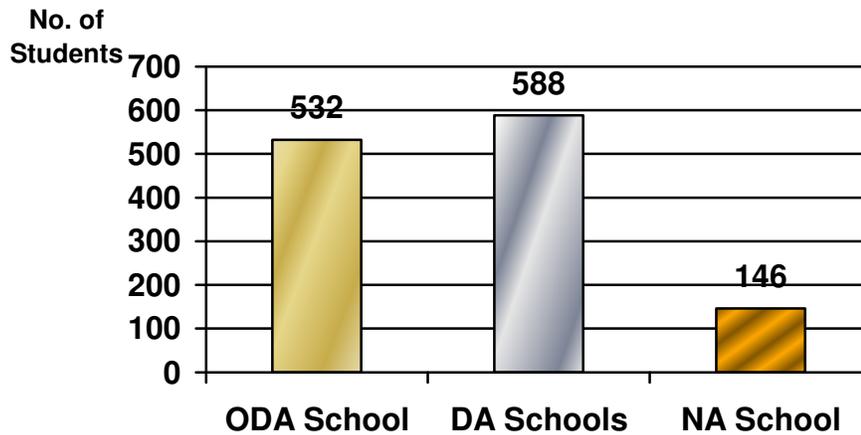
**Fig 4.1: Breakdown by Students, Staff & Parents**



#### 4.4.2.1 Students

From Table 4.1 and Figure 4.2, there were a total of 532 students from the ODA school, 588 students from the DA schools and 146 students from the no award school who participated in the research.

**Fig 4.2: Students by Awards**



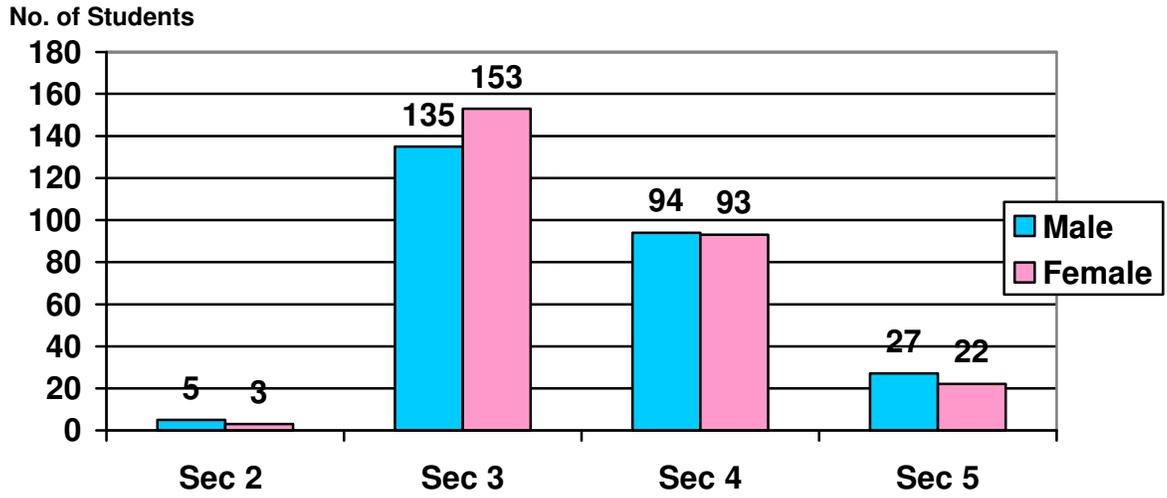
##### 4.4.2.1.1 Outstanding Development Award School

For the ODA school, the breakdown of male and female students by the academic standard from Secondary 2 to 5 could be seen in Table 4.2 and Figure 4.3. There were a total of 261 males and 271 females involved in the research across the various standards from the ODA school.

**Table 4.2: ODA School's Students by Gender and Year**

	Sec 2	Sec 3	Sec 4	Sec 5	Total
Male	5	135	94	27	261
Female	3	153	93	22	271
Total	8	288	187	49	532

**Figure 4.3: ODA School's Students by Gender & Year**



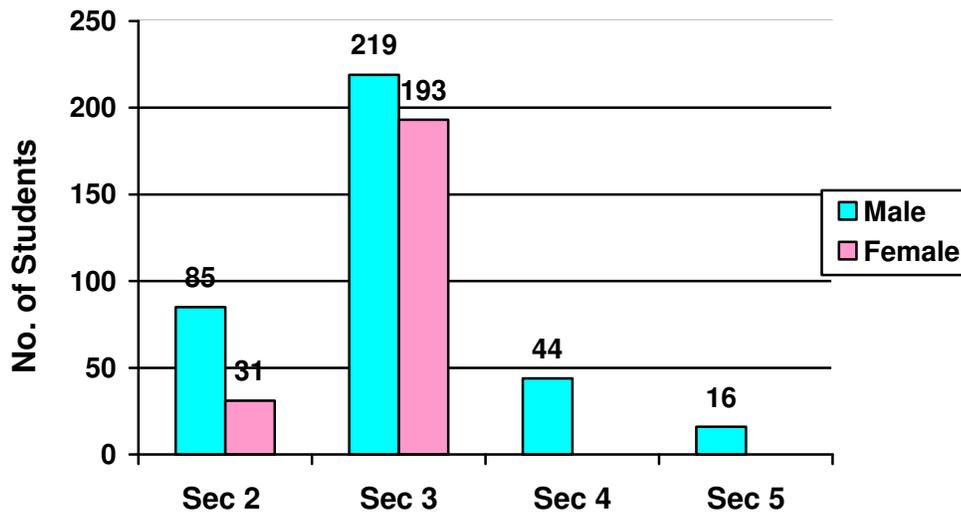
**4.4.2.1.2 Development Award Schools**

For the DA schools, the breakdown of male and female students by the academic standard can be seen in Table 4.3 and Figure 4.4. There were 364 males and 224 females involved in the research across Secondary 2 to 5.

**Table 4.3: DA Schools' Students by Gender and Year**

	Sec 2	Sec 3	Sec 4	Sec 5	Total
<b>Male</b>	85	219	44	16	364
<b>Female</b>	31	193	0	0	224
<b>Total</b>	116	412	44	16	588

**Figure 4.4: DA Schools' Students by Gender & Year**



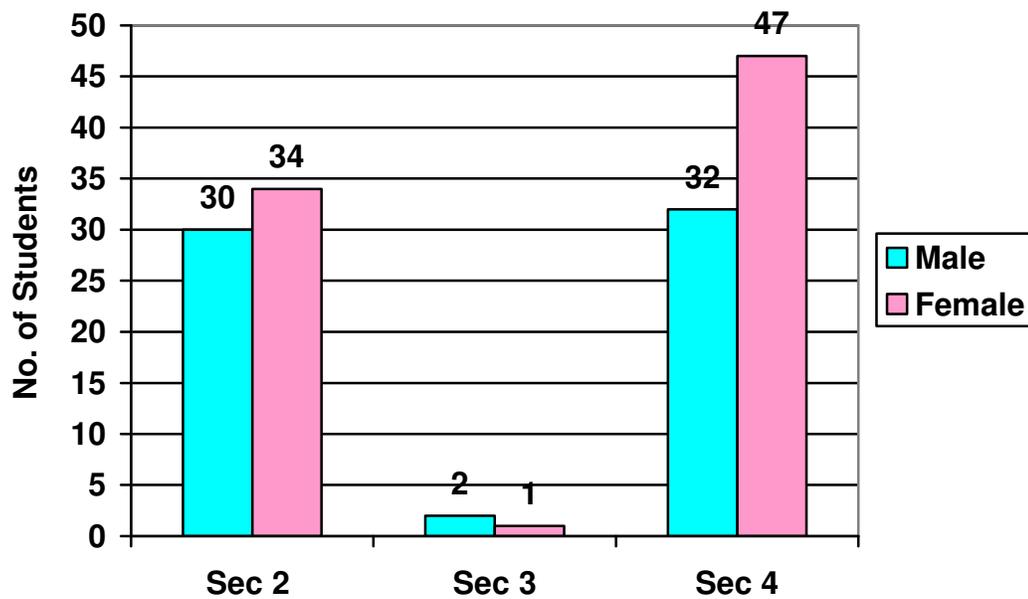
**4.4.2.1.3 No Award School**

For the no award school, the breakdown of male and female students by the academic standard can be seen in Table 4.4 and Figure 4.5. There were 64 males and 82 females involved in the research across Secondary 2 to 5.

**Table 4.4: NA School's Students by Gender and Year**

	Sec 2	Sec 3	Sec 4	Total
<b>Male</b>	30	2	32	64
<b>Female</b>	34	1	47	82
<b>Total</b>	64	3	79	146

**Figure 4.5: NA School's Students by Gender & Year**



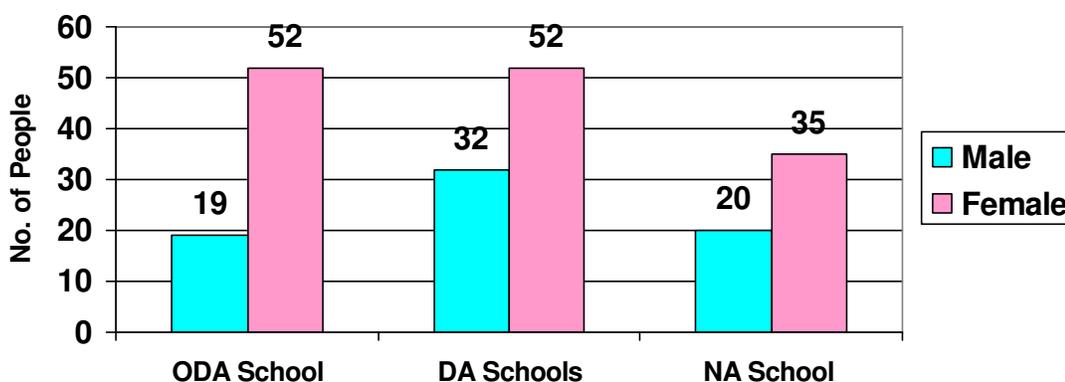
#### 4.4.2.2 Staff

From Table 4.5 and Figure 4.6, there were a total of 71 staff from the ODA school, 84 staff from the DA schools and 55 staff from the no award school who participated in the research. The breakdown by gender for the staff was 71 male staff and 139 female staff among the 210 staff across all the participating schools.

**Table 4.5: Breakdown of Staff by Gender and Award**

	<b>ODA School</b>	<b>DA Schools</b>	<b>NA School</b>	<b>Total</b>
<b>Male</b>	19	32	20	<b>71</b>
<b>Female</b>	52	52	35	<b>139</b>
<b>Total</b>	<b>71</b>	<b>84</b>	<b>55</b>	<b>210</b>

**Figure 4.6: Breakdown of Staff by Gender & Award**



#### **4.4.2.2.1 Outstanding Development Award School**

For the ODA school, there were 19 male and 52 female staff involved in the research.

#### **4.4.2.2.2 Development Award Schools**

For the DA schools, there were 32 male and 52 female staff involved in the research.

#### **4.4.2.2.3 No Award School**

For the no award school, there were 20 male and 35 female staff involved in the research.

#### **4.4.2.3 Parents**

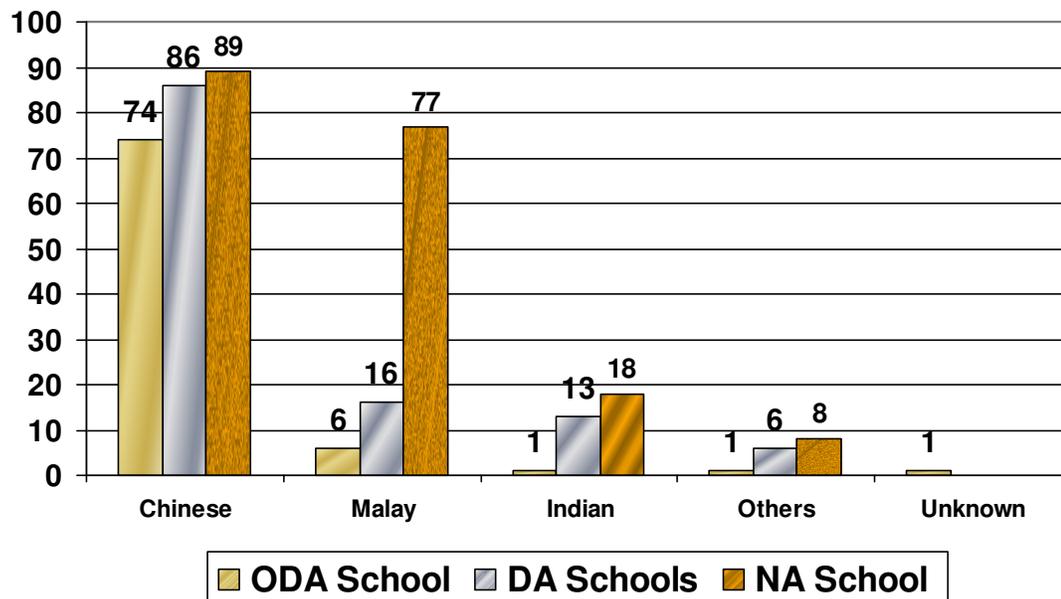
From Table 4.1, there were a total of 83 parents from the ODA school, 121 parents from the DA schools and 192 parents from the no award school who participated in the research. In the context of Singapore, there would naturally be more Chinese parents than the rest of the ethnic groups because Chinese is the predominant ethnic race in Singapore, forming about 75% of the total population (Singapore Department of Statistics, 2009). The Malays, Indians and other ethnic races form 14%, 9% and 2% respectively.

The overall breakdown of parents involved in the survey based on ethnicity can be seen in Table 4.6 and Figure 4.7. Chinese, Malay, Indian and Others formed 57%, 28.5%, 9.5% and 5% respectively.

**Table 4.6: Breakdown of Parents by Award & Ethnicity**

	Chinese	Malay	Indian	Others	Unknown	Total
<b>ODA School</b>	74	6	1	1	1	<b>83</b>
<b>DA Schools</b>	86	16	13	6	0	<b>121</b>
<b>NA School</b>	89	77	18	8	0	<b>192</b>
<b>Total</b>	<b>249 (62.88%)</b>	<b>99 (25%)</b>	<b>32 (8.08%)</b>	<b>15 (3.79%)</b>	<b>1 (0.25%)</b>	<b>396 (100%)</b>

**Figure 4.7: Breakdown of Parents by Award & Ethnicity**



#### **4.4.2.3.1 Outstanding Development Award School**

For the ODA school, there were a total of 74 Chinese parents, 6 Malay parents, 1 Indian parent, 1 parent from the Others and 1 unknown who participated in the survey.

#### **4.4.2.3.2 Development Award Schools**

For the DA schools, there were a total of 86 Chinese parents, 16 Malay parents, 13 Indian parents and 6 parents from Others who participated in the survey.

#### **4.4.2.3.3 No Award School**

For the no award school, there were a total of 89 Chinese parents, 77 Malay parents, 18 Indian parents and 8 parents from Others who participated in the survey.

With the selection criteria and the profiles of the participating schools for the research study being elaborated, the next section will discuss the validity and reliability of the research study and its survey instrument.

## **4.5 Validity and Reliability**

### **4.5.1 Internal Reliability of Research Instrument**

The authors of the instrument had published the latest reliability tests for High School Students and Staff in America as seen in the Table 4.7 and Table 4.8 for CREE version 2.7 Short (Khmelkov & Davidson, 2009). The Cronbach's Alpha values for the constructs of both the Student and Staff Survey had consistently high to excellent internal consistency with Cronbach's Alpha greater than 0.7 except for one construct in the Student Survey as seen in Table 4.7. The construct of Ethical Learning Community would need careful attention from the researcher during the research process given the possibility of the low interrelatedness among the items. Therefore, it could be seen from the reports generated that there was high internal consistency and reliability of the Student Survey and Staff Survey constructs. However, the statistical reports for the Parent Survey were not available from the authors as they were still in the midst of compilation.

