

Secondary School Teachers' Perceptions of
Extracurricular Activity Sports Program in Singapore

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Abstract

The study examined teachers' perceptions toward the Extracurricular Activity Sports program (ECA) in the Singapore secondary schools. Through a 79-item questionnaire, ECA sports teachers (N=290) gave their views on the present status, strengths and concerns of the program. In addition, they provided suggestions and recommendations to improve the present system. Overall, the teachers were positive towards the ECA sports program, and agreed that pupils have benefited from the program. They expressed support for: (1) the development of an ECA sports curriculum and (2) a review of the grading scheme to recognise pupils' varied skills and abilities. Moreover, they were concerned about the lack of trained personnel to deliver the program in the schools. Views and opinions from the teachers were compared according to their gender, type of school they taught in and total years of teaching experience. Though some differences in opinions were noted between the male and female teachers and among teachers from the three school types, most differences were found between the most experienced and less experienced teachers with regards to their perceptions on: (1) schools' emphasis and support, (2) principals' support and involvement and (3) schools' sports reputation and discipline.

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Chapter 1

Introduction

Since Independence in 1965, education in Singapore has undergone many changes, adapting and evolving to meet the demands and challenges of nation building, social cohesion and economic survival. As of 1997, the education system has introduced three initiatives to prepare schools for the twenty-first century. They are Information Technology Masterplan, National Education and the concept of “thinking schools”. While all the attention and emphasis are focused on these new plans and initiatives, the relevance of existing programs must not be forgotten. It is the intent of this study to examine the extent to which the extracurricular activity program, in particular, the sports program, is adapting to prepare the youth for the future. A brief account of the role and development of extracurricular activity in education over the past three decades aims to provide background information to this study.

Soon after Independence in 1965, at a time when national economic survival was most crucial, educational policies were determined by the economic needs of the country. Singapore, with no natural resources, realised that the nation could depend only on her people. Thus, each individual was considered an important and valuable asset of society. Education played the role of providing the fundamental training and prepared each individual to be a useful and contributing member to the economic development of the country. Furthermore, it was a time when the political leaders faced the difficult tasks of integrating the multiracial society of Chinese, Malays, Indians and Eurasians into one and improving the living conditions for all the people. Before Independence, schools

operated as Chinese, Malay and Tamil stream schools, using these languages as the medium of instruction. One of the strategies used to integrate the ethnic groups was to eliminate the non-English stream schools and change them to operate as English medium schools, with English as the main medium of instruction. Under these circumstances, the role of education in building an effective state “had to become an instrument of social cohesion, to provide opportunities for social mobility, and to provide the trained manpower that the economy needed” (Sharpe & Gopinathan, 1997, p. 373). So the state adopted a centralised and standardised educational system which included “standardisation of subject syllabuses and educational structures across the various language streams and the institution of common terminal examinations” (J. Tan, 1998, p. 51). These measures followed closely the political and economic realities of nation building and industrialisation.

From the 1980s onwards, in response to changing world economic conditions, Singapore refocused the educational system to adapt to the global changes and competition. The result was that educational development followed the notion of competition and emphasised academic excellence. The examination system of the centrally controlled educational system was given greater emphasis, as academic excellence became the main focus and feature of the system. This was evident in the emphasis given to the Primary School Leaving Examination (taken after 6 years of primary education), the Singapore-Cambridge General Certificate of Education ‘Ordinary’ Level and ‘Advanced’ Level Examinations (taken after 4 or 5 years of secondary education and 2 or 3 years of pre-university education respectively). Though the intention of the examination system was to act as a placement exercise to channel students into their appropriate courses, be it vocational, polytechnic or university

education, it became the basis for selection of the best performers to proceed to the next stage. As this upward mobility ensured a better future, the pressure to pass examinations and to strive for academic excellence was felt by schools and society at large (Morris, 1996; Watson, 1992).

In Chew's (1997) year-long study of a single school on the interaction of Singapore culture and values in the school, she also found that examinations "exerted a powerful sway over the instructional programs and work of school personnel, geared at preparing pupils for academic competitions and improving their chances of going on to tertiary education" (p. 90). Though Chew's study involved one school, the examination syndrome appears to have taken on greater significance with the introduction of school ranking in 1992.

In October 1996, the Ministry of Education commissioned an External Review Team to review the school curriculum, taking into consideration the future economic, technological and social needs so as to propose changes to prepare the pupils for the twenty-first century (Ministry of Education, 1998). Though the Team found the educational system "remarkably efficient", it had become "competition and examination driven". To cater to the dual tasks of remaining competitive in the global market and preparing pupils for the future, the Team stressed that education "broaden its focus beyond examination results and discipline". To achieve this, the Team recommended that pupils develop a passion for lifelong learning, inculcate independence and creative thinking, and communicate their ideas confidently to be effective team members. Above all, the review drew attention to the development of the all-round individual.

Schools have all along promoted the idea of an all-round education. With the establishment of the Extra-Curricular Activities Centre (ECAC) in 1967, it has assisted

and supported schools in providing pupils the opportunities for a balanced and all-round development through extracurricular activities. The extracurricular activities (ECA) program, which is conducted beyond the classroom, is considered an integral part of the educational system.

In the early days of Independence, one of the main aims of the ECA program was to build a rugged male school population; preparing the boys for national service when they left school. Furthermore, through the integration of the different stream schools and the many activities conducted outside the curriculum, the program intended to promote cultural and racial integration and tolerance among the ethnic groups in school based and inter-school activities (Gopinathan, 1997). Though there had been no empirical studies on the ECA program nationally, the program has been commended for its contribution toward nation building.

Under the guidelines provided by the ECAC, schools plan their activities in three core areas; namely, (1) sports and games, (2) uniformed groups, and (3) music, culture and the arts. The ECA program aims to “teach pupils skills, inculcate in them correct values and desirable social attitudes, and provide for healthy recreation” (Ministry of Education, 1995, p.1). By the nature of the program, extracurricular activities provide an excellent learning environment for the development of the all-round individual. The strengths and merits of the existing program, if utilised maximally to the advantage of the pupils, prepare pupils for adult living and may also offer answers to the social problems afflicting youth of today. However, the ECA program succumbed to the prevailing competitive forces of society and thus joined the drive to compete and excel. In Pang and Lim’s (1997) examination of the Singapore school system and social structure, they observed that the “spirit of competition and individual self advancement is unsurprisingly

carried over from the classroom into extracurricular activities” (p. 367). Though the program was designed to support the development of the all-round individual, it was competition and the need to excel that provided the impetus for the program.

One of the key features of the ECA program is the awarding of marks to recognise pupils’ involvement in recreational and competitive participation, achievements, and leadership abilities. At the end of their secondary school career, the marks are totalled and converted to an ECA grade. The importance of the ECA program was recognised when the ECA grade could be used as one of the subjects for admission to the three-year pre-university courses. In addition, from 1998 onwards, pupils are able to earn bonus points from their ECA grades, giving them an advantage for admission to junior colleges and polytechnics.

In 1998, the Education Ministry announced a comprehensive list of attributes, called the Desired Outcomes of Education, which encourages every Singaporean to acquire (H. Y. Tan, 1998). Prime Minister Goh Chok Tong highlighted the need to review the goals of education to meet the challenges of the future. Rather than narrowing education to just academic achievement, he called for the need to “revisit the fundamentals”, and to see education as the nurturing of the physical, moral, cognitive, social, psychological and aesthetic development of the individual.

In line with this, the Second Prime Minister, Dr. Tony Tan announced that the university entrance criteria would be reviewed (Davie & Nirmala, 1998). Instead of considering only the G.C.E. ‘Advanced’ Level Examination results, a review committee would look into the possibility of including ECA as one of the criteria. The fact that the policy makers initiated these announcements helped to set the direction and future role ECA will play in the development of the all-round individual.

In that both the Prime Minister and Second Prime Minister have called for changes, it is timely to examine whether the present ECA program is capable of providing the means to meet these changes and needs. A closer look at the present ECA program reveals two disturbing concerns.

Firstly, an examination of the grading scheme reveals that pupils who participate in inter-school competitions, especially those who excel and win medals for themselves or for their teams are given the opportunities to gain more marks from the scheme. The program being biased toward the recognition of winning in competition favours pupils who participate in competition. It is understandable that the emphasis is important as the quest for excellence raises the standard of performance but when the system heavily rewards achievement in performance in tangible and measurable terms, the whole concept of educating the all-round individual is subverted. This is evident when the ECA program in schools concentrates on preparing pupils for competition, be it for inter-schools sports tournaments, or the Singapore Youth Festival music and dance, and band and drama presentations. Under the ECA grading scheme, many non-medal achievers are disadvantaged because the system measures success in terms of the number of medals won. While the aim of education is to provide equal participatory opportunities for all pupils, this may act as a deterrent for pupils to participate in the program.

Secondly, in the area of leadership recognition, the system shows a discrepancy in the grading scheme. A closer examination into the Uniformed Groups (UG) rank system reveals that more leadership opportunities are created for their members as compared to the Sports, Music and Dance, Cultural Activities and Clubs and Societies groups. It seems to show that only the UG create and recognise the tiered leadership opportunities for its members. Though the other groups recognise their outstanding top leaders, many

second and third tier leaders are left out of the grading rewards. Thus, it appears that there are two distinct approaches towards leadership training within the ECA system.

Given the present situation, the message sent out to all schools implies a strong emphasis in competition and an imbalance in leadership opportunities evident in the grading scheme. While it is apt to involve pupils in competition and leadership roles, it is timely to reflect on the rationale of the ECA program, to be fair in providing equal opportunities and recognition to all, and to stress on learning processes rather than just to focus on end results. It is with these concerns in mind that the purpose of this study is initiated and developed.

Purpose of the Study

A centrally controlled educational system practices a top-down approach, where any changes or reforms are initiated from the top. Moreover, McLaughlin (1996) remarks that policies do not dictate outcomes nor do policy makers have direct control over the implementers. For policies to work there is a need for policy makers to consider the teachers' perspectives as one of the many factors to successful and effective program implementation. Schwab (1983) recommends the inclusion of teachers; being the direct implementers of the program and who understand the needs and interests of the pupils to be involved in program planning and preparation. Their experience would provide invaluable information as they have much to offer in anticipating problems and solving them, much of which are encountered at the school level. Thus this study offers an opportunity to gain an insight into the secondary school teachers' perceptions of the ECA program. It also aims at allowing teachers to input their responses on the present status of

the ECA program in their schools. Of the three core groups in the ECA program, the study attempts to look only into sports and games.

The study will examine teachers' perceptions toward four issues. Firstly, to assess the present status of the ECA (Sports) program in the schools. Secondly, to find out how the program has benefited schools. Thirdly, to address teachers' concerns and lastly to determine the improvements that can be made to the present ECA (Sports) programs to further enhance the all-round development plan of the individual.

Research Questions

Seven research questions regarding the overall ECA (Sports) program were addressed in this study. They were as follows:

1. What do secondary school teachers perceive to be the present status of the ECA (Sports) program in the schools?
2. What do secondary school teachers perceive to be the strengths of the ECA (Sports) program in the schools?
3. What do secondary school teachers perceive to be the main concerns in the ECA (Sports) program?
4. How do male and female teachers differ in their views on the present status, strengths and concerns of the ECA (Sports) program?
5. How do teachers from the secondary schools -- government, government-aided and independent/autonomous schools -- differ in their views on the present status, strengths and concerns of the ECA (Sports) program?

6. How do teachers with varying lengths of teaching experience -- less experienced, experienced and more experienced -- differ in their views on the present status, strengths and concerns of the ECA (Sports) program?
7. What changes would secondary school teachers' recommend to the present ECA (Sports) program?

Definition of Terms:

All-round education:

The fundamental educational objective in nurturing the whole person. It covers the development of the person in a broad range of educational opportunities to nurture the physical, moral, cognitive, social, psychological and aesthetic areas.

Autonomous Schools:

Government or government-aided schools, enjoying partial independence and flexibility in school financial, managerial and curricular matters, closely following the concept of independent schools. Despite given the autonomy to run the schools, they are required to conform to national educational policies.

Extracurricular Activities (ECA) Program:

The ECA program is conducted outside academic curriculum time and all schools are to plan and implement a suitable program, consistent with the national educational objectives (Ministry of Education, 1995, p. 1). The activities offered by the schools comprise of activities from (1) sports and games, (2) uniformed organisation, and (3) music, dance, cultural clubs and societies.

ECA (Sports) Program:

One of the three core groups of activities contained within the main ECA program. The sports program refers to the various athletic and sports activities conducted outside the school's academic curricula throughout the school calendar year. It covers the recreational and competitive aspects of sports, offering mass participatory, inter-class/house and inter-school activities for the pupils.

Government Schools:

Publicly run schools fully funded by the government. Members of public sit on School Advisory Committee / School Management Committee to contribute toward schools' development programs. Matters that pertain to the appointment of Principals, staff deployment and admission of students come under the direct supervision of the Ministry of Education. They follow closely directives from the Ministry of Education.

Government-Aided Schools:

Mission or clan-run schools with a heavy subsidy from the government. They run along similar lines as the Government schools with the exception that mission schools embrace the teaching of religion in their curricula.

Grading Scheme:

Grading scheme in this study refers to the existing recognition system. Marks based on pupils' participation, representation and achievement are allocated at the end of their secondary education career. These marks are converted to a grade and this is standardised across all schools. The ECA grade may be used as bonus points for admission to pre-university courses in the centralised institutes (3-year courses), the junior colleges (2-year courses) and the polytechnics.

Independent Schools:

Government or government-aided schools set up with the intention of moving towards excellence in education. They function under a Board of Governors who decides on the hiring and firing of staff and the appointment of the principal. In addition, they enjoy full independence and flexibility in financial, managerial and curricular matters.

Ministry of Education:

The Ministry of Education oversees and directs the formulation and implementation of the educational policy in Singapore. It is responsible for the development and administration of government and government-aided primary schools, secondary schools and junior colleges.

Secondary Schools:

Pupils enter secondary schools after successful completion of the Primary School Leaving Examination. Secondary schools offer four-year Special and Express courses in preparation for the Singapore-Cambridge General Certificate of Education 'Ordinary' (GCE 'O') level examination. In addition, some schools offer the Normal (Academic) or the Normal (Technical) courses, both of which prepare pupils for the GCE 'Normal' level examination at the end of four years. Pupils who do well may proceed for a fifth year and sit for the GCE 'O' level examination. Pupils in the secondary schools are in the 13 to 17 age range.

Secondary School Teachers:

Teachers currently teaching in secondary schools. Besides regular teaching duties, they are required to do ECA duties as part of their teaching responsibilities.

Limitations

1. The degree of motivation shown by the respondents in completing the questionnaire might have influenced their responses.
2. Factors such as the educational system, society, media and experience might have influenced teachers' perceptions towards the ECA (Sports) program.
3. The clarity and content of the questionnaire was dependent on feedback given by a panel of experts.
4. The range of activities a school may offer its pupils is wide and varied but the preferred emphasis is largely dependent on the availability of staff, facilities and resources.
5. The study was limited to the researcher's ability to establish contact with the principals over the phone.
6. The study was limited to the principals' approval to allow their teachers to participate in the study.

Delimitation

1. Of the three core groups in the entire ECA program, only the sports and game program was studied.

Assumptions

1. The teachers responded accurately and truthfully to the items on the questionnaire.
2. The perceptions of the randomly selected teachers were representative of the secondary school teachers.

3. The perceptions toward the ECA (Sports) program was reliably demonstrated and measured via the questionnaire.
4. Teachers are important informants in providing valuable feedback to the decision/policy makers.

Chapter 2

Review of Literature

This chapter reviews the following areas: (1) adolescent development and their needs, (2) research in extracurricular activity, (3) character and moral development, (4) competition and (5) motivation and competition.

Adolescent Development and their Needs

Traditionally, research in adolescent development focused on behavioural or psychological processes. In these studies, adolescents were involved either as subjects or observed as particular groups of adolescents such as high school students or delinquents (Petersen, 1988). Research then shifted from the stage-oriented to process-oriented approaches as adolescents went through a change in behaviour best described by a period of transitions (Hill, 1993; Thornburg, 1983). Researchers often view adolescents going through a difficult and confused period most frequently sandwich between childhood and adulthood. The transition, however, does not happen in a vacuum and thus developmental psychologists find it necessary to consider and recognise the interactions between the individual and the social context they are in (Hill, 1993; Takanishi, 1993; Thornburg, 1983). This approach of looking at adolescent development through stages of transition not only presents a better picture to understand the adolescent but is able to provide a glimpse of them as adults as well (Hoffman, 1996).

The adolescent period starts at the onset of puberty, with changes evident in the biological, mental, psychological, social and moral growth. Thornburg (1983)

conceptualises the transition of adolescent development into four interactive levels. He explains that adolescents begin with changes in the physical, cognitive and social areas. These changes interact with the social agents; namely, the family, peers, school and community to affect the personality traits of the adolescent. As adolescents experience much change and conflict within the self, they struggle with the concepts of autonomy, identity, sense of belonging, achievement, aspirations and self worth. The journey of the adolescents through discovery within themselves and with the environment around them will equip them with the necessary skills to deal with special events that happen in their later life years.

In Csikszentmihalyi & Larson's (1984) study of adolescents, they used the Experience Sampling Method to find out "how teenagers' subjective experiences relate to the concrete events of their daily life". Participants in the study carried an electronic pager for a week, and whenever the pager beeped, they were to complete a self-report form, writing down their thoughts, activities and feelings with persons at that moment in time. From the information gathered, Csikszentmihalyi & Larson found that adolescents live in an increasingly complex and fast changing world, and are constantly faced with choices and opportunities, leading to tension and conflict within the self. They suggested that in order to help adolescents transit smoothly into adulthood, adolescents must make a conscious effort to be involved with people and the events around them, that is, to experience life. The processes that evolved from these experiences and interactions would better prepare them for the challenges ahead in adult life. Petersen (1988) concurred that this period is of great significance because the experiences encountered, impressions held and the choices made would affect the adolescent's eventual perception of the adult world. According to Havighurst (1972), one has to learn a series of tasks,

which he calls developmental tasks, to survive living in modern society. He emphasises that the successful achievement of these developmental tasks leads to happiness and to further success with later tasks, while failure may lead to unhappiness, disapproval by society, and difficulty with later tasks.

In their study, Hamburg and Takanishi (1996), from the Carnegie Council on Adolescent Development, raised three concerns afflicting the American youth of today. Firstly, as more parents enter the workforce, largely due to economic demands and cultural changes, they spend less time with their children. Secondly, the influence of the media and pop culture that takes up an increasing amount of adolescents' time has been a disturbing factor. Thirdly, the access to the new age of information technology has raised concerns of its impact on adolescents. With these concerns in mind, Hamburg and Takanishi call upon society's pivotal institutions to address the needs of adolescents as they move into the twenty-first century. Hamburg outlines the essential requirements for setting young adolescents on the pathway to effective adulthood. Ideally, all adolescents need to:

- find a valued place in a constructive group
- learn how to form close, durable human relationships
- feel a sense of worth as a person
- achieve a reliable basis for making informed, deliberate decisions, especially on matters that have large consequences, such as educational futures
- know how to use available support systems
- find ways of being useful to others
- believe in a promising future with real opportunities
- cultivate inquiring and problem-solving habits of mind for lifelong learning and adaptability
- learn respect for democratic values and understand responsible citizenship
- build a healthy lifestyle (Poinsett, 1996, pp. 7-8).

According to Hamburg and Takanishi, these basic needs may be applied to all adolescents regardless of their economic, ethnic and cultural backgrounds, religion, gender and their country of origin.

Thus in attempting to make the transition from adolescent to adulthood a smooth one, developmental psychologists stress that adolescents participate actively and consciously in the choices they make. From the experiences they encounter, the adolescents will be well equipped for adult living. On a similar note, other researchers on adolescents emphasise the need to help adolescents cope in this transition period and view the period as “a time of great opportunities”. They call for the need to develop life skills programs to help them in their decision making process. Besides the family, institutions -- the schools, health organisations, community organisations and the media -- could render the necessary support and impetus for a smooth transition into the adult world.

Research in Extracurricular Activity (ECA)

According to Holland & Andre (1987), the role of the school may be viewed from two perspectives. Academically, the school emphasises intellectual competence and promotes academic excellence through the transmission of formal knowledge. Developmentally, the school stresses the all-round development of the individual through learning opportunities and experiences. In either approach, the school takes on the responsibility of promoting a smooth transition to adult living, helping the adolescents acquire and accomplish developmental tasks to become independent adults. While an academic program serves to accomplish some of these developmental tasks, Holland & Andre argue that they could be achieved through the extracurricular activity program as well.

Researchers agree that the ECA program creates learning opportunities for the pupils. This is mainly due to the nature of ECA, conducted outside of curricula time and able to offer a wide range of skills and interests not available in the academic classroom. But studies have not been conclusive on the benefits of the ECA program.

In Hanks and Eckland's (1976) longitudinal study of 2,077 students, they found no relationship between ECA participation and academic performance and concluded that athletics neither depress nor enhance academic performance. However, their findings did suggest that ECA participation played an important socialisation role in fostering the acquisition and transference of status from the adolescent to the adult social system. Similarly Otto's (1982) review indicated that though ECA participation was found to contribute to the development of desirable and social behavioural outcomes, he cautioned that much research in this area need to be done as there were drawbacks in the studies. In Holland and Andre's review of ECA participation in secondary schools, though they concluded that the studies done were not convincingly strong on the merits of ECA, they found desirable outcomes associated with personality and social characteristics, self-esteem and interracial relations. Their findings also suggested that ECA participation enabled adolescents to acquire new skills in time management and leadership, and have the potential to prepare them for adulthood.

Specifically, what do researchers say about the social aspects of ECA participation? Karweit's (1983) analysis of research studies suggests that ECA draw pupils of similar interests together. Since participation in these activities is voluntary, pupils have complete control over the selection of activities that may interest them. Thus the commitment to each other helps them to sustain interest in the activity and provides an important avenue for social integration in the school (Karweit, 1983; Larson, 1994).

Similarly, Marsh's (1992) longitudinal study involving 4,000 pupils who were followed for the last two years in their high school, supported the commitment-to-school hypothesis that ECA participation has the potential to increase students' commitment to school. In Hollingsworth's (1996) survey of 273 teachers and 756 students, he found that ECA played a crucial role in the public school experience, where students' behaviour and achievement were positively linked to ECA participation, and hence developed a positive effect on school climate.

Brennan (1985) in his study reported that ECA participation provided opportunities for peers to share viewpoints and opinions. He found that students were drawn out of their shells to learn more about themselves and the world at large and that the experience gained proved to be significant in the socialisation process and enhanced students' self-image and esteem.

As to whether there were any significant differences in self-esteem between athletes and non-athletes, Yarworth and Gauthier (1978) found in their 459 high school sample, a strong relationship existed between athletic participation and the way athletes perceived themselves. The researchers concluded that the athletes were more confident and projected a positive physical, social and behavioural image while the non-athletes did not display such self-confidence.

In Snyder and Spreitzer's (1992) longitudinal study of 4461 boys, they examined the relationship between role identity as scholars and athletes and their socio-psychological characteristics. The study found that boys who were involved in academic and athletic roles manifested higher self-esteem and leadership scores and internal focus of control as compared to athletic, non-academic and non-athletic boys. In addition, their findings

suggested that the academic cognitive factor was more influential than sports participation with respect to self-esteem and feelings of self-control.

However, Spreitzer (1994) raised some pertinent questions when he studied the relationship between athletic participation and the carry over effects of athletics into other areas of adult life. He argued that those who participated in sports began their sports career as early as junior high school as a result of the selection process. He found no clear association between athletic participation as a high school senior and psychological well-being six years later. His data indicated that those who stayed on with high school athletics tend to come from more advantaged social backgrounds, in terms of parental social class, level of cognitive ability, academic achievement and level of self-esteem. Because athletes who stayed on survived the selection process, Spreitzer questioned the reliance on a biased sample group for the study.