**Table 4.7: Reliability and Factor Analysis of CREE Student Survey for American High School**

		High School	
Constructs	Components	Valid N	Cronbach's Alpha
<b>School/ Classroom Climate</b>	Social Health & Safety Perceived by Students	1,982	.85
	Social Capital from Adults Perceived by Students	2,005	.76
<b>Ethical Learning Community</b>	Acceptance of Differences & Caring Towards Peers Perceived by Students	2,018	.57
	Collective Responsibility for Class/School Community Perceived by Students	1,992	.80
<b>Experiences of Learning the Strengths of Character</b>	Student Perceptions of Staff Practices Impacting Performance Character	1,935	.78
	Student Perceptions of Staff Practices Impacting Moral Character	1,930	.90
	Performance Character Experiences with Class/Schoolmates	1,966	.88

	Moral Character Experiences with Class/Schoolmates	1,939	.82
<b>Student's Character</b>	Performance Character Reported by Students	1,939	.78
	Moral Character Reported by Students	1,958	.78

**Table 4.8: Reliability and Factor Analysis of CREE Staff Survey for American High School**

<b>Constructs</b>	<b>Sub-components</b>	<b>Valid N</b>	<b>Cronbach's Alpha</b>
<b>Professional Ethical Learning Community</b>	Personal Responsibility	386	.88
	Leadership and Collective Responsibility	413	.81
<b>Assessment of the Ethical Learning Community</b>	Student Acceptance & Caring Attitude Towards Peers Perceived by Staff	443	.70
	Student Responsibility for Community Perceived by Staff	438	.84

<b>Teaching the Strengths of Character</b>	Practices Impacting Performance Character	399	.79
	Practices Impacting Moral Character	394	.87
<b>Assessment of Student's Character</b>	Student Performance Character Perceived by Staff	399	.88
	Student Moral Character Perceived by Staff	426	.85

#### **4.5.2 Internal Validity of the Study**

In order to ensure internal validity of the research study, the researcher scanned through Secondary Schools that had either Outstanding Development Award or Development Award to identify schools with students of similar academic ability and social status through SMOE's Character Development website. However, this attempt was not achievable as students of various social backgrounds were found in any one school because entry into Secondary Schools was based on academic merits from their Primary School Leaving Examination.

The researcher then attempted to find schools with similar academic standing among the list of Secondary Schools that could fit into the selection criteria as

stated in section 4.3.1. The current scenario in Singapore is such that all government's Secondary Schools are not ranked based on academic results alone but on a combination of factors and are grouped by different bandings instead (SMOE, 2004). There are 12 academic bandings for schools offering Special/Express course and 7 other academic bandings for schools offering Normal course. If a school offers both Express (four years) and Normal (five years) courses to students, it will carry two different bandings for that year. These academic bandings are the aggregate ranges that schools will base upon to accept students into the schools. These yearly bandings are released by the Ministry of Education. If the researcher were to conduct surveys for a Secondary School with Express and Normal courses and with the participating students coming from Sec 2 to 5, there would be a possibility to have 8 different academic bandings to consider. It would require a perfect research situation to find schools that have the same academic bandings for all their students in the different standards and fulfil the selection criteria set in section 3.4.

Given the high complexity and low probability to find schools that would have the same academic bandings for effective comparison, the researcher decided to only involved neighbourhood schools that were not elite academic schools. This would provide the closest possibility for good comparison among the schools. In hindsight, the data collected showed that the schools with better academic banding did not score significantly higher than school

with the lowest banding for the construct under Student's Character. Therefore, internal validity was not compromised in this area even though schools involved in the research did not come from the same academic bandings.

The second area that was considered to ensure internal validity for the research study was for students who participated in the research to have spent at least one year in the school of study. This was to ensure that students and parents who took the surveys had experienced at least one year of the school's character development programmes and initiatives to make a good evaluation of the school's efforts in character education.

With the effort to ensure reliability and validity for the research instrument and participating schools being highlighted, the next section will explain other tests that were conducted to ensure data reliability and for the analysis of data.

## **4.6 Data Analysis**

Before the data analysis could take place, the data had to be first entered into the SPSS software to facilitate the analysis. The researcher had to provide training for research assistants to perform data entry on SPSS software. This was easily done within an hour given that the structure of the data file was already created by the researcher for the ease of data entry. All the statistical tests were done and generated with SPSS software version 15. Three main tests conducted were the Reliability Test, Correlation Test and the Analysis of Variance.

### **4.6.1 Reliability Test**

The Reliability Test had to be conducted to ensure that the data collected was reliable before further tests could be performed. Reliability tests were done for all the Student, Staff and Parent Surveys to ensure their internal reliability before proceeding to do other variance tests. As highlighted earlier that one of the constructs in the Student Survey, Ethical Learning Community, did not have a good internal reliability, thus special attention was given to ensure that it had an acceptable Cronbach's Alpha value of at least 0.7 before any further tests could be conducted on the data.

### **4.6.2 Correlation Test**

Given that the Student Survey had three constructs that measured the inputs into a school's character development initiatives and with one construct

measuring the outcomes of character development, a correlation test was conducted to verify their relationships.

#### **4.6.3 Analysis of Variance**

The univariate analysis of variance tests were conducted to derived findings to answer the various research questions. The findings to the research questions were then used to validate the hypotheses of the research study and whether to accept or reject these null hypotheses with a level of significant set at .05. Before each of the analysis of variance was performed for the constructs, the Levene's test was conducted to ensure that the variances in the different groups were equal. The effect sizes of the variances were calculated to determine the importance of the findings.

As there was a difference in the sample sizes between the various award winning schools, in order to ensure a high accuracy in the data analysis process, Hochberg's GT2 procedure was used together with Tukey HSD and Bonferroni procedures during the post hoc tests. Hochberg's GT2 procedure is known to factor in the difference in sampling sizes for post hoc test analysis.

## **4.7 Research Limitations**

There were various limitations encountered during the duration of data collection and they are highlighted and explained in the following segment from Section 4.7.1 to 4.7.3.

### **4.7.1 Different Period in Receiving of Awards**

The five schools that allowed the conduct of the research had received their awards at different years. One of them received the award in 2006 when the Character Development Award was first introduced. Those schools that received their award earlier might have the opportunity to further improve and enhance their character development programmes and initiatives, resulting in more effective overall approach in their character education. This limitation would only hold true if schools continue to improve on their existing programmes after the evaluations were completed. The reverse might be true where schools that had gotten their awards much earlier became less proactive and aggressive in the various implementation processes versus those who had just gotten their award recently. Therefore, it would be ideal to have schools that obtained their awards in the same year to be involved in the research. However, this was not possible given that schools that responded to the research did not obtain their awards in the same year.

#### **4.7.2 Access to Stakeholders**

Given the sudden outbreak of the Avian H1N1 influenza virus during the period of data collection, the researcher was not able to access the various stakeholders of the schools directly. As result, the conduct of the surveys had to be carried out through the assigned staff members from the schools. Although this was not the most ideal as the researcher could not be at the survey sites to clarify any possible query, the researcher met up with the assigned staff members of the various schools to explain and clarify their questions before the conduct of the surveys. As the assigned personnel were very experienced staff members, usually Head of Department, the surveys were conducted smoothly without encountering much difficulty.

#### **4.7.3 Different Population Size**

Out of the five schools that responded to the research request, three of them obtained the Development Award, one with Outstanding Development Award and one with no award. When calculating the mean scores of the various schools based on the factor (independent variable) of award, the sample size for schools with Development Award (N=588) would be much bigger than the sample sizes of schools with Outstanding Development Award (N=311) and no award (N=146). Therefore, given this large difference in the sample sizes, special attention was given to the population variance to minimise Type 1 error through Laven's Test to ensure homogeneity of variance. Furthermore, more conservative post hoc tests such as Games-Howell and Dunnett's T3

procedures were also generated for reference if the homogeneity of variance was not found.

## **4.8 Ethical Considerations**

### **4.8.1 Permission For The Conduct of Research**

Given that all Singapore's Secondary schools, except international schools, come under the jurisdiction of SMOE, permission must first be obtained for the conduct of the research before approaching any school. Thereafter obtaining permission from SMOE (see Appendix G), a second level of permission had to be sought from the principals of the selected schools for the conduct of the research (see Appendix H).

Although this two level permission granting process could be tedious, once permission was given by the school principals, the researcher could conduct the research with the students, staff and parents with great ease. Permission was not required from the parents for the students because the school principals were directly responsible to ensure that all research work would not jeopardise the students' welfare and safety in any way. Students, staff or parents who were not comfortable with the surveys were given the option not to complete the questionnaires or participate in them at all.

#### **4.8.2 Anonymous Questionnaires**

Given that the nature of the surveys required students, staff and parents to evaluate the character development programmes and initiatives of schools, the questionnaires were designed without the need to have any personal information from the students, staff and parents to maintain confidentiality of the participants. This was especially important for staff given that they were asked to evaluate the leadership of their respective schools in one portion of the survey and such anonymity would facilitate a greater comfort and assurance in the research participation.

#### **4.9 Summary**

The purpose of this chapter was to provide an overview of the quantitative methodology used in the research study to achieve its research objectives. The research procedures, statistical tests and analyses that were conducted, profiles of the participants and the research limitations were highlighted to bring understanding to the entire research process for the reader. With the understanding of the research processes, procedures and methodology, the next chapter will elaborate the research findings and analyses that were derived from the research study.

## **CHAPTER 5: ANALYSIS OF DATA**

### **5.1 Introduction**

This chapter will detail the process of analysis on the research data collected through the Collective Responsibility for Excellence and Ethics (CREE) instrument from the five schools involved in the research study. In order to determine if there were statistically significant differences between the different awards and no award schools, the research data were analysed after they were collected from students, staff and parents. The results of the data analysis were then used to answer the research questions stated in Chapter 1. In the sections following, the data analysis will begin with the Student Survey, follow by the Staff and Parent Surveys. The details of the analysis will involve Reliability Test, Correlation Test and Analysis of Variance.

### **5.2 Results of Student Survey**

The CREE Student Survey was used to examine whether there were significant differences in character development among the students between the different award and no award schools. The CREE Student Survey measured the means and standard deviations of the four constructs of School Climate, Ethical Learning Community, Experience the Strengths of Character and Student's Character within the student population. With these derived data, an analysis of variance was performed to determine the significant differences in character development among the different award schools. Out

of the four constructs, only the Student's Character construct measured the outputs of the character development programmes in the school while the rest of the three constructs were used to measure the inputs of the character development programmes as highlighted earlier in Chapter 3.

### **5.2.1 Overall Means of Student Survey**

Table 5.1 and Figure 5.1 show the various mean scores for the Student Survey constructs of the different award schools. The ODA school had mean scores of 3.62 (School Climate), 3.40 (Ethical Learning Community), 3.21 (Experience of Learning the Strengths of Character) and 3.41 (Student's Character). The standard deviations were 0.534, 0.514, 0.545 and 0.484 respectively.

The DA schools had mean scores of 3.43 (School Climate), 3.27 (Ethical Learning Community), 3.12 (Experience of Learning the Strengths of Character) and 3.35 (Student's Character). The standard deviations were 0.606, 0.534, 0.603 and 0.568 respectively.

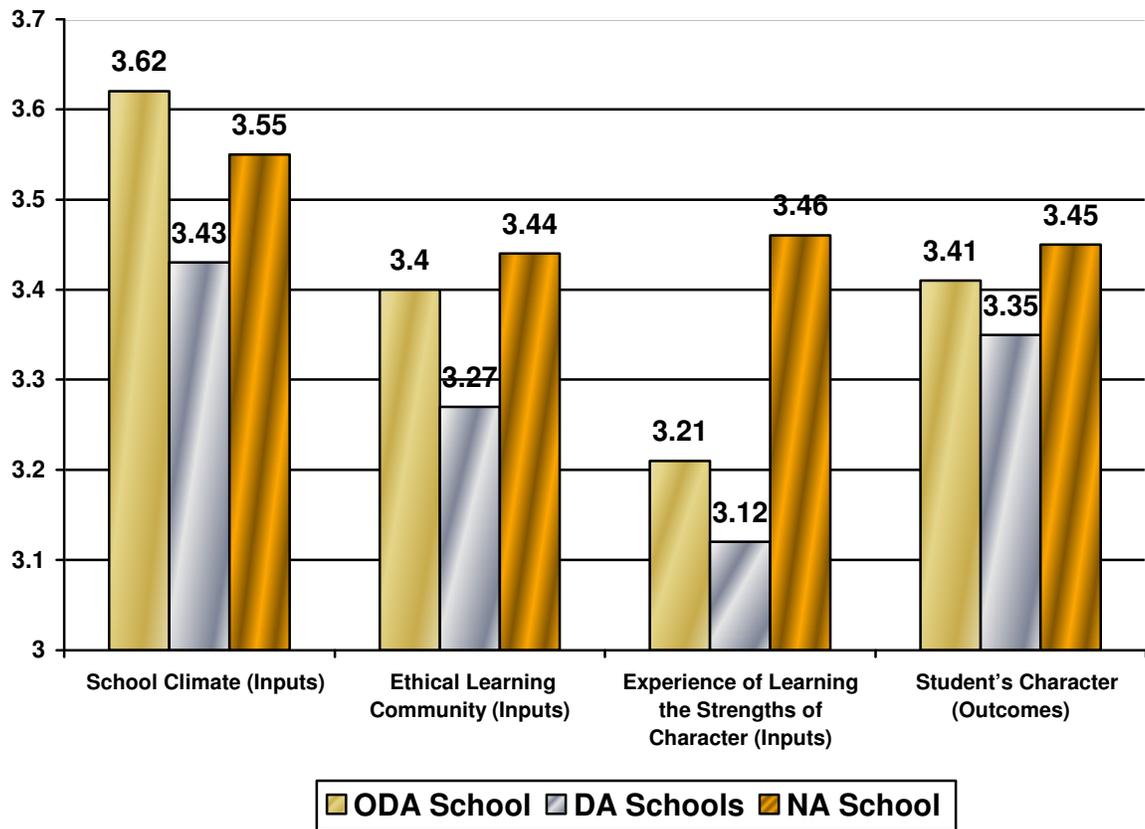
The no award school had mean scores of 3.55 (School Climate), 3.44 (Ethical Learning Community), 3.46 (Experience of Learning the Strengths of Character) and 3.45 (Student's Character). The standard deviations were 0.578, 0.515, 0.584 and 0.563 respectively.

From these tabulated mean scores, the ODA school had the highest mean score of 3.62 for School Climate among the schools whereas the no award school had the highest mean scores of 3.44, 3.46 and 3.45 for Ethical Learning Community, Experience of Learning the Strengths of Character and Student's Character constructs respectively.

**Table 5.1: Mean of Constructs for Student Survey by Award**

<b>Award</b>		<b>School Climate (Inputs)</b>	<b>Ethical Learning Community (Inputs)</b>	<b>Experience of Learning the Strengths of Character (Inputs)</b>	<b>Student's Character (Outcomes)</b>
<b>ODA School</b>	<b>Mean</b>	3.62	3.40	3.21	3.41
	<b>N</b>	528	527	528	532
	<b>Std Dev.</b>	.534	.514	.545	.484
<b>DA Schools</b>	<b>Mean</b>	3.43	3.27	3.12	3.35
	<b>N</b>	587	587	585	588
	<b>Std Dev.</b>	.606	.534	.603	.568
<b>NA School</b>	<b>Mean</b>	3.55	3.44	3.46	3.45
	<b>N</b>	146	146	146	146
	<b>Std Dev.</b>	.578	.515	.584	.563

**Figure 5.1: Mean of Constructs for Student Survey by Award**



### 5.2.2 Reliability Test of Student Survey Items

Before proceeding to conduct the Analysis of Variance test to determine the significant differences between the students of the different award schools, a reliability test was conducted to assess how well the items within each construct would relate to each other.

The construct of School Climate comprised eleven items, Ethical Learning Community comprised eleven items, Experiences of Learning the Strengths

of Character comprised thirty-one items and Student's Character comprised seventeen items.

From Table 5.2, the reliability tests on the four major constructs of the Student Survey showed Cronbach's Alpha of 0.75, 0.76, 0.94 and 0.88 for School Climate, Ethical Learning Community, Experiences of Learning the Strengths of Character and Student's Character respectively. Given that the Cronbach's Alpha values were more than 0.70, which were of high reliability, the data collected could be used for further analysis.

**Table 5.2: Reliability Test for Student Survey Constructs**

<b>Construct</b>	<b>Cronbach's Alpha</b>
1. School Climate – 11 items (Items 18 to 22 & 34 to 39)	0.75
2. Ethical Learning Community – 11 items (Items 23 to 33)	0.76
3. Experiences of Learning the Strengths of Character – 31 items (Items 40 to 70)	0.94
4. Student's Character – 17 items (Items 1 to 17)	0.88

### 5.2.3 Correlation Test

Out of the four constructs in Student Survey, three of them (School Climate, Ethical Learning Community, Experiences of Learning the Strengths of Character) measured the inputs into character development by staff and students within the school community, and one construct (Student's Character) measuring the outcomes as seen through students' moral and performance character. Given the relationships between the constructs, the correlation between them should be such that School Climate, Ethical Learning Community and Experiences of Learning the Strengths of Character would each have a positive relationship with Student's Character.

**Table 5.3: Pearson Correlation Test for Student Survey Constructs**

Construct		School Climate (n=1261)	Ethical Learning Community (n=1260)	Experience of Learning the Strengths of Character (n=1259)
Student's Character (n=1266)	Pearson Correlation	0.358**	0.439**	0.557**
	Sig. (1-tailed)	0.000	0.000	0.000

\*\* correlation is significant at the 0.01 level (1-tailed)

From Table 5.3, there were significant positive correlations between Student's Character and School Climate, Ethical Learning Community and Experience of Learning the Strengths of Character with a Pearson's coefficient of  $r = 0.358$ ,  $0.439$  and  $0.557$  respectively and significant at  $p < 0.01$ . Given the tabulated results as shown, Student's Character had strong positive

relationships with the rest of the three constructs as per the design of the survey instrument.

#### **5.2.4 Analysis of Variance Test**

The One-way Analysis of Variance (ANOVA) test was used to test the significant differences between the means of the constructs in the Student Survey. Before reading into the post hoc tests, the Leven's test was first conducted to determine whether the variances were equal. Equal variances would require the use of Tukey HSD, Bonferroni and Hochberg's post hoc procedures to be used for the analysis. Any unequal variances would require the use of Game-Howell and Dunnett's T3 procedures to be used instead.

For the School Climate construct, the Leven's test was found to be non-significant and therefore, variances in the different award schools were assumed to be equal. The ANOVA post-hoc tests from Tukey HSD, Bonferroni and Hochberg's GT2 procedures showed statistical significant difference only between ODA school (Mean = 3.62) and DA schools (Mean = 3.43) but with small effect size,  $F(2, 1258) = 15.24, p < 0.01, \omega^2 = 0.012$  where omega squared,  $\omega^2$ , represented the effect size (Hays, 1994; Warner, 2008).

For the Ethical Learning Community construct, the Leven's test was found to be non-significant and therefore, variances in the different award schools were assumed to be equal. The ANOVA post hoc tests from Tukey HSD, Bonferroni and Hochberg's GT2 procedures showed statistically significant

difference only between the no award school (Mean = 3.44) with DA schools (Mean = 3.27) but with small effect size where  $F(2, 1257) = 12.03, p < 0.01, \omega^2 = 0.008$ .

For Experience of Learning the Strengths of Character, the Leven's test was found to be non-significant and therefore, variances in the different award schools were assumed to be equal. The ANOVA post hoc tests from Tukey HSD, Bonferroni and Hochberg's GT2 procedures showed statistically significant differences between the different award schools. The no award (Mean = 3.46) school had a significantly higher mean than the ODA school (Mean = 3.21) and DA schools (Mean = 3.12). The ODA school also had a significantly higher mean than DA schools. However, the effect size was small where  $F(2, 1256) = 20.48, p < 0.01, \omega^2 = 0.014$ .

For Student's Character, the only construct that measured the outputs of the character development programmes, the Leven's test was found to be significant and therefore, variances in the different award schools were assumed to be unequal. The post hoc tests using Game-Howell and Dunnett's T3 procedures showed no statistical significant difference between the different award schools and with a very small effect size where  $F(2, 1063) = 3.02, p < 0.05, \omega^2 = 0.002$ .

### **5.3 Results of Staff Survey**

The CREE Staff Survey was used to examine whether there were significant differences in character development between the different award and no award schools from the perspectives of the staff. The CREE Staff Survey measured the means and standard deviations of the four constructs of Professional Ethical Learning Community, Assessment of Ethical Learning Community, Teaching the Strengths of Character and Assessment of Student's Character within the student population. With these derived data, an analysis of variance was performed to determine the significant differences in character development among the staff of the different award schools.

#### **5.3.1 Overall Means of Staff Survey**

Table 5.4 and Figure 5.2 showed the various mean scores for the Staff Survey constructs of the different award schools. The ODA school had mean scores of 3.29 (Professional Ethical Learning Community), 3.26 (Assessment of Ethical Learning Community), 3.54 (Teaching the Strengths of Character) and 3.26 (Assessment of Student's Character). The standard deviations were 0.507, 0.497, 0.408 and 0.330 respectively.

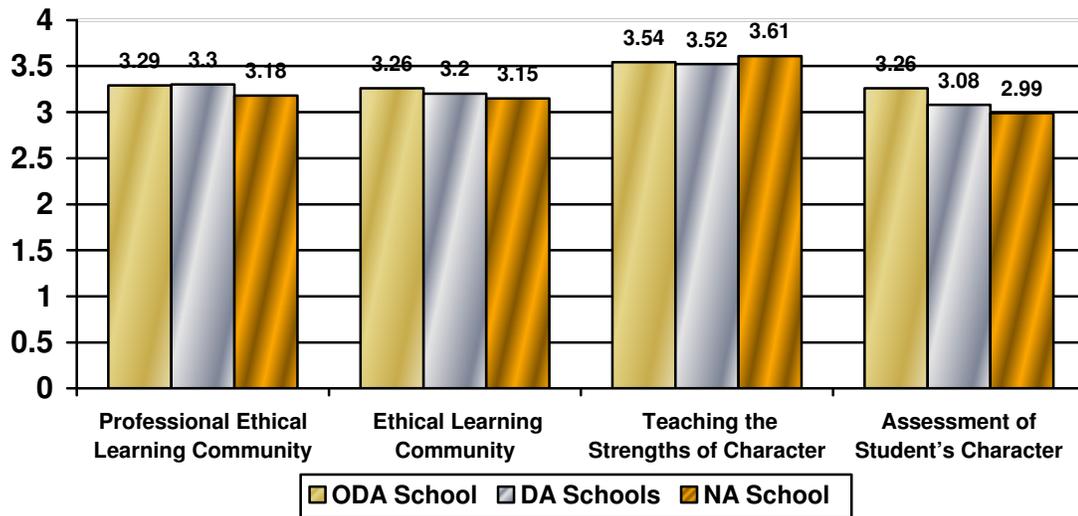
The DA schools had mean scores of 3.30 (Professional Ethical Learning Community), 3.20 (Assessment of Ethical Learning Community), 3.52 (Teaching the Strengths of Character) and 3.08 (Assessment of Student's Character). The standard deviations were 0.448, 0.429, 0.493 and 0.392 respectively.

The no award school had mean scores of 3.18 (Professional Ethical Learning Community), 3.15 (Assessment of Ethical Learning Community), 3.61 (Teaching the Strengths of Character) and 2.99 (Assessment of Student's Character). The standard deviations were 0.413, 0.563, 0.448 and 0.316 respectively.

**Table 5.4: Mean of Constructs for Staff Survey by Award**

<b>Award</b>		<b>Professional Ethical Learning Community</b>	<b>Assessment of Ethical Learning Community</b>	<b>Teaching the Strengths of Character</b>	<b>Assessment of Student's Character</b>
<b>ODA School</b>	<b>Mean</b>	3.29	3.26	3.54	3.26
	<b>N</b>	71	71	68	71
	<b>Std Dev.</b>	.507	.497	.408	.330
<b>DA Schools</b>	<b>Mean</b>	3.30	3.20	3.52	3.08
	<b>N</b>	84	84	84	84
	<b>Std Dev.</b>	.448	.429	.493	.392
<b>NA School</b>	<b>Mean</b>	3.18	3.15	3.61	2.99
	<b>N</b>	55	55	55	55
	<b>Std Dev.</b>	.413	.563	.448	.316

**Figure 5.2: Mean of Constructs for Staff Survey by Award**



### 5.3.2 Reliability Test of Staff Survey Items

Before proceeding to conduct the analysis of variance test to determine the significant differences between the different award schools from the perspectives of the staff, a reliability test was conducted to assess how well the items within each construct would relate to each other.

The construct of Professional Ethical Learning Community comprised twenty-three items, Assessment of Ethical Learning Community comprised eleven items, Teaching the Strengths of Character comprised nineteen items and Assessment of Student's Character comprised seventeen items.

From Table 5.5, the reliability tests on the four major constructs of the Staff Survey showed Cronbach's Alpha of 0.83, 0.76, 0.91 and 0.85 for Professional Ethical Learning Community, Assessment of Ethical Learning Community, Teaching the Strengths of Character and Assessment of Student's Character respectively. Given that the Cronbach's Alpha values were more than 0.70, which were of high reliability, the data collected could be used for further analysis.

**Table 5.5: Reliability Test for Staff Survey Constructs**

<b>Construct</b>	<b>Cronbach's Alpha</b>
1. Professional Ethical Learning Community – 23 items (Items 48 to 70)	0.83
2. Assessment of Ethical Learning Community – 11 items (Items 18 to 28)	0.76
3. Teaching the Strengths of Character – 19 items (Items 29 to 47)	0.91
4. Assessment of Student's Performance and Moral Character – 17 items (Items 1 to 17)	0.85

### **5.3.3 Analysis of Variance Test**

The One-way Analysis of Variance (ANOVA) was used to test the significant differences between the means of the constructs in the Staff Survey. Before reading into the post hoc tests, the Leven's test was first conducted to

determine whether the variances were equal. Equal variances would require the use of Tukey HSD, Bonferroni and Hochberg's post hoc procedures to be used for the analysis. Any unequal variances would require the use of Game-Howell and Dunnett's T3 procedures to be used instead.

For the Professional Ethical Learning Community construct, the Leven's test was found to be non-significant and therefore, variances in the different award schools were assumed to be equal. The ANOVA post hoc tests from Tukey HSD, Bonferroni and Hochberg's GT2 procedures showed no statistically significant difference between the different award schools where  $F(2, 207) = 1.33, p > 0.05, \omega^2 = 0.002$ , where omega squared,  $\omega^2$ , was used to represent the effect size.

For the Assessment of Ethical Learning Community construct, the Leven's test was found to be significant and variances in the different award schools were assumed to be unequal. The post hoc tests using Game-Howell and Dunnett's T3 procedures showed no statistical significant difference between the different award schools where  $F(2, 207) = 0.88, p > 0.05, \omega^2 = 0.0004$ .

For the Teaching the Strengths of Character construct, the Leven's test was found to be non-significant and therefore, variances in the different award schools were assumed to be equal. The post hoc tests from Tukey HSD, Bonferroni and Hochberg's GT2 procedures showed no statistically significant

difference between the different award schools where  $F(2, 204) = 0.66$ ,  $p > 0.05$ ,  $\omega^2 = 0.002$ .

For the Assessment of Student's Character construct, the Leven's test was found to be non-significant and therefore, variances in the different award schools were assumed to be equal. The post hoc tests from Tukey HSD, Bonferroni and Hochberg's GT2 procedures showed statistically significant difference between the ODA (3.26) school with DA (3.08) and no award (2.99) schools but with a small effect size,  $F(2, 207) = 10.19$ ,  $p < 0.01$ ,  $\omega^2 = 0.04$ .

#### **5.4 Results of Parent Survey**

The CREE Parent Survey was used to examine whether there were significant differences in character development between the different award and no award schools from the perspectives of the parents. The CREE Parent Survey measured the means and standard deviations of the three constructs of School-Family Partnership, Parent Practices Promoting Character and School Focus on Excellence and Ethics. With these derived data, an analysis of variance was performed to determine the significant differences in character development among the parents of the different award schools.

#### **5.4.1 Overall Means of Parent Survey**

Table 5.6 and Figure 5.3 showed the various mean scores for the Parent Survey constructs of the different award schools. The ODA school had mean scores of 2.17 (School-Family Partnership), 3.00 (Parent Practices Promoting Character), 3.58 (School Focus on Excellence and Ethics). The standard deviations were 0.621, 0.918 and 0.612 respectively.

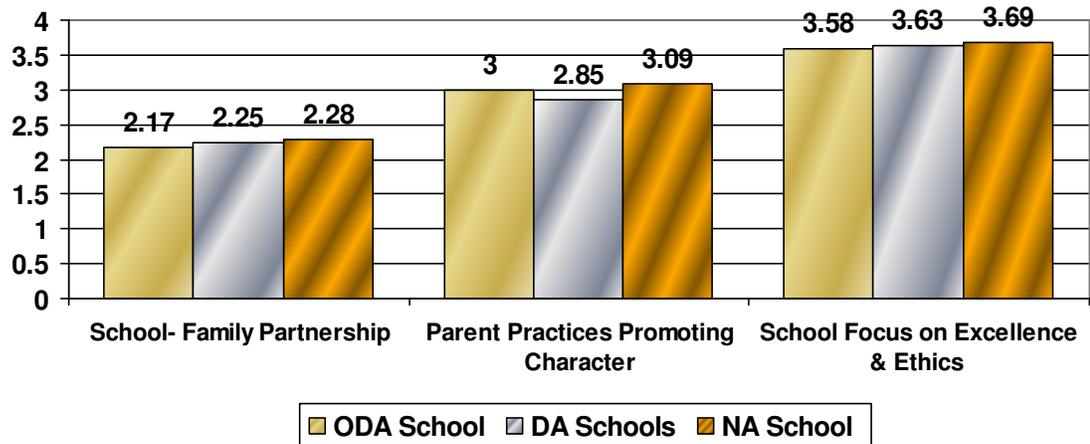
The DA schools had mean scores of 2.25 (School-Family Partnership), 2.85 (Parent Practices Promoting Character), 3.63 (School Focus on Excellence and Ethics). The standard deviations were 0.682, 0.902 and 0.509 respectively.

The no award school had mean scores of 2.28 (School-Family Partnership), 3.09 (Parent Practices Promoting Character), 3.69 (School Focus on Excellence and Ethics). The standard deviations were 0.645, 0.925 and 0.475 respectively.

**Table 5.6: Mean of Constructs for Parent Survey by Award**

Award		School-Family Partnership	Parent Practices Promoting Character	School Focus on Excellence & Ethics
ODA School	Mean	2.17	3.00	3.58
	N	83	83	83
	Std Dev.	.621	.918	.612
DA Schools	Mean	2.25	2.85	3.63
	N	121	121	121
	Std Dev.	.682	.902	.509
NA School	Mean	2.28	3.09	3.69
	N	192	192	191
	Std Dev.	.645	.925	.475

**Figure 5.3: Mean of Constructs for Parent Survey by Award**



#### 5.4.2 Reliability Test of Parent Survey Items

Before proceeding to conduct the analysis of variance test to determine the significant differences between the different award schools from the perspectives of the parents, a reliability test was conducted to assess how well the items within each construct would relate to each other.

The construct of School-Family Partnership comprised eighteen items, Parent Practices Promoting Character comprised twelve items and School Focus on Excellence and Ethics comprised twenty items.

From Table 5.7, the reliability tests on the three major constructs of the Parent Survey showed Cronbach's Alpha of 0.91, 0.88 and 0.88 for School-Family Partnership, Parent Practices Promoting Character and School Focus on Excellence and Ethics respectively. Given that the Cronbach's Alpha values were more than 0.70, which were of high reliability, the data collected could be used for further analysis.