In general, research on ECA has not been consistent. Instead, studies produced contradicting results in the positive and negative outcomes of ECA participation. Many researchers argue that due to the diverse and complex categorisation of extracurricular activities, ECA studies lack a theoretical perspective and methodological techniques are not robust enough to allow accurate insights into these issues. In order to have a deeper understanding of the value of the ECA program, researchers call for the need to study the processes involved in “why” pupils participate and the impact ECA has on the individual participant (Brown, 1988; Holland & Andre, 1987; McNeal, 1998; Otto, 1982; Taylor & Chiogioji, 1988).

Character and Moral Development

It is often reported that participation in sports builds character. But according to Tutko and Bruns (1976) this notion is more often a myth than a reality. In Ogilvie and Tutko's (1985) study on the effects of competition on athletes' personalities, they found no empirical evidence over this debate that sports builds character, but rather evidence that sports limits the growth of athletes in some areas. They argued that the stress experienced by athletes while in competitions did not seem to reflect the benefits derived from competing. Moreover, the fact that the media highlighted mostly the successful athletes did not do justice to portray a balanced picture of success and failure in the sports scene as those who compete in sports managed to survive the selection process. They believed that if sports were really building character, sports should be used as a tool to help athletes acquire life skills to solve their problems.

Researchers in character building or development based their studies on social learning and structural development theories. Social learning theories "contend that environmental cues influence behaviour, including modelling and reinforcement" while structural development theories "assert that through social interactions, the child undergoes an active cognitive process of reorganising patterns of thoughts and behaviour" (Solomon, 1997; p. 39). In defining character development, it has been considered by researchers to study it as a component of moral development.

In Bredemeier's (1988) study of 107 grades 4 – 7 boys and girls at a summer sports camp, the relationship between their sports involvement and moral reasoning and aggression tendencies was investigated. It was reported that those involved in high-contact sports tend to show less mature moral reasoning, as well as physical and non-physical aggression in both sports and daily life activities. Based on her findings,

Bredemeier cautioned the timing to introduce competitive sports to young children, as the high degree of physical contact may impede rather than develop moral growth. She recommended the inclusion of co-operative activities instead of contact competitive games in the sports programs.

Gibbons and Ebbeck (1997) studied the effect of different teaching strategies on the moral development of 204 physical education pupils from grades 4 – 6. They found that both groups under the social learning and structural developmental teaching strategies benefited and scored higher on the moral measures than the control group. In addition, the structural development group showed a significant difference as compared to both the social learning and control groups. The study implied that students who underwent the structural development teaching strategies, go through a learning process that is internalised into their value system through discussion, reflection and dialogue with each other, which seems to make an impact on the students.

From the studies cited here, if sport is to be used as an effective means to develop desirable behaviour and character in our children and youth, the environmental context is an important feature in cultivating moral growth and development. Four salient points may be worth considering for those involved in youth sports programs. They are: (1) instil a deliberate effort to include the teaching of values in the sports program, (2) involve the active participation of teachers, coaches and adult leaders to consistently reinforce and model desirable behaviour, (3) create opportunities for children and youth to learn about themselves and be responsible for their own actions and (4) establish a safe and non-threatening environment through co-operation for learning to occur.

Competition

The issue of competition in sports is faced with controversial and complicating arguments. The effect of competition on adolescent developmental growth is often an area of concern for those involved in youth sports programs.

On the positive effects of competition, Billing (1980) states that competition helps “to motivate the learning of skills, increase physical fitness and to purposely create environments conducive to the development of desirable personality qualities” (p. 1). Furthermore, competitive activities are said to develop character, promote sportpersonship, create excellence, prepare individuals into the “real world”, instil confidence, build self-esteem, enhance moral development and increase motivation (Arnold, 1989, 1994; Brown & Grineski, 1992; Graham, 1976). From an individual perspective, competition allows for self-discovery and promotes the full use of one’s abilities, talents and skills which brings about a deeper understanding of knowledge and self-fulfilment (Rich & De Vitis, 1992). Arnold (1989) argues that positive qualities of tolerance, independence, responsibility, co-operation and integrity if consciously taught, can be cultivated through competitive exposure as these intrinsic rewards of competition teach valuable lessons to the pupils. According to Wilson (1989), competition provides the outlets to vent feelings and in this way, pupils learn to control their feelings as they play under the confines of rules and regulations. Furthermore, he argues that competition exposes pupils to success and failure, victory and defeat and helps in their emotional development. He maintains that rather than keep them away or protect them from the harshness of the real world, to compete is to teach the pupils to face the reality in the world.

On the other hand, competition has its down side too. Contrary to the belief that sports offers opportunities to all pupils, sports and physical activities with the element of competition segregates and discourages pupils from further participation (Brown & Grineski, 1992; Hendry & Thorpe, 1976). Researchers contest that to enter the competitive scene, one needs to work hard at acquiring and mastering the skills, as only the best will be selected. Thus competition caters to the selected few, and tests the survival of the fittest. Those who qualify for competition go through a rigorous selection process, from which the best are chosen. Graham (1976) argues that competitions adopt an exclusion policy, turning away and depriving many of the opportunities to participate.

In the game of competition, a winner will emerge. As the opposing participants contest against each other, competition inevitably brings forth the strengths and weaknesses of the participants. Though the standard of performance is raised by the minority who wins, those who fail are turned away, they lose heart and develop a negative attitude to participate in future activities. To many, these unpleasant experiences in rejection reflect a sign of failure (Brown & Grineski, 1992; Graham, 1976).

Hendry & Thorpe (1976) find that competition discriminates against the failures and dropouts and creates a dominant and elite class. They argue that though school programs are organised on the pretext for all pupils to attend, but yet not all are included. Eventually, the pupils choose to stay away and find their own niche in pop culture, shopping malls, fashion, drugs and boy-girl relationships.

Arnold (1989) in his philosophical argument against competition in sports, claims that “it is intrinsically immoral and leads to selfish and egotistical forms of behaviour” (p. 17). He further contends that competition gives rise to violence, rudeness, refusal to

accept rules and referees' decisions. These unsportsmanlike behaviours on the competition ground are more likely to make enemies rather than friends.

In the real sense, competition is about winning and losing. Many researchers argue that the value of competition lies in the competition itself and not the final score or the outcome (Graham, 1976; Ross, 1987; Wilson, 1989). What is important is how competition is conceptualised, and this is the crucial question to those involved in school sports. When the focus is on winning, all attention is on beating the opponent. But when the aim of competition concentrates on mastering or improving skills, the personal performance gives a sense of achievement and success. Martens (1988) stresses that for sports programs to be successful, it is crucial to keep the long-term development of the athlete in mind. His approach of "athletes first, winning second" calls for programs to create opportunities for youth to learn skills, make decisions and to take responsibility for their lives.

Do children and youth participate in sports to win? To find out the major reasons for their participation in sports and physical activities, Gill, Gross & Huddleston (1983) studied 720 boys and 418 girls, aged 8 to 18 years old. The following reasons were cited for their participation: (1) to learn and improve their skills, (2) to make friends and to have fun, and (3) to keep fit through challenging activities. To compete was not among the reasons mentioned for their sports participation.

In Scarisbrick & Allison's (1986) study of thirty-three boys, aged 10 to 13 years old, similarities and differences between competitive and recreational teams were investigated. From field observations, it was obvious that both teams offered different environments for the boys. They observed that the competitive team followed a structured organisation of selection, practised long sessions, kept standing records, and

played in post-season playoffs and championships. The recreational team, on the other hand, allowed all players to play on a rotational basis regardless of their skill ability, scheduled limited practices, kept no records and played no post-season competition. Regardless of the teams they came from, the study found that the reason the boys played was to have fun and that winning was an important reason too. In addition, though they looked upon adults as their role models, the findings suggested that children were active and capable of processing and evaluating daily experiences, integrating these processes into their environment. Overall, the findings showed consistency with research which indicated “that children will enjoy and persist at the sports experience to the extent that they feel good about their ability, are satisfied with their performance and are not placed in a situation which they perceive to be threatening” (p. 308).

Furthermore, Klint & Weiss (1987) in their sample group of 27 boys and 40 girls, aged 8 to 16 years, found those who were high in perceived physical competence rated skill development as a more important reason for participating than did low perceived physical competence athletes. Those likely to continue in their sport involvement were motivated by their ability to demonstrate competence in their skills.

Upon weighing the pros and cons of competition in sports, both seem to offer valuable learning experiences to children and youths. Unless pupils are well prepared to enter competition, studies in research stress that more could be achieved through co-operative activities, in helping them to develop their full potential toward becoming the all-round individual. In considering the school context, where its task is to develop the physical, intellectual, moral, social and psychological needs of the individual, it is only appropriate that school programs adopt an encompassing approach to include all pupils of varying abilities the opportunity to participate in the sports program. Activities

conducted under a non-threatening environment seem to be more beneficial in allowing pupils to experience success in their tasks. Such positive feelings will enhance confidence and lead to further success, while failure may lead to feelings of unhappiness, rejection and inability to handle later tasks. Thus, one of the challenges facing the school deliverers is to provide opportunities through co-operative activities that will promote success and consider all winners in whatever they do.

Motivation and Competition

Closely associated with competitive sports is the impact of competition on children and youth's motivation to play. In Watson's (1984) conceptual analysis of the effects of competition, motivation and learning in children, he compares the play environments adopting an adult-centred and a child-centred focus. According to Watson, the adult-centred structure is highly formalised and competitive and concerned with product (goal) rather than the process (task) outcome. On the other hand, the child-centred setting characterised by informality and co-operation emphasises the process rather than product or goal in learning. Hence, he finds that intrinsic motivation under informal and co-operative conditions is more likely to occur than in highly evaluative competitive environments.

Furthermore, in his article, he argues that competition may be viewed as both extrinsically rewarding and intrinsically motivating. But when the activity outcome is attributed to external factors, this interferes with the process of intrinsically motivated learning. So, when extrinsic reward is given, self-motivated exploration and mastery are not developed, shifting the attention away from the activity and subsequently resulting in decreased intrinsic motivation.

Similarly, Fair and Silvestri's (1992) review of literature on the effects of rewards, competition and the outcome of intrinsic motivation concur with Watson, that external incentives such as money, gifts and tours have a significant diminishing effect on intrinsic motivation. In addition, they find that when participants have a positive feeling about themselves, they are more intrinsically motivated after a successful performance rather than after a failed one.

Competitions producing negative effects on learning were reported in Vallerand, Gauvin & Halliwell's (1986) study of 23 boys, aged 10 to 12 years of age. In the study, the boys were assigned to two groups with different goal orientations. Boys in the competition orientation group were told to "beat" their opponents, whereas boys from the intrinsic mastery orientation group were told to focus on doing their best and being creative in the task given. The findings showed that boys in the competition group displayed less intrinsic motivation than did boys from the intrinsic mastery group toward a motor task as measured by the time spent on the activity during a free-choice period. Losers of the competition experienced incompetence and lost interest in being involved in further play. In schools sports competition, this implies that participation for competition sake may result in a decrease in intrinsic motivation, and may also interfere with the process of learning.

According to Roberts (1993), the study of motivation "is the investigation of the constructs that energise and direct behaviour" (p. 406). Most motivational theories are generally concerned with achievement behaviour. In sport, achievement behaviour refers to behaviour, which reflects effort, concentration, performance, perseverance, attitude and choices individuals make which are used to assess the level of motivation in sports.

Recent research by the social cognitive theorists, in particular the achievement goal theorists, have made headway in gaining an understanding of the motivational processes of children. Based on the works of Maehr, Nicholls and Dweck, Roberts (1993) agrees that identifying the goals of behaviour is the basis in understanding why individuals are motivated to achieve. For example, some children may aim to seek social approval from peers and adults while others may want to demonstrate their competence in skills.

Thus, in the attempt to understand achievement behaviour under the achievement goal approach, researchers agree that it is closely related to how individuals perceive themselves under a successful or failed psychological context. In other words, “if the outcome of the achievement striving is seen to reflect desirable attributes to the self, such as, light effort or high ability, then the outcome is interpreted as success. Conversely, if the outcome is seen to reflect undesirable qualities of the self, such as laziness or poor ability then the outcome is regarded as failure” (Roberts, p. 401).

The achievement goal theorists assume the functions of two goals in the achievement context. Although they refer to these achievement goals by different names, Roberts name them as task/mastery and ego/competitive goal orientations. He explains that in task goal orientation, the focus is on the ability to demonstrate learning or mastery of the task. Perceptions of ability are self-referenced and are dependent on learning or improving at the task. On the other hand, an ego goal orientation concentrates on making comparisons with others. Perceptions of ability are dependent on how others judge and assess the performance. Thus researchers argue that the development of goal orientations in individuals is dependent upon their experience and perceptions of the psychological climate, be it task or ego oriented. From here, individuals develop their own achievement goal consistent with that of their own ability.

In the attempt to understand competition and motivation, competition is best presented in an achievement-oriented context when an individual or team is striving to achieve a goal or standard of excellence. The individual is responsible for the behaviour that leads to the outcome and is evaluated by others which determines success or failure (Roberts, 1993).

Williams (1994) examined the relationship between goal orientations and the preferences for sources of competence information with 152 male and female school athletes, between 14 – 18 years old. His study supported the achievement motivation theorists in that athletes who were high in ego goal orientation preferred to compare themselves with others when assessing their ability, while the task goal orientation athletes focused more on learning, trying hard and improving.

Studies by Treasure and Roberts (1994), which involved 11 to 16 year old British boys and girls (N = 330), found differences between task-oriented and ego-oriented students in their approach to social and adaptive achievement beliefs about sports participation. The results revealed that task-oriented students showed positive responses to their own personal development and that sport cultivated a commitment to lifetime health. In contrast, ego-oriented students viewed sport to enhance their image and status in the school. The study also indicated that task-oriented students related their success to ability and derived satisfaction from mastery experiences.

In Williams and Gill's (1995) study of 11 to 15 year old high school students (N = 174), the role of perceived competence in the motivation of sport and physical activity was examined. They found that task-oriented students associated their success with the effort they put in, while no such indication was found in ego-oriented students. In

addition, task-orientation was positively linked with perceived competence, intrinsic interest and effort.

In addition, researchers find that achievement behaviour is adapted to suit the competitive situation. They explain that when task-oriented individuals are placed in a competitive situation, they are likely to face the tasks with moderate challenge, put in effort, try hard regardless of the task difficulty, show interest and perseverance and not give up so easily. However, ego-oriented individuals are likely to display some adaptive patterns when their perception of ability is high. But once they realise their ability is threatened, they tend to choose the easy way out and show maladaptive behaviour to avoid challenge, start to lose interest and lack the perseverance to pursue to the end.

Another important aspect that achievement goal theorists find is in the differences in the development of goals in 9 to 14 years olds. In Robert's (1993) review on the development trends in goal perspectives, he reports that until the ages of 11 to 12, children are not able to distinguish the concepts of effort and ability. Children perceive that successful performances are due to one's ability and are more likely to show a clear orientation toward mastery and social approval. But by ages 12 to 13, they are able to see that a successful performance is related to one's ability and skill and they associate ability with success and begin to adopt an ego-oriented approach to their play. When success is not experienced, they become discouraged and tend to drop out of the activity. So it seems that this is the turning point for children in that their perception of competence will motivate them to stay on or leave the sport.

Researchers conclude that while the age of the child is important when considering the effect of development of goal orientation on achievement behaviour, the social

context is equally crucial. Although much of Ames's (1992) research is done in the classroom, parallels from her studies could be drawn to the sports context.

According to Ames, she finds that the goal structures created by the adults draw children to form different self-evaluation and performance and thus influence their adoption of either the task or ego concepts of ability. Her findings on the role of the environmental climate on skill learning and development suggest that adults' (teachers, coaches, parents) cues, rewards and expectations are likely to enhance children's mastery goal orientation. Hence she stresses on the need to focus on children's participation, interests and goals, rather than on immediate achievement, scores or performances. In addition, she sees the need to involve children as "active participants, to focus on their skill development, to opt for those activities and challenges where they can best develop these skills, and to have positive feelings toward both activity and their involvement in the activity" (p. 175).

Researchers postulate that motivation is closely associated to the feeling of competence. If children and youth feel competent, they see themselves as successful while a lack of competence brings on feelings of failure. In other words, it is important to experience success. The competitive setting that focuses on beating the opponent is not often considered an ideal setting to allow children and youth to experience success. More frequently, driven by the desire to win, the attention is turned toward outdoing the opponent rather than focusing on the task. Success in the competitive setting should not be defined as beating the opponent. Rather success should be seen in terms of mastery and learning of tasks. Hence, instead of making social comparisons, program implementers need to encourage children and youth to strive for mastery and improvement in skills/tasks. More importantly, care should be taken by program

implementers to decide on how reward and recognition is awarded for sports involvement and participation, as it will determine the way children and youth perceive themselves and the adult world.

Summary

Despite the considerable number of studies conducted on extracurricular activity, research in this area has failed to produce conclusive and convincing evidence on the merits of the ECA system. Fortunately, research studies in adolescent development, character and moral development, competition and motivation are able to provide an in-depth understanding on how adolescents can be motivated to learn through the competitive and co-operative environments. Though their approaches differ, it is of interest to note that researchers in adolescent development, moral development and motivation concur that opportunities of learning and exposure to new experiences be made available to children and youth. Moreover, the researchers stress the importance for adolescents to experience success in their tasks. All in all, the researchers are concerned with the ways and means to help adolescents transit smoothly into adulthood. In summary, the following research findings offer valuable information for policy makers and program implementers to understand the adolescent.

1. Adolescents go through many transitions on their way to adulthood. Learning should not be left to chance, but deliberate opportunities must be created to allow learning to occur. The more experiences they go through, the more enriched they will be to face adult life.

2. To help adolescents in their smooth transitional journey, they need to experience success in what they do, especially through their own effort and hard work. Success generates positive feelings and enhances the way they perceive themselves.
3. The feeling of competence that accompanies success is most desired when adolescents master a skill/task or show improvement on their previous attempt. The use of external rewards does not appear to produce long-lasting impact on learning as compared to internal rewards in motivating participation from adolescents.
4. Adults (teachers, coaches, parents) play an important and crucial role in reinforcing adolescents toward achieving a mastery goal orientation.
5. A non-threatening environment that incorporates co-operative activities is more likely to provide the conducive climate for adolescents to learn about themselves and the environment in which they live.
6. Lessons can be learnt from competitive situations too, but only if adolescents are well prepared and adults are ready to give guidance and explain the moral lessons that can be learnt from competition.
7. The use of rewards has a tremendous impact on the kind of achievement goals adolescents will adopt, as they are capable of adapting their behaviour to the environmental climate predetermined by the adults.

Chapter 3

Method

This chapter contains a description of the research design, research questions, subject selection, instrument design, data collection and data analysis. In order to understand the Extracurricular Activity (ECA/Sports) program in Singapore, on which this study was based, a brief description of the program is presented below.

Extracurricular Activity (ECA/Sports) Program

The ECA (Sports) program is part of the overall school ECA program. Though schools differ in their choice of games offered, the numerous sports activities can be categorised into mass participation events (mass jog, cross country run, track and field meet, swimming carnival), recreational game participation, intra-school and inter-school competitive events.

In preparation for these sporting events, schools provide a sequence of practices and contests for their pupils. In the real context, these sports experiences differ in organisational style, competitive level, length of training and competitive seasons, qualifications of the coaches and teacher coaches and the skill level of the pupils. The philosophy of the program adopted by the schools may vary from providing fun and exposure through physical activity to “winning is the name of the game” in the competitive arena.

Competition is evident at all levels from within schools to between schools. Some go beyond the school realm to participate in national sports association leagues. But the

inter-school games competitions organised by the Singapore Schools' Sports Council (SSSC) receive the most support from the schools, playing first at the zonal level, and moving on to the national level for the top four schools from the zones. Membership of the SSSC is comprised of all secondary schools, junior colleges and centralised institutes. One of the primary purposes of the SSSC is to provide rules, regulations and guidelines for the organisation of the inter-school competitions.

Under the ECA policy made known to all schools, pupil ECA participation is mandatory in one of the three core groups, be it a sport, a uniformed group, a cultural activity or a club/society. A list of activities in the core and optional groups is presented in Appendix A. The policy recommends that pupils are to remain in the chosen ECA throughout their secondary school years in the school. Pupils may take on a second ECA if they are able to cope with the demands of a second ECA.

With the exception of the uniformed groups, ECA teachers in general design their own 30-week activity program with no curriculum framework. The general guidelines given by the Ministry are broad statements and pertain mainly to the policy, scope, planning and organisation of the program, with much emphasis placed on the pupils' grading scheme. In recognition of the pupils' ECA involvement, "the grading scheme aims to (1) encourage continuous participation by pupils in ECA, (2) ensure a balanced ECA load, (3) discourage over-involvement and (4) reward effort, contribution and achievement" (Ministry of Education, 1995, pp. 2-3). Marks for participation are awarded for pupils' attendance and their representation at inter-school competition. In addition, bonus marks are given for leadership, performance achievement in competitions and participation at Singapore Youth Festival and National Day Parade events (Appendix

B). At the end of their secondary school career, the marks are totalled and converted to an ECA grade (Appendix C).

Research Design

The study examined the present status of the ECA (Sports) program through a self-report questionnaire (Appendix D), which was administered to secondary school teachers. In this study, teachers' perceptions of the ECA (Sports) program was considered as the dependent variable. Information on the following aspects of the program -- present status, strengths and concerns -- were addressed in the questionnaire. Teachers' gender, type of school and length of service were considered as independent variables which were obtained from the data responses. In Singapore there are three categories of schools: government schools (**GOV**), government-aided schools (**GAD**) and independent and autonomous schools (**IND/AUT**). Independent and autonomous schools are considered as one because they are similar in that they are given the flexibility and autonomy to run the schools. Government-aided schools form an independent category because they are mission schools with religious affiliations. Teachers' length of service was categorised into: less experienced group with up to four years of teaching experience (**LESSEXP**), experienced group who has between five and fifteen years (**EXP**) and more experienced teachers with more than fifteen years of experience (**MOREEXP**).

Research Questions

1. What do secondary school teachers perceive to be the present status of the ECA (Sports) program in the schools?

2. What do secondary school teachers perceive to be the strengths of the ECA (Sports) program in the schools?
3. What do secondary school teachers perceive to be the main concerns in the ECA (Sports) program?
4. How do male and female teachers differ in their views on the present status, strengths and concerns of the ECA (Sports) program?
5. How do teachers from the secondary schools -- government, government-aided and independent/autonomous schools -- differ in their views on the present status, strengths and concerns of the ECA (Sports) program?
6. How do teachers with varying lengths of teaching experience -- less experienced, experienced and more experienced -- differ in their views on the present status, strengths and concerns of the ECA (Sports) program?
7. What changes would secondary school teachers' recommend to the present ECA (Sports) program?

Participants

The study targeted secondary school teachers who were currently involved in the ECA (Sports) program in their schools. From a total of 147 secondary schools in Singapore, 104 schools agreed to participate and five individuals were randomly selected from the schools' lists of ECA (Sports) teachers to participate in the study.

Research Approval and Contact of Participants

In order to conduct the survey, approval was sought and obtained from the University of Victoria and the Ministry of Education, Singapore. Although the Ministry of

Education had no objection to the study, the decision to allow the researcher to conduct the study rested with the school principals. Thus contact letters (Appendix E), providing the purpose of the study and seeking principals' approval to allow their teachers to participate were sent to 147 secondary schools. This was accomplished through the principals' electronic mail system. In addition, the Zone Advisers (Specialist Inspectors/ECA Sports) at the Zone Schools' Sports Council meetings in August 1998 brought the study to the principals' attention.

Instrument Design

As there was no established questionnaire available to determine the present status, strengths and concerns of the ECA (Sports) program in Singapore, it was necessary to develop a questionnaire suitable to this specific situation. The content of the questionnaire was established by reviewing related literature on adolescents and their needs, extracurricular activity, character and moral development, competition and motivation. In addition, the questionnaire was tailored to the school context in Singapore, through observations and informal sharing sessions with ex-colleagues and teachers during the researcher's two and a half years attachment at the ECAC, Ministry of Education.

The survey instrument consisted of three sections: (1) general information, (2) present status and strengths and (3) program concerns (Appendix D). Section I asked for background information on the teacher with regards to gender, type of school they taught in, total number of years in teaching, and their involvement in the ECA (Sports) program.