**Table 5.7: Reliability Test for Parent Survey Constructs**

<b>Construct</b>	<b>Cronbach's Alpha</b>
1. School-Family Partnership – 18 items (Items 13 to 30)	0.91
2. Parent Practices Promoting – 12 items Character (Items 1 to 12)	0.88
3. School Focus on Excellence & Ethics – 20 items (Items 31 to 50)	0.88

### 5.4.3 Analysis of Variance Test

The One-way Analysis of Variance (ANOVA) was used to test the significant differences between the means of the constructs in the Parent Survey. Before reading into the post hoc tests, the Leven's test was first conducted to determine whether the variances were equal. Equal variances would require the use of Tukey HSD, Bonferroni and Hochberg's post hoc procedures to be used for the analysis. Any unequal variances would require the use of Game-Howell and Dunnett's T3 procedures to be used instead.

For the School-Family Partnership construct, the Leven's test was found to be non-significant and therefore, variances in the different award schools were assumed to be equal. The ANOVA post hoc tests from Tukey HSD, Bonferroni and Hochberg's GT2 procedures showed no statistically significant difference between the different award schools where  $F(2, 393) = 0.90$ ,  $p > 0.05$ ,  $\omega^2 = 0.02$ , where omega squared,  $\omega^2$ , was used to represent the effect size.

For the Parent Practices Promoting Character construct, the Leven's test was found to be non-significant and therefore, variances in the different award schools were assumed to be equal. The ANOVA post hoc tests from Tukey HSD, Bonferroni and Hochberg's GT2 procedures showed no statistically significant difference between the different award schools where  $F(2, 393) = 2.50$ ,  $p > 0.05$ ,  $\omega^2 = 0.036$ .

For the School Focus on Excellence and Ethics construct, the Leven's test was found to be non-significant and therefore, variances in the different award schools were assumed to be equal. The ANOVA post hoc tests from Tukey HSD, Bonferroni and Hochberg's GT2 procedures showed no statistically significant difference between the different award schools where  $F(2, 392) = 1.32, p > 0.05, \omega^2 = 0.0009$ .

## **5.5 Research Questions Revisited**

The previous sections elaborated the various findings derived through the different tests conducted on the research data collected. These findings will be used in the following sections to answer the five research questions raised in Chapter 1. Given that Research Questions 1 to 3 involved all the three key stakeholders, references were made to the ANOVA tests done from the Student, Staff and Parent Surveys to provide triangulation of findings where possible. As there were various constructs found in each of the survey, only constructs that would directly measure the students' character development from students, staff and parents were used to answer Research Questions 1 to 3. Therefore, from the Student Survey, all the four constructs were used given that they measured students' character development directly. From the Staff Survey, only two constructs, Assessment of Ethical Learning Community and Assessment of Student's Character were used. From the Parent Survey, only the construct of School Focus on Excellence and Ethics was used.

As for Research Questions 4 and 5, the ANOVA tests done respectively from the Staff Survey and Parent Survey would be used to answer them. The below sections would show the details of answering the five research questions.

### 5.5.1 Research Question 1

Would students from an ODA school rate the character development of their school more positively than students from DA schools?

**Table 5.8: Statistical Significant Difference Between Students of ODA & DA Schools**

	ODA School	DA Schools
School Climate (Inputs)	✓	
Ethical Learning Community (Inputs)	✓	
Experience of Learning the Strengths of Character (Inputs)	✓	
Student's Character (Outputs)		

✓ - statistically significant higher mean

From the ANOVA post-hoc comparisons conducted on the data collected from the Student Survey as seen in section 5.2.4, the ODA school had statistically significant higher mean scores in its character development input constructs of School Climate, Ethical Learning Community and Experience of Learning the Strengths of Character than DA schools although the effect sizes for the three constructs were small as seen in Table 5.8. As for the character development output construct of Student's Character, there was no statistical significant difference found between the ODA and DA schools.

Therefore, the ODA school's students rated their school more positively in the character development process inputs than the students from DA schools but not in the character development outcomes.

### 5.5.2 Research Question 2

**Would students from DA schools rate the character development of their schools more positively than students from the no award school?**

**Table 5.9: Statistical Significant Difference Between Students of DA & NA Schools**

	DA Schools	NA School
<b>School Climate (Inputs)</b>		
<b>Ethical Learning Community (Inputs)</b>		✓
<b>Experience of Learning the Strengths of Character (Inputs)</b>		✓
<b>Student's Character (Outputs)</b>		

✓ - statistically significant higher mean

From the ANOVA post-hoc comparisons conducted on the data collected from the Student Survey as seen in section 5.2.4, the various findings were tabulated as seen in Table 5.9:

- There was no statistical significant difference in the character development input construct of School Climate between the DA schools and no award school.
- The no award school had a statistically significant higher mean score in the character development input construct of Ethical Learning Community than DA schools.
- The no award school had a statistically significant higher mean score in the character development input construct of Experience of Learning the Strengths of Character than DA schools.
- There was no statistical significant difference in the character development output construct of Student's Character between DA schools and the no award school.

Given the above findings, DA schools' students did not have statistically higher mean scores in the process input constructs than the no award school. Conversely, the no award school had statistically significant higher mean scores in two of the input constructs than DA schools. As for the character development output construct of Student's Character, there was no statistical significant difference found between the DA and NA schools.

Therefore, DA schools' students did not rate their school more positively than the students from the no award school in both the character development process inputs and outputs.

### 5.5.3 Research Question 3

Would students from the ODA school rate the character development of their school more positively than students from the no award school?

**Table 5.10: Statistical Significant Difference Between Students of DA & NA Schools**

	ODA School	NA School
School Climate (Inputs)		
Ethical Learning Community (Inputs)		
Experience of Learning the Strengths of Character (Inputs)		✓
Student's Character (Outputs)		

✓ - statistically significant higher mean

From the ANOVA post-hoc comparisons conducted on the data collected from the Student Survey as seen in section 5.2.4, the findings were tabulated as seen in Table 5.10:

- There was no statistical significant difference in the character development input constructs of School Climate and Ethical Learning Community between the ODA and no award schools.
- The no award school had a statistically significant higher mean score in the character development input construct of Experience of Learning the Strengths of Character than the ODA school.

- There was no statistical significant difference in the character development output construct of Student's Character between the ODA and no award schools.

Given the above findings, the ODA school's students did not have statistically higher mean scores in the process input constructs than the no award school. Conversely, the no award school had statistically significant higher mean scores in one of the input constructs than the ODA school. As for the character development output construct of Student's Character, there was no statistical significant difference found between the ODA and no award schools.

Therefore, the ODA school's students did not rate their school more positively than the students in the no award school in both the character development process inputs and outputs.

#### 5.5.4 Research Question 4

Would staff from a higher award school rate the students' character development of their school more positively than staff from schools with lower or no award?

**Table 5.11: Statistical Significant Difference Between Staff of Schools**

	ODA School	DA Schools	NA School
<b>Assessment of Ethical Learning Community (Inputs)</b>			
<b>Assessment of Student's Character (Outputs)</b>	✓		

✓ - statistically significant higher mean

In order to answer Research Question 4, the ANOVA tests from the Staff Survey for Assessment of Ethical Learning Community and Assessment of Student's Character constructs were used for comparison among the different award schools. This was because these two constructs measured the direct assessment of the staff in the character development inputs and outcomes of the students respectively.

From the ANOVA post-hoc comparisons conducted on the data collected from the Staff Survey as seen in section 5.3.3, the findings were tabulated as seen in Table 5.11:

- There was no statistical significant difference for the input construct of Assessment of Ethical Learning Community between students from the different award schools based on the evaluation of the staff who were teaching in these schools.
- There was statistically significant difference for the output construct of Assessment of Student's Character between the ODA school with DA and no award schools though the effect size was small.

Given the above findings, the following conclusions could be made:

- The staff in the ODA school rated only the outputs of character development more positively than the rest of the staff in the DA and no award schools.
- The staff in the DA schools did not rate their students more positively than the staff in the no award school for character development.

Therefore, there was no strong empirical evidence to support the conclusion that staff from a higher award school rate the students' character development of their school more positively than schools with lower or no award.

### **5.5.5 Research Question 5**

**Would parents from a higher award school rate their children's character development more positively than parents from schools with lower or no award?**

In order to answer Research Question 5, the ANOVA test from Parent Survey for the School Focus on Excellence and Ethics construct was used for comparison among the different award schools. This was because the School Focus on Excellence and Ethics construct measured the assessment of parents in the character development programmes of the school.

From the ANOVA post-hoc comparisons conducted on the data collected from the Parent Survey as seen in section 5.4.3, there was no statistically significant difference for the construct of School Focus on Excellence and Ethics between students from the different award schools as evaluated by the parents of the schools.

Therefore, the parents from the higher award schools did not rate their children's character development more positively than the lower award schools.

## **5.6 Summary**

This chapter presented the analysis of data collected from the Student, Staff and Parent Survey. The details of the various analyses were used to answer the five research questions that guided the research study. The answers for the research questions would be further used in the next chapter to verify the claims of the hypotheses.

## **CHAPTER 6:**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **6.1 Introduction**

The purpose of the research study was to determine if there were significant differences in character development outcomes among schools in Singapore that were awarded the ODA, DA and no award. The earlier chapters provided the theoretical basis for character education, research processes and empirical findings needed to support the purpose of the research study. This chapter will conclude the research study by summarising the findings for the two hypotheses of the research, highlighting educational and theoretical implications for policy makers, and also making recommendations for educators and implementers of character education in Singapore's schools. One part of the recommendations will be for future researchers who may want to engage in similar research work in the context of Singapore schools.

#### **6.2 Hypotheses of Research Revisited**

As discussed in Chapter 1, the two hypotheses for the research study were:

Hypothesis1:

Any ODA school would have statistically significant higher character development outcomes than schools with DA or no award.

Hypothesis 2:

Any DA school would have statistically significant higher character development outcomes than schools with no award.

The direct implication from these two hypotheses is that the ODA school should have higher statistical significant difference with large effect size in its character development outcomes when compared with the DA or no award schools.

Given that there were more than one hundred secondary schools that had received either one of the two awards from Singapore Ministry of Education (SMOE) since 2006, it was hypothesised that schools with the ODA would have statistically significant higher mean scores in their character development programmes' outcomes than DA and no award schools when evaluated by their respective students, staff and parents. Similarly, DA schools should have statistically significant higher mean scores in their character development programmes' outcomes than no award schools when evaluated by their respective students, staff and parents.

However, research findings and analyses gathered in Chapter 5 gave the empirical support to reject the hypotheses because schools with higher awards did not have statistically significant differences in character development outcomes when compared with schools with lower or no awards.

The explanations for rejecting the hypotheses can be seen in the next section through answering the five guiding research questions.

### **6.3 Evaluating the Hypotheses**

In order to evaluate the two hypotheses, the findings for the five research questions will be used to verify their claims. For Hypothesis 1, the research findings from Research Questions 1, 3, 4 and 5 as discussed in Chapter 5.5.1, 5.5.3, 5.5.4 and 5.5.5 will be used respectively. As for Hypothesis 2, Research Questions 2, 4 and 5 as discussed in Chapter 5.5.2, 5.5.4 and 5.5.5 will be used respectively. Given that the analyses were already performed in Chapter 5, the following will summarise the various findings to either reject or accept the hypotheses.

#### **6.3.1 Evaluating Hypothesis 1**

Given that Hypothesis 1 encompassed the key stakeholders of students, staff and parents, its evaluation would require empirical evidences from the surveys conducted for these three groups to verify its claims.

##### **6.3.1.1 Student Survey**

From the research findings derived from Research Question 1 as discussed in Chapter 5.5.1, the empirical evidence showed that students from the ODA school students did rate their school significantly higher than students from

the DA schools in the inputs of character development but the corresponding outputs of character development were not statistically significant. Although there were significant higher mean scores in the character development inputs between the ODA and DA schools' students, the effect sizes were found to be small. One possible reason for the ODA school not to have statistically significant higher outputs could be because the implementation of character development programmes in schools required a longer time for the actual desired outcomes and behaviours to be seen. Since the implementation of the awarding system by SMOE took place in 2006 and the data collected from the schools was from 2009 to 2010, more time could be required for the desired results in students to be seen externally. This raises a persistent issue that is related to the current criteria used in evaluating schools for the character development awards. This will be discussed further in the section under Implications for Policy Makers.

From the research findings derived from Research Question 3 as discussed in Chapter 5.5.3, the empirical evidence showed that students from the ODA school did not rate their school character development process inputs and outputs statistically significantly higher than students from the no award school. This was rather surprising given that ODA schools had been closely examined and scrutinised in their character development programmes by SMOE to warrant the highest award in recognition for their efforts in promoting and implementing character development among their students.

Such high quality programmes were assumed to lead to definite positive outcomes in character development. However, the findings did not support this assumption and indicate no statistically significant difference between the students from the ODA and no award schools. A good example was from the input construct of Experience of Learning the Strengths of Character in which the no award school students rated their experience in this area to be more positive than the ODA school. Given the resources, training and systems that were put in place to allow schools to be recognised and given awards by SMOE, this finding raises the same issue whether the current criteria used to recognise schools for their character development efforts was effective in its evaluation and approach.

#### **6.3.1.2 Staff Survey**

From the research findings derived from Research Question 4 as discussed in Chapter 5.5.4, the empirical evidence showed that staff from the ODA school did rate their school's character development outputs statistically significantly higher than staff from the lower award and no award schools, albeit small effect size. This would then require further investigation and research to verify the significant differences between ODA and the lower and no award schools given the small effect size. One possible reason for the lack of significant findings among the staff from the various award schools could be the many emphases within each school where the staff could not recognise their school's programmes and efforts to be part of the character

development initiatives. Many could have been promoting character development in their personal interactions with students but might not recognise those occasions as character development moments due to their busyness and many demands on them (Lickona, 1997). Often schools would have staff who were specially given the responsibility to oversee character development programmes where these staff would have greater involvement in the direct planning and execution of character development initiatives in their schools. The rest of the staff members who were not involved in such committee overseeing the character development programmes should not see themselves as not being involved. Instead, the school management should emphasis to all staff the importance of a school-wide approach towards character development where all staff would directly and indirectly influence the character development of students.

### **6.3.1.3 Parent Survey**

From the research findings derived from Research Question 5 as discussed in Chapter 5.5.5, the empirical evidence showed that parents from the ODA school did not rate their school's character development outputs statistically significantly higher than parents from the lower award and no award schools. One possible reason could be because parents generally felt that the education system in Singapore had done well in moulding the character of their children regardless of which school their children would attend. Given the high confidence level in the education system, parents would give a

positive rating to any school that would be involved in educating their children. The other surprising finding that was not as per hypothesised was the partnership between the respective schools and the parents of the students. Since parents were one of the key stakeholders in the character development of the students, it was expected that the ODA school would involve the parents much more than parents from other award schools. However, the research finding indicated that parents involvement across the board was considered to be unsatisfactory given the mean scores were lower than 3 for all schools in the School-Family Partnership construct. Furthermore, there was no statistically significant difference among the schools for this construct as well. This could indicate the lack of partnership and involvement of parents in the character development programmes of schools which might not be reflected or measured in the current SMOE evaluation criteria for the various character development awards. Even if schools were to actively engage and involve parents in their character development programmes, parents' involvements would not be easily garnered given the current culture within Singapore's society which the current research did not probe further. However, it is also acknowledged that it would be impossible to have the full participation of parents before the implementation of any character development programme. It would even be adverse to any school's operation effectiveness if no programme could be implemented without parents' involvements. Therefore, schools should seek to increase the proportion of

parents' participation over time as they implement their various character development programmes.

#### **6.3.1.4 Conclusion for Hypothesis 1**

As seen from Sections 3.1.1 to 3.1.3, there was no empirical evidence from both the Student Survey and Parent Survey to support the claim that the ODA school would have higher significant differences in character development outcomes than schools with lower award or no award. Although the Staff Survey did show higher significance difference for the ODA school than the schools with DA and no award, the effect size is small. This was less than the ideal situation where the ODA school should have higher statistically significant difference and large effect size than the schools with DA and no award. Therefore, given these findings, Hypothesis 1 was rejected.