In Part A of Section II, a five point Likert scale was used to determine participants' responses to 30 statements on the present status of the program. The five point scale

provided a sufficient range of choice for the participants to respond to: five, “strongly agree”; four, “agree”; three, “undecided”; two, “disagree”; and one, “strongly disagree”. In Part B of Section II, participants responded to a five point Likert scale which offered: five, “very much”; four, “much”; three, “undecided”; two, “little”; and one, “very little” on how the school has benefited from the program. In Section III, participants responded to 24 open and closed-ended questions that sought their opinions on program concerns and suggestions to improve the present system.

A panel of specialist inspectors from the Extracurricular Activities Centre, Ministry of Education, staff from the School of Physical Education, Nanyang Technological University, and Heads of Department (PE/ECA) from the secondary schools, reviewed the questionnaire for clarity of language and understanding. They suggested minor changes to the questionnaire and alterations were made before administering it to the ECA (Sports) teachers in the secondary schools.

Data Collection

The questionnaires were administered in three batches in the months of September and October 1998. Phone calls were made to follow up on the contact letter sent in August. Upon confirmation of the principal’s approval, the questionnaires were hand delivered to the school. Each questionnaire, with a cover letter (Appendix F), was packaged in a stamped, self-addressed envelope. The participating teachers were randomly selected from their schools’ ECA (Sports) list. Follow up letters to all participating school principals were sent two weeks after the due date.

To ensure the anonymity of all the participants, they were not required to place their names on the questionnaires. Confidentiality of the responses was observed throughout the period of the study and the questionnaires were kept in a locked cupboard.

Data Analysis

The data were entered and analysed using the Statistical Package for Social Sciences (Version 8.0/SPSS). The use of non-parametric statistics was applied to the information in Section I. Applying the chi-square test, data were tabulated and analysed by frequencies and percentages, and reported as a function of gender, school type, and number of years in the teaching service. Information from Section II was analysed to determine if differences existed among the teachers with regard to gender, type of schools they were teaching in, and their total teaching years. The *t* test was used to determine if there were differences in the gender responses while ANOVA analysed responses according to the school types and total teaching years. An alpha level of .05 was used for all statistical tests. In analysing and interpreting the responses to the closed-ended statements, a response range for each point on the scale was established to ensure consistency in interpreting the results. The ranges were: strongly disagree, 1.0 to 1.49; disagree, 1.5 to 2.49; undecided, 2.5 to 3.49; agree, 3.5 to 4.49; and strongly agree, 4.5 to 5.

Responses to the open-ended questions in Section III involved reading the statements a few times by the researcher to determine the issues mentioned. This procedure produced a set of categories and sub-headings that would be used to code the responses from the teachers' perspectives. Responses that were ambiguous were read and categorised with the assistance of an ex-colleague, who is familiar and involved in the

ECA (Sports) program. To determine the reliability of identifying and coding the responses, both the researcher and the second coder analysed 40 randomly chosen responses. Coding from the researcher and the coder were then compared and analysed using a point by point agreement ratio to determine an inter-coder reliability coefficient. The level of acceptability was set at 80%. The inter-coder reliability coefficient was 86%.

Chapter 4

Results and Discussion

The purpose of this study was to examine teachers' perceptions toward the ECA (Sports) program: the present status of the program, the benefits of the program to the school, the teachers' concerns and the improvements that can be suggested to enhance the all-round development of the pupils. Results and discussion of the teacher questionnaire are organised into five identified sections; namely, (1) teacher demographics, (2) teachers' involvement in the ECA (Sports) program, (3) the present status, (4) the strengths and (5) the concerns about the ECA (Sports) program.

Teacher Demographics:

In this section of the questionnaire, teacher respondents provided background information with regards to their gender, type of school they taught in and the total number of years in teaching.

Of the 147 secondary schools in Singapore, 104 (70.7%) schools consented to participate in the study (Table 1). A list of the participating schools may be found in Appendix G. From each participating school, approximately five teachers were randomly selected from the schools' ECA (Sports) list to participate in the study. Schools with a small student population received a slightly reduced number of questionnaires.

Table 1

Frequency and Percentage of School Types in Singapore in comparison to the Participating Schools

School Types	<u>Schools in Singapore</u>		<u>Participating Schools</u>	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Independent/ Autonomous	26	17.7	15	14.4
Government	96	65.3	67	64.4
Government-Aided	25	17.0	22	21.2
Total	147	100	104	100

In Singapore, secondary schools may be grouped into three distinct types; namely, Independent/Autonomous (**IND/AUT**), Government (**GOV**) and Government-aided (**GAD**). In total, **GOV** schools make up 65.3%, while 17.7% are **IND/AUT** and 17% are **GAD** schools. What is significant here is that the percentage of total responses from the participants of **IND/AUT** schools (14.4%), **GOV** schools (64.4%) and **GAD** schools (21.2%) shows a close correspondence to the general distribution of school types in Singapore (Table 1). Hence, it can be said that the group of participants is a representative sample of the ECA (Sports) teachers in the Singapore schools.

On the whole, the relatively good percentage (70.7%) of participation from the schools indicates that teachers are open and concerned about educational policies and programs and dispels the common misunderstanding that teachers in Singapore are too busy and indifferent toward research studies. The following factors may have played a contributing role in determining the response rate: (1) timing of the survey, conducted after the ECA sports season and before the end-of-year examinations, (2) increasing

awareness of the value of school-based research by the principals and (3) working relationship of the principals/teachers and the researcher.

The number of male and female teachers from each of the type of schools is presented in Table 2.

Table 2

Frequency and Percentage of Male and Female Teachers by School Types

Gender	School Types						Total	
	Independent/ Autonomous		Government		Government- Aided		n	%
	n	%	n	%	n	%		
Male	20	6.9	126	43.4	19	6.6	165	56.9
Female	21	7.2	74	25.5	30	10.4	125	43.1
Total	41	14.1	200	68.9	49	17.0	290	100

A total of 504 questionnaires were distributed and 290 (57.5%) returns were received. From the 290 questionnaires received, 165 (56.9%) were males and 125 (43.1%) were females. Of the total respondents, 43.4% of the male and 25.5% of the female teachers teach in the **GOV** schools. In the **GAD** schools, there were more female (10.4%) than male (6.6%) teachers but the male (6.9%) and female (7.2%) percentages were almost the same at the **IND/AUT** schools. Using the chi-square test of independence on gender and school types, the results of $\chi^2(4, N = 290) = 10.49, p < .05$, suggest that there is an association between teacher gender and the type of school they teach in. That is to say, proportionately there seems to be more male teachers involved in the ECA (Sports) program in the **GOV** schools than in the **IND/AUT** or **GAD** schools.

Respondents in the study are grouped into three categories according to their length of teaching experience in the schools. Teachers with up to four years of teaching experience are classified into the less experienced group (**LESSEXP**), those with 5 – 15 years, the experienced group (**EXP**), and teachers with more than 15 years into the more experienced group (**MOREEXP**).

The results shown in Table 3 compare the teachers according to their years of teaching experience and their gender. In total, there were approximately equal numbers of teachers from the less experienced, **LESSEXP** (36.6%) and more experienced **MOREEXP** (34.5%) groupings. Although the percentage from the **EXP** (28.9%) grouping, which consisted of teachers between 5 – 15 years of experience is slightly below a third of the total, it is encouraging to find that all groups are involved in the program.

Table 3

Frequency and Percentage of Male and Female Teachers by Total Teaching Years

Gender	Total Teaching Years						Total	
	0 - 4 years LESSEXP		5 – 15 years EXP		> 15 years MOREEXP		<u>n</u>	%
	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%		
Male	57	19.7	39	13.4	69	23.8	165	56.9
Female	49	16.9	45	15.5	31	10.7	125	43.1
Total	106	36.6	84	28.9	100	34.5	290	100

Of the total number of teachers in the **LESSEXP** grouping, there were approximately the same number of male (19.7%) and female (16.9%) teachers. Similarly, equivalent numbers were reported in the males (13.4%) and females (15.5%) of the **EXP** groupings. However, among the teachers from the **MOREEXP** grouping, the male teachers

constituted the highest group (23.8%) while the female teachers formed the smallest group (10.7%). Using the chi-square test of independence on gender and the total number of years the teacher has taught, the results of $\chi^2(2, N = 290) = 10.15, p < .05$ suggest that teacher gender and years of teaching experience are associated with teacher participation rates in the ECA (Sports) program. This seems to suggest that male teachers tend to show more involvement in the ECA program as they remain in teaching whereas there is less participation from the female teachers as they continue in their teaching career. If these trends are allowed to continue in the future, it may upset the deployment of teachers to implement the program, as there will be a lack of continuity in experienced female personnel to run the program.

Teachers' Involvement in ECA (Sports) Program:

In order to gain an understanding as to how teachers are involved in the ECA (Sports) program, respondents were asked to supply information on the following: primary role in the ECA (Sports) program, main ECA sport of which they are in charge, nature of their activity groups, training received specific to their sport and whether they have been successful in given the ECA sports of their preference. The information obtained gave a brief profile of the teachers responding to the study and the common trends prevailing among the ECA (Sports) teachers.

As the main implementers of the ECA (Sports) program, teachers perform several roles. Although the duties may vary from teacher to teacher and from school to school, by the nature of the roles, the responsibilities placed on the coach outweigh that of the administrator. Generally, the teacher coach is responsible for (1) player recruitment, (2)

program planning, (3) coaching the team(s) in preparation for competition, (4) planning and organising intra-school competition games and (5) administering the program.

Though the administrator, who plays the role of the teacher-in-charge, may take on the planning and administering duties, the coaching duties are likely to be assumed by an external coach employed by the school. With the training sessions taken on by the external coach, the demands and expectations of the administrator seem to be less complex and involved than that of the coach.

The information displayed in Table 4 shows the roles played by the male and female teachers in delivering the ECA (Sports) program.

Table 4

Frequency and Percentage of Teachers' ECA Role by Gender

Gender	Teachers' Role								Total	
	Coach		Assistant Coach		Administrator		Others			
	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
Male	84	29.3	17	5.9	57	19.9	6	2.0	164	57.1
Female	45	15.7	15	5.2	58	20.2	5	1.7	123	42.9
Total	129	45.0	32	11.1	115	40.1	11	3.8	287	100

The results from the respondents showed that most of them were either involved as coaches (45%) or administrators (40.1%) in the program. The rest acted in the capacity of assistant coaches, Heads of Department / Physical Education & ECA or Trim and Fit co-ordinators. Between the males and females, there is a balanced mix of teachers involved as assistant coaches and administrators, but in the area of coaching, the proportion of males exceeds that of the females. Applying the chi-square test of

independence on gender and ECA role, the results of $\chi^2(2, N = 276) = 6.26, p < .05$ reveal that gender and the ECA roles teachers assume are linked to teacher participation in the ECA (Sports) program. In other words, it appears that there are more males than females involved in the sports coaching program.

The information presented in Table 5 shows teachers' involvement in the roles they play according to the number of years they have taught.

Table 5

Frequency and Percentage of Teachers' ECA Role by Total Teaching Years

Total Teaching Years	Teachers' Role								Total	
	Coach		Assistant Coach		Administrator		Others			
	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
0 – 4 (LESSEXP)	52	18.1	18	6.3	33	11.5	1	0.3	104	36.2
5 – 15 (EXP)	41	14.3	7	2.4	32	11.2	4	1.4	84	29.3
> 15 (MOREEXP)	36	12.6	7	2.4	50	17.4	6	2.1	99	34.5
Total	129	45.0	32	11.1	115	40.1	11	3.8	287	100

The results revealed that among the coaches, the **LESSEXP** grouping reported the highest percentage (18.1%) while the **MOREEXP** grouping has the lowest number (12.6%). As for the assistant coaches, the **LESSEXP** teachers constituted the highest number (6.3%). The trend is reversed for the administrators, with the **MOREEXP** grouping making up the highest percentage (17.4%). Using the chi-square test of independence on teachers' ECA role and the number of years they have taught, the results of $\chi^2(4, N = 276) = 12.51, p < .05$ indicate that the less experienced teachers are more

involved in coaching, whereas the more experienced teachers take on the role of administrators.

From the responses of the participants, the study investigated the extent of the ECA (Sports) program as it relates to the sporting activities offered in the program and the number of teachers involved in each activity. Table 6 shows the list of 24 ECA sports taken by the respondents.

Table 6

List of ECA Sports and Frequency of Teachers Involved

Sports	Frequency
Track & Field	54
Netball	37
Soccer	31
Basketball	29
Badminton	23
Volleyball	21
Table Tennis	13
Sepak Takraw	7
Rugby	7
Swimming	7
Air Rifle	6
Hockey	6
Softball	5
Gymnastics	4
Tennis	3
Canoeing	2
Tenpin Bowling	2
Cricket	2
Outdoor pursuits	1
Squash	1
Water-polo	1
Wushu	1
Fencing	1
Sailing	1
Total	265

Though the list is not exhaustive, the wide range of sports covered by the teachers revealed that schools offer a variety of ECA sports activities to the pupils. The sports and games played most frequently by the schools are track and field, netball, soccer, basketball, badminton, volleyball and table tennis. The availability of facilities to conduct these activities may be one of the reasons for their popularity, as most schools are equipped with a playing field, outdoor courts and a multi-purpose school hall. Sports/games that seem to be played less frequently by schools are those that require special facilities, expensive equipment and specially trained personnel.

The ECA (Sports) program caters generally to two groups of pupils: the recreational and competitive groups. Depending on staff availability and needs of the schools, teachers may be assigned to either the recreational or the competitive group. But due to the shortage of personnel in the schools, it is not uncommon to find the teacher being given the responsibility of handling both the recreational and competitive groups. The results presented in Table 7 depict male and female teachers' responses to the kind of groups under their charge.

Table 7

Frequency and Percentage of Teachers' ECA Groups by Gender

Gender	Teachers' ECA Groups						Total	
	Recreational		Competitive		Both		<u>n</u>	%
	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
Male	12	4.3	70	25.0	79	28.2	161	57.5
Female	16	5.7	44	15.7	59	21.1	119	42.5
Total	28	10.0	114	40.7	138	49.3	280	100

Among the three activity groupings under the charge of the respondents, the results indicated that 49.3% of the respondents were responsible for both the recreational and competitive groups. In contrast, only a small group of teachers (10.0%) were involved exclusively with the recreational pupils. Of the 138 teachers involved in both recreational and competitive activities, 28.2% were males and 21.1% were females. Likewise, of the teachers involved exclusively in competitive activities, the results showed that there were more male (25.0%) than female (15.7%) teachers. Of those who were involved exclusively in the recreational group, there were approximately equal numbers of female (5.7%) and male (4.3%) teachers involved. Using the chi-square test of independence on gender and the ECA groups under the responsibility of the teachers, the results of $\chi^2(2, N = 280) = 3.17, p = .205$ suggest that gender is not associated with the type of activity groups with which teachers are involved.

As to the kind of activity groups under the respondents' responsibility according to the number of years they have taught (Table 8), the results revealed that 50% of the teachers exclusively in charge of the recreational group were **MOREEXP** teachers. Whereas an even distribution of **LESSEXP**, **EXP** and **MOREEXP** teachers were found in the exclusively competitive and both groups. Applying the chi-square test of independence on the total teaching years of the teachers and the activity groups under their charge, the results of $\chi^2(4, N = 280) = 5.29, p = .26$ suggest that, regardless of their teaching years, teachers show no preference for the type of activity groups they wish to take.

Table 8

Frequency and Percentage of Teachers' ECA Groups by Total Teaching Years

Total Teaching Years	Teachers' ECA Groups						Total	
	Recreational		Competition		Both		<u>n</u>	%
	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%		
0 – 4 years (LESSEXP)	6	21.4	44	38.6	54	39.1	104	37.1
5 – 15 years (EXP)	8	28.6	31	27.2	43	31.2	82	29.3
> 15 years (MOREEXP)	14	50.0	39	34.2	41	29.7	94	33.6
Total	28	100	114	100	138	100	280	100

In order to determine if teachers received any formal training related to their ECA involvement, respondents were asked if they had undergone training (Table 9). While slightly more than half (54.6%) of the respondents had undergone some form of training, 45.4% indicated that they had not received any training.

Table 9

Frequency and Percentage of Training Received by Teachers

Training Received	<u>n</u>	%
Yes	153	54.6
No	127	45.4
Total	280	100

The results in Table 10 summarise respondents' course attendance conducted by the various organisations.

Table 10

Frequency and Percentage of Course Attendance by Teachers

Type of Courses	Frequency	Percentage
SSC/NSA	58	37.9
PE Diploma/Degree	29	18.9
Asian/International	17	11.1
NSA	16	10.5
Ministry of Education	12	7.8
No recent courses	7	4.6
No responses given	14	9.2
Total	153	100

The largest percentage (37.9%) of respondents who had received training attended the Theory & Technical Coaching Certification Course organised by the Singapore Sports Council (SSC) in conjunction with the various National Sports Associations (NSA). Another 18.9 % received their training while undergoing a diploma or degree course at local and / or foreign institutions. The remainder of the respondents who had some training, attended courses conducted by: the Asian /International sports bodies (11.1%), the various NSA (10.5%) and the Ministry of Education (7.8%). A small number of teachers (4.6%) reported that they did not attend any recent courses.

Judging from the various courses attended by the respondents, the courses may be further categorised into three types, each catering to the various needs of the teachers. Firstly, courses organised by SSC/NSA prepare individuals for coaching certification. Secondly, the Asian/International sports bodies conduct advanced level courses for those who wish to upgrade and update their knowledge and skills in coaching. Thirdly, NSA and MOE courses are organised with the purpose of catering to non-PE and sports trained personnel, equipping them with basic knowledge to handle their ECA sports. While it is

encouraging to note that opportunities have been made available to prepare teachers for the coaching aspects of the ECA (Sports) program, perhaps more teachers could be convinced to attend in order to reduce the number of those who had not received any formal training.

Teacher involvement in the ECA program is mandatory for all secondary school teachers, be it in the area of sports, uniformed groups, music and dance, or cultural clubs and societies. To ensure that teachers are matched closely with their interests and specific training they have received, it is deemed important to the researcher to investigate whether the teachers were successful in obtaining the ECA sport of their choice. The results of the teachers' responses are shown in Table 11.

Table 11

Responses of Teachers to their ECA Sport Preference

Successful	<u>n</u>	%
Yes	124	44.4
No	155	55.6
Total	279	100

From the responses received, less than half (44.4%) were successful in getting the ECA of their choice. This seems to indicate that teachers do not have much say in choosing their preferred ECA. As schools allocate ECA duties to their teachers, not only do they need to examine the needs and interests of the whole school but it might be worthwhile to consider the interests of the teachers as well. For, if the teachers are expected to give their best to the program, a happy and successful match with the ECA of their choice is to be desired.

The Present Status:

In Part A of Section II, teachers responded to 30 statements regarding the present status of the ECA (Sports) program in their schools. These statements aimed to provide an insight into the following areas: (1) schools' support and emphasis on the program, (2) ECA sports teachers' emphasis and their activity plan, (3) pupils' participation patterns, (4) principals' support and involvement and (5) participation of ECA sports colleagues in the school. To the 30 statements, teachers responded to a five point Likert scale of:

- 5 = strongly agree (SA),
- 4 = agree (A),
- 3 = undecided (U),
- 2 = disagree (D) and
- 1 = strongly disagree (SD).

Means and standard deviations were calculated from these numerical values for total teacher group as well as for groups according to gender, school types and the number of years they have taught. Mean values were used to interpret the extent to which groups agreed or disagreed with the various statements. Values between 3.5 and 5 reflected agreement, with the degree of agreement increasing with the value. Values between 2.49 and 1 indicated disagreement, the strongest being at 1. Values between 2.5 and 3.49 represented a group or collective indecision. Results (means and standard deviations) of the total teachers' responses were presented and discussed as they appeared in the questionnaire, followed by group results in line with gender, school types and total teaching years. The *t* test was used to determine if a gender difference existed between the two groups. From this test, a *t* value was calculated. The One Way Analysis of Variance (ANOVA) test was used to detect group mean differences among the teachers

from the three types of schools and total years of teaching experience. From this test, an F ratio was computed. Under post hoc testing, the Scheffé test was used to further investigate which of the groups differed. The level of significance was set at .05.

The information in Table 12 shows the means and standard deviations of the teachers' responses to their schools' support and emphasis on the ECA (Sports) program. The results revealed respondents' positive reaction to nine of the ten statements with mean scores ranging from 3.59 to 4.16. Only one mean score (3.30) was reported to fall in the indecisive category, suggesting respondents' doubts on the program to help them understand their pupils better.

Interpretation of the data indicates that the ECA (Sports) program, being an integral part of the school curriculum, has found its place in the schools. What is most significant is that ECA sports teachers are well aware of the importance and potential of the program in promoting the development of the all-round individual.

Generally, the ECA (Sports) program is viewed as an active program that offers a range of activities catering to the needs and interests of the pupils. Through mass participatory and competitive activities, teachers agree that not only has it helped to meet the needs and interests of the pupils, but that it has allowed pupils to form a closer bond with the school. However, one irony throughout all this is that, although teachers appear to agree and promote the goals and objectives of the program, their indecisive reaction may indicate that teachers are doubting whether the time spent with their pupils is a worthwhile experience for both teachers and pupils.

Table 12

Summary of Total Responses to Schools' Support and Emphasis

Statement	The ECA (Sports) Program in my school:	<u>M</u>	<u>SD</u>
11	Aims to support the development of the all-round individual.	4.16	.78
12	Provides a wide range of activities to cater to the needs and interests of the pupils.	3.89	.93
13	Receives adequate support from the school in staff allocation.	3.65	1.02
14	Receives adequate support from the school in financial assistance.	3.78	.96
15	Receives adequate support from the school in resource availability.	3.59	1.00
16	Is structured to allow teachers time and opportunity to learn about the needs of each pupil.	3.30	.95
17	Helps the pupils to create a strong sense of identity to the school.	3.84	.79
18	Provides equal opportunities for mass participatory activities and competitive activities.	3.80	.95
19	Emphasises the preparation of the school teams for competitions.	3.90	.93
20	Meets the needs and interests of the school.	3.87	.78

The results outlined in Table 13, which compared the responses of male and female respondents, show that both males and females were convinced of their schools' support on the ECA (Sports) program. However, perceptions of the males were significantly more positive than the females on the following statements: (12) the wide range of activities offered at the schools, (14) the schools' willingness to provide financial assistance, (15) the school's support in allocating resources to the program, (17) the

impact of the program in creating a school identity among the pupils, (19) the emphasis given to inter-school competition and (20) the extent of the program in fulfilling the needs and interests of the school.

Table 13

Responses of Males and Females toward Schools' Support and Emphasis

The ECA (Sports) Program in my school:	Gender				t	p
	Males		Females			
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>		
11. Aims to support the development of the all-round individual.	4.21	.78	4.08	.79	1.41	.161
12. Provides a wide range of activities to cater to the needs and interests of the pupils.	3.99	.91	3.74	.94	2.28	.023*
13. Receives adequate support from the school in staff allocation.	3.74	1.01	3.53	1.02	1.75	.082
14. Receives adequate support from the school in financial assistance.	3.92	.90	3.59	1.01	2.90	.004*
15. Receives adequate support from the school in resource availability.	3.74	.92	3.40	1.07	2.91	.004*
16. Is structured to allow teachers time and opportunity to learn about the needs of each pupil.	3.33	.94	3.25	.98	.70	.488
17. Helps the pupils to create a strong sense of identity to the school.	3.96	.75	3.69	.81	2.95	.003*
18. Provides equal opportunities for mass participatory activities and competitive activities.	3.88	.96	3.67	.93	1.86	.063
19. Emphasises the preparation of the school teams for competitions.	4.01	.86	3.74	1.01	2.36	.019*
20. Meets the needs and interests of the school.	3.98	.76	3.73	.79	2.72	.007*

* Denotes significant difference $p < .05$

The significant difference in six statements between the males and females seems to suggest that males view the emphasis and support given to the ECA (Sports) program differently from the females. Though it is not clear as to how and why the males and females differ, it may be reasonable to say that they differ in their expectations of the: (1) school's role, (2) benefits of the program and (3) their own contributions to the program.

Table 14

Teachers' Responses toward Schools' Support and Emphasis by School Types

	School Types			F	p
	IND/AUT	GOV	GAD		
	<u>M</u> (<u>SD</u>)	<u>M</u> (<u>SD</u>)	<u>M</u> (<u>SD</u>)		
The ECA (Sports) Program in my school:					
11. Aims to support the development of the all-round individual.	4.29 (.68)	4.15 (.77)	4.06 (.92)	.99	.374
12. Provides a wide range of activities to cater to the needs and interests of the pupils.	3.80 (1.10)	3.90 (.90)	3.88 (.95)	.19	.827
13. Receives adequate support from the school in staff allocation.	3.83 (.86)	3.70 (1.01)	3.31 (1.10)	3.71	.026*
14. Receives adequate support from the school in financial assistance.	4.10 (.70)	3.73 (.98)	3.71 (1.04)	2.62	.074
15. Receives adequate support from the school in resource availability.	3.95 (.74)	3.55 (1.01)	3.47 (1.08)	3.25	.040*
16. Is structured to allow teachers time and opportunity to learn about the needs of each pupil.	3.32 (.91)	3.27 (.95)	3.41 (1.00)	.42	.655
17. Helps the pupils to create a strong sense of identity to the school.	3.80 (.81)	3.86 (.76)	3.78 (.90)	.30	.742
18. Provides equal opportunities for mass participatory activities and competitive activities.	3.51 (.98)	3.89 (.91)	3.65 (1.05)	3.39	.035*
19. Emphasises the preparation of the school teams for competitions.	4.13 (.79)	3.87 (.90)	3.80 (1.15)	1.55	.215
20. Meets the needs and interests of the school.	4.00 (.64)	3.85 (.78)	3.84 (.87)	.67	.514

* Denotes significant differences $p < .05$.

The results in Table 14 present teachers' responses toward their schools' emphasis and support with respect to the type of schools from which they come. Among the teachers from the **IND/AUT**, **GOV** and **GAD** schools, significant differences were found in the way schools (1) allocate the ECA duties to their staff, (2) provide resources and (3) organise a balanced range of mass and competitive activities for their pupils. However, because these differences were of borderline significance, post hoc tests were unable to detect group differences among the three groups.

When examining whether mean differences exist among the teachers with different years of teaching experience, teachers from **MOREEXP** grouping scored the highest mean ratings in all ten statements (See Table 15), with seven found above the agreement score of 4.00.

Conversely, **LESSEXP** group teachers emerged with the lowest mean scores for all ten statements with three scores in the indecisive range of 2.50 – 3.49. Applying the ANOVA tests to the **LESSEXP**, **EXP** and **MOREEXP** groupings, significant differences were evident in all ten statements. Post hoc testing revealed that **MOREEXP** teachers differed significantly ($p < .05$) from the **LESSEXP** teachers in their perceptions of all ten statements. In addition, **EXP** teachers showed more positive support and interest ($p < .05$) than the **LESSEXP** teachers with regards to allocation of staff ECA duties and organisation of school-based mass participatory and competitive activities.

Years of experience seem to be a determining factor as to how teachers perceive the ECA (Sports) program in their schools. The significant differences in responses between the **LESSEXP** and **MOREEXP** groupings may be attributed to the maturity level and experience acquired over the years. Although the **LESSEXP** teachers do not lose out in

zest and enthusiasm, they might not have grasped and accepted the status of ECA in the academically oriented education system.

Table 15

Teachers' Responses toward Schools' Support and Emphasis by Total Teaching Years

	Total Teaching Years			F	p
	0 – 4 LESSEXP	5 – 15 EXP	> 15 MOREEXP		
The ECA (Sports) Program in my school:	<u>M</u> (<u>SD</u>)	<u>M</u> (<u>SD</u>)	<u>M</u> (<u>SD</u>)		
11. Aims to support the development of the all-round individual.	4.00 (.87)	4.22 (.78)	4.27 (.65)	3.52	.031*
12. Provides a wide range of activities to cater to the needs and interests of the pupils.	3.60 (1.11)	4.04 (.80)	4.06 (.76)	8.12	.001*
13. Receives adequate support from the school in staff allocation.	3.42 (1.15)	3.76 (.90)	3.80 (.93)	4.20	.016*
14. Receives adequate support from the school in financial assistance.	3.50 (1.12)	3.81 (.99)	4.06 (.61)	9.23	.001*
15. Receives adequate support from the school in resource availability.	3.33 (1.14)	3.57 (1.02)	3.90 (.70)	8.73	.001*
16. Is structured to allow teachers time and opportunity to learn about the needs of each pupil.	3.05 (1.11)	3.30 (.88)	3.57 (.75)	8.07	.001*
17. Helps the pupils to create a strong sense of identity to the school.	3.66 (.92)	3.85 (.72)	4.03 (.63)	5.84	.003*
18. Provides equal opportunities for mass participatory activities and competitive activities.	3.57 (1.08)	3.71 (.94)	4.11 (.70)	9.37	.001*
19. Emphasises the preparation of the school teams for competitions.	3.59 (1.07)	4.01 (.85)	4.12 (.75)	9.59	.001*
20. Meets the needs and interests of the school.	3.65 (.86)	3.92 (.70)	4.06 (.70)	7.60	.001*

* Denotes significant differences $p < .05$.

The results in Table 16 display teachers' responses to their ECA emphasis and the way they plan their activities. As a group, teachers agreed strongly (3.90 – 4.41) that their activities catered to their pupils' five areas of developmental growth. Though teachers agreed that their activities were challenging and stimulating, a lower mean agreement score of 3.77 was reported. Similarly, a lower mean agreement score of 3.65 was accorded to the progressive manner in which teachers plan their activities.

Table 16

Summary of Teachers' Emphasis and Activity Plan

Statement	The Teachers' ECA Activity Plan:	<u>M</u>	<u>SD</u>
21	Is based on a 30-week activity schedule.	3.94	.96
	Included activities that cater to the developmental level of the individual, in the following aspects:		
22	Physical	4.41	.52
23	Social	4.17	.64
24	Emotional	3.91	.81
25	Intellectual	3.90	.79
26	Moral	4.01	.82
27	Is systematically planned to enable pupils to learn in a progressive manner throughout the 4-year program.	3.65	.90
28	Provides a challenging and stimulating learning environment with different but related activities.	3.77	.76

Under the Ministry's ECA guidelines to all secondary schools, teachers are to plan their year's activities based on a 30-week activity schedule. From the high mean agreement score of 3.94, teachers do make it a point to adhere to the stipulated guidelines.

Based on the overall teachers' responses on their ECA emphasis, it does indicate that teachers acknowledge the fundamental educational objectives in nurturing the all-round individual. Though mean scores reported are still within the agreement range, the lower mean scores accorded to the progressive, challenging and stimulating learning environment seem to reveal that teachers are not as convinced in implementing as they are in stating the emphasis of their program. Perhaps teachers are caught within the time constraint to carry out their ECA duty over and above a full teaching load.

Table 17

Responses of Males and Females toward their Emphasis and Activity Plan

	Gender				t	p
	Males		Females			
The Teachers' ECA Activity Plan:	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>		
21. Is based on a 30-week activity schedule.	4.04	.98	3.81	.93	2.06	.041*
Included activities that cater to the developmental level of the individual, in the following aspects:						
22. Physical	4.45	.54	4.35	.50	1.69	.093
23. Social	4.17	.62	4.19	.65	.25	.805
24. Emotional	3.96	.79	3.85	.82	1.06	.289
25. Intellectual	3.92	.80	3.88	.77	.44	.661
26. Moral	4.04	.81	3.96	.82	.86	.392
27. Is systematically planned to enable pupils to learn in a progressive manner throughout the 4-year program.	3.68	.93	3.61	.87	.66	.511
28. Provides a challenging and stimulating learning environment with different but related activities.	3.80	.76	3.73	.76	.86	.390

* Denotes significant differences $p < .05$

A comparison of the mean scores of males and female teachers (Table 17) showed that both groups reported similar high mean values toward creating an all- round development program for their pupils. Though slightly lower mean scores were reported, both groups responded in agreement regarding the learning environment. Statistical analysis of the data revealed only one significant difference, in that the males were more positive to follow Ministry's 30-week activity guidelines than the females.

Table 18

Responses of Teachers' Emphasis and Activity Plan by School Types

The Teachers' ECA Activity Plan:	School Types						F	p
	IND/AUT		GOV		GAD			
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>		
21. Is based on a 30-week activity schedule.	3.61	1.15	4.01	.92	3.96	.93	2.79	.063
Included activities that cater to the developmental level of the individual, in the following aspects:								
22. Physical	4.36	.49	4.41	.53	4.43	.50	.22	.800
23. Social	4.18	.64	4.20	.60	4.08	.76	.65	.525
24. Emotional	4.08	.77	3.89	.80	3.86	.87	.98	.376
25. Intellectual	4.10	.75	3.87	.79	3.88	.81	1.47	.233
26. Moral	4.21	.70	3.97	.84	4.00	.82	1.36	.259
27. Is systematically planned to enable pupils to learn in a progressive manner throughout the 4-year program.	3.82	.85	3.62	.91	3.65	.93	.83	.437
28. Provides a challenging and stimulating learning environment with different but related activities.	3.97	.49	3.69	.80	3.92	.70	3.42	.034*

* Denotes significant difference $p < .05$

The results from teachers of the three school types, presented in Table 18, found only one significant difference with regards to creating a stimulating and challenging learning environment for the pupils. But further investigation under the Scheffé testing failed to reveal which groups differed.

Table 19

Responses of Teachers' Emphasis and Activity Plan by Total Teaching Years

The Teachers' ECA Activity Plan:	Total Teaching Years						F	p
	0 – 4		5 – 15		> 15			
	LESSEXP M	SD	EXP M	SD	MOREEXP M	SD		
21. Is based on a 30-week activity schedule.	3.65	1.05	3.96	.99	4.24	.73	9.98	.001*
22. Included activities that cater to the developmental level of the individual, in the following aspects:								
23. Physical	4.43	.50	4.37	.58	4.42	.50	.28	.754
24. Social	4.13	.73	4.16	.59	4.23	.55	.69	.502
25. Emotional	3.88	.88	3.90	.74	3.96	.77	.28	.760
26. Intellectual	3.85	.92	3.94	.79	3.93	.63	.40	.668
27. Moral	3.90	.93	4.02	.75	4.11	.73	1.82	.164
28. Is systematically planned to enable pupils to learn in a progressive manner throughout the 4-year program.	3.42	1.00	3.69	.92	3.86	.71	6.20	.002*
29. Provides a challenging and stimulating learning environment with different but related activities.	3.66	.85	3.75	.78	3.91	.61	2.90	.057

* Denotes significant difference $p < .05$

As shown in Table 19, the **LESSEXP**, **EXP** and **MOREEXP** group of teachers reported similar mean scores except in two statements. Firstly, **MOREEXP** teachers perceived significantly ($p < .05$) more willingness to follow Ministry's recommended

30-week activity guideline than the **LESSEXP** teachers. Secondly, significant difference was found in the way teachers plan their year round activities incorporating progressive learning within a 4-year time frame, but post hoc tests failed to show which groups differed.

In the attempt to examine teachers' views toward their pupils' ECA sport participation (Table 20), teachers agreed that pupils join the ECA because of the interest in the sport and influence from their peers.

Table 20

Summary of Responses of Reasons for Pupil Participation

Statement	My Pupils:	<u>M</u>	<u>SD</u>
29	Are motivated to join my ECA because they are interested to learn more about the sport.	3.97	.76
30	Are influenced by their friends to join the ECA.	3.73	.84

Interpretation of the data in Tables 21 to 23 indicated that no significant differences were found with regards to pupil participation, between the male and female teachers, among the teachers from the three school types and teachers with different years of teaching experience.

Table 21

Reasons for Pupil Participation by Gender

Reasons for pupil participation:	Gender				<u>t</u>	<u>p</u>
	Males		Females			
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>		
29. Interest in the sport	4.00	.78	3.93	.73	.80	.425
30. Peer influence	3.70	.88	3.77	.73	.68	.494

Table 22

Reasons for Pupil Participation by School Types

Reasons for pupil participation	School Types						F	p
	IND/AUT		GOV		GAD			
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>		
29. Interest in the sport	4.03	.77	3.92	.79	4.10	.63	1.21	.299
30. Peer influence	3.45	1.08	3.78	.80	3.73	.74	2.65	.073

Table 23

Reasons for Pupil Participation by Total Teaching Years

Reasons for pupil participation	Total Teaching Years						F	p
	0 – 4		5 – 15		> 15			
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>		
29. Interest in the sport	3.90	.76	3.98	.84	4.03	.69	.71	.495
30. Peer influence	3.78	.74	3.55	.97	3.82	.81	2.57	.078

According to the results presented, it is of interest to note that teachers generally feel that the pupils' reasons for participation lie in their interest and the influence from their peers. However, the reasons for pupil participation could be further studied from the pupils' perspectives, as they are the recipients of the overall program.

The principal as the main person responsible for the running of the school plays an important role in the ECA (Sports) program. The results in Table 24 present teachers' perceptions of their principals' support and involvement in the program.

Table 24

Teachers' Responses to Principals' Support and Involvement

Statement	My Principal:	<u>M</u>	<u>SD</u>
31	Is supportive of the ECA (Sports) program.	4.02	.87
32	Encourages teachers to share in the vision of the development of the all-round individual through the ECA (Sports) program.	3.76	.95
33	Ensures that the school; staff and students work towards this shared vision.	3.66	.92

Based on the range of mean scores reported (3.66 – 4.02), teachers, in general, perceived their principals to show support toward the ECA (Sports) program and encourage the nurturing of all-round development in the pupils.

According to the results in Tables 25 and 26, male and female teachers and teachers from the three school types expressed similar views of their principals' support in the program and showed no significant difference toward the principals' involvement.

Table 25

Responses to Principals' Support and Involvement by Gender

My Principal:	Gender				<u>t</u>	<u>p</u>
	Males		Females			
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>		
31. Is supportive of the ECA (Sports) program.	4.08	.87	3.94	.87	1.39	.167
32. Encourages teachers to share in the vision of the development of the all-round individual through the ECA (Sports) program.	3.79	.95	3.71	.96	.73	.465
33. Ensures that the school; staff and students work towards this shared vision.	3.70	.92	3.60	.93	.95	.343

Table 26

Responses to Principals' Support and Involvement by School Types

My Principal:	School Types							
	IND/AUT		GOV		GAD		F	p
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>		
31. Is supportive of the ECA (Sports) program.	4.25	.84	4.02	.86	3.84	.94	2.49	.084
32. Encourages teachers to share in the vision of the development of the all-round individual through the ECA (Sports) program.	3.92	1.00	3.78	.92	3.53	1.02	2.07	.128
33. Ensures that the school; staff and students work towards this shared vision.	3.80	.99	3.68	.89	3.43	.98	2.07	.128

However, among the **LESSEXP**, **EXP** and **MOREEXP** teachers (Table 27), the results revealed significant differences ($p < .05$) in all three principal-related statements. The **MOREEXP** teachers were more likely to perceive their principals to play an active and supportive role than the **LESSEXP** teachers. In addition, both the **EXP** and **MOREEXP** teachers viewed their principals to be more involved in incorporating the total development of the pupils into the schools' vision and mission plan than the **LESSEXP** teachers.

Table 27

Responses to Principals' Support and Involvement by Total Teaching Years

My Principal:	Total Teaching Years						F	p
	0 – 4		5 – 15		> 15			
	LESSEX M	SD	M	SD	MOREEXP M	SD		
31. Is supportive of the ECA (Sports) program.	3.82	.95	4.08	.85	4.17	.77	4.61	.011*
32. Encourages teachers to share in the vision of the development of the all-round individual through the ECA (Sports) program.	3.47	1.11	3.81	.87	4.01	.76	8.77	.001*
33. Ensures that the school; staff and students work towards this shared vision.	3.34	1.06	3.75	.79	3.91	.78	11.17	.001*

* Denotes significant difference $p < .05$

From a set of seven statements, respondents were asked their opinion of ECA sports teachers in their schools. Interpretation of the results in Table 28 indicates respondents' moderate views (3.53 – 3.79) of their colleagues' overall attitude and enthusiasm toward their ECA duty.

The results reported two mean scores falling within the indecisive range, which suggest that respondents are not sure whether their colleagues are burdened by their ECA duty (3.23) nor are they pressured to produce results at the inter-school competitions (3.05). However, higher standard deviations (1.07 and 1.05) in these two statements tend to reveal respondents' divided opinion. But on the other hand, respondents feel that there is strong support (4.10) from the colleagues to employ external coaches to take over their coaching duties.

Table 28

Summary of Responses to Sports Colleagues' Involvement

Statement	The ECA (Sports) Teachers in my school:	<u>M</u>	<u>SD</u>
34	Are encouraged and supported to upgrade their knowledge and skills in their ECA.	3.77	.89
35	See their ECA duties as an added burden to their teaching load.	3.23	1.07
36	Are proud to play a contributing role in the total development of the pupils.	3.66	.76
37	Take on their ECA duties with commitment and enthusiasm.	3.53	.86
38	Are keen for the school to employ external coaches to coach the school teams.	4.10	.77
39	Are pressured to show results at the inter-school competitions.	3.05	1.05
40	Organise inter-house/class games for their pupils.	3.79	1.06

In general, ECA sports teachers are perceived to be fairly committed and enthusiastic in their ECA duty. Yet, they are eager for the school to employ external coaches to relieve them of their duties. There may be several reasons to suggest why teachers think and feel this way. Firstly, all teachers are required to take on an ECA duty above the normal teaching load. While the educational system heavily stresses on academic achievement, teachers may want to devote more time to lesson preparation and marking. Secondly, based on the data on teacher involvement in Section I, 45.4% of the respondents reported that they are not trained in their ECA sport. Thirdly, again based on the results collected, 55.6% were unsuccessful in receiving the ECA of their choice. Perhaps, academic pressures, feeling of incompetence and unsuccessful matching to their

preferred ECA may have prompted them to seek external assistance if given the opportunity.

Between the mean scores of the male and female teachers (Table 29), only one significant difference was noted, that is, the pressure to produce results at the inter-school competitions. Though female teachers perceived more pressure than their male colleagues, the extent of this pressure was relatively low, as it was reported in the indecisive range.

Table 29

Responses of Male and Female Respondents to Sports Colleagues' Involvement

	Gender		M	SD	t	p
	Males	Females				
The ECA (Sports) Teachers in my school:	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>		
34. Are encouraged and supported to upgrade their knowledge and skills in their ECA.	3.84	.93	3.68	.84	1.50	.134
35. See their ECA duties as an added burden to their teaching load.	3.27	1.08	3.18	1.06	.70	.483
36. Are proud to play a contributing role in the total development of the pupils.	3.72	.79	3.60	.71	1.31	.191
37. Take on their ECA duties with commitment and enthusiasm.	3.53	.91	3.54	.80	.16	.871
38. Are keen for the school to employ external coaches to coach the school teams.	4.05	.77	4.18	.76	1.40	.162
39. Are pressured to show results at the inter-school competitions.	2.94	1.02	3.19	1.08	2.04	.042*
40. Organise inter-house/class games for their pupils.	3.78	1.07	3.81	1.04	.21	.835

* Denotes significant difference $p < .05$

From the results in Table 30, three significant differences were found among teachers from the three school types with regards to the perceptions of their colleagues' involvement in the program.

Table 30

Responses to Sports Colleagues' Involvement by School Types

The ECA (Sports) Teachers in my school:	School Types						F	p
	IND/AUT		GOV		GAD			
	M	SD	M	SD	M	SD		
34. Are encouraged and supported to upgrade their knowledge and skills in their ECA.	3.97	.89	3.78	.90	3.55	.84	2.57	.078
35. See their ECA duties as an added burden to their teaching load.	2.80	1.10	3.35	1.04	3.08	1.06	5.15	.006*
36. Are proud to play a contributing role in the total development of the pupils.	3.90	.77	3.61	.79	3.71	.58	2.73	.067
37. Take on their ECA duties with commitment and enthusiasm.	3.98	.79	3.47	.84	3.45	.91	6.45	.002*
38. Are keen for the school to employ external coaches to coach the school teams	4.07	.69	4.11	.77	4.08	.84	.074	.929
39. Are pressured to show results at the inter-school competitions.	2.93	1.06	3.03	1.06	3.24	.99	1.19	.306
40. Organise inter-house/class games for their pupils.	3.46	1.25	3.95	.97	3.41	1.10	7.94	.001*

* Denotes significant differences $p < .05$

Firstly, though mean scores were recorded within the indecisive range, significant difference ($p = .011$) was found between **GOV** and **IND/AUT** teachers, indicating that **GOV** teachers were more likely to perceive ECA duty being a burden on top of the regular teaching load than the **IND/AUT** teachers. Secondly, the results implied that

IND/AUT teachers perceived their ECA duties with more commitment and enthusiasm than the **GOV** ($p = .002$) and **GAD** ($p = .015$) teachers. Thirdly, **IND/AUT** and **GAD** teachers tend to show less involvement in organising intra-school activities as compared to the **GOV** teachers ($p < .05$).

In Table 31, four significant differences were found among the teachers with different years of teaching experience.

Table 31

Responses to Sports Colleagues' Involvement by Total Teaching Years

The ECA (Sports) Teachers in my school:	Total Teaching Years						F	p
	0 – 4		5 – 15		> 15			
	LESSEXP M	SD	EXP M	SD	MOREEXP M	SD		
34. Are encouraged and supported to upgrade their knowledge and skills in their ECA.	3.61	.99	3.74	.88	3.96	.76	4.10	.018*
35. See their ECA duties as an added burden to their teaching load.	3.24	1.07	3.24	1.09	3.21	1.06	.02	.977
36. Are proud to play a contributing role in the total development of the pupils.	3.56	.82	3.64	.74	3.80	.70	2.66	.072
37. Take on their ECA duties with commitment and enthusiasm.	3.44	.87	3.40	.84	3.74	.85	4.46	.012*
38. Are keen for the school to employ external coaches to coach the school teams	3.97	.81	4.07	.72	4.27	.74	4.06	.018*
39. Are pressured to show results at the inter-school competitions.	3.01	1.04	2.88	1.00	3.23	1.08	2.68	.070
40. Organise inter-house/class games for their pupils.	3.59	1.10	3.73	1.14	4.06	.87	5.38	.005*

* Denotes significant difference $p < .05$

Though three mean scores of the respondents were reported to fall within the agreement range, the **MOREEXP** teachers expressed stronger feelings than the **LESSEXP** teachers with regards to their colleagues' eagerness to: (statement 34) upgrade themselves ($p = .019$), (statement 40) organise intra-school activities ($p = .006$) and (statement 38) seek external assistance to coach the school teams ($p = .020$). In addition, **MOREEXP** teachers perceived significantly stronger support ($p < .05$) than the **EXP** and **LESSEXP** teachers toward colleagues' commitment and enthusiasm in the program.

Strengths of the ECA (Sports) Program

In Part B of Section II, teachers were asked their views on how the school has benefited from the ECA (Sports) program. They rated 13 statements using the following 5 point Likert scale:

- | | | |
|---|---|-------------------|
| 5 | = | Very Much (VM) |
| 4 | = | Much (M) |
| 3 | = | Undecided (U) |
| 2 | = | Little (L) |
| 1 | = | Very Little (VL). |

Similarly, as in Part A, means and standard deviations were derived from the teachers' responses and used to interpret the extent and ways in which the program has helped the school. Values between 3.5 and 5 reflected much benefit, with the degree of benefit increasing with the value. Values between 2.49 and 1 indicated little benefit with the least gain at 1. Values between 2.50 and 3.49 represented a group or collective indecision. Likewise as in Part A of the section, the t test was used to detect for differences between the two gender groups and the ANOVA test to find out if

respondents differ in regards to the school types and the number of years the teachers have taught. Post hoc testing, in particular the Scheffé Test was applied to examine which groups differed.

In order to determine the strengths of the program, respondents gave their views regarding the program's impact on the school, pupils and staff members. The results in Table 32 present teachers' responses towards the strengths of the program in building a reputable school name and maintaining a favourable school tone.