#### **6.3.2 Evaluating Hypothesis 2**

Given that Hypothesis 2 also encompassed the key stakeholders of students, staff and parents, its evaluation requires empirical evidence from the surveys conducted for these three groups to verify its claims.

##### **6.3.2.1 Student Survey**

From the research findings derived from Research Question 2 as discussed in Chapter 5.5.2, the empirical evidence showed that students from DA schools did not rate their schools significantly higher than students from the

no award school in both the inputs and outputs of character development. On the contrary, two of the input constructs of the NA school were found to be statistically significantly higher than DA schools. The possible reason for this could be the need for more time to see the evidence of the character development outcomes as mentioned in Section 3.1.1. However, this again raised the validity issue of the current criteria used to evaluate schools for their character development programmes.

#### **6.3.2.2 Staff Survey**

From the research findings derived from Research Question 4 as discussed in Chapter 5.5.4, the empirical evidence showed that staff from DA schools did not rate their schools' character development outputs statistically significantly higher than staff from the no award school.

#### **6.3.2.3 Parent Survey**

From the research findings derived from Research Question 5 as discussed in Chapter 5.5.5, the empirical evidence showed that parents from DA schools did not rate their schools' character development outputs statistically significantly higher than parents from the no award school. The reason for the lack of significant difference would be the same as those found in 3.1.1.

#### **6.3.2.4 Conclusion for Hypothesis 2**

As seen from Sections 3.2.1 to 3.2.3, there was no empirical evidence from all three surveys to support the claim that DA schools would have higher significant differences in character development outcomes than the school with no award. Therefore, given these findings, Hypothesis 2 was rejected.

#### **6.3.3 Summary of the Hypotheses**

Based on research findings, the two hypotheses for the research study were rejected as seen from Sections 6.3.1 and 6.3.2. There is no empirical evidence to show that the ODA school had significant differences in character development outcomes than schools with DA and no award. The same is true for DA schools where they did not have significant differences in character development outcomes than the school with no award. This implies that the outcomes of character development in the different award schools may not have been effectively measured by the two Character Development Awards. The possible reasons will be discussed in the following sections.

## **6.4 Implications for Policy Makers**

This section will address issues that are pertinent for policy makers to consider for the formulation of criteria and processes in the evaluation of schools for character development awards. Although the context of evaluation was in Singapore, the implications that will be discussed may provide good insight for policy makers who are involved in character education. The implications that will be presented in the following were derived from literature review, analyses derived from the research study and interactions with staff of the schools involved in the research study.

### **6.4.1 Evaluation Criteria**

As seen in Chapter 1, the SMOE's list of evaluation criteria has three major components of Leadership, Culture and Processes, Systems and Structures. When these three components were examined and compared with the various proven methods and strategies of character development from the literature review, two of the three were found except for the component of Culture. These scientifically proven components that are found in SMOE's evaluation criteria give credibility to the overall criteria. It shows that SMOE has taken into consideration some of the proven research strategies in the formulation of these evaluation criteria. Out of the three major components, the major emphasis is placed in evaluating processes, systems and structures within schools to facilitate their character development programmes. The reason for this emphasis is the belief that as long as the

processes, systems and structures are in place with the full support of the schools' management, achieving the desired positive character development outcomes will only be a matter of time. Inherent in this belief is the certainty of future success in schools' character development programmes as long as these three components are implemented by schools. However, from the results obtained and analyses derived from the research study, the validation for this belief is yet to be substantiated. The assumption that faithful and strict adherence to these three components will result in positive desired outcomes in schools' character development has yet to be proven according to this research study. Since the Character Development Award has been in existence from 2006, it would be appropriate for SMOE to conduct an internal review of its current criteria, especially in its espoused theory that a strict adherence to the three components would lead to successful character development outcomes. The emphasis in processes, systems and structures are commonly found in organisations that use the Star Model (Galbraith, 1995) in their organisational design for effective allocation of resources. However, the success of organisations that use the Star Model is not guaranteed because of the possible failures during the implementation stages (Galbraith, 2008). It may be the case for schools that do have the three major components in their character development programme design but still may not see the desired outcomes because of the implementation processes at the classroom level between the staff and students.

The second area within the evaluation criteria that requires some review is the component of Culture. Although SMOE does not define the meaning of culture from its published materials, it can be understood from the description given in the Character Development Award Handbook (SMOE, 2006) that it is referring to an environmental condition that exists consistently where staff show care towards students in a genuine manner. In order for a care culture to be formed, it will require much effort to be taken by the staff and students over time to build it (cf. Alder & Gundersen, 2008; Alvesson & Sveningsson, 2008; Schein, 2004). Therefore, a school culture of care is a resultant outcome created by the staff and students over time within the school community. However, the Character Development Award Handbook has emphasised that the evaluation criteria do not take into consideration the current school environment and conditions but yet the component of culture seems to indicate otherwise. Therefore, SMOE may need to consider removing this component given the contradiction it brings into the evaluation process, which can create an internal validity issue within the criteria (cf. Brewer, 2000; Shadish *et al.*, 2002). Alternatively, SMOE may need to redefine the meaning of culture as used in the criteria so as to prevent possible confusion in this matter albeit a greater confusion that may result from the redefinition. The most appropriate solution would be to recognise the necessity to evaluate the school's culture as part of the evaluation criteria.

The third area within the evaluation criteria that may require further consideration is for SMOE to determine the award status of schools that do not produce the desired outcome after consistently obtaining the DA and ODA for several years. Given that the emphasis of the current evaluation criteria is on processes, systems and structures, it will be appropriate to determine if the award winning schools should retain its award status if there are no apparent desired outcomes seen over time among their students. A reasonable time period may have to be stipulated where schools with the awards will have to validate their character development programmes with outcomes that befit their awards. This is to ensure the credibility of both the schools and the awards given by SMOE. Therefore, a set of more comprehensive evaluation criteria may need to be formulated to evaluate schools.

#### **6.4.2 Definition of Character**

One of issues that was constantly encountered during the research was the definition of character. The usage of the word *character* connotes a myriad of meanings to different people as discussed earlier in Chapter 2. Although SMOE attempted to define character in the Character Development Award Handbook, it is often not referred to by schools' staff during the evaluation process. During the research study process, the researcher found different definitions that were used by staff from different schools and even among staff within the same school. Furthermore, schools that participated in the

research did not share the same definition as defined by SMOE. The current evaluation criteria for the character development awards do not ask for the definition of character, presuming that schools are clearly aware of their own definition or share the same definition with SMOE. This situation may lead to serious validity issues, both internal and external, given the lack of clarity and requirement for a formal definition of character within schools that have character development programmes. Once the definition of character and its constructs are not clearly defined, the effectiveness and resultant outcomes of the character development programmes cannot be measured. It is based on the definition of character and its constructs that the effectiveness of the programmes and their outcomes can be evaluated and even measured (Berkowitz and Bier, 2006; Was *et al.*, 2006). Any character development programme requires clear definition in its character construct in order for implementation strategies and processes to work together towards achieving the desired outcomes. Lickona (1996) has also highlighted the need for clear definition of character as one of the pivotal principles when evaluating character development programmes in schools. Given the complexity in the study of character as mentioned earlier in Chapter 2, this is one area that is clearly in need of serious consideration to be added into SMOE's evaluation criteria.

Although SMOE's Character Development Award Handbook does state that the criteria are meant to evaluate the Processes, Systems and Structures that

are put in place to ensure the success of any school's character development programmes, without a proper definition of character, the evaluation criteria may not be meaningfully evaluating students' character development. Therefore, it is highly recommended for SMOE to add into the current criteria some measures to determine the constructs and definition of character as used in schools.

### **6.4.3 The Evaluation Process**

The current evaluation process by SMOE (SMOE, 2008) is such that any school that is interested to be evaluated for the character development awards must first submit a three-page application document with attached annexes of not more than 10 pages that will give details of the various character initiatives and programmes currently taking place within the school community. Schools will then be shortlisted based upon the information gathered from the submitted documents. Schools that are shortlisted will be visited by a panel of evaluators for half a day to conduct interviews with the school management, teachers and students. Following the first validation visit, schools that are shortlisted for the ODA will receive a second validation visit that will last for another full day. The intent of the second visit is to have further interviews with the various stakeholders of the schools' community to validate the schools' character development programmes. However, the question to be raised in this process is whether a half day school visit for DA or a one and a half day school visit for ODA is sufficient to determine the

effectiveness of character development programmes within each school. SMOE may want to consider using other quantitative methods to supplement its current qualitative method of interviews to evaluate the effectiveness of schools' character development programmes. It is recommended to have quantitative instruments that will determine if there is indeed a school wide adoption and implementation of the various character development programmes among the school's stakeholders. It will be even better if the evaluation process takes place over time and not just a one time evaluation by the panel. This is to further ensure that schools are indeed implementing the various character development initiatives over time and not just for the evaluation panel visit only. Such thorough evaluation process may require more competent staff to be deployed and trained to conduct the regular visits to schools.

Another area that can assist schools in their process to apply for the character development awards is to provide a template for schools to have a self-study framework of assessment. Such a self-study assessment will facilitate schools to determine if they have met the expectations and requirements for either the DA or ODA. Currently, the evaluation rubrics used for evaluating schools are not made known publicly and schools will not be able to know the areas for improvements and strengths of their programmes. Such knowledge will be helpful for schools to know where they stand for the awards and how to work towards improving themselves from the DA to the

ODA. Currently, schools are also not given any expert advice on their character development programmes and a self-assessment template will be helpful for them to self-evaluate their strengths and areas for improvements before applying for evaluation with SMOE.

## **6.5 Implications on Character Development Theories**

The research study has discussed the various implications for policy makers of schools in the previous section. In this section, the implications for character development theories that were raised in Chapter 2 and how they will directly affect the understanding of character education will be presented.

### **6.5.1 Measurability of Character Development Outcomes**

The research study affirmed the various challenges and difficulty faced in character development, especially the claim for schools to have effective character education programmes. The revolving theoretical issues that constantly surfaced in the research study were that of the definition of character, the constructs that constituted character and whether character could be effectively measured. These issues are related to each other and further complicated by a myriad of definitions and understanding of character as defined by various academic fields and highlighted in Chapter 2 (see Berkowitz, 1997; Smagorinsky & Taxel, 2005). However, despite the complicated challenges involved in having a unified definition and constructs

for character, it is clear from the research study that the outcomes for character development can be measured as long as the definition and constructs of character are determined in the early stage before the implementation of any character development programmes (Berkowitz and Bier, 2006; Davidson *et al.*, 2008). The character constructs chosen must accurately capture the essence of character as per defined and in line with the general understanding of character.

The research experience in the various schools showed that schools did not have an established definition in place and some stakeholders of the same school would even define character differently. The lack of unified definition and understanding of character within schools would lead to the insurmountable task of measuring the outcomes for their character development programmes. This often resulted in capturing the wrong outcomes for schools' character development programmes and nullifying their effectiveness. Some schools might see a few character development outcomes that happened by chance rather than what were desired before the implementation of their character education. In the case of the research study, although participating schools did not use the same definition of character as defined in this research study by Davidson, Lickona and Khmelkov (2008), they accepted the character constructs used in the research survey as indicative of what character would be in their students. The findings from the research study reinforced the need for schools and SMOE to examine and

understand the theoretical relationships between the definition of character, the constructs of character and the desirable outcomes for character development programmes. Such understanding of the theoretical relationships would assist schools to provide effective character education and also for awarding institutions to set criteria that would accurately evaluate schools' character development programmes as discussed in Section 6.4.2.

### **6.5.2 Effectiveness of Character Education**

From the hypothesis evaluation as seen in Sections 6.3.1.4 and 6.3.2.4, it may lead to a premature conclusion to doubt the effectiveness of character development programmes that were used in schools given the contradictory findings. Such a conclusion will be erroneous given that the rejection of the two hypotheses cannot be seen as negating the effectiveness of character education in schools. The reasons for rejecting the two hypotheses were clearly stated in Sections 6.4.1 to 6.4.3 where the actual outcomes of the various character development programmes might not be evaluated appropriately. Given the many factors that affected the evaluation criteria used for awarding schools, the true outcomes of character education that took place in schools were not accurately measured. Therefore, the effectiveness of character education cannot be nullified based on this research study as there are many other studies that have provided the empirical evidences to support the effectiveness of character education (see Corrigan, Grove, Vincent, Chapman & Walls 2007; Berkowitz & Bier, 2007;

Flay, Alfred, Ji, Segawa, Burns & Campbell 2005; Hendrix, Luedtke & Barlow, 2004; Rudd & Stoll, 2004). Furthermore, the objective of this research study was not to prove the ineffectiveness of character education but to determine if higher award winning schools did have a significant difference in the outcomes of character development over lower or no award schools in the context of Singapore's Character Development Award. The issue then is not on the effectiveness of character education but the effectiveness in measuring character development outcomes when there is character education taking place in schools.

Therefore, schools can adopt different approaches such as Traditional Character Education, Rational Moral Education or even integrative approaches of both in their character development programmes as highlighted in Chapter 2. However, the effectiveness can only be validated when the outcomes are correctly and accurately measured.

### **6.5.3 School Culture for Character Education**

The research study has highlighted the internal validity issue in Section 6.4.1. It was maintained that the Character Development Award Handbook stated the exclusion of current school culture in the evaluation process and yet the criteria for evaluation seemed to indicate otherwise. Empirical studies conducted in schools with proven effective character development outcomes have shown that the school culture is vital in ensuring that these desired

outcomes are achieved (Berkowitz and Bier, 2006; Lickona & Davidson, 2005). Berger (2003) went as far to say that culture would even shape students' character. The culture for character education must pervade the student body, staff and parents where these stakeholders are fully involved and engaged in the character development process. A strong school culture that emphasises character education will bring an alignment of staff's professional and teaching practices to support the desired character development outcomes. This is further reinforced by parents at home when students are back from school. Such strong school culture will also harness a peer culture among its students to support the school's effort in building a healthy and good environment that encourages positive ethical behaviours (Berger, 2003; Narvaez, 2010). Therefore, the school leadership will need to consciously utilise the potency and influence of school culture to achieve their desired goals for character education (Barth, 2002; Character Education Partnership, 2010). This can only be achieved through long term mutual collaboration and partnership with the stakeholders to reinforce and sustain the common desire for character formation to take place among their students.

## **6.6 Recommendations for Educators and Implementers**

This section will make recommendations for educators and implementers who are involved or are interested in character education in their schools. Although these recommendations are not new discoveries or theories in character development, they serve as a good reference for educators to review and evaluate their current character development initiatives.

### **6.6.1 Establishing a Working Definition for Character**

From the findings gathered through the research study, the definition of character must be stated early in the implementation process of a school's character development programmes. As discussed in Section 6.5.1, an established definition will allow a school to determine the constructs of its character, which will facilitate the focus on the various areas of character development within the school community (Berkowitz & Bier, 2006). As many educators may not be content expert in the area of character education, the definition may change or be amended as the school progresses in its character development programmes and initiatives. The process of amending the definition of character within each school is encouraged as it shows progress of understanding in the knowledge of character development. Therefore, an early stage working definition will allow teachers and the various stakeholders in the school community to begin the process of refining the definition and garner greater ownership towards the character development initiatives.

Once the definition is agreed and embraced by the school's stakeholders, the school management will then be able to allocate the necessary resources to achieve the required outcomes as determined from the constructs of character.

### **6.6.2 Communicate the Desired Outcomes**

Once the definition of character is established, the school will then be able to set the outcomes of its character development programmes. This is achieved through measuring the various outcomes in accordance to the defined constructs of character. However, the measurement of these outcomes must be communicated explicitly and be in agreement with the stakeholders of the school community (Berkowitz & Bier, 2006; Lickona & Davidson, 2005). It will not be meaningful to measure the outcomes without the active participation of students as their involvements and awareness of the outcomes will determine the success of the character development programmes. Furthermore, if the desired outcomes are not agreed upon between the students and staff, there will be mismatched expectations when it comes to the evaluation of desired behaviours and end goals (Power *et al.*, 1989). Students may feel that the expectations are imposed on them and not derived from their personal motivations. This can result in students opposing the character development programmes instead of supporting and actively participating in them.

### **6.6.3 Professional Staff Development**

One of the essential processes to ensure good implementation of character development programmes in schools is that of staff training and development (Elias *et al.*, 2001; Elias *et al.*, 2006b; Elias, Zins, Weissberg, *et al.*, 1997). This is especially so when teachers are generally not taught the theories or skills in character education during the pre-service teacher training course (Williams & Schaps, 1999; Jones *et al.*, 1998). As informed by current new teachers in schools, this is also true for Singapore's context where trainee teachers are not given any formal lessons on character education in the National Institute of Education. Given that very good character development programmes may lose its effectiveness if staff do not implement and execute them correctly at the classroom level, professional training in both the implementation skill and knowledge of character education are vital (Berkowitz & Bier, 2004; Kam *et al.*, 2003; Schwartz, 2008; Solomon *et al.*, 2000). Schools may want to dedicate staff who are passionate in the area of character development to specialise in this area and become content experts to guide and train other staff members. It is highly encouraged for schools' management to free up time and lighten the teaching load of such dedicated staff to do the necessary research and study into the character development curriculum that will be most suitable for their schools.

#### **6.6.4 School-Wide Approach**

The other area that is important for schools to consider before implementing any character development programmes is the scope of the implementation. The most effective character development programmes that are found by researchers are usually implemented and supported through a school-wide approach (Berkowitz & Bier, 2006; Lickona & Davidson, 2005). This is because any programme that uses a school-wide approach affects the entire school where stakeholders are keenly aware of its importance and priority. In order for any programme to have a school-wide approach, the school management must be supportive of it and such favourable environment will greatly enhance its implementation at all levels within the school community (Dinham, 2005; Fullan, 2002; Heck, 1991). Besides being supportive of the programmes, the school management will have to allocate resources and be mentally prepared for the programmes to run for a few years in order to benefit from the desired outcomes. If there is very little support and interest at the school management level for character development programmes to be implemented for a prolonged period, it may be more appropriate to postpone the launch of such programmes.

#### **6.6.5 Parental Involvement**

The other important area that cannot be neglected for schools that desire to have effective character development programmes is the involvement of parents in students' character development process (Berkowitz, 2002;

Halstead, 1999; Lickona *et al.*, 2007; Smetana, 1999; Walker & Taylor, 1991). Given that family is the moral centre of a child's character development and the seedbed for moral thinking, affection and behaviours (Dun, 2006; Ponzetti, 2005), it is inevitable to engage parents as partners in schools' character development programmes. Given that the findings from the research study show a rather low involvement of parents in the character development process, schools should think of creative ways to engage parents and obtain their direct or indirect involvements in the schools' character development initiatives. Although the research findings did show the possibility that parents had a high confident and trust level in the schools' character development programmes and in the teachers, schools should continue their efforts to solicit participation and input from parents. This is to ensure that parents can reinforce the learning of character development and moral values in their children when they are at home. Such partnership will greatly enhance the character education experience in schools and at home.

#### **6.6.6 New Media Technologies**

One of the researcher's personal observations is the need for schools to use new media technologies such as the Internet, digital media and other interactive methods to engage students in the teaching of moral values (cf. Beach & Lundell, 1998; Tierney & Damarin, 1998). From the informal feedback gathered from students, they indicated a greater enjoyment of moral education classes when teachers were able to engage students through the

usage of digitised movie clips from Youtube or from other digitised media that would capture and show the values that were intended to be taught. This stirred greater interests than didactic teaching by staff in a unidirectional way where students would listen and staff would teach. However, such methods would require staff to be comfortable with using the latest new media technologies (Leu & Kinzer, 2000; Plumm, 2008) and also the ability to facilitate class discussions on moral lessons among students (Askov & Bixler, 1998) to enhance the learning experience after watching the movie clips. This once again highlights the critical need for staff training in the area of using technologies for character development in schools. It may be inevitable for schools to pursue this route given the current phenomenon of students being very familiar with new media through daily entertainment and interactions with friends on the Internet (Hogan & Strasburger, 2008; Lickona, 1999; Lickona & Davidson, 2005).

## **6.7 Possible Improvements to the Research Study**

The research study was probably the first to be conducted by an external researcher to determine the validity of SMOE's character development awards. Given the rich experience learnt throughout the research study, Sections 6.7.1 to 6.7.3 will list the areas that the researcher would recommend for future researchers when similar research of this nature is to be conducted in Singapore schools.

### **6.7.1 Partnership with SMOE**

One of the earlier challenges encountered in the research study was to gain entry into schools to conduct the research. Although permission was given by SMOE to conduct the research study, there was the second level permission required from school principals before the research could take place in their schools. The reason for this was because the approval given by SMOE for the research study was not a mandate to schools to participate. Principals had the option to decide their school's involvement in the research study. From the list of potential schools that the researcher had in mind, many of the schools did not reply to the initial electronic mail requesting them to participate in the research or did not want to participate in the research study due to many activities and events already taking place in the schools. Eventually, the researcher had to depend on informal personal contacts to gain entry into schools to conduct the research study. It would have been ideal if the research study was approved by SMOE and mandated on schools

to participate in the research study. This will definitely allow many of the potential schools that match the selection criteria to be involved in the research to further enhance the research findings. Therefore, it is recommended for potential researchers in character development to first write to SMOE's Character Development Branch to determine whether there are worthy research projects initiated by SMOE that they can undertake. Alternatively, researchers may want to explore with the Character Development Branch whether their proposed projects can be a partnership with SMOE to be conducted in schools. Such direct involvement of SMOE will facilitate researchers' ease of entry into schools to conduct their research studies.

### **6.7.2 Longitudinal Research Study**

The research study was conducted through a one time assessment of schools using a quantitative survey instrument that measured the various stakeholders' perspectives of school character development programmes. Although this provided a good basis for evaluation and analysis of school character development outcomes, a longitudinal research approach may provide very useful insights and findings that track the character development outcomes over time. This is especially useful if schools can begin tracking the outcomes of student character development when they first enter into schools in Secondary 1. The tracking process will end when the students exit schools upon their graduation at Secondary 4 or 5. The four to five years of tracking

will give a very in-depth understanding of student character development outcomes as seen through the years in their respective schools. Such level of tracking and research study will provide good indicators to show whether schools' character development programmes are effective in helping students to increase their moral literacy and behaviours. However, such a longitudinal research study will require resources and long term support from SMOE in order for it to take place. Schools that are endowed with more resources may be able to conduct their own longitudinal research study as it will require staff members who are proficient in character education, research methodologies and a long term commitment of the school management to ensure continuity of the research in the midst of transitions of key staff and future developments of schools.

### **6.7.3 Usage of Other Survey Instruments**

The research study used the CREE Instrument for the conduct of the quantitative research work among the school community's stakeholders. The CREE research instrument was used as the key instrument in the research study because of its definition of the various constructs of character that matched the researcher's choice of definition for character. Although the CREE instrument served its function well in measuring the required character constructs in the research study, more comprehensive data and information on the outcomes of character development in schools may be gathered if more instruments were used alongside CREE. Given the complexity of

character as mentioned in Chapter 2, it may serve the character development research process well to include various instruments with different constructs of character to examine the various outcomes in school character development programmes. This may give a more thorough and complete coverage of the various constructs of character that are well accepted by educationists and character development experts. The only concern for the usage of various instruments to measure the outcomes of school character development will be the extra demand placed on schools to find time to conduct the various instruments given that schools are already operating on a very demanding schedule.

## **6.8 Summary**

The research study has shown empirically that SMOE's current evaluation criteria for its Character Development Award may require some fine tuning since its inception in 2006. Such fine tuning process is a normal routine for any award that attempts to evaluate character development in schools. This is especially true when measuring outcomes from a complex concept such as character. Any good award will constantly seek to improve its evaluation criteria in tandem with the latest reliable research findings in character education. SMOE has done well in formulating its current evaluation criteria as its first attempt to recognise schools for their efforts in character development. Such attempt is to be applauded and given due recognition as

it promotes holistic education among Singapore's schools. In order to maintain its reputation as a nation that provides quality education and holistic development for its students, SMOE will excel in this through constant engagement in research based programmes in character education and give schools the recognition for their empirically proven character development programmes that positively shape and mould the lives of their students. The benefits for such engagement may not be seen immediately but it will reap a harvest of citizens who are not only competent in their skills and knowledge but also exhibit moral integrity in their relationships with others.

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## APPENDIX A

### **4 KEYS for Developing Performance Character and Moral Character (Davidson, Lickona & Khmelkov, 2008, p381-382)**

- 1. The Ethical Learning Community (ELC)** – developing a community (classroom, advisory group, team, whole school) that both supports and challenges and whose members pursue the realisation of their own potential for excellence and ethics and seek to bring out the best in every person.
- 2. Self-Study** – engaging students in assessing their strengths and areas for growth in performance character and moral character, setting goals for improvement, and monitoring their progress.
- 3. Other-Study** – learning from exemplars of performance character and moral character by analysing and emulating their pathways to success.
- 4. Public Performance/Presentation** – using public performances and presentations as experiential learning and authentic assessment of students' performance character and moral character

## APPENDIX B

### The Eleven Principles of Effective Character Education (Lickona, Schaps & Lewis, 2007, p2-5)

<p><b>Principle 1: Promotes core ethical values and supportive performance values as the foundation of good character</b></p>	<p>Character education holds that widely shared, pivotally important, core ethical values—such as caring, honesty, fairness, responsibility, and respect for self and others—along with supportive performance values—such as diligence, a strong worth ethic, and perseverance—form the basis of good character. A school committed to character development stands for these values (sometimes referred to as “virtues” or “character traits”), defines them in terms of behaviours that can be observed in the life of the school, models these values, studies and discusses them, uses them as the basis of human relations in the school, celebrates their manifestations in the school and community, and holds all school members accountable to standards of conduct consistent with the core values.</p> <p>In a school committed to developing character, these core values are treated as a matter of obligation, as having a claim on the conscience of the individual and community. Character education asserts that the validity of these values, and our responsibility to uphold them, derive from the fact that such values affirm our human dignity, promote the development and welfare of the individual person, serve the common good, meet the classical tests of reversibility (i.e., Would you want to be treated this way?) and universality (i.e., Would you want all persons to act this way in a similar situation?), and inform our rights and responsibilities in a democratic society. The school makes clear that these basic human values transcend religious and cultural differences, and express our common humanity.</p> <p>The Character Education Partnership (CEP) believes that character education’s primary focus is on developing the core ethical values needed to be a good human being. But character education also seeks to develop complementary performance character qualities that enable students to perform at their highest potential in the classroom, the workplace, or any other area of endeavour. These two parts of character work together in mutually supportive ways</p>
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<p><b>Principle 2: Defines “character” comprehensively to include thinking, feeling, and behaviour.</b></p>	<p>Good character involves understanding, caring about, and acting upon core ethical values. A holistic approach to character development therefore seeks to develop the cognitive, emotional, and behavioural aspects of moral life. Students grow to understand core values by studying and discussing them, observing behavioural models, and resolving problems involving the values. Students learn to care about core values by developing empathy skills, forming caring relationships, helping to create community, hearing illustrative and inspirational stories, and reflecting on life experiences. And they learn to act upon core values by developing prosocial behaviours (e.g., communicating feelings, active listening, helping skills) and by repeatedly practicing these behaviours, especially in the context of relationships (e.g., through cross-age tutoring, mediating conflicts, school and community service). As children grow in character, they develop an increasingly refined understanding of the core values, a deeper commitment to living according to those values, and a stronger capacity and tendency to behave in accordance with them.</p>
<p><b>Principle 3: Uses a comprehensive, intentional, and proactive approach to character development.</b></p>	<p>Schools committed to character development look at themselves through a moral lens to assess how virtually everything that goes on in school affects the character of students. A comprehensive approach uses all aspects of schooling as opportunities for character development. This includes what is sometimes called <i>the hidden curriculum</i> (e.g., school ceremonies and procedures; the teachers’ example; students’ relationships with teachers, other school staff, and each other; the instructional process; how student diversity is addressed; the assessment of learning; the management of the school environment; the discipline policy); the <i>academic curriculum</i> (i.e., core subjects, including the health curriculum); and <i>extracurricular programmes</i> (i.e., sports teams, clubs, service projects, after-school care). “Stand alone” character education programmes can be useful first steps or helpful elements of an ongoing effort but are not an adequate substitute for a holistic approach that integrates character development into every aspect of school life. Finally, rather than simply waiting for opportunities to arise, with an intentional and proactive</p>

	<p>approach, the school staff takes deliberate steps for developing character, drawing wherever possible on practices shown by research to be effective.</p>
<p><b>Principle 4: Creates a caring school community.</b></p>	<p>A school committed to character strives to become a microcosm of a civil, caring, and just society. It does this by creating a community that helps all its members form caring attachments to one another. This involves developing caring relationships among students (within and across grade levels), among staff, between students and staff, and between staff and families. These caring relationships foster both the desire to learn and the desire to be a good person. All children and adolescents have needs for safety, belonging, and the experience of contributing, and they are more likely to internalize the values and expectations of groups that meet these needs. Likewise, if staff members and parents experience mutual respect, fairness, and cooperation in their relationships with each other, they are more likely to develop the capacity to promote those values in students. In a caring school community, the daily life of classrooms and all other parts of the school environment (e.g., the hallways, cafeteria, playground, school bus, front office, and teachers' lounge) is imbued with a climate of concern and respect for others.</p>
<p><b>Principle 5: Provides students with opportunities for moral action.</b></p>	<p>In the ethical as in the intellectual domain, students are constructive learners; they learn best by doing. To develop good character, they need many and varied opportunities to apply values such as compassion, responsibility, and fairness in everyday interactions and discussions as well as through community service. By grappling with real-life challenges (e.g., how to divide the labour in a cooperative learning group, how to reach consensus in a class meeting, how to reduce fights on the playground, how to carry out a service-learning project) and reflecting on these experiences, students develop practical understanding of the requirements of cooperating with others and giving of oneself. Through repeated moral experiences, students develop and practice the skills and behavioural habits that make up the action side of character.</p>

<p><b>Principle 6: Includes a meaningful and challenging academic curriculum that respects all learners, develops their character, and helps them to succeed.</b></p>	<p>When students succeed at work in school and feel a sense of competence and autonomy, they are more likely to feel valued and cared about as persons. Because students come to school with diverse skills, interests and needs, an academic program that helps all students succeed will be one in which the content and pedagogy are sophisticated enough to engage all learners. This means providing a curriculum that is inherently interesting and meaningful to students. A meaningful curriculum includes active teaching and learning methods such as cooperative learning, problem-solving approaches, and experience-based projects. These approaches increase student autonomy by appealing to students' interests, providing them with opportunities to think creatively and test their ideas, and fostering a sense of "voice and choice"—having a say in decisions and plans that affect them.</p> <p>In addition, effective character educators look for the natural intersections between the academic content they wish to teach and the character qualities they wish to develop. These "character connections" can take many forms, such as addressing current ethical issues in science, debating historical practices and decisions, and discussing character traits and ethical dilemmas in literature. When teachers bring to the fore the character dimension of the curriculum, they enhance the relevance of subject matter to students' natural interests and questions, and in the process, increase student engagement and achievement. When teachers promote performance values such as intellectual curiosity, critical thinking, and diligence, students are better able to do their best work.</p>
<p><b>Principle 7: Strives to foster students' self-motivation.</b></p>	<p>Character is often defined as "doing the right thing when no one is looking." The best underlying ethical reason for following rules, for example, is respect for the rights and needs of others—not fear of punishment or desire for a reward. Similarly, we want students to be kind to others because of an inner belief that kindness is good and a desire to be a kind person. Growing in self-motivation is a developmental process that schools of character are careful not to undermine by excessive emphasis on extrinsic incentives. When such schools give appropriate social recognition for</p>