Table 32

Summary of Responses toward School Reputation and Tone

Statement	The ECA (Sports) Program has contributed by:	<u>M</u>	<u>SD</u>
41	Attaining a winning reputation in the schools' sports scene.	3.50	1.13
42	Gaining recognition for showing sporting behaviour in the schools' competitive scene.	3.51	.97
43	Building a strong sense of school identity.	3.63	.95
44	Improving the discipline in the school.	3.37	.97

From the relatively low agreement mean scores (3.37 to 3.63) reported by the respondents, the results tend to indicate that the school's tone, reputation and discipline are only marginally influenced by the ECA (Sports) program.

Between the male and female teachers, males recorded higher mean scores in all four statements (See Table 33).

Table 33

Responses of Male and Female Teachers toward School Reputation and Tone

The ECA (Sports) Program has contributed by:	Gender				t	p
	Males		Females			
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>		
41. Attaining a winning reputation in the schools' sports scene.	3.57	1.05	3.40	1.22	1.33	.185
42. Gaining recognition for showing sporting behaviour in the schools' competitive scene.	3.63	.89	3.36	1.06	2.31	.022*
43. Building a strong sense of school identity.	3.70	.94	3.54	.97	1.37	.172
44. Improving the discipline in the school.	3.51	.95	3.19	.96	2.78	.006*

* Denotes significant difference $p < .05$

Although mean scores of both male and female teachers showed no strong support, the males showed significantly more positive reactions than the females with regards to gaining a reputable sporting image and maintaining school discipline.

Table 34

Responses toward School Reputation and Tone by School Types

The ECA (Sports) Program has contributed by:	School Types						F	p
	IND/AUT		GOV		GAD			
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>		
41. Attaining a winning reputation in the schools' sports scene.	3.85	1.15	3.37	1.12	3.71	1.06	4.53	.014*
42. Gaining recognition for showing sporting behaviour in the schools' competitive scene.	3.59	1.05	3.52	.96	3.45	.98	.22	.804
43. Building a strong sense of school identity.	3.88	.90	3.57	.97	3.67	.88	1.91	.150
44. Improving the discipline in the school.	3.34	1.02	3.39	.99	3.35	.83	.06	.942

* Denotes significant difference $p < .05$

A comparison of teacher responses from **IND/AUT**, **GOV** and **GAD** schools (Table 34) revealed moderate support for schools' sports reputation. Only one significant difference ($p = .041$) was found which indicated that **IND/AUT** schools seem to show more concern of their sports reputation than the **GOV** schools.

In examining the responses of the teachers from **LESSEXP**, **EXP** and **MOREEXP** groupings (See Table 35), the indecisive mean scores of **LESSEXP** teachers revealed their doubts on the benefits the program could bring in creating a respectable school reputation and positive school climate. The **MOREEXP** teachers perceived significantly stronger support ($p < .05$) for the program than the **LESSEXP** teachers.

Table 35

Responses toward School Reputation and Tone by Total Teaching Years

The ECA (Sports) Program has contributed by:	Total Teaching Years						F	p
	0 – 4		5 – 15		> 15			
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>		
41. Attaining a winning reputation in the schools' sports scene.	3.22	1.22	3.55	1.06	3.75	1.01	5.93	.003*
42. Gaining recognition for showing sporting behaviour in the schools' competitive scene.	3.29	1.06	3.55	.91	3.73	.88	5.48	.005*
43. Building a strong sense of school identity.	3.43	1.07	3.61	.88	3.86	.82	5.41	.005*
44. Improving the discipline in the school.	3.12	1.00	3.31	.91	3.69	.90	9.62	.001*

* Denotes significant difference $p < .05$

The information in Table 36 displays teachers' perceptions with regards to how pupils and staff had benefited from the program. The relatively high mean scores (3.75 –

4.24) in seven of the nine benefits indicated respondents' positive reactions to pupils benefiting from the program. It is only in the area of "teaching pupils to manage their time effectively" (3.49) that respondents were undecided about the statement. In response as to whether the program had brought the staff closer together, the respondents' mean score of 3.34 indicated that they were not convinced of the program's benefit on the staff.

Table 36

Summary of Responses toward Pupil and Staff Benefits

Statement	The ECA (Sports) Program has contributed by:	<u>M</u>	<u>SD</u>
45	Creating student awareness towards healthy living through physical activities.	3.76	.87
46	Promoting social interaction among the pupils.	4.03	.63
47	Instilling a sense of confidence in the students.	3.94	.72
48	Teaching the pupils to manage their time effectively.	3.49	.92
49	Exposing pupils to competition; to experience winning and losing.	4.20	.69
50	Encouraging teamwork and co-operation among the pupils.	4.24	.64
51	Involving pupils in planning and organising of activities.	3.75	.86
52	Encouraging pupils to assume leadership roles.	3.98	.77
53	Promoting cohesiveness among staff members.	3.34	.96

The results in Table 37 revealed that male and female teachers in general respond positively to the benefits pupils could receive from the program. They showed "very high" agreement scores in three benefits and "high" scores in four benefits. No

significant difference was found between the views of the two groups. With regards to staff benefiting from the program, again, no significant difference was evident between the male and female respondents.

Table 37

Responses of Male and Female Teachers' Perceptions toward Pupil and Staff Benefits

	Gender				t	p
	Males		Females			
The ECA (Sports) Program has contributed by:	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>		
45. Creating student awareness towards healthy living through physical activities.	3.81	.89	3.69	.84	1.22	.222
46. Promoting social interaction among the pupils.	4.04	.69	4.02	.54	.35	.727
47. Instilling a sense of confidence in the students.	3.95	.80	3.93	.61	.209	.834
48. Teaching the pupils to manage their time effectively.	3.55	.95	3.43	.89	1.07	.284
49. Exposing pupils to competition; to experience winning and losing.	4.26	.70	4.11	.68	1.80	.072
50. Encouraging teamwork and co-operation among the pupils.	4.28	.70	4.18	.56	1.35	.177
51. Involving pupils in planning and organising of activities.	3.69	.89	3.84	.82	1.45	.149
52. Encouraging pupils to assume leadership roles.	3.95	.82	4.02	.72	.79	.431
53. Promoting cohesiveness among staff members.	3.41	.98	3.24	.93	1.50	.135

Of the teachers from the three school types (Table 38), most of the mean scores recorded indicated respondents' positive feedback to the benefits of the program on the pupils. No significant difference existed among the teachers of the three school types. Again, teachers of the three school types did not differ significantly as to whether the program promoted cohesiveness among the staff members

Table 38

Responses of Teachers' Perceptions toward Pupil and Staff Benefits by School Types

The ECA (Sports) Program has contributed by:	School Types						F	p
	IND/AUT		GOV		GAD			
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>		
45. Creating student awareness towards healthy living through physical activities.	3.80	.87	3.74	.91	3.78	.71	.10	.909
46. Promoting social interaction among the pupils.	4.05	.63	4.04	.62	3.98	.69	.20	.820
47. Instilling a sense of confidence in the students.	4.00	.71	3.91	.75	4.00	.65	.48	.618
48. Teaching the pupils to manage their time effectively.	3.51	.93	3.43	.96	3.73	.73	2.13	.121
49. Exposing pupils to competition; to experience winning and losing.	4.32	.76	4.18	.72	4.16	.51	.73	.483
50. Encouraging teamwork and co-operation among the pupils.	4.12	.75	4.26	.63	4.24	.60	.76	.467
51. Involving pupils in planning and organising of activities.	3.95	.86	3.70	.87	3.82	.81	1.62	.199
52. Encouraging pupils to assume leadership roles.	4.15	.65	3.94	.80	4.02	.78	1.28	.279
53. Promoting cohesiveness among staff members.	3.54	.98	3.30	.98	3.33	.86	1.01	.365

From the **LESSEXP**, **EXP** and **MOREEXP** teachers' responses to the advantages of the program on the students and staff (Table 39), the recorded scores indicated teachers favourable reaction to the program with the exception of the **LESSEXP** teachers on pupils' ability to manage their time well (3.29) and staff cohesiveness (3.21).

Table 39

Responses of Teachers' Perceptions toward Pupil and Staff Benefits by Total Teaching Years

The ECA (Sports) Program has contributed by:	Total Teaching Years						F	p
	0 – 4		5 – 15		> 15			
	LESSEXP M	SD	EXP M	SD	MOREEXP M	SD		
45. Creating student awareness towards healthy living through physical activities.	3.58	1.03	3.71	.71	3.99	.76	6.20	.002*
46. Promoting social interaction among the pupils.	3.95	.72	4.04	.48	4.11	.63	1.61	.203
47. Instilling a sense of confidence in the students.	3.80	.83	3.95	.64	4.07	.64	3.62	.028*
48. Teaching the pupils to manage their time effectively.	3.29	1.01	3.53	.79	3.68	.90	4.72	.010*
49. Exposing pupils to competition; to experience winning and losing.	4.12	.81	4.25	.64	4.23	.58	1.00	.370
50. Encouraging teamwork and co-operation among the pupils.	4.11	.67	4.26	.64	4.35	.59	3.63	.028*
51. Involving pupils in planning and organising of activities.	3.61	1.00	3.93	.64	3.76	.84	3.16	.044*
52. Encouraging pupils to assume leadership roles.	3.84	.85	4.07	.64	4.06	.78	2.90	.057
53. Promoting cohesiveness among staff members.	3.21	1.04	3.32	.90	3.50	.89	2.42	.091

* Denotes significant difference $p < .05$

Significant differences were reported, revealing **MOREEXP** teachers displaying a more positive perception than **LESSEXP** teachers with regards to the ability of the program to help pupils (statement 45) create healthy living awareness ($p = .003$), (statement 48) manage personal time table ($p = .010$), (statement 47) instil confidence ($p = .029$), (statement 50) work and co-operate as a team ($p = .029$) and (statement 51) plan and organise activities ($p = .044$).

Concerns about the ECA (Sports) Program

In the final section of the questionnaire, the researcher outlined three areas of concerns for the present ECA (Sports) program. Respondents' views were sought regarding the (1) need for the development of an ECA (Sports) curriculum, (2) the importance and relevance of competition in the all-round development of the individual and (3) issue of equity in the ECA grading scheme. Moreover, respondents were given the opportunity to share concerns other than those mentioned by the researcher. Finally, respondents were asked, "What changes, if any, would you like to see in the Ministry's ECA (Sports) policy to enable schools to plan and implement an all-round development program for their pupils?"

At present, ECA sports teachers plan their activity schedule with no defined curriculum from the Ministry. In response to the need for the Ministry to provide an ECA sports curriculum, the results show that a total of 167 (60.1%) respondents supported the idea (See Table 40).

Table 40

Frequency and Percentage of Responses to Development of an ECA Sports Curriculum

Responses	Frequency	Percentage
Yes	167	60.1
No	111	39.9
Total	278	100

To the 12 curriculum topics suggested by the researcher, respondents rated their importance using the following 4-point scale:

- 4 = Very Important
- 3 = Important
- 2 = Somewhat Important and
- 1 = Not Important.

From the calculated mean scores, the topics are ranked according to their importance with the higher mean scores denoting a greater importance. A general ranking is derived for the total teacher group as well as for groups according to gender, school types and the number of years taught.

A ranked list of the suggested curriculum topics is displayed in Table 41.

Examination of the mean values scored by the total teacher group revealed that all topics were perceived to be “Important” or “Very Important”. Using the mean values to rate the topics, three distinct areas surfaced. Topics with the highest mean scores between 3.43 and 3.57 include game rules, fair play, game skills, tactics and strategies. The second area, with mean scores ranging between 3.23 and 3.30, is comprised of topics that relate to the roles and responsibilities of the player and captain, basic first aid and evaluation of

pupils' learning. Thirdly, topics that focused on tournament organisation as well as roles and responsibilities of tournament personnel received the lowest ranking of importance.

Table 41

Total Teacher Responses to Suggested Curriculum Topics

Rank	Topics	<u>M</u>	<u>S D</u>
1	Rules of the game	3.57	.65
2	Fair Play	3.55	.69
3	Game skills	3.53	.64
4	Game tactics & strategies	3.43	.68
5	Role & responsibility of player	3.30	.74
6	Evaluation	3.29	.67
7	Role & responsibility of captain	3.26	.76
8	Basic first aid	3.23	.78
9	Role & responsibility of umpire	3.17	.79
10	Tournament organisation	3.15	.78
11	Role & responsibility of official	3.10	.83
12	Role & responsibility of tournament manager	3.04	.87

A comparison of male and female means scores (Table 42) indicated no significant differences exist in their preferences for the 12 suggested curriculum topics. The results of both male and female teachers presented in Table 42 show their similarity in most of the topic preferences with the exception of the role and responsibility of the player and basic first aid. The results revealed that male teachers rate player responsibility higher in importance than the females, whereas the reverse is seen for basic first aid.

Table 42

Responses to Suggested Curriculum Topics by Gender

Topics	Gender						t	p
	Males			Females				
	M	SD	Rank	M	SD	Rank		
Rules of the game	3.55	.66	2	3.59	.65	1	.326	.745
Fair Play	3.53	.67	3	3.57	.72	2	.432	.667
Game skills	3.56	.63	1	3.49	.65	3	.764	.446
Game tactics & strategies	3.41	.67	4	3.46	.70	4	.474	.636
Role & responsibility of player	3.32	.72	5	3.28	.76	8	.346	.730
Evaluation	3.26	.67	6	3.33	.68	6	.730	.467
Role & responsibility of captain	3.23	.77	7	3.29	.75	7	.495	.621
Basic first aid	3.14	.75	11	3.35	.80	5	1.725	.086
Role & responsibility of umpire	3.22	.75	8	3.10	.84	10	.959	.339
Tournament organisation	3.17	.75	10	3.12	.81	9	.360	.719
Role & responsibility of official	3.20	.75	9	2.96	.91	11	1.867	.064
Role & responsibility of tournament manager	3.14	.81	11	2.90	.94	12	1.739	.084

Though differences in ranking were noted (Table 43), there were no significant differences on the 12 suggested topics among the teachers of the three school types. From the ranking results of the **IND/AUT**, **GOV** and **GAD** schools, there is close resemblance of the **GOV** and **GAD** teachers to that of the total teachers group, while the **IND/AUT** teachers ranked the topics differently. **IND/AUT** teachers gave priority to pupil-centred topics as opposed to topics in game rules and skills.

Table 43

Responses to Suggested Curriculum Topics by School Types

Topics	School Types						F	p
	IND/AUT		GOV		GAD			
	M (SD)	Rank	M (SD)	Rank	M (SD)	Rank		
Rules of the game	3.37(1.01)	10	3.59(.61)	1	3.61(.56)	1	.999	.370
Fair Play	3.63(.83)	2	3.56(.65)	2	3.45(.72)	3	.453	.636
Game skills	3.47(.61)	5	3.55(.68)	3	3.48(.51)	2	.220	.803
Game tactics & strategies	3.42(.69)	7	3.47(.69)	4	3.26(.63)	5	1.234	.294
Role & responsibility of player	3.61(.61)	3	3.30(.74)	5	3.13(.76)	9	2.489	.086
Evaluation	3.50(.71)	4	3.24(.68)	6	3.33(.61)	4	1.215	.300
Role & responsibility of captain	3.67(.59)	1	3.20(.77)	8	3.23(.77)	6	2.999	.053
Basic first aid	3.42(.61)	7	3.22(.80)	7	3.13(.81)	9	.841	.433
Role & responsibility of umpire	3.39(.61)	9	3.14(.83)	9	3.16(.73)	7	.782	.459
Tournament organisation	3.22(.88)	11	3.14(.78)	9	3.14(.74)	8	.093	.911
Role & responsibility of official	3.44(.62)	6	3.05(.86)	11	3.06(.81)	11	1.783	.171
Role & responsibility of tournament manager	3.17(.86)	12	3.04(.88)	12	2.94(.85)	12	.410	.664

In comparing mean scores of teachers with different teaching years of experience (Table 44), the results showed that only one significant difference was found with regards to basic first aid, in that, the **LESSEXP** ($p = .025$) and **EXP** ($p = .015$) teachers perceived basic first aid to be more important than did the **MOREEXP** teachers.

Table 44

Responses to Suggested Curriculum Topics by Total Teaching Years

Topics	Total Teaching Years						F	p
	0 – 4 Years LESSEXP		5 – 15 Years EXP		> 15 Years MOREEXP			
	M (SD)	Rank	M (SD)	Rank	M (SD)	Rank		
Rules of the game	3.57(.67)	3	3.46(.72)	2	3.67(.55)	1	1.369	.257
Fair Play	3.53(.78)	4	3.60(.69)	1	3.50(.58)	3	.310	.734
Game skills	3.65(.55)	1	3.41(.74)	3	3.52(.61)	2	2.087	.127
Game tactics & strategies	3.58(.62)	2	3.28(.76)	6	3.40(.63)	4	2.973	.054
Role & responsibility of player	3.39(.67)	5	3.25(.83)	8	3.25(.71)	5	.703	.497
Evaluation	3.25(.73)	8	3.39(.67)	4	3.23(.61)	7	.892	.412
Role & responsibility of captain	3.29(.79)	7	3.27(.82)	7	3.22(.67)	8	.129	.879
Basic first aid	3.34(.80)	6	3.38(.71)	5	2.94(.75)	12	5.354	.006*
Role & responsibility of umpire	3.15(.78)	11	3.11(.87)	10	3.25(.71)	5	.417	.660
Role & responsibility of official	3.17(.83)	10	3.00(.92)	11	3.12(.73)	9	.596	.552
Role & responsibility of tournament manager	3.02(.98)	12	2.98(.90)	12	3.12(.70)	9	.332	.718
Tournament organisation	3.18(.83)	9	3.17(.80)	9	3.09(.69)	11	.216	.806

* Denotes significance difference $p < .05$

To obtain teachers' opinions about the value of competition in the ECA (Sports) program, respondents were asked to rate the importance of the inter-school competition using a 4-point scale of: four, "very important"; three, "important"; two, "somewhat important"; and one, "not important". In addition, teachers gave their views, again on a scale of four, "very relevant"; three, "relevant"; two, "somewhat relevant"; and one, "not

relevant” to gain an understanding to the appropriateness of competition in the total development of the individual. Means were calculated to give an indication of the relative importance and relevance of competition. For interpretation purposes, the higher the mean value the higher the importance and relevance accorded to the statement.

Respondents were asked the importance of competition in the ECA (Sports) program. The mean score of 3.29 (SD = .70) implied that teachers do regard competition to be an important aspect of the program. Similarly, when teachers were asked the relevance of competition in developing the all-round individual, a mean score of 3.30 (SD = .64) was recorded from the teachers, showing their support to the role of competition in the program.

From the high mean scores by the respondents, the fact that the value of competition is held in high importance suggests that this may be a common experience felt by the ECA sports teachers. It is not surprising to discover that teachers regard the competitive environment as an important element in order to groom the all-round individual.

The results in Table 45 and 46 indicated no significant difference between the views of male and female participants and among the teachers from the three school types on the importance and relevance of competition in the ECA (Sports) program.

Table 45

Responses of Male and Female Teachers toward Importance and Relevance of Competition

Value of Competition	Gender				t	p
	Males		Females			
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>		
Importance	3.32	.74	3.25	.65	.776	.438
Relevance	3.33	.64	3.27	.64	.856	.393

Table 46

Responses of Teachers toward Importance and Relevance of Competition by School Types

Value of Competition	School Types						F	p
	IND/AUT		GOV		GAD			
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>		
Importance	3.30	.72	3.27	.70	3.35	.72	.224	.800
Relevance	3.38	.59	3.28	.64	3.33	.69	.464	.629

Among the teachers from the **LESSEXP**, **EXP** and **MOREEXP** groupings (See Table 47), the **LESSEXP** teachers perceived competition to be most important (3.43) and relevant (3.36) in the ECA (Sports) program. Statistical analysis of the data revealed significant differences in the teachers' perceptions about the importance of competition. Post hoc testing found significant differences ($p = .002$) between the **LESSEXP** and **MOREEXP** teacher groupings, which appear to show that the teachers newer in the service are more competitive-minded than their most experienced colleagues.

Table 47

Responses of Teachers toward Importance and Relevance of Competition by Total Teaching Years

Value of Competition	Total Teaching Years						F	p
	0 – 4 Years		5 – 15 Years		> 15 Years			
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>		
Importance	3.43	.65	3.34	.70	3.09	.72	6.566	.002*
Relevance	3.36	.61	3.33	.66	3.21	.65	1.492	.227

* Denotes significant difference $p < .05$

The ECA grading scheme was designed not only to encourage and motivate pupils to participate in the ECA activities, but according to the Education Ministry, “the objectives aimed to (1) encourage continuous participation by the pupils, (2) ensure a balanced ECA load, (3) discourage over-involvement and (4) reward effort, contribution and achievement” (Ministry of Education, 1995, p. 2-3). Teacher input was requested in an attempt to determine the importance of the grading scheme and the equity of marks awarded to all pupils involved. To determine teacher perceptions of the importance of the grading scheme, teachers were asked, “How important is the ECA grading system to your pupils?” They responded according to the following scale:

- 4 = Very Important
- 3 = Important
- 2 = Somewhat Important and
- 1 = Not Important.

In reply to the question of equity of the grading scheme on four pupil groups; namely, the (1) medal winners, (2) non-medal winners, (3) intra-school game participants and (4) sports leaders and organisers, teachers responded to a four point scale rating of:

- 4 = Most Fair
- 3 = Fair
- 2 = Unfair and
- 1 = Most Unfair.

Again, from the calculated means, the values were used to interpret the degree of fairness of the grading scheme. Values between 2.50 and 4 reflected equity, showing fairness as the value increases. Values between 2.49 and 1 indicated unfairness with the highest degree at 1.

The responses of the total teacher group toward the grading scheme are depicted in Table 48. In response to how important the grading scheme is to their pupils, the mean value of 2.86 was not high, indicating that teachers might have some reservations toward the grading scheme. Despite the fact that pupils could use the ECA grade for entry to the three-year pre-university institutes, junior college or polytechnic desired, the varying strength of agreement (2.65 to 3.01) accorded to the four groups tend to indicate that teachers perceive greater equity given to medal winners than to intra-game participants, sports leaders and non-medal winners. Thus, it is reasonable to argue that the grading scheme may not have recognised the different ability levels of the pupils and hence, has not projected itself as a fair and equitable system to assess pupils' ECA participation and achievement results.

Table 48

Teachers' Responses toward the Grading Scheme

Grading Scheme	<u>M</u>	<u>SD</u>
Importance to : Pupils	2.86	.82
Fairness to Pupil Groups:		
Medal winners	3.01	.58
Intra-school game participants	2.72	.61
Sports leaders and organisers	2.66	.70
Non-medal winners	2.65	.63

A closer examination of the grading scheme seems to reveal that the award of marks is based primarily on attendance, representation and achievement. There is no evidence to show that pupils are assessed on what they have learnt in the program. According to

achievement-goal motivation research, the way individuals perceive themselves is closely related to what they are able to achieve. If they believe they are competent, they perceive themselves as successful, while individuals who lack competence see themselves as failures. Thus, rewarding pupils based on comparisons with other persons encourages the development of achievement behaviour toward an ego-goal orientation. Individuals with such an orientation always seek to compare themselves with others and, in the long run, tend to show no desire for learning. If the educational system aims to instil continuous learning in our pupils, the grading scheme should focus on developing task-goal orientated individuals, who seek mastery learning and improvement. This would project a fairer and more equal basis for assessing pupils' abilities.

According to the mean values of the male and female teachers (See Table 49), both groups agreed that the grading scheme was important to the pupils.

Table 49

Perceptions of Male and Female Teachers toward the Grading Scheme

Grading Scheme	Gender				t	p
	Males		Females			
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>		
Importance to: Pupils	2.90	.87	2.81	.74	.911	.363
Fairness to Pupil Groups:						
Medal winners	3.03	.61	2.99	.53	.567	.571
Intra-school participants	2.79	.62	2.62	.60	2.307	.022*
Sports leaders and organisers	2.69	.74	2.62	.64	.795	.427
Non-medal winners	2.67	.63	2.62	.63	.680	.497

* Denotes significant difference $p < .05$

As to the fairness of the scheme on the four pupil groups, perceptions were similar except with regards to the intra-school participants. The male teachers were more convinced that the scheme was fairer to the intra-school participants than their female colleagues.