	<p>students' prosocial actions (e.g., "Thank you for holding the door—that was a thoughtful thing to do.") or celebrate character through special awards (e.g., for outstanding school or community service), they keep the focus on character. Schools of character work with students to develop their understanding of rules, their awareness of how their behavior affects others, and the character strengths—such as self-control, perspective taking, and conflict resolution skills— needed to act responsibly in the future. Rather than settle for mere compliance, these schools seek to help students benefit from their mistakes by providing meaningful opportunities for reflection, problem solving, and restitution.</p>
<p><b>Principle 8: Engages the school staff as a learning and moral community that shares responsibility for character education and attempts to adhere to the same core values that guide the education of students.</b></p>	<p>All school staff—teachers, administrators, counsellors, school psychologists, coaches, secretaries, cafeteria workers, playground aides, bus drivers—need to be involved in learning about, discussing, and taking ownership of the character education effort. First and foremost, staff members assume this responsibility by modelling the core values in their own behaviour and taking advantage of other opportunities to influence the students with whom they interact.</p> <p>Second, the same values and norms that govern the life of students serve to govern the collective life of adult members in the school community. Like students, adults grow in character by working collaboratively with each other and participating in decision-making that improves classrooms and school. They also benefit from extended staff development and opportunities to observe colleagues and then apply character development strategies in their own work with students.</p> <p>Third, a school that devotes time to staff reflection on moral matters helps to ensure that it operates with integrity. Through faculty meetings and smaller support groups, a reflective staff regularly asks questions such as: What character building experiences is the school already providing for its students? What negative moral experiences (e.g., peer cruelty, student cheating, adult disrespect of students, littering of the grounds) is the school currently failing to address? And what important moral experiences (e.g., cooperative learning, school and community service, opportunities to learn about and</p>

	<p>interact with people from different racial, ethnic, and socioeconomic backgrounds) is the school now omitting? What school practices are at odds with its professed core values and desire to develop a caring school community? Reflection of this nature is an indispensable condition for developing the moral life of a school.</p>
<p><b>Principle 9: Fosters shared moral leadership and long range support of the character education initiative.</b></p>	<p>Schools that are engaged in effective character education have leaders (e.g., the principal, a lead teacher or counselor, a district administrator, or preferably a small group of such individuals) who champion the effort. At least initially, many schools and districts establish a character education committee—often composed of staff, students, parents, and possibly community members—that takes responsibility for planning, implementation, and support. Over time, the regular governing bodies of the school or district may take on the functions of this committee. The leadership also takes steps to provide for the long-range support (e.g., adequate staff development, time to plan) of the character education initiative, including, ideally, support at the district and state levels. In addition, within the school students assume developmentally appropriate roles in leading the character education effort through class meetings, student government, peer mediation, cross-age tutoring, service clubs, task forces, and student-led initiatives.</p>
<p><b>Principle 10: Engages families and community members as partners in the character-building effort.</b></p>	<p>Schools that reach out to families and include them in character-building efforts greatly enhance their chances for success with students. They take pains at every stage to communicate with families—via newsletters, e-mails, family nights, and parent conferences—about goals and activities regarding character education. To build greater trust between home and school, parents are represented on the character education committee. These schools also make a special effort to reach out to subgroups of parents who may not feel part of the school community. Finally, schools and families enhance the effectiveness of their partnership by recruiting the help of the wider community (i.e., businesses, youth organizations, religious institutions, the government, and the media) in promoting character development.</p>

<p><b>Principle 11: Assesses the character of the school, the school staff's functioning as character educators, and the extent to which students manifest good character.</b></p>	<p>Effective character education must include an effort to assess progress using both qualitative and quantitative methods. Three broad kinds of outcomes merit attention:</p> <p>(a) The character of the school: To what extent is the school becoming a more caring community? This can be assessed, for example, with surveys that ask students to indicate the extent to which they agree with statements such as, "Students in this school (classroom) respect and care about each other," and "This school (classroom) is like a family."</p> <p>(b) The school staff's growth as character educators: To what extent have adult staff—teaching faculty, administrators, and support personnel—developed understandings of what they can do to foster character development? Personal commitment to doing so? Skills to carry it out? Consistent habits of acting upon their developing capacities as character educators?</p> <p>(c) Student character: To what extent do students manifest understanding of, commitment to, and action upon the core ethical values? Schools can, for example, gather data on various character-related behaviors: Has student attendance gone up? Fights and suspensions gone down? Vandalism declined? Drug incidents diminished? Schools can also assess the three domains of character (knowing, feeling, and behaving) through anonymous questionnaires that measure student moral judgment (for example, "Is it wrong to cheat on a test?"), moral commitment ("Would you cheat if you were sure you wouldn't get caught?") and self-reported moral behaviour ("How many times have you cheated on a test or major assignment in the past year?"). Such questionnaires can be administered at the beginning of a school's character initiative to get a baseline and again at later points to assess progress.</p>
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# APPENDIX C

## CREE Student Survey



**Cornerstone**  
Consulting &  
Evaluation, LLC  
Cornerstone is the cornerstone of our work.

### Collective Responsibility for Excellence and Ethics

#### Student Survey

THIS QUESTIONNAIRE IS NOT A TEST.

We hope you will answer every question, but you may skip any question you do not wish to answer.

Mark one answer on each line

Like this:  Not like this:

1. Think about what you do in school. How often does this happen?	Almost never	Rarely	Sometimes	Often	Almost always
1) I can be counted on to do my part for the team/group.	1	2	3	4	5
2) I try to be creative in my assignments.	1	2	3	4	5
3) I spend extra time working to improve my weaknesses.	1	2	3	4	5
4) I discuss ideas from my readings or assignments with my parents or other adults.	1	2	3	4	5
5) I think about my school work and consider whether I need to work harder.	1	2	3	4	5
6) I present or discuss different cultural, religious or political beliefs in class.	1	2	3	4	5
7) I give up watching TV or hanging out with friends to study for a test or do an assignment for school.	1	2	3	4	5
8) I redo a school assignment to make it better.	1	2	3	4	5
9) When I work on an assignment for some class, I include ideas from a different subject.	1	2	3	4	5
10) I treat teachers and staff with respect, even if I disagree with them.	1	2	3	4	5
11) When I see someone having a problem, I offer to help.	1	2	3	4	5
12) I do the right thing no matter what others might think.	1	2	3	4	5
13) I speak up when someone is bullied or harassed.	1	2	3	4	5
14) I cheat on a test or an assignment.	1	2	3	4	5
15) I admit if I do something wrong.	1	2	3	4	5
16) I consider different points of view when making a decision about a moral issue or dilemma.	1	2	3	4	5
17) I help another student choose between doing what is right and what is wrong.	1	2	3	4	5

Continue on next page

2. How often do the following things happen in this school?	Almost never	Rarely	About once a month	About once a week	A few times every week
18) ... someone gets drunk or high.	1	2	3	4	5
19) ... someone verbally abuses or harasses another person.	1	2	3	4	5
20) ... someone steals from another person.	1	2	3	4	5
21) ... someone physically assaults another person.	1	2	3	4	5
22) ... someone uses e-mail, text messaging, or websites to bully or harass others.	1	2	3	4	5

3. Think about students and adults in this school. Do you agree or disagree with these statements?	Completely disagree	Somewhat disagree	Not sure	Somewhat agree	Completely agree
23) Students work together to develop new skills or complete projects.	1	2	3	4	5
24) Students here do not talk to or include those who are different (for example, those who belong to a different race, religion, or culture).	1	2	3	4	5
25) Students who are not part of the popular groups get picked on or excluded.	1	2	3	4	5
26) If students are in trouble, they can rely on others to help them.	1	2	3	4	5
27) Students here only care about themselves.	1	2	3	4	5
28) Students try to get their friends to follow the rules.	1	2	3	4	5
29) Students take an active role in helping solve school problems.	1	2	3	4	5
30) When students see someone being picked on, they try to stop it.	1	2	3	4	5
31) Students would try to stop their friends from spreading rumors or gossip about others.	1	2	3	4	5
32) Students believe that working together they can bring about change in the school.	1	2	3	4	5
33) Students get involved in making decisions about things that affect them.	1	2	3	4	5
34) Adults give you individual attention and assistance when you need it.	1	2	3	4	5
35) There are adults to talk with about problems that are bothering you.	1	2	3	4	5
36) Adults are fair in enforcing the rules.	1	2	3	4	5
37) Adults know students and care about their interests (their friends, music, hobbies, etc.).	1	2	3	4	5
38) The school asks for my parents' input about school matters.	1	2	3	4	5
39) Many parents are involved in students' activities in the school.	1	2	3	4	5

4. Think about what teachers and other staff members in this school do. How often does this happen?		Almost never	Rarely	Some-times	Often	Almost always
In this school, teachers and/or staff members ...						
40)	... discuss with students examples of high quality work.	1	2	3	4	5
41)	... make learning interesting.	1	2	3	4	5
42)	... teach students how to manage their time.	1	2	3	4	5
43)	... give feedback that really helps students improve their work.	1	2	3	4	5
44)	... have students revise their work until it meets the teacher's standard for quality.	1	2	3	4	5
45)	... help students in evaluating progress towards their goals.	1	2	3	4	5
46)	... have students present their schoolwork to peers.	1	2	3	4	5
47)	... continue teaching even if students aren't paying attention.	1	2	3	4	5
48)	... teach students how to solve conflicts fairly and peacefully.	1	2	3	4	5
49)	... talk to students about ethical or moral issues in recent news stories or events.	1	2	3	4	5
50)	... teach students to fix problems in relationships with schoolmates.	1	2	3	4	5
51)	... ask for student input when setting up rules.	1	2	3	4	5
52)	... make sure that students hold each other accountable for following the rules.	1	2	3	4	5
53)	... involve students in solving class or school challenges.	1	2	3	4	5
54)	... have students take turns in being leaders in different activities or events.	1	2	3	4	5
55)	... make sure that all students have a chance to express their opinions about class or school issues.	1	2	3	4	5
56)	... teach students how to make decisions about ethical or moral issues or dilemmas.	1	2	3	4	5
<hr/>						
5. Think about your interactions with other students in this school. How often does this happen?		Almost never	Rarely	Some-times	Often	Almost always
57)	A schoolmate gives me advice about how to make good decisions.	1	2	3	4	5
58)	If I slack off, a schoolmate encourages me to work harder.	1	2	3	4	5
59)	A schoolmate gives me advice about how to deal with bullying or hazing.	1	2	3	4	5
60)	I engage in conversations with students who belong to a different culture, race or ethnicity.	1	2	3	4	5

Continue on next page

5 (continued). Think about your interactions with other students.

How often does this happen?	Almost never	Rarely	Sometimes	Often	Almost always
61) A schoolmate challenges me to be more creative in my schoolwork.	1	2	3	4	5
62) A schoolmate helps me find alternative ideas or more information for my assignment.	1	2	3	4	5
63) If I try to do something that is not right, a schoolmate tries to convince me not to do it.	1	2	3	4	5
64) I get advice from a schoolmate about how to communicate better with a teacher or staff member.	1	2	3	4	5
65) A schoolmate advises me how to plan my time for doing my school work.	1	2	3	4	5
66) I volunteer to tutor or mentor someone in my school.	1	2	3	4	5
67) A schoolmate encourages me to set high goals in my life.	1	2	3	4	5
68) A schoolmate gives me advice about how to raise my grades.	1	2	3	4	5
69) A schoolmate encourages me to avoid alcohol and drugs.	1	2	3	4	5
70) I engage in conversations with students who have different values or political beliefs than my own.	1	2	3	4	5

**What is your gender?**

- Male       Female

**Which of the following categories best describe you?**

- Chinese       Malay  
 Indian       Eurasian  
 Other (please specify) \_\_\_\_\_

**What is your grade in school?**

- Secondary 1       Secondary 2       Secondary 3  
 Secondary 4       Secondary 5  
 Pre-University 1       Pre-University 2

**THANK YOU!**

# APPENDIX D

## CREE Staff Survey



**Cornerstone**  
Consulting &  
Evaluation, LLC  
Quality of life assessment services

### Collective Responsibility for Excellence and Ethics Faculty/Staff Survey

We hope you will answer every question, but you may skip any question you do not wish to answer.

Mark one answer on each line

Like this:  Not like this:

1. Think about students in this school. How often does the following happen?		Almost never	Rarely	Sometimes	Often	Almost always
1)	Students demonstrate dependability, including the ability to do their part on a project.	1	2	3	4	5
2)	Students try to be creative in their assignments.	1	2	3	4	5
3)	Students spend extra time working to improve their weaknesses.	1	2	3	4	5
4)	Students come to me after class to discuss ideas from their readings or assignments.	1	2	3	4	5
5)	Students are involved in goal setting and self-evaluation toward the realization of their goals.	1	2	3	4	5
6)	Students present or discuss different cultural, religious or political beliefs in class.	1	2	3	4	5
7)	Students demonstrate self-discipline, including the ability to delay gratification in order to pursue future goals.	1	2	3	4	5
8)	Students integrate ideas from a different subject in their assignments.	1	2	3	4	5
9)	Students demonstrate diligence, including a personal concern to do a job or assignment well.	1	2	3	4	5
10)	Students treat teachers and staff with respect.	1	2	3	4	5
11)	When they see someone having a problem, students offer to help.	1	2	3	4	5
12)	Students consider different views in their discussions of ethical or moral issues.	1	2	3	4	5
13)	Students show ability to discern what is right and wrong.	1	2	3	4	5
14)	Students do the right thing no matter what their peers might think.	1	2	3	4	5
15)	Students speak up when someone is bullied or harassed.	1	2	3	4	5
16)	Students cheat on tests or assignments.	1	2	3	4	5
17)	Students admit if they did something wrong.	1	2	3	4	5

Continue on next page

<b>2. Think about how students in this school interact with each other. Do you agree or disagree with these statements about them?</b>		Completely disagree	Somewhat disagree	Not sure	Somewhat agree	Completely agree
18)	Students work together to develop new skills.	1	2	3	4	5
19)	Students exclude those who are different (for example, kids who belong to a different race, religion, or culture).	1	2	3	4	5
20)	Students who are not part of the popular groups get picked on or excluded.	1	2	3	4	5
21)	If students are in trouble, they can rely on others to help them.	1	2	3	4	5
22)	Students here only care about themselves.	1	2	3	4	5
23)	Students try to get their friends to follow the rules.	1	2	3	4	5
24)	Students take an active role in helping solve school problems.	1	2	3	4	5
25)	When students see someone being picked on, they try to stop it.	1	2	3	4	5
26)	Students would try to stop their friends from spreading rumors or gossip about others.	1	2	3	4	5
27)	Students work together to bring about change in the school.	1	2	3	4	5
28)	Students get involved in making decisions about things that affect them.	1	2	3	4	5

<b>3. Educators use different approaches in their work. How often does the following happen?</b>		Almost never	Rarely	Sometimes	Often	Almost always
29)	I encourage students to express opinions different from my own.	1	2	3	4	5
30)	I assign homework that requires students to think in new ways about what has been presented in class.	1	2	3	4	5
31)	I have students examine models of high quality work and the factors that contribute to that quality.	1	2	3	4	5
32)	I give students opportunities to practice organizational skills.	1	2	3	4	5
33)	I assist students in evaluating their progress in reaching their goals.	1	2	3	4	5
34)	I have students revise their work until it meets my standard for excellence.	1	2	3	4	5
35)	I have students regularly present their schoolwork to peers.	1	2	3	4	5
36)	I seek opportunities for students to showcase their development at exhibitions, competitions, concerts, etc.	1	2	3	4	5
37)	I look for new examples from current events to discuss ethical or moral issues.	1	2	3	4	5
38)	I see to it that students help other students solve conflicts fairly and peacefully.	1	2	3	4	5

Continue on next page

<b>3 (continued). Educators use different approaches in their work.</b>		<b>Almost never</b>	<b>Rarely</b>	<b>Some-times</b>	<b>Often</b>	<b>Almost always</b>
<b>How often does the following happen?</b>						
39)	I explain to students the rationale for my disciplinary actions.	1	2	3	4	5
40)	I involve students in the creation of the classroom rules.	1	2	3	4	5
41)	I make sure that all students have a chance to express their opinions about class or school issues.	1	2	3	4	5
42)	I help students share responsibility for holding class members accountable to the agreed-upon rules.	1	2	3	4	5
43)	I look for ways to involve students in service to others.	1	2	3	4	5
44)	I help students fix their mistakes (make restitution and repair the relationship).	1	2	3	4	5
45)	I have students practice different leadership roles.	1	2	3	4	5
46)	I teach students how to make decisions about ethical or moral issues or dilemmas.	1	2	3	4	5
47)	I seek the help of students in solving class or school challenges.	1	2	3	4	5