Statistical analysis of the data (Table 50) found no significant differences among the views of teachers from the three school types with regards to the importance and fairness of the grading scheme to the pupils.

Table 50

Teachers' Perceptions toward the Grading Scheme by School Types

Grading Scheme	School Types						F	p
	IND/AUT		GOV		GAD			
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>		
Importance to: Pupils	3.00	.79	2.81	.83	2.98	.78	1.224	.224
Fairness to Pupil Groups:								
Medal winners	2.95	.52	3.01	.61	3.08	.50	.599	.550
Intra-school game participants	2.65	.54	2.73	.63	2.75	.60	.315	.730
Sports leaders and organisers	2.58	.72	2.65	.70	2.73	.71	.491	.613
Non-medal winners	2.50	.65	2.69	.63	2.63	.61	1.464	.233

The results in Table 51 indicated that **LESSEXP**, **EXP** and **MOREEXP** teachers view the grading scheme to be “important”. Though **LESSEXP**, **EXP** and **MOREEXP** teachers’ mean scores fall within the “fair” range, the range of scores (2.42 to 3.06) appears to suggest that the degree of equity varies among the four pupil groups. Significant differences ($p < .05$) were reported between the **MOREEXP** and **LESSEXP**,

and **MOREEXP** and **EXP** teachers, indicating that the **MOREEXP** teachers perceived the grading scheme to be fairer to the sports leaders and organisers than the **LESSEXP** and **EXP** teachers.

Table 51

Teachers' Perceptions toward the Grading System by Total Teaching Years

Grading System	Total Teaching Years						F	p
	0 – 4 Years		5 – 15 Years		> 15 Years			
	LESSEXP M	SD	EXP M	SD	MOREEXP M	SD		
Importance to: Pupils	2.88	.82	2.82	.73	2.89	.89	.162	.850
Fairness to Pupil Groups:								
Medal winners	3.06	.57	2.93	.56	3.04	.60	1.366	.257
Intra-school game participants	2.68	.65	2.65	.55	2.82	.62	2.061	.129
Sports leaders and organisers	2.60	.65	2.42	.69	2.93	.68	12.997	.001*
Non-medal winners	2.64	.61	2.55	.61	2.76	.65	2.426	.090

* Denotes significant difference $p < .05$

Using an open-response format, respondents were asked to share their views and opinions on: (1) recommendations to improve the grading system, (2) other concerns in the ECA (Sports) area and (3) suggestions and comments to enable schools to plan and implement an all-round development program for their pupils.

A total of 132 teachers responded and gave 114 suggestions to improve the grading system. Their recommendations were coded into three classifications and are presented in Table 52.

Table 52

Teachers' Recommendations to Improve the ECA Grading Scheme by Frequency

Recommendations:	Frequency
More recognition for:	
• leadership and organisational skills	18
• non-school team members	14
• pupils' hours and time put in	14
• intra-school participants	11
• achievers and medallists	9
• school team members	2
• Singapore Schools' players	2
Review ECA policy:	
• achievement versus participation emphasis	11
• on par with Uniformed Groups	9
• fair system in achievement and participation emphasis	6
• standard assessment	2
Avenues to gain more points:	
• adopt accumulative as opposed to restrictive system	9
• include more pupil ECA participation	4
• include involvement from outside organisations	3

Of the 114 responses coded, 61.4% called for due recognition to be given to pupils who have contributed their time, effort and expertise to the ECA. Most of the responses were in favour of acknowledging pupils other than those who win medals for their schools and excel at a high performance level. A quarter of the responses requested a review of the present ECA status. They call for the need to equate the emphasis accorded to participation to that given to achievement. It is recommended that the grading scheme consider the assessment method used by the Uniformed Groups. The remaining respondents (14.0%) suggested that pupils be allowed to accumulate their ECA points rather than place restrictions on the maximum points they can earn.

The 117 concerns offered by 121 teachers are classified into six main areas. A summary of these concerns is provided in Table 53. The responses represent a diverse range of concerns with the most frequent being related to the financial and resource support (34). The emphasis of the ECA (Sports) program (28) and the ECA grading scheme (8) which had been mentioned at one point in the questionnaire surfaces again here. Other concerns regarding academic emphasis and ranking (15), teachers ECA load (13), lack of parental support (9) and too many school programs and activities are mentioned.

Table 53

Teachers' Concerns in the ECA (Sports) Program by Frequency

Concerns:	Frequency
Financial and resource support:	
• lack of trained personnel	17
• lack of facilities	8
• lack of financial support	4
• lack of information dissemination	2
• shortage of funds to hire coaches	2
• money spent on hiring of coaches	1
ECA emphasis:	
• focus on winning and competition	9
• lack of focus on all-round development	5
• received low priority	4
• no clear guidelines given	3
• bias toward certain ECAs	3
• no support for mass participation	1
• demanding on students' time	1
• open to new ECAs	1
• focus on life-long sports	1
Academic emphasis and ranking:	
• creates overwhelming teachers' workload	6
• creates low student ECA priority	4
• creates low teachers' priority	3
• stress student academic performance	2

Concerns:	Frequency
Teachers' ECA load:	
• demanding	6
• lacks recognition	4
• heavy because of too many ECAs	2
• mismatch between assigned ECA and interest	1
ECA grading system:	
• biased grading scheme	3
• unfair to non-medallists	3
• unfair to student leaders	2
Others:	
• lack of parental support	9
• too many school programs and activities	6
• problem coaches	1
• need for standard computerised ECA program	1
• effective Head of Department	1
• insufficient courses held	1

The respondents provided an extensive and diverse list of suggestions for the Ministry to consider in implementing an all-round development plan for their pupils. The 142 suggestions offered by the respondents could be grouped into six categories. A summary of the suggestions is presented in Table 54. Based on the total recommendations, 38 responses called for the need to establish the priority the program intends to take, while the issue of financial, staff and resource support formed the next most frequent group (33). Other suggestions focused on (1) the support given to the ECA sports teachers, (2) the issue of external coaches and (3) the request for clearer Ministry of Education guidelines.

Table 54

Teachers' Recommendations to the ECA (Sports) Program

Recommendations to changes:	Frequency
Define ECA emphasis:	
• move away from achievement and results	12
• recognise organisational and leadership skills	7
• encourage more ECA participation	7
• compulsory sports ECA for all	5
• encourage more fun participation/social skills	4
• move away from Uniformed Group bias	3
Resources:	
• provide training for teachers	13
• general funds for sports	8
• provide and improve facilities	6
• funds for outdoor pursuits	2
• draw up salary scale for coaches	1
• provide information	1
• funds to employ coaches	1
• provide standardised software for schools	1
Teachers and their ECA duties:	
• schedule trained personnel to handle ECA	12
• offload from academic duties	10
• be given one ECA only	3
• equate ECA and teaching load	2
Upgrade ECA status	14
Employment of external coaches:	
• take over ECA	10
• no external coaches	1
Provide clearer MOE guidelines:	
• provide curriculum handbook	5
• define number of ECAs to offer	2
• pupil evaluation and assessment	2
• role of ECA teacher	1
Others:	
• sharing among schools	4
• better planning and co-ordination with NSAs and SSC	2
• HQ to be receptive to suggestions	2

On reflecting the responses to the three open-ended questions, the diverse range of suggestions, recommendations and concerns indicate that teachers are faced with a multitude of obstacles, conflicts and dilemma as they go about their ECA duties. In all the three open-ended questions, one of the most frequently addressed issues is the emphasis given to achievement recognition.

One of the prominent ironies in the ECA (Sports) program is the conflict that exists between the theoretical and practical approaches. In theory, the program aims to promote the development of the all-round individual. But in practice, the achievement-oriented program does not appear to support the intended goal. A second irony is seen in the grading scheme. Though the objective is to reward pupils' time, effort and contribution in their ECA, it seems to favour the medal winners who participate in inter-school competitions. For those pupils who are not involved in competitive sports but may be exposed to opportunities to develop into all-round individuals, they are not given the same chance as their competitive schoolmates. Hence, what is most significant from the open-ended responses is that the teachers are not asking for any drastic changes to be made to the existing system. But rather, they are requesting that it is timely for the Ministry to appraise and evaluate the entire ECA (Sports) program. Such an evaluation may help policy makers take stock of the direction the program has taken and consider the problems encountered by the implementers. Perhaps, this will instil confidence in the teachers and seek to clarify the inconsistencies and discrepancies teachers face while performing their ECA duties.

Chapter 5

Summary, Conclusions and Recommendations

This chapter contains (1) an overview of the study, (2) a summary of the results, (3) implications of the study for ECA sports teachers and the Ministry of Education in Singapore and (4) suggestions for future research.

Overview of the Study

The study examined teachers' perceptions toward the ECA (Sports) program in the Singapore secondary schools. Teachers, being the direct implementers of the program, were given the opportunity to participate in the study, as their feedback would provide invaluable insight into the present system.

A questionnaire consisting of 79 items was developed for the study. Through the questionnaire, teachers gave background information with respect to their gender, type of schools they taught in, total number of years in teaching and involvement in the ECA (Sports) program. Next, teachers were asked to share their perceptions of the present status, the strengths of the program and the concerns about the program in their schools. Lastly, through the open response format, teachers gave suggestions and recommendations to improve the present system.

The study aimed to address seven research questions. They were:

1. What do secondary school teachers perceive to be the present status of the ECA (Sports) program in the schools?

2. What do secondary school teachers perceive to be the strengths of the ECA (Sports) program in the schools?
3. What do secondary school teachers perceive to be the main concerns in the ECA (Sports) program?
4. How do male and female teachers differ in their views on the present status, strengths and concerns of the ECA (Sports) program?
5. How do teachers from the secondary schools -- government, government-aided and independent/autonomous schools -- differ in their views on the present status, strengths and concerns of the ECA (Sports) program?
6. How do teachers with varying lengths of teaching experience -- less experienced, experienced and more experienced -- differ in their views on the present status, strengths and concerns of the ECA (Sports) program?
7. What changes would secondary school teachers recommend to the present ECA (Sports) program?

Of the 147 secondary schools in Singapore, 104 (70.7%) schools consented to participate in the study. Approximately five teachers from each participating school who were selected from the school ECA (Sports) list participated in the study. A total of 504 questionnaires were distributed, out of which 290 (57.5%) returns were received.

The data were entered and analysed using the Statistical Package for Social Sciences (Version 8.0/SPSS). Frequencies and percentages were calculated according to gender, school type and total teaching years and analysed using the chi-square test. To determine the perception of teachers toward the ECA (Sports) program, means and standard deviations were calculated. The *t* test was used to establish if significant differences

existed between the male and female teachers, and the ANOVA was used to test for differences among the teachers from the three school types and with different years of teaching experience. An alpha level of .05 was used for all statistical tests.

Summary of the Results

The conclusions presented in this study are drawn from the data gathered from the secondary school teachers in Singapore. The summary of results consists of: (1) a profile of the teacher participants and their ECA participation in the program and (2) specific information related to each of the research questions.

Teachers' Profiles and Involvement in the ECA (Sports) Program

1. Of the total 290 participants, 165 (56.9%) were male and 125 (43.1%) were female teachers. As to the type of schools they taught in, 41(14.1%) taught in the Independent/Autonomous (**IND/AUT**) schools, 200 (68.9%) in the Government (**GOV**) schools and 49 (17.0%) in the Government-Aided (**GAD**) schools. The results reveal that there are more male teachers who participated in the study teaching in the **GOV** than in the **IND/AUT** or **GAD** schools. As these percentages draw close resemblance to the general distribution of school types in Singapore, the sample of participants can be regarded as representative of the ECA sports teachers in the schools. Thus, there is reason to agree that the results may be generalised to the population of ECA sports teachers from which the sample was selected.

2. Among the participants, 106 (36.6%) teachers had less than five years of teaching experience (**LESSEXP**), 84 (28.9%) teachers had between five to fifteen years (**EXP**) and 100 (34.5%) had more than fifteen years (**MOREEXP**). The data reveal that

male teachers tend to be more involved in the ECA program as they remain in teaching while there is less participation from the female teachers as they continue in their teaching career.

3. Results indicate that there are more males than females involved as coaches and that the **LESSEXP** teachers are more involved in coaching, while the **MOREEXP** teachers take on the role of administrators in the program.

4. From the sporting activities listed by the participants, schools provide a variety of sports and games to their pupils. A total of 24 sports and games are offered in the ECA (Sports) program, of which track and field, netball, soccer, basketball, badminton, volleyball and table tennis are reported to be played most frequently in Singapore schools.

5. Among the three activity groups; namely, (1) recreational, (2) competitive and (3) recreational and competitive, under the responsibility of the participants, the results indicate that only 28 (10.0%) are involved exclusively with the recreational pupils, while 114 (40.7%) take charge of only the competitive pupils and 138 (49.3%) handle both the recreational and competitive pupils. The results demonstrate that between the male and female teachers, and among the teachers with different years of experience, there is no preference to the type of activity group they wish to take.

6. Slightly over half (54.6%) of the participants have undergone some form of training. The largest number (37.9%) attended the Theory and Technical Coaching Certification Course organised by the Singapore Sports Council in conjunction with the various National Sports Associations (NSA). A further 18.9% received their training while undergoing a diploma or degree course at local and / or foreign institutions. The rest attended courses conducted by: the Asian / International sports bodies (11.1%), the

various NSA (10.5%) and the Ministry of Education (7.8%). A small group of 4.6% participants indicated that they had not attended any recent courses.

7. Lastly, the results indicated that 124 (44.4%) participants were successful in obtaining the ECA sport of their choice.

Research Question #1: What do secondary school teachers perceive to be the present status of the ECA (Sports) program in the schools?

The conclusions made of the present status are based on the following aspects of the program: (1) schools' support and emphasis, (2) ECA sports teachers' emphasis and activity plan, (3) pupil participation patterns, (4) principals' support and involvement and (5) participation of ECA sports colleagues in the school.

Schools' support and emphasis

The teachers as a whole group indicate that the ECA (Sports) program supports the development of the all-round individual through the wide range of activities offered in the schools. To achieve this, schools lend their support in ensuring that adequate staff is assigned to the various activities and that teachers receive adequate financial assistance and resources. Furthermore, teachers agree that the program meets the needs and interests of the school, which includes providing pupils the opportunities to participate in mass and competitive activities. Though the program has helped pupils to identify with the school, the teachers were unable to confirm that the time and opportunity spent with their pupils was worthwhile and beneficial in understanding their pupils better.

Teachers' emphasis and activity plan

According to the teachers in the study, their program caters to the physical, social, emotional, intellectual and moral development of the all-round individual. In addition,

their 30-week plan is in line with the time frame recommended by the Ministry of Education. Teachers report that their activities are challenging and stimulating and that their pupils benefit as skills are taught in a progressive manner.

Pupil participation pattern

Teachers agree that pupil participation in ECA (Sports) is attributable to their interest in sport and the influence of their peers.

Principals' support and involvement

From the responses of the participants, they perceive their principals to be supportive of the ECA (Sports) program and encourage the school to work on an all-round development plan for their pupils.

Participation of sports colleagues

In general, ECA sports teachers are perceived by their peers to be willing to contribute to the total development of their pupils. They are also seen to be fairly committed and enthusiastic in performing their ECA duties, keen to organise intra-school games as well as attend relevant courses at an opportune time. However, in spite of all these positive attributes, they are eager for the school to employ external coaches to relieve them of their coaching duties.

Research Question #2: What do secondary school teachers perceive to be the strengths of the ECA (Sports) program in the schools?

The strengths of the program are determined from respondents' views on the impact of the program on the school, pupils and staff members.

1. Participants concur that among the pupils, school and staff members, the pupils are the direct beneficiaries of the program. Among the major benefits to the pupils, results show that the program enables the pupils to:
 - learn teamwork and co-operation
 - gain competitive game exposure
 - improve on their social skills
 - take on leadership roles
 - become more confident
 - learn healthy habits
 - plan and organise school activities.
2. Regarding the advantages of the program for the school, participants are not overly concerned about the kind of reputation the school gains as a result of attaining achievement in the schools' sports arena. In addition, they are not convinced that the program has made an impact in improving discipline in the school.
3. From the indecisive responses received, the results indicate that participants had doubts on the influence of the program to bring the staff members closer together.

Research Question # 3: What do secondary school teachers perceive to be the main concerns in the ECA (Sports) program?

Participants' views were sought on (1) the need for development of an ECA (Sports) curriculum, (2) the importance and relevance of competition in the all-round development of the individual and (3) issue of equity in the grading scheme to four pupil

groups, particularly the medal winners, intra-school game participants, sports leaders and organisers, and non-medal winners. Furthermore, through an open-response format, participants were asked to share their views and opinions on (1) recommendations to improve the grading system, (2) other concerns in the program and (3) suggestions and comments to enable schools to plan and implement an all-round development program for their pupils.

1. The need for the Education Ministry to provide an ECA sports curriculum is supported by 167 (60.1%) of the ECA (Sports) teachers.
2. There is strong support (from “important” to “very important”) to include the suggested curriculum topics in the ECA (Sports) curriculum. The topics appear to group themselves into three distinct groupings based upon priority. Game rules, fair play, game skills, tactics and strategies are ranked as top priority topics while topics that relate to the roles and responsibilities of the player and captain, basic first aid and evaluation of pupils’ learning are ranked second in priority. Topics that focus on tournament organisation as well as the roles and responsibilities of the tournament manager and umpire receive the lowest ranking but still within the “important” range.
3. In general, participants display a favourable inclination toward competition, in that, it plays an important and relevant role in the program.
4. As to how important the grading scheme is to their pupils, the teachers regarded the grading scheme as “important”.
5. Although the participants perceive the grading scheme to be a fair system to the four pupil groups; namely, (1) medal winners, (2) intra-school game participants,

- (3) sports leaders and organisers and (4) non-medal winners, they consider the medal winners to be given a slightly fairer deal than the other three groups.
6. Teachers are of the opinion that that the grading scheme could be improved by:
- recognising the varying abilities of the pupils, be it in performance, leadership or organisational skills
 - reviewing the emphasis on achievement and participation
 - adopting an accumulative system to gain more ECA points.
7. In order to implement the program well, teachers are most concerned with the financial and resource support given to them. Of special concern is the lack of trained personnel to run the program. Again, teachers voice their concerns on the preference given to competition and achievement and the biased grading system. Other concerns mentioned are:
- academic emphasis and ranking
 - teachers' ECA workload
 - lack of parental support.

In the attempt to summarise the differences in teachers' views on the present status, strengths and concerns toward the ECA (Sports) program as it relates to gender, school types and years of teaching experience, the findings are presented in research questions 4 – 6. Unless specifically mentioned, the views of male and female teachers, teachers of the three school types and of different years of teaching experience are considered similar to the total group as reported in research questions 1 – 3.

Research Question #4: How do male and female teachers differ in their views on the present status, strengths and concerns of the ECA (Sports) program?

School's emphasis and support

The results indicate that male teachers perceive more positive reactions than the female teachers with regards to the:

- range of activities offered at the school
- schools' support in allocating more resources to the program
- schools' willingness to provide financial assistance
- impact of the program in creating a school identity among the pupils
- emphasis given to inter-school competition
- extent of the program in fulfilling the needs and interests of the school.

Teachers' activity plan

In response to the 30-week activity plan, results indicate that male participants are more convinced to follow Ministry's recommended time frame than the female participants.

Participation of sports colleagues

Results reveal that female participants seem to perceive more pressure to produce results at the inter-school competitions than the male teachers but the extent of the pressure is relatively low as it falls within the undecided range.

Strengths of the program

The results indicate that males tend to show more concern for their schools to be recognised for desirable sporting behaviour than their female colleagues. Moreover,

males displayed more support toward the program's influence to improve the discipline in the school than the female teachers.

Concerns about the program

In reference to the equity of the grading scheme, the male teachers perceive the scheme to be fairer to the intra-school game participants than their female colleagues.

Research Question # 5: How do teachers from the secondary schools -- government, government-aided and independent/autonomous schools -- differ in their views on the present status, strengths and concerns of the ECA (Sports) program?

Schools' emphasis and support

Participants from the three school types showed differences in their perceptions with regards to the:

- allocation of ECA duties to the staff
- availability of resources
- organisation of a balanced range of mass participatory and competitive activities for their pupils.

However, Scheffe test was unable to detect group differences among the three groups as the differences were of borderline significance.

Teacher emphasis and activity plan

Although results reveal that significant differences are present among the participants in the way they conduct their activities to allow the pupils to learn progressively from simple to complex tasks, Scheffe tests fail to provide the differences among the groups.

Participation of ECA sports colleagues

Results reveal three significant differences. Firstly, though results fall in the undecided range with a small degree of difference between them, the **IND/AUT** teachers show more positive reaction toward their ECA duty than the **GOV** teachers. Secondly, the results imply that **IND/AUT** teachers approach their ECA duties with more commitment and enthusiasm than the **GOV** and **GAD** teachers. Thirdly, **GOV** teachers express significantly more support to organise intra-school activities for their pupils than the **IND/AUT** and **GAD** teachers.

Strengths of the program

Results indicate that **IND/AUT** teachers seem to show more concern of their schools' sports reputation than the **GOV** teachers.

Research Question #6: How do teachers with varying lengths of teaching experience -- less experienced, experienced and more experienced -- differ in their views on the present status, strengths and concerns of the ECA (Sports) program?

School's emphasis and support

MOREEXP teachers perceive their schools' overall support and emphasis more favourably than the **LESSEXP** teachers. In addition, **EXP** teachers show more positive support and interest than the **LESSEXP** teachers with regards to staff ECA allocation and organisation of school based mass participatory and competitive activities.

Teachers' emphasis and activity plan

Results reveal that **MOREEXP** teachers are more willing to follow Ministry's recommended 30-week time frame guideline than the **LESSEXP** teachers. **LESSEXP**, **EXP** and **MOREEXP** teachers differ significantly with regards to incorporating

progressive learning into their 4-year time frame, but post hoc tests fail to indicate which groups differ.

Principals' support and involvement

The results infer that **EXP** and **MOREEXP** teachers viewed their principals to show more support and involvement in the promotion of all-round development in their pupils than the **LESSEXP** teachers.

Participation of ECA sports colleagues

The **MOREEXP** teachers express stronger feelings than the **LESSEXP** teachers with regards to their colleagues' eagerness to (1) upgrade themselves, (2) organise intra-school activities and (3) seek external assistance to coach the school teams. In addition, **MOREEXP** teachers perceive significantly stronger support than the **LESSEXP** and **EXP** teachers toward colleagues' commitment and enthusiasm in the program.

Strengths of the Program

1. Although **LESSEXP**, **EXP** and **MOREEXP** teachers agree on pupils benefiting from the program, **MOREEXP** teachers' are significantly more positive than the **LESSEXP** teachers in their perceptions of the program to help pupils:
 - become more aware of healthy living
 - build confidence
 - manage their time effectively
 - work and co-operate as a team
 - plan and organise student activities.

2. **MOREEXP** teachers perceive significantly stronger support regarding the program's impact on the school reputation, tone and discipline than the **LESSEXP** teachers.

Concerns of the Program

1. In response to the suggested curriculum topics to be included in an ECA (Sports) curriculum, the **LESSEXP** and **EXP** teachers perceive basic first aid to be of more importance than the **MOREEXP** teachers.
2. In response to the importance of competition in the ECA (Sports) program, the **LESSEXP** teachers show more competitive drive than their **MOREEXP** colleagues.
3. The **MOREEXP** teachers perceive the grading scheme to be fairer to the sports leaders and organisers than the **EXP** and **LESSEXP** teachers.

Research Question #7: What changes would secondary school teachers recommend to the present ECA (Sports) program?

From the responses of the teacher participants, it appears that they are not asking for any drastic changes to be made to the existing system. Instead they would like the Ministry to take stock of the present situation, with special emphasis and attempt to:

- define the ECA priorities and address the direction the program intends to take
- upgrade the ECA status
- provide training, financial and resource support
- devise an equitable distribution of teachers' academic and ECA load.

Implications of the Study

In view of both the External Review Team's concern to put more emphasis on the development of the all-round individual (Ministry of Education, 1998) and Prime Minister Goh Chok Tong's call to "revisit the fundamentals" of education (J. Tan, 1998), it is indeed an opportune time to examine the present status of the ECA program. The timing could not be more appropriate as the nation prepares to step into the next millennium. Entering the new era against a backdrop of economic and political instability in the region, the nation will face new challenges and encounters. In order for a small nation like Singapore to stay competitive and survive in the world economic market, schools will have a vital role to play. The ECA program, conducted beyond the classroom will offer plenty of opportunities to nurture and develop pupils for the task ahead. This study with reference to the ECA (Sports) program aims to examine whether the ECA policy and present status are capable of preparing the pupils to face the challenges ahead.

The results of the study hold significant importance for the policy makers – Ministry of Education, the program implementers – ECA sports teachers and the pupils who are recipients of the program. From the 57.5% returns received from the participants, their collective views and opinions represent a unified voice. Teachers, who are the direct implementers, are given the opportunity to make known their views and reactions as a group to the Ministry. To the Ministry, feedback from the teachers should be seen as a positive indication that teachers are concerned about educational policies and plans. Taking time and effort to complete the 79-item questionnaire does reveal that teachers have the interest of the pupils at heart. Through the questionnaire, teachers appraised the ECA (Sports) program. In adopting an open mind to listen to what the ECA sports

teachers have to say, policy makers will be making the effort to stay abreast of what is happening at the school level. This might help to give some impetus to the policy makers as they decide on future national policies and directions.

Generally, teachers seem to believe that the ECA (Sports) program caters to the nurturing of the physical, moral, social, emotional and intellectual development of the individuals. Through the varied range of sporting activities organised at mass participatory and competitive levels, teachers are in agreement that the program offers opportunities to develop the all-round individual it proposes to achieve.

Teachers concur that the strength of the program lies in the impact it creates on the pupils, who are the direct beneficiaries of the program. Teachers are willing to be involved in moulding their pupils to be better persons. However, while trying to implement an all-round development plan in the schools, teachers are faced with obstacles and are more often than not caught in contradictory situations. Of the diverse and mixed concerns raised, they are not isolated issues, but are intricately related to each other. This presents a snowballing effect and consequently, the system finds itself caught in a vicious cycle. For instance, the strive to achieve has created a competitive environment and in order to recognise the achievements generated by this emphasis, medal winners are rewarded with scoring the most points in the grading system. So, despite the fact that teachers are supportive of the intended objectives of the ECA (Sports) program, it seems that the program has steered toward competition and lost sight of the main theme.

Although research on ECA (Brown, 1988; Holland & Andre, 1987; McNeal, 1998; Otto, 1982; Taylor & Chiogioji, 1988) has not been convincing and conclusive on the merits of pupil ECA participation, research in adolescent development, moral

development and motivation have been able to offer insight and understanding of the needs and motivational processes of children and youth. What is succinct in their findings is the concern for children and youth to transit smoothly from adolescence to adulthood. To achieve this, researchers in adolescent development stress that adolescents be given the opportunities to explore and be involved in life experiences. Furthermore, it is important that they experience success in what they do. Achievement goal theorists find that in preparation for adult living, adolescents need to feel competent. This competence is achieved through hard work and perseverance toward mastering and improving their skills/tasks. In recognition of their achievements, the reward system should, as far as possible, reflect the learning they have accomplished.

Having lived and worked in a competitive society, teachers acknowledge the importance and relevance of competition and they see the need to incorporate it into the program. But they do seem to be rather apprehensive to allow competition to be the central focus at the expense of recognising the varying abilities of the general pupil population. They reckon that the program should be fair and beneficial to all pupils in preparing them for adult living. It is with the general student population in mind that they see the urgent need to review the ECA policy and its emphasis. Thus, before schools can even draw up and implement an all-round development plan for their pupils, they are in dire need of guidance and direction.

Recommendations

The following recommendations are written not with the intention to revamp and do away with the existing program, but rather to build and improve the program to help and direct schools toward a successful implementation of the ECA (Sports) program.

1. Review the ECA (Sports) program to include recognition achievement in performance, leadership and organisational skills as well as to encourage pupil learning.
2. Appraise the grading scheme to ensure that an equitable and systematic evaluation method is in place, providing evidence that predetermined goals and objectives have been met.
3. Integrate a sports development program for ECA sports teachers through collaborating the expertise and resources of the Singapore Sports Council, School of Physical Education and Ministry of Education.
4. Establish an ECA sports curriculum to determine a scope and sequence and desired learning outcomes.
5. Formalise a mentoring system, utilising the expertise of experienced teachers to initiate the newer teachers into the ECA (Sports) program.

Suggestions for Future Research

Based on the results of this study, the following topics or methods are recommended for future research.

1. Apply factorial analysis of variance to look into the interaction of variables -- gender, type of school and years of teaching experience – on the ECA (Sports) program.
2. Utilise qualitative techniques, such as single subject case studies or interviews to provide an understanding of the different perceptions held by teachers with regards to gender, type of school they teach in and total years of teaching experience toward the ECA (Sports) program.

3. Examine pupils' perceptions toward the ECA program by comparing the medal winners, intra-school game participants, sports leaders and organisers, and non-medal winners.
4. Study pupil benefits from the program using a questionnaire or interview approach.

Conclusion

In conclusion, it is obvious from this study that in implementing the ECA (Sports) program, teachers encounter conflicting and contradictory issues. On the one hand, the program, in theory stresses the development of the all-round individual, but in practice, the message sent out to schools, promotes achievement and excellence through competition, benefiting only a minority group of pupils. If these issues are ignored, it might not be surprising to find teachers losing interest and enthusiasm in carrying out their ECA duties and, ultimately, confidence in the program. By adopting a proactive approach of listening to the teachers, the Education Ministry may be able to erase the inconsistencies and doubts existing within the system, and instil the confidence that is much needed and desired to run a successful ECA (Sports) program.

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APPENDIX A

CORE AND OPTIONAL GROUP OF ACTIVITIES

Note: From Extra Curricular Activities Guidelines,
Ministry of Education, Singapore 1995 (p. 7)

CORE ECA AND OPTIONAL ECA

SPORTS & GAMES / ADVENTURE	UNIFORMED ORGANIZATIONS	CULTURAL ACTIVITIES/ CLUBS & SOCIETIES	OPTIONAL ECA
<ol style="list-style-type: none"> 1. Air Rifle 2. Badminton 3. Basketball 4. Cricket 5. Canoeing 6. Gymnastics 7. Hockey 8. Judo 9. Netball 10. Rugby 11. Sailing 12. Sepaktakraw 13. Soccer 14. Softball 15. Squash 16. Swimming 17. Table Tennis 18. Tennis 19. Tenpin Bowling 20. Track & Field 21. Volleyball 22. Waterpolo 23. Outdoor Pursuits 24. Wushu 	<ol style="list-style-type: none"> 1. National Cadet Corps (Boys)* 2. National Cadet Corps (Girls) 3. National Cadet Corps (Air) 4. National Cadet Corps (Sea) 5. National Police Cadet Corps (Boys)* 6. National Police Cadet Corps (Girls) 7. Scouts 8. Guides 9. Red Cross 10. St John 11. Boys' Brigade 12. Girls' Brigade 13. Band* <p>Note: Band is categorised under Uniformed Organisations for the purpose of ECA marks.</p>	<ol style="list-style-type: none"> 1. Choir 2. Dance 3. Drama 4. Singapore Youth Orchestra 5. Instrumental Groups <ol style="list-style-type: none"> i) Angklung ii) Guitar iii) Harmonica iv) Recorder v) School Orchestra vi) Others 6. Art & Craft <ol style="list-style-type: none"> i) Chinese Painting ii) Chinese Calligraphy iii) Photography iv) Others eg. Pottery 7. Language & Culture <ol style="list-style-type: none"> i) Eg. LDDS 8. Community Service <ol style="list-style-type: none"> i) Interact ii) Others eg. Leo Club 9. Youth Flying Club 10. Chess <ol style="list-style-type: none"> i) International Chess ii) Chinese Weiqi 11. Audio Visual 12. Library 13. Computer Club 	<ol style="list-style-type: none"> 1. Aeromodelling 2. Civics 3. Gardening 4. Geographical 5. Historical 6. Home Economics 7. Mathematics 8. Philatelic 9. Science 10. Technical 11. Others

* Mandatory Activities

APPENDIX B

ECA MARKS AWARD SCHEME

Note: From Extra Curricular Activities Guidelines,
Ministry of Education, Singapore, 1995 (pp. 11-16)

ECA MARKS AWARD SCHEME (SPORTS)

	5 marks	4 marks	3 marks	2 marks	1 mark
A. Continuous Participation	Active participation with 75% attendance for 5 years	Active participation with 75% attendance for 4 years	Active participation with 75% attendance for 3 years	Active participation with 75% attendance for 2 years	Active participation with 75% attendance for 1 years
B. Achievement	<p>a. Represent Singapore Schools *at local competitions for 2 or more years</p> <p>b. Represent Singapore Schools* at</p> <ul style="list-style-type: none"> • Asean Schools • Asian Schools • Regional competitions 	Represent Singapore Schools* at local competitions organised by NSAs	Represent school at inter-school competitions for more than 2 years	Represent school at inter-school competitions	Represent house or class at intra-school competitions

* Represent Singapore Schools - Pupils / Schools selected by MOE

ECA MARKS AWARD SCHEME (UNIFORMED YOUTH ORGANISATIONS)

	5 marks	4 marks	3 marks	2 marks	1 mark
A. Continuous Participation	Good record of efficient service for 5 years	Good record of efficient service for 4 years	Efficient service for 3 years	Efficient service for 2 years	Efficient service for 1 year
B. Achievement					
1. National Cadet Corps	Cadet Lieutenant Master Sergeant	Staff Sergeant	Sergeant	Corporal	Lance Corporal
2. National Police Cadet Corps	Cadet Inspector Station Inspector	Staff Sergeant	Sergeant	Corporal	Lance Corporal
3. Boys' Brigade	Founder's Badge Officer Cadet	Staff Sergeant	Sergeant	Corporal	Lance Corporal
4. Girls' Brigade	Brigadier's Brooch Warrant Officer	Staff Sergeant	Sergeant	Corporal	Lance Corporal
5. Scouts	President's Scout Award Venture Executive Member	Chief Commissioner's Award Venture Scout Standard	Advanced Scout Standard Senior Patrol Leader	Scout Standard Patrol Leader	Assistant Patrol Leader
6. Guides	President's Guide Award	1 st Class Badge	Company Leader	2 nd Class Badge Patrol Leader	Patrol Second
7. Red Cross Youth	Cadet Officer	Warrant Officer	Sergeant	Corporal	Lance Corporal
8. St John	Probationary Divisional Officer Cadet Leader	Staff Sergeant	Sergeant	Corporal	Lance Corporal
9. Band	Senior Staff Sergeant (Drum Major or Band Major)	Staff Sergeant (Assistant Drum Major)	Sergeant	Corporal	Lance Corporal

ECA MARKS AWARD SCHEME (CULTURAL ACTIVITIES / CLUBS & SOCIETIES)

	5 marks	4 marks	3 marks	2 marks	1 mark
A. Continuous Participation	Active participation with 75% attendance for 5 years	Active participation with 75% attendance for 4 years	Active participation with 75% attendance for 3 years	Active participation with 75% attendance for 2 years	Active participation with 75% attendance for 1 year
B. Achievement					
1. Music & Dance <ul style="list-style-type: none"> • Dance • Drama • Choir • Instrumental • Musical 	a. Represent Singapore Schools* at regional competition / festival for 2 or more years b. Represent Singapore at international competition / festival	a. Represent Singapore Schools* at local competition / festival for 2 or more years b. Represent Singapore Schools* in regional competition / festival	a. Represent school in SYF Music and Dance central judging / competition b. Represent Singapore Schools* at local competition	a. Represent school in outside performances: musical activities, dance, instrumental, drama, choral b. Conductor, Accompanist, Soloist or Leader	Perform in school musical activities, instrumental, dance, choral, drama etc
2. Clubs & societies <ul style="list-style-type: none"> • Art & Craft • Language & Cultural Society • Chess • Others 	a. Represent Singapore Schools* at regional competitions for 2 or more years b. Represent Singapore at international competitions or exhibitions	a. Represent Singapore Schools* at local competitions or exhibitions for 2 or more years b. Represent Singapore Schools* in regional competitions c. Works accepted for international exhibitions or competitions	a. Works accepted for SYF Art & Craft exhibition b. Represent Singapore Schools* at local competitions or exhibitions	a. Represent school at inter-school competitions or exhibitions b. Represent school at local exhibitions or competitions	Participate in school art & craft exhibitions, competitions, debates, quizzes etc

* Represent Singapore Schools - Pupils / Schools selected by MOE

ECA MARKS AWARD SCHEME (CLUBS & SOCIETIES)

	5 marks	4 marks	3 marks	2 marks	1 mark
3. Library & Audio Visual			Head or secretary of library / audio visual committee	2 or more years' service as member of the library / audio visual committee	Service as member of the library / audio visual committee
Community Service	Organise community service / environmental projects outside for 2 or more years	a. Present seminar papers at regional conferences b. Organise community service / environmental projects outside Singapore	a. Present papers at local conferences b. Organise community service / environmental projects for 2 or more years	a. Represent school at seminars of workshops b. Organise community service / environmental projects	Participate in community service projects organised by the school
4. Youth Flying Club	Private Pilot Licence holder	Successfully completed basic flying course	Successfully completed advanced aeromodelling course	Successfully completed intermediate aeromodelling course	Successfully completed basic aeromodelling course

AWARD OF BONUS MARKS

BONUS MARKS	5 marks	4 marks	3 marks	2 marks	1 mark
1. Bonus marks are awarded for:	SPORTS & GAMES				
a. High standards of performance and achievements in	Represent Singapore at international competitions:	Won medal at Asean/Asian Schools Competitions	Won a Gold medal at national inter-school competitions	Achieve 2 nd , 3 rd and 4 th placings at national inter-school competitions	Qualify from zone to national level inter-school competitions
<ul style="list-style-type: none"> • Sports and Games • Uniformed Groups • Community Service • Cultural Activities 	<ul style="list-style-type: none"> • SEA Games • Asian Games • Commonwealth Games • World Championships • Olympics 				
b. Participation at SYF Opening Ceremony and National Day Parade (NDP)	UNIFORMED GROUPS				
c. Leadership roles			Participate in NDP for 2 or more years	a. Participate in SYF Opening Ceremony	
d. Attaining the National Youth Achievement Award				b. Participate in NDP	
2. Bonus marks are awarded only at the end of 4/5 year in a secondary school	CULTURAL ACTIVITIES				
3. Only the highest bonus marks of any one ECA will be considered.	<u>Music Groups</u>				
4. For participation in a second ECA, at school representative level, an additional one bonus mark may be added over and above the bonus mark accrued.	Awarded gold medal or equivalent at an international music competition sanctioned by MOE.	Awarded silver medal or equivalent at an international music competition sanctioned by MOE.	Awarded bronze medal or equivalent at an international music competition sanctioned by MOE.	a. Awarded gold medal or Certificate of Distinction in SYF central judging.	Awarded silver medal or Certificate of Merit in SYF central judging
The maximum bonus mark that can be scored is 6.				b. Participate in SYF Opening Ceremony	
				c. Participate in NDP	

AWARD OF BONUS MARKS

BONUS MARKS	5 marks	4 marks	3 marks	2 marks	1 mark
1. Bonus marks are awarded for:	<u>Clubs & Societies</u>				
a. High standards of performance and achievements in <ul style="list-style-type: none"> • Sports and Games • Uniformed Groups • Community Service • Cultural Activities 	Awarded gold medal or equivalent at an international competition or exhibition sanctioned by MOE.	Awarded silver medal or equivalent at an international competition or exhibition sanctioned by MOE.	a. Awarded silver medal or equivalent at an international competition or exhibition sanctioned by MOE.	a. Awarded gold medal or Certificate of Distinction at national competition.	a. Awarded gold medal or Certificate of Distinction at national competition.
b. Participation at SYF Opening Ceremony and National Day Parade (NDP)			b. Head	b. More than 2 years service as: <ul style="list-style-type: none"> • Prefect • Monitor • School team captain • House captain • Class chairman • Member of editorial board • Assistant editor of magazine • Office bearer or committee member of club/society • Member of choral excellence choir • Student council 	b. More than 2 years service as: <ul style="list-style-type: none"> • Prefect • Monitor • School team captain • House captain • Class chairman • Member of editorial board • Assistant editor of magazine • Office bearer or committee member of club/society • Member of choral excellence choir • Student council
c. Leadership roles			<ul style="list-style-type: none"> • Prefectorial Board • Co-operatives • Students' Council 		
d. Attaining the National Youth Achievement Award					
2. Bonus marks are awarded only at the end of 4/5 year in a secondary school					
3. Only the highest bonus marks of any one ECA will be considered.					
4. For participation in a second ECA, at school representative level, an additional one bonus mark may be added over and above the bonus mark accrued.			Participate in NDP for 2 or more years	a. Participate in SYF Opening Ceremony b. Participate in NDP	
5. The maximum bonus mark that can be scored is 6.			Awarded the National Youth Achievement Award Gold	Awarded the National Youth Achievement Award Silver	Awarded the National Youth Achievement Award Bronze

APPENDIX C

ECA GRADING SCHEME

Note: From Extra Curricular Activities Guidelines,
Ministry of Education, Singapore, 1995 (p. 5)

ECA GRADING SCHEME

SCORING TABLE

4-YEAR SECONDARY COURSE		5-YEAR SECONDARY COURSE	
Marks	Grade	Marks	Grade
10 & over	A1	11 & over	A1
9	A2	10	A2
8	B3	9	B3
7	B4	8	B4
6	C5	6 – 7	C5
4 – 5	C6	5	C6
3	D7	3 – 4	D7
1 – 2	E8	1 – 2	E8
0	F9	0	F9

APPENDIX D
SAMPLE QUESTIONNAIRE

SURVEY QUESTIONNAIRE

Note: Your participation in this study is entirely voluntary. Completion and return of the questionnaire indicates consent. The information provided will be used for analysis purposes and no individual responses or schools will be identified.

SECTION I: GENERAL INFORMATION

This section seeks general information regarding yourself, your school and your involvement in the school's ECA (Sports) program. Please indicate your responses with a tick (✓) in the boxes provided. Your response to all questions will be much appreciated.

- 1 Sex: Male Female
- 2 Please check the relevant box(es) the type of school you are currently teaching in:
- Independent school Autonomous school
- Government school Government-Aided school
- 3 Number of years that you have been teaching:
- 0 – 4 5 – 10 11 – 15 16 – 20 21 +
- 4 Number of years that you have been teaching at the present school:
- 0 – 4 5 – 10 11 – 15 16 – 20 21 +
- 5 Total number of years that you have been involved in the ECA (Sports) program?
- 0 – 4 5 – 10 11 – 15 16 – 20 21 +
- 6 My primary role in the ECA is that of a:
- Coach Assistant Coach Administrator
- Others Please specify: _____
- 7 State your main ECA sport that you are currently involved in:
- _____

8 I am in-charge of the:

Recreation Group Competition Group Both Groups

9 Have you received any training specific to your present ECA role?

Yes No

If Yes, please list the 3 most recent courses you attended, the year attended and the conducting agencies:

10 Did you request this ECA duty?

Yes No

If Yes, please state your reason:

If No, will you be asking for a change in ECA duty next year?

Yes No

My reason being:

SECTION II

PART A: PRESENT PROGRAM
PART B: STRENGTHS OF THE PROGRAM

PART A: PRESENT PROGRAM

On a scale of: 5 = Strongly Agree (SA)
 4 = Agree (A)
 3 = Undecided (U)
 2 = Disagree (D)
 1 = Strongly Disagree (SD)

Indicate with a tick (✓) in the boxes provided, the strength of your agreement or disagreement to each of these statements.

	SA	A	U	D	SD
	5	4	3	2	1
The ECA (Sports) Program in my school:					
11	aims to support the development of the all-round individual.				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	provides a wide range of activities to cater to the needs and interests of the pupils.				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13-15	receives adequate support from the school in:				
13	staff allocation				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	financial assistance				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	resource availability				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	is structured to allow teachers time and opportunity to learn about the needs of each pupil.				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	helps the pupils to create a strong sense of identity to the school.				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	provides equal opportunities for mass participatory activities and competitive activities.				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	emphasises the preparation of the school teams for competitions.				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	meets the needs and interests of the school.				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

My ECA activity plan:

	SA	A	U	D	SD
	5	4	3	2	1
21 is based on a 30-week activity schedule.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22-26 includes activities that cater to the developmental level of the individual, in the following aspects:					
22 physical,	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23 social,	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24 emotional,	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25 intellectual	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26 moral.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27 is systematically planned to enable pupils to learn in a progressive manner throughout the 4 year program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28 provides a challenging and stimulating learning environment with different but related activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

My pupils:

29 are motivated to join my ECA because they are interested to learn more about the sport.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30 are influenced by their friends to join the ECA.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

My Principal:

31 is supportive of the ECA (Sports) program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32 encourages teachers to share in the vision of the development of the all-round individual through the ECA (Sport) program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33 ensures that the school; staff and students work towards this shared vision.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The ECA (Sports) teachers in my school:

	SA	A	U	D	SD
	5	4	3	2	1
34	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
are encouraged and supported to upgrade their knowledge and skills in their ECA.					
35	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
see their ECA duties as an added burden to their teaching load.					
36	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
are proud to play a contributing role in the total development of the pupils.					
37	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
take on their ECA duties with commitment and enthusiasm.					
38	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
are keen for the school to employ external coaches to coach the school teams.					
39	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
are pressured to show results at the inter-school competitions.					
40	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
organise inter-house/class games for the pupils.					

PART B: STRENGTHS OF THE PROGRAM

- 41–53 On a scale of:
- 5 = Very Much (VM)
 - 4 = Much (M)
 - 3 = Undecided (U)
 - 2 = Little (L)
 - 1 = Very Little (VL)

Indicate with a tick (✓) in the boxes provided, how has your school benefited from the ECA (Sports) program?

	VM	M	U	L	VL
	5	4	3	2	1
41	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
attaining a winning reputation in the schools' sports scene.					
42	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
gaining recognition for showing sporting behavior in the schools' competitive scene.					
43	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
building a strong sense of school identity.					

- 69 One of the highlights of the ECA (Sports) program is the inter-school games competition. On a scale of:

4 = Very Important (VI)
 3 = Important (I)
 2 = Somewhat Important (SI)
 1 = Not Important (NI)

	VI	I	SI	NI
	4	3	2	1
How important should inter-school competition be in the ECA (Sports) program?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

My reason being:

- 70 On a scale of:

4 = Very Relevant (VR)
 3 = Relevant (R)
 2 = Somewhat Relevant (SR)
 1 = Not Relevant (NR)

	VR	R	SR	NR
	4	3	2	1
How relevant is competition in the ECA (Sports) program in providing all-round development for the pupils?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

My reason being:

- 71 On a scale of:

4 = Very Important (VI)
 3 = Important (I)
 2 = Somewhat Important (SI)
 1 = Not Important (NI)

	VI	I	SI	NI
	4	3	2	1
In your opinion, how important is the ECA grading system to the pupils?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

72-75 The ECA grading scheme has been designed to reward pupils' effort, contribution and achievement. On a scale of:

4 = Most Fair (MF)

3 = Fair (F)

2 = Unfair (U)

1 = Most Unfair (MU)

	MF	F	U	MU
	4	3	2	1
72	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
73	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
74	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
75	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
76	What recommendations would you suggest to further improve the ECA grading scheme that could encourage more pupil participation in the ECA (Sports) program? <hr/> <hr/> <hr/> <hr/> <hr/>			

77 Are there other concerns in the ECA (Sports) program that you would like to share?

- 78 What changes, if any, would you like to see in the Ministry's ECA (Sports) policy to enable schools to plan and implement an all-round development program for their pupils?

- 79 Please feel free to provide any additional information.

Thank you for your responses and co-operation in this project. Please be assured that the information you have provided will be treated confidentially.

APPENDIX E

SAMPLE CONTACT LETTER TO SCHOOL PRINCIPALS

To: Name of Principal
Principal
Name of School

Date: 1 August 1998

Dear

**RE: REQUEST FOR CONTACT INFORMATION
TO CONDUCT MASTERS' PROJECT**

As part of my masters' program at the University of Victoria, I am conducting a research project on the perceptions of secondary school teachers toward the Extracurricular Activities (ECA) Sports Program in Singapore. Please be informed that Planning Division, Ministry of Education has granted me permission to conduct this survey in Singapore schools.