<b>4. Do you agree or disagree with these statements about this school?</b>		<b>Completely disagree</b>	<b>Somewhat disagree</b>	<b>Not sure</b>	<b>Somewhat agree</b>	<b>Completely agree</b>
48)	This school's administration understands the problems faced by the staff.	1	2	3	4	5
49)	Faculty and staff hold high standards for student learning.	1	2	3	4	5
50)	Most parents share the school's beliefs and values about what the central mission of the school should be.	1	2	3	4	5
51)	Faculty and staff do a good job aligning their practices with the school's mission.	1	2	3	4	5
52)	Routine duties and paperwork interfere with my job of teaching.	1	2	3	4	5
53)	The principal knows what kind of school he/she wants and has communicated it to the staff.	1	2	3	4	5
54)	In this school, staff members are recognized for a job well done.	1	2	3	4	5
55)	Staff members regularly evaluate each other's work and provide constructive criticism.	1	2	3	4	5
56)	Faculty and staff engage in dialogue with their colleagues about important issues in the life of the school.	1	2	3	4	5
57)	Faculty and staff in this school feel personally responsible for maximizing student success.	1	2	3	4	5
58)	Faculty and staff do a good job educating parents about ways to support their children's learning at home.	1	2	3	4	5
59)	Faculty and staff hold each other accountable for culturally sensitive behavior.	1	2	3	4	5
60)	Most of the staff agree that developing students' character is no less important than academic learning.	1	2	3	4	5

Continue on next page

5. How often do you do the following?		Almost never	Rarely	About once a month	About once a week	A few times every week
61)	I share my struggles in teaching character and ethics with my colleagues in the school.	1	2	3	4	5
62)	I invite comments from my colleagues on my lesson plans.	1	2	3	4	5
63)	I invite my colleagues to observe my lessons and critique them.	1	2	3	4	5
64)	I share my students' work with my colleagues.	1	2	3	4	5
65)	I ask for advice from colleagues on my discipline practices.	1	2	3	4	5
66)	I share my views on the school with the administration.	1	2	3	4	5
67)	I ask faculty/staff members tough questions, even when others seem to avoid them.	1	2	3	4	5
68)	I engage my colleagues in honest discussions of challenges that are facing this school.	1	2	3	4	5
69)	I give constructive feedback to my colleagues about their subject matter teaching practices.	1	2	3	4	5
70)	I give constructive feedback to my colleagues about their teaching of character and ethics.	1	2	3	4	5

What is your gender?

- Male       Female

Which of the following categories best describe you?

- Chinese       Malay  
 Indian       Eurasian  
 Other (please specify) \_\_\_\_\_

How many years have you taught/worked in THIS school?

- 1-2       6-10  
 3-5       11 or more

How many years total have you taught/worked at the primary and/or secondary level and/or Pre-university level?

- 1-2       6-10  
 3-5       11 or more

What is your job category in this school?

- Administrator       Academic staff  
 Teacher       Non-academic staff

**THANK YOU!**

# APPENDIX E

## CREE Parent Survey



**Cornerstone**  
Consulting &  
Evaluation, LLC  
Donor to the Cornerstone Ethical Inst.

### Collective Responsibility for Excellence and Ethics Parent Survey

We hope you will answer every question, but you may skip any question you do not wish to answer.

Mark one answer on each line

Like this:  Not like this:

	Almost never	Rarely	About once a month	About once a week	A few times every week
1) ... help my child plan time for homework and chores.	1	2	3	4	5
2) ... discuss with my child their readings or assignments for school.	1	2	3	4	5
3) ... help my child review material or practice skills before a test.	1	2	3	4	5
4) ... talk to my child about progress he/she has made towards his or her goals.	1	2	3	4	5
5) ... assist my child in preparing for a class presentation.	1	2	3	4	5
6) ... ask my child to redo his/her work if he or she did a sloppy job.	1	2	3	4	5
7) ... teach my child how to make decisions about moral issues or dilemmas.	1	2	3	4	5
8) ... ask my child for input about family rules.	1	2	3	4	5
9) ... teach my child how to solve conflicts fairly and peacefully.	1	2	3	4	5
10) ... talk to my child about ethical or moral issues in recent news stories or events.	1	2	3	4	5
11) ... let my child be a leader in different family activities or events.	1	2	3	4	5
12) ... seek help from my child in solving real-life challenges.	1	2	3	4	5
13) ... talk with my child's teacher at school, on the phone or via email.	1	2	3	4	5
14) ... go to special events at the school.	1	2	3	4	5
15) ... volunteer at school or in my child's classroom.	1	2	3	4	5
16) ... go to parent meetings or school committee meetings.	1	2	3	4	5
17) ... take my child to special places or events in the community.	1	2	3	4	5

2. Schools use various ways to get families involved. How often does this school do any of the following things?		Almost never	Rarely	Some- times	Often	Almost always
18)	... helps me understand what social and emotional skills my child needs to learn.	1	2	3	4	5
19)	... sends home news about things happening at school.	1	2	3	4	5
20)	... contacts me if my child is having social or emotional problems.	1	2	3	4	5
21)	... contacts me if my child has done something well or improves.	1	2	3	4	5
22)	... asks me to volunteer at the school.	1	2	3	4	5
23)	... invites me to programs at the school.	1	2	3	4	5
24)	... tells me what skills my child needs to learn each year.	1	2	3	4	5
25)	... tells me what I can do to help my child learn the skills he or she is learning at school this year.	1	2	3	4	5
26)	... teaches me how to monitor my child's progress in school.	1	2	3	4	5
27)	... assigns homework that requires my child to talk with me about things learned in class.	1	2	3	4	5
28)	... invites me to PTA/PTO meetings.	1	2	3	4	5
29)	... invites me to participate in school committees such as curriculum, budgets, and school improvement.	1	2	3	4	5
30)	... provides information on community services that I may want to use.	1	2	3	4	5

Continue on next page

3. Do you agree or disagree with the following statements about this school?		Completely disagree	Somewhat disagree	Not sure	Somewhat agree	Completely agree
31)	The school provides a rigorous academic curriculum.	1	2	3	4	5
32)	Teachers and staff provide my child with additional support when needed.	1	2	3	4	5
33)	Teachers in this school feel personally responsible for maximizing my child's success.	1	2	3	4	5
34)	Faculty and staff believe that developing students' character is no less important than academic learning.	1	2	3	4	5
35)	Many parents work together to support school mission and policies.	1	2	3	4	5
36)	Teachers expect all students to meet state standards.	1	2	3	4	5
37)	The school encourages my child to be creative in her or his work.	1	2	3	4	5
38)	The school does a good job teaching my child organizational skills.	1	2	3	4	5
39)	The school does a good job teaching my child to act responsibly.	1	2	3	4	5
40)	The school does a good job teaching my child to make ethical decisions.	1	2	3	4	5
41)	The school does a good job teaching my child to make healthy choices.	1	2	3	4	5
42)	The school has activities that celebrate different cultures in our community.	1	2	3	4	5
43)	The school provides a safe environment.	1	2	3	4	5
44)	The school involves students in making decisions about things that affect them.	1	2	3	4	5
45)	Students work together to bring about change in the school.	1	2	3	4	5
46)	Students work together on school assignments, class projects or presentations.	1	2	3	4	5
47)	Students exclude those who are different (for example, kids who belong to a different race, religion, or culture).	1	2	3	4	5
48)	Incidents of peer cruelty (bullying or hazing) are very rare in this school.	1	2	3	4	5
49)	Students who are not part of the popular groups get picked on or excluded.	1	2	3	4	5
50)	Students take an active role in helping solve school problems.	1	2	3	4	5

Continue on next page

**Please provide the following background information about your household:**

What is your relationship to this student? (mark one)

- 1 Parent (biological or adoptive)                       4 Other adult relative  
 2 Stepparent     5 Other Guardian  
 3 Grandparent    Other (please specify) \_\_\_\_\_

How many siblings of this student (including adoptive, half-, and step-brothers and sisters) live in your household?

- 0     2     4  
 1     3     5 or more

How many adults other than yourself live in your household?

- 0     2     4  
 1     3     5 or more

What is your gender?

- M Male     F Female

Which of the following categories best describe you?

- Chinese                       Malay  
 Indian                       Eurasian  
 Other (please specify) \_\_\_\_\_

What is the highest level of education you have reached? (mark one)

- Primary                       Secondary  
 Pre-University                       Tertiary

**THANK YOU!**

## APPENDIX F

### Request for Approval to Collect Data from Schools

Title of Project			
The Effectiveness in Measuring Character Development Outcomes in Singapore's Schools			
Purpose of Collection (please attach research proposal if available)			
The purpose is to conduct a doctoral level research in the secondary schools of Singapore to determine the character development outcomes and their relationships with the various character development awards.			
Methodology: Survey/Interview/Observation/etc (attach copies of instruments to be used)			
Qualitative research methods will be used. A 20 minutes survey will be conducted with Secondary 2 to 5 students. Please see instruments submitted for details.			
Description of Sample and Sample Size			
Number of Schools involved : 0 Primary, 10 Secondary, 0 JCs/CI			
Provide names of schools (if available):			
Schools	Number of Teachers	Number of Pupils	Numb
Secondary	300	1000	30
Total	300	1000	30
Number of visits per school And estimated time of each visit		Date to start the data collection in schools	Date of completion of data collection
Twice a week visit for the 1st month in each college and decrease in frequency once data is collected through survey.  4 to 8 hours in the 1 <sup>st</sup> month per college and decrease to 2 to 4 hours after initial phase of survey.		April/ May 2009	March/April 2010

<p>I agree to the following conditions:</p> <p>1 To adhere to the original proposed research study.</p> <p>2 To seek clearance from the Ministry before publishing any of the findings from this study.</p> <p>Name: <u>Wilson Teo</u> Signature: _____</p> <p>Singapore NRIC No.: <u>SXXXXXXXX</u> Date: <u>31<sup>st</sup> January 2009</u></p>	
<p>Correspondence Address:  <u>XXXXXXX</u>  <u>XXXXXXX</u></p> <p>Tel : <u>9XXXXXX</u></p> <p>Fax: <u>6XXXXXX</u></p> <p>E-mail: <u>wilsonteo@myemail.com.sg</u></p>	<p>Name of Institution attached to (attach letter of introduction):</p> <p><u>Durham University (UK)</u>  <a href="http://www.durham.ac.uk">www.durham.ac.uk</a></p>

*Data Administration Centre  
Planning Division  
Ministry of Education  
Data Administration Centre  
Planning Division  
Ministry of Education*

# APPENDIX G

## Letter of Approval 1

1 NORTH BUONA VISTA DRIVE  
SINGAPORE 138675  
REPUBLIC OF SINGAPORE



Telephone: 6872-1110  
Telefax : 6775-5826  
CS-mailbox: GVT 036  
e-mail: contact@moe.edu.sg

Personal e-mail address:  
E-mail: Teo\_Kie\_Eng@moe.gov.sg

Ministry of Education  
SINGAPORE

EDUN N32-07-005

Request No.: **RQ12-09(04)A**

22<sup>nd</sup> April 2009

Reverend Wilson Teo  
TCA College  
249 Paya Lebar Road, #03-11  
Trinity@Paya Lebar  
Singapore 409046

Dear Rev. Teo

**STUDY ON "THE EFFICACY OF THE CHARACTER DEVELOPMENT AWARD IN PROMOTING MORAL GROWTH AND DEVELOPMENT FOR STUDENTS BETWEEN 14 TO 18 YEARS OLD"**

I refer to your email dated 22<sup>nd</sup> April 2009.

2 I am pleased to inform you that we have no objections to your request to increase the sample size from 6 junior colleges to 10 secondary schools and 6 junior colleges. The number of pupils and teachers to be surveyed remains at 900 and 24 respectively. The revised Annex A is enclosed.

3 Please acknowledge receipt of this letter by contacting me at Tel: 68796065. Alternatively, I can be reached at e-mail address at the top right hand corner of this letter.

Yours sincerely

A handwritten signature in black ink, appearing to be 'Teo Kie Eng'.

Teo Kie Eng (Ms)  
Head, Data Administration 3  
Data Administration Centre  
for PERMANENT SECRETARY (EDUCATION)  
N3207005/RQ12-09(04)A

# APPENDIX H

## Letter of Approval 2

1 NORTH BUONA VISTA DRIVE  
SINGAPORE 138675  
REPUBLIC OF SINGAPORE



Telephone: 6872-1110  
Telefax: 6775-9826  
CS-mailbox: GVT 036  
e-mail: contact@moe.gov.sg

Personal e-mail address:  
E-mail: Teo\_Kie\_Eng@moe.gov.sg  
Sim\_Lee\_Nah@moe.gov.sg

Ministry of Education  
SINGAPORE

EDUN N32-07-005

Request No.: **RQ12-09(02)**

23<sup>rd</sup> February 2009

To: Principal of Junior Colleges

**STUDY ON "THE EFFICACY OF THE CHARACTER DEVELOPMENT AWARD IN PROMOTING MORAL GROWTH AND DEVELOPMENT IN THE JUNIOR COLLEGES IN SINGAPORE"**

The Ministry has no objection to the research proposed by Reverend Wilson Teo, a Doctoral student at the Durham University, UK. **You may decide** whether or not to allow him to conduct the research in your school. If you do, please:

- i) check that the approved research proposal should be adhered to;
- ii) inform your teachers/pupils that participation in the study is voluntary and they need not provide any sensitive information (e.g. name and NRIC No.);
- iii) record your school's participation by completing the form as shown in Annex A;
- iv) note that the researcher is granted a period of 6 months starting from the date of this letter to complete the research.

2 If you require any clarifications, please contact the researcher through the contact number as stated in the application form. Thank you.

Yours sincerely

  
Teo Kie Eng (Ms)  
Head, Data Administration 3  
Data Administration Centre  
14327005RQ12-09(02)

Public Service for the 21st Century

# APPENDIX I

## Letter to Conduct Research in School

### **1. Objective of Research**

To conduct a high quality research on the effectiveness of Character Development Award in evaluating schools' character development initiatives and programmes

### **2. Benefits for School**

- Utilise the research work to train staff to be aware of character development programmes and initiatives
- Utilise the research work to further improve on current character development processes and programmes
- Utilise the research work to evaluate current character development programmes that school is using for students
- Utilise the research work as an independent review required for schools that have obtained the Outstanding Development Award (ODA) after the duration of 5 years
- School can choose to remain anonymous for the entire research work
- School has access to the data collected for the research work done in the school for internal circulation and review

### **3. Research Methodologies**

#### **(a) Quantitative Research**

##### **Students**

- Conduct a one time 4-page (70 questions) survey for at least 120 students. This can be done in one sitting or in various available platforms as determined by the school. The conduct of the survey will take only 15 minutes.
- The number of students can be obtained from Secondary 2 to 5. They can be strictly from one level or from a combination of various levels.

### **Teachers**

- Conduct a one time 4-page (70 questions) survey for at least 60 teachers. This can be done in one sitting or in various available platforms as determined by the school. The conduct of the survey will take only 15 minutes.
- The teachers must be teaching students from Secondary 2 to 5.

### **Parents**

- Conduct a one time 4-page (50 questions) survey for at least 60 parents. This can be done in one sitting or in various available platforms as determined by the school. The conduct of the survey will take only 15 minutes.
- The parents must have children studying from Secondary 2 to 5.

## **4. Approval from MOE**

MOE has given approval for the nature of this research as seen from the attachment. (please refer to “Letter of Approval from MOE.pdf”)

## **5. Researcher’s Details**

### **(a) Personal Information**

**Name:** Reverend Wilson Teo  
**Email:** wilsonteo@myemail.com

### **(b) University of Research**

**University Name:** Durham University, UK ([www.durham.ac.uk](http://www.durham.ac.uk))  
**Programme:** Doctor of Education