Our ECA Program offers excellent learning opportunities for the pupils beyond the classroom and if the strengths and merits of the existing program are utilized maximally to the advantage of the pupils, it may provide for the development of the all-round individual. Further, in view of the External Review Team's recommendations to give more attention to the development of the all-round individual, it is timely to reflect on the rationale of the ECA Program. It was with the concern of how we could improve the present ECA program that the study was initiated and developed. The purpose of my study is to examine teachers' perceptions toward the present ECA (Sports) program. The study aims to focus on the present status, the strengths and main concerns of the ECA (Sports) program. I am involving teachers in my study because being the direct implementers of the program, they understand the needs and interests of the pupils. The information gathered would provide valuable input as to how the ECA program could be improved to meet pupils' needs and interest.

At this initial stage of the project I am identifying the names of teachers who are involved in the ECA (Sports) program. I would like your staff to participate in the survey. I would very much appreciate if you could fax me at **2886065** a list of your staff who is currently involved in the ECA (Sports) program in your school.

As I am targeting to collect the teacher returns by the end of September, I would appreciate if the names could be sent to me by **15 August 1998** to allow me sufficient time to prepare the surveys to the teachers. If you require further information regarding my project, do not hesitate to contact me at my email address, tsaic@uvic.ca.

Thank you for your assistance and cooperation. I look forward to hear from you in the near future.

Yours sincerely,

Chang Tsai
Graduate Student

APPENDIX F

SAMPLE COVER LETTER TO PARTICIPANTS

31 August 1998

To:

Dear

SURVEY QUESTIONNAIRE ON THE ECA (SPORTS) PROGRAM

My two and a half years stint at the ECAC Branch, Ministry of Education, gave me valuable insight and understanding of the ECA policy and the way it is implemented in the schools. With the changing economic and social trends that affect our youth today, it has caused me to think how best can the ECA program be planned and implemented so as to equip our pupils with the necessary skills for a smooth transition into adulthood.

As part of my masters' program at the University of Victoria, I am conducting a research project on the perceptions of secondary school teachers towards the Extracurricular Activities (ECA) Sports Program in Singapore. The Ministry and the University have granted me permission to conduct the study.

The purpose of my project is to study teachers' perceptions of (a) the present status, (b) the strengths and (c) the main concerns of ECA (Sports) program.

The study will involve teachers, like you, who are the direct implementers of the ECA program. As you work closely with the pupils, you understand their needs and interests. I believe your honest and truthful feedback will provide valuable information as how best we can improve the existing system in nurturing all-round individuals in our pupils. I sincerely hope that you will find time in your busy schedule to participate in this study. Participation will require approximately forty-five to sixty minutes of your time to answer all the three sections of the questionnaire. The instructions as to how they are to be completed are included with each section of the questionnaire.

Participation in this study is entirely voluntary. You may, at your discretion, withdraw from the study at any time and that refusal to participate will have no effects on employment status. Please be assured that the information collected in this questionnaire will be kept confidential and used for the purposes of this study only. Return of the completed questionnaire indicates your consent and no identification will be required on the questionnaire.

Should you agree to participate, I would appreciate if the completed questionnaire could be posted to me by **16 September 1998** in the stamped enveloped provided. The results of the study will be made available through a presentation to be announced at a later date.

If you require further information regarding the project, you may contact my supervisor,

Dr H. David Turkington,
Director, Secondary Teacher Education,
University of Victoria,
Phone (250) 721-7865
FAX (250) 472-4641
Email: daveturk@uvic.ca

and I can be reached at email address, tsaic@uvic.ca.

Thank you for your valuable time and cooperation. I look forward to hear from you in the near future.

Yours sincerely,

Chang Tsai
Graduate Student

APPENDIX G
LIST OF PARTICIPATING SCHOOLS

List of Participating Schools and their School Types

S/N	Name of Participating Schools	Independent/ Autonomous	Government	Government- Aided
1	Ahmad Ibrahim Secondary		√	
2	Ang Mo Kio Secondary		√	
3	Bartley Secondary		√	
4	CHIJ St Joseph's Convent			√
5	CHIJ St Nicholas Girls'	√		
6	Chong Boon Secondary		√	
7	Deyi Secondary		√	
8	Fuchun Secondary		√	
9	Holy Innocents' High			√
10	Maris Stella High	√		
11	Montfort Secondary			√
12	Naval Base Secondary		√	
13	North View Secondary		√	
14	Paya Lebar MGS			√
15	Peicai Secondary		√	
16	Presbyterian High			√
17	Serangoon Secondary		√	
18	Serangoon Garden Sec		√	
19	Woodlands Secondary		√	
20	Xinmin Secondary		√	
21	Yio Chu Kang Secondary		√	
22	Yishun Secondary		√	
23	Yishun Town Secondary		√	
24	Yuying Secondary			√
25	Anglican High	√		
26	Bedok South Secondary		√	
27	Bedok Town Secondary		√	
28	Broadrick Secondary		√	
29	Chai Chee Secondary		√	
30	Changkat Changi Sec		√	
31	CHIJ Katong Convent			√
32	Chung Cheng High (Main)	√		
33	Chung Cheng High (Branch)			√
34	Damai Secondary		√	
35	Dunman High	√		
36	Dunman Secondary		√	
37	East View Secondary		√	
38	Geylang Methodist Sec			√
39	Greenview Secondary		√	
40	Hai Sing High			√
41	Loyang Secondary		√	
42	MacPherson Secondary		√	
43	Manjusri Secondary			√
44	Ngee Ann Secondary			√
45	Pasir Ris Secondary		√	
46	Ping Yi Secondary		√	
47	St Andrew's Secondary			√

S/N	Name of Participating Schools	Independent/ Autonomous	Government	Government- Aided
48	St Anthony's Canossian Sec			√
49	St Hilda's			√
50	St Patrick's			√
51	Siglap Secondary		√	
52	Springfield Secondary		√	
53	Telok Karau Secondary		√	
54	Victoria	√		
55	Woodsville Secondary		√	
56	Anglo-Chinese Sec (Full)			√
57	Balestier Hill Secondary		√	
58	Beatty Secondary		√	
59	Bishan Park Secondary		√	
60	Braddell Secondary		√	
61	Bukit Merah Secondary		√	
62	Catholic High	√		
63	Christ Church Secondary			√
64	CHIJ St Theresa's Convent			√
65	First Toa Payoh Secondary		√	
66	Gan Eng Seng Secondary		√	
67	Henderson Secondary		√	
68	Hua Yi Secondary		√	
69	Methodist Girls'	√		
70	Nan Chiau High			√
71	Raffles Girls' Secondary	√		
72	Rangoon Secondary		√	
73	St Thomas Secondary			√
74	Thomson Secondary		√	
75	Whitley Secondary		√	
76	Boon Lay Secondary		√	
77	Bukit Batok Secondary		√	
78	Bukit Panjang Govt High	√		
79	Bukit View Secondary		√	
80	Bouna Vista Secondary		√	
81	Chestnut Drive Secondary		√	
82	The Chinese High	√		
83	Clementi Town Secondary		√	
84	Commonwealth Secondary	√		
85	Crescent Girls'	√		
86	Dunearn Secondary		√	
87	Fairfield Methodist Sec	√		
88	Ghim Moh Secondary		√	
89	Hong Kah Secondary		√	
90	Jin Tai Secondary		√	
91	Jurong Secondary		√	
92	Jurongville Secondary		√	
93	Kranji Secondary		√	
94	Nan Hua Secondary		√	
95	Pioneer Secondary		√	
96	Queensway Secondary		√	

S/N	Name of Participating Schools	Independent/ Autonomous	Government	Government- Aided
97	River Valley High	√		
98	St Margaret's Secondary			√
99	Shuqun Secondary		√	
100	Swiss Cottage Secondary		√	
101	Tanglin Secondary		√	
102	Teck Whye Secondary		√	
103	Yuhua Secondary		√	
104	Yusof Ishak Secondary		√	
	Total	15	67	22

APPENDIX H
RAW DATA FOR SCALED RESPONSES

RAW DATA FOR SCALED RESPONSES IN SECTION II
(Presented by Frequency and Percentage)

	Strongly Disagree 1	Disagree 2	Undecided 3	Agree 4	Strongly Agree 5
Q#11					
Males	1 (0.6%)	7 (4.2%)	9 (5.5%)	87 (52.7%)	61 (37.0%)
Females-2*	1 (0.8%)	6 (4.9%)	9 (7.3%)	73 (59.3%)	34 (27.6%)
IND/AUT schools	-	1 (2.4%)	2 (4.9%)	22 (53.7%)	16 (39.0%)
GOV schools-2*	1 (0.5%)	9 (4.5%)	12 (6.1%)	113 (57.1%)	63 (31.8%)
GAD schools	1 (2.0%)	3 (6.1%)	4 (8.2%)	25 (51.0%)	16 (32.7%)
LESSEXP years	2 (1.9%)	6 (5.7%)	10 (9.4%)	60 (56.6%)	28 (26.4%)
EXP years-1*	-	4 (4.8%)	6 (7.2%)	41 (49.4%)	32 (38.6%)
MOREEXP years-1*	-	3 (3.0%)	2 (2.0%)	59 (59.6%)	35 (35.4%)
Total	2 (0.6%)	13 (4.5%)	18 (6.3%)	160 (55.6%)	95 (33.0%)
Q#12					
Males-2*	3 (1.8%)	12 (7.4%)	14 (8.6%)	88 (54.0%)	46 (28.2%)
Females-1*	1 (0.8%)	18 (14.5%)	15 (12.1%)	68 (54.8%)	22 (17.7%)
IND/AUT schools	1 (2.4%)	7 (17.1%)	2 (4.9%)	20 (48.8%)	11 (26.8%)
GOV schools-3*	3 (1.5%)	16 (8.1%)	23 (111.7%)	110 (55.8%)	45 (22.8%)
GAD schools	-	7 (14.3%)	4 (8.2%)	26 (53.1%)	12 (24.5%)
LESSEXP years-1*	3 (2.9%)	20 (19.0%)	15 (14.3%)	45 (42.9%)	22 (21.0%)
EXP years	1 (1.2%)	5 (6.0%)	4 (4.8%)	54 (64.3%)	20 (23.8%)
MOREEXP years-2*	-	5 (5.1%)	10 (10.2%)	57 (58.2%)	26 (26.5%)
Total	4 (1.3%)	30 (10.5%)	29 (10.1%)	156 (54.4%)	68 (23.7%)
Q#13					
Males	6 (3.6%)	18 (10.9%)	21 (12.7%)	88 (53.3%)	32 (119.4%)
Females-2*	5 (4.1%)	18 (14.6%)	22 (17.9%)	63 (51.2%)	15 (12.2%)
IND/AUT schools	-	5 (12.2%)	4 (9.8%)	25 (61.0%)	7 (17.1%)
GOV schools-2*	8 (4.0%)	21 (10.6%)	29 (14.6%)	105 (53.0%)	35 (17.7%)
GAD schools	3 (6.1%)	10 (20.4%)	10 (20.4%)	21 (42.9%)	5 (10.2%)
LESSEXP years	7 (6.6%)	20 (18.9%)	15 (14.2%)	49 (46.2%)	15 (14.2%)
EXP years	1 (1.2%)	9 (10.7%)	13 (15.5%)	47 (56.0%)	14 (16.7%)
MOREEXP years-2*	3 (3.1%)	7 (7.1%)	15 (15.3%)	55 (56.1%)	18 (118.4%)
Total	11 (3.8%)	36 (12.5%)	43 (14.9%)	151 (52.5%)	47 (16.3%)
Q#14					
Males	3 (1.8%)	14 (8.5%)	14 (8.5%)	96 (58.2%)	38 (23.0%)
Females-2*	4 (3.3%)	21 (17.1%)	10 (8.1%)	74 (60.2%)	14 (11.4%)
IND/AUT schools	-	2 (4.9%)	2 (4.9%)	27 (65.9%)	10 (24.4%)
GOV schools-2*	5 (2.5%)	26 (13.1%)	20 (10.1%)	113 (57.1%)	34 (17.2%)
GAD schools	2 (4.1%)	7 (14.3%)	2 (4.1%)	30 (61.2%)	8 (16.3%)
LESSEXP years	4 (3.8%)	23 (21.7%)	13 (12.3%)	48 (45.3%)	18 (17.0%)
EXP years	3 (3.6%)	9 (10.7%)	5 (6.0%)	51 (60.7%)	16 (19.0%)
MOREEXP years-2*	-	3 (3.1%)	6 (6.1%)	71 (72.4%)	18 (18.4%)
Total	7 (2.4%)	35 (12.2%)	24 (8.3%)	170 (59.0%)	52 (18.1%)

*Missing Responses

RAW DATA FOR SCALED RESPONSES CONTINUED
(Presented by Frequency and Percentage)

	Strongly Disagree 1	Disagree 2	Undecided 3	Agree 4	Strongly Agree 5
Q#15					
Males	3 (1.8%)	18 (10.9%)	24 (14.5%)	94 (57.0%)	26 (15.8%)
Females-2*	6 (4.9%)	26 (21.1%)	15 (12.2%)	65 (52.8%)	11 (8.9%)
IND/AUT schools	1 (2.4%)	1 (2.4%)	3 (7.3%)	30 (73.2%)	6 (14.6%)
GOV schools-2*	6 (3.0%)	33 (16.7%)	30 (15.2%)	104 (52.5%)	25 (12.6%)
GAD schools	2 (4.11%)	10 (10.4%)	6 (12.2%)	25 (51.0%)	6 (12.2%)
LESSEXP years	6 (5.7%)	24 (22.6%)	19 (17.9%)	43 (40.6%)	14 (13.2%)
EXP years	3 (3.6%)	13 (15.5%)	12 (14.3%)	45 (53.6%)	11 (13.1%)
MOREEXP years-2*	-	7 (7.1%)	8 (8.2%)	71 (72.4%)	12 (12.2%)
Total	9 (3.1%)	44 (15.3%)	39 (13.5%)	159 (55.2%)	37 (12.9%)
Q#16					
Males	2 (1.2%)	35 (21.2%)	47 (28.5%)	68 (41.2%)	13 (7.9%)
Females-3*	6 (4.9%)	21 (17.2%)	38 (31.1%)	50 (41.0%)	7 (5.7%)
IND/AUT schools	-	11 (26.8%)	7 (17.1%)	22 (53.7%)	1 (2.4%)
GOV schools-3*	6 (3.0%)	37 (18.8%)	67 (34.0%)	72 (36.5%)	15 (7.6%)
GAD schools	2 (4.1%)	8 (16.3%)	11 (22.4%)	24 (49.0%)	4 (8.2%)
LESSEXP years	7 (6.6%)	32 (30.2%)	25 (23.6%)	33 (3.1%)	9 (8.5%)
EXP years-1*	1 (1.2%)	15 (18.1%)	30 (36.1%)	32 (38.6%)	5 (6.0%)
MOREEXP years-2*	-	9 (9.2%)	30 (30.6%)	53 (54.1%)	6 (6.1%)
Total	8 (2.8%)	56 (19.5%)	85 (29.6%)	118 (41.1%)	20 (7.0%)
Q#17					
Males	-	9 (5.5%)	23 (13.9%)	99 (60.0%)	34 (20.6%)
Females-1*	1 (0.8%)	14 (11.3%)	18 (14.5%)	81 (65.3%)	10 (8.1%)
IND/AUT schools	-	4 (9.8%)	6 (14.6%)	25 (61.0%)	6 (14.6%)
GOV schools-1*	1 (0.5%)	13 (6.5%)	27 (13.6%)	129 (64.8%)	29 (14.6%)
GAD schools	-	6 (12.2%)	8 (16.3%)	26 (53.1%)	9 (18.4%)
LESSEXP years	1 (0.9%)	16 (15.1%)	15 (14.2%)	60 (56.6%)	14 (13.2%)
EXP years	-	5 (6.0%)	14 (16.7%)	54 (64.3%)	11 (13.1%)
MOREEXP years-1*	-	2 (2.0%)	12 (12.1%)	66 (66.7%)	19 (19.2%)
Total	1 (0.3%)	23 (8.0%)	41 (14.2%)	180 (62.3%)	44 (15.2%)
Q#18					
Males	1 (0.6%)	20 (12.1%)	20 (12.1%)	80 (48.5%)	44 (26.7%)
Females-2*	1 (0.8%)	20 (16.35)	13 (10.6%)	73 (59.3%)	16 (13.0%)
IND/AUT schools	-	9 (22.0%)	7 (17.1%)	20 (48.8%)	5 (12.2%)
GOV schools-2*	1 (0.5%)	22 (11.1%)	21 (10.6%)	108 (54.5%)	46 (23.2%)
GAD schools	1 (2.0%)	9 (18.4%)	5 (10.2%)	25 (52.0%)	9 (18.4%)
LESSEXP years	2 (1.9%)	22 (20.8%)	16 (15.1%)	46 (43.4%)	20 (18.9%)
EXP years	-	14 (16.7%)	10 (11.9%)	46 (54.8%)	14 (16.7%)
MOREEXP years-2*	-	4 (4.1%)	7 (7.1%)	61 (62.2%)	26 (26.5%)
Total	2 (0.7%)	40 (13.9%)	33 (11.5%)	153 (53.1%)	60 (20.8%)

*Missing Responses

RAW DATA FOR SCALED RESPONSES CONTINUED
(Presented by Frequency and Percentage)

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
	1	2	3	4	5
Q#19					
Males	-	15 (9.1%)	15 (9.1%)	89 (53.9%)	46 (27.9%)
Females-4*	4 (3.3%)	13 (10.7%)	18 (14.9%)	61 (50.4%)	25 (20.7%)
IND/AUT schools-1*	-	3 (7.5%)	1 (2.5%)	24 (60.0%)	12 (30.0%)
GOV schools-3*	2 (1.0%)	19 (9.6%)	24 (12.2%)	109 (55.3%)	43 (21.0%)
GAD schools	2 (4.1%)	6 (12.2%)	8 (16.3%)	17 (34.7%)	16 (32.7%)
LESSEXP years	3 (2.8%)	18 (17.0%)	18 (17.0%)	47 (44.3%)	20 (18.9%)
EXP years-1*	1 (1.2%)	5 (6.0%)	8 (9.6%)	47 (56.6%)	22 (26.5%)
MOREEXP years-3*	-	5 (5.2%)	7 (7.2%)	56 (57.7%)	29 (29.9%)
Total	4 (1.4%)	28 (9.8%)	33 (11.5%)	150 (52.5%)	71 (24.8%)
Q#20					
Males-1*	-	12 (7.3%)	13 (7.9%)	106 (64.6%)	33 (20.1%)
Females-1*	3 (2.4%)	4 (3.2%)	30 (24.2%)	74 (59.7%)	13 (10.5%)
IND/AUT schools-1*	-	2 (5.0%)	2 (5.0%)	30 (75.0%)	6 (15.0%)
GOV schools-1*	2 (1.0%)	11 (5.5%)	33 (16.6%)	122 (61.3%)	31 (15.6%)
GAD schools	1 (2.0%)	3 (6.1%)	8 (16.3%)	28 (57.1%)	9 (18.4%)
LESSEXP years	3 (2.8%)	9 (8.5%)	19 (17.9%)	66 (62.3%)	9 (8.5%)
EXP years-1*	-	4 (4.8%)	12 (14.5%)	54 (65.1%)	13 (15.7%)
MOREEXP years-1*	-	3 (3.0%)	12 (12.1%)	60 (60.6%)	24 (24.2%)
Total	3 (1.0%)	16 (5.6%)	43 (14.9%)	180 (62.5%)	46 (16.0%)
Q#21					
Males-2*	2 (1.2%)	16 (9.8%)	14 (8.6%)	72 (44.2%)	59 (36.2%)
Females-7*	1 (0.8%)	17 (14.4%)	7 (5.9%)	72 (61.0%)	21 (17.8%)
IND/AUT schools-3*	1 (2.6%)	9 (23.7%)	2 (5.3%)	18 (47.4%)	8 (21.1%)
GOV schools-4*	1 (0.5%)	20 (10.2%)	16 (8.2%)	99 (50.5%)	60 (30.6%)
GAD schools-2*	1 (2.0%)	4 (8.5%)	3 (6.4%)	27 (57.4%)	12 (25.5%)
LESSEXP years-4*	2 (2.0%)	18 (17.6%)	14 (13.7%)	48 (47.1%)	20 (19.6%)
EXP years-2*	1 (1.2%)	11 (13.4%)	2 (2.4%)	44 (53.7%)	24 (29.3%)
MOREEXP years-3*	-	4 (4.1%)	5 (5.2%)	52 (53.6%)	36 (37.1%)
Total	3 (1.1%)	33 (11.7%)	21 (7.5%)	144 (51.2%)	80 (28.5%)
Q#22					
Males-2*	-	1 (0.6%)	-	86 (52.8%)	76 (46.6%)
Females-2*	-	-	1 (0.8%)	78 (63.4%)	44 (35.8%)
IND/AUT schools-2*	-	-	-	25 (64.1%)	14 (35.9%)
GOV schools-2*	-	1 (0.5%)	1 (0.5%)	111 (56.1%)	85 (42.9%)
GAD schools	-	-	-	28 (57.1%)	21 (42.9%)
LESSEXP years-1*	-	-	-	60 (57.1%)	45 (42.9%)
EXP years-1*	-	1 (1.2%)	1 (1.2%)	47 (56.6%)	34 (41.0%)
MOREEXP years-2*	-	-	-	57 (58.2%)	41 (41.8%)
Total	-	1 (0.35%)	1 (0.35%)	164 (57.3%)	120 (42.0%)

*Missing Responses

RAW DATA FOR SCALED RESPONSES CONTINUED
(Presented by Frequency and Percentage)

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Q#23	1	2	3	4	5
Males-3*	-	3 (1.9%)	11 (6.8%)	104 (64.2%)	44 (27.2%)
Females-1*	-	4 (3.2%)	5 (4.0%)	79 (63.7%)	36 (29.0%)
IND/AUT schools-2*	-	1 (2.6%)	2 (5.1%)	25 (64.1%)	11 (28.2%)
GOV schools-2*	-	3 (1.5%)	11 (5.6%)	128 (64.6%)	56 (28.3%)
GAD schools	-	3 (6.1%)	3 (6.1%)	30 (61.2%)	13 (26.5%)
LESSEXP years-1*	-	5 (4.8%)	7 (6.7%)	62 (59.0%)	31 (29.5%)
EXP years-1*	-	1 (1.2%)	6 (7.2%)	55 (66.3%)	21 (25.3%)
MOREEXP years-2*	-	1 (1.0%)	3 (3.1%)	66 (67.3%)	28 (28.6%)
Total	-	7 (2.4%)	16 (5.6%)	183 (64.0%)	80 (28.0%)
Q#24					
Males-3*	1 (0.6%)	7 (4.3%)	27 (16.7%)	90 (55.6%)	37 (22.8%)
Females-1*	-	11 (8.9%)	19 (15.3%)	71 (57.3%)	23 (18.5%)
IND/AUT schools-2*	-	2 (5.1%)	4 (10.3%)	22 (56.4%)	11 (28.2%)
GOV schools-2*	-	13 (6.6%)	35 (17.7%)	110 (55.6%)	40 (20.2%)
GAD schools	1 (2.0%)	3 (6.1%)	7 (14.3%)	29 (59.2%)	9 (18.4%)
LESSEXP years-1*	-	11 (10.5%)	15 (14.3%)	55 (52.4%)	24 (22.9%)
EXP years-1*	-	4 (4.8%)	15 (18.1%)	49 (59.0%)	15 (18.1%)
MOREEXP years-2*	1 (1.0%)	3 (3.1%)	16 (16.3%)	57 (58.2%)	21 (21.4%)
Total	1 (0.4%)	18 (6.3%)	46 (16.0%)	161 (56.3%)	60 (21.0%)
Q#25					
Males-2*	1 (0.6%)	9 (5.5%)	26 (16.0%)	93 (57.1%)	34 (20.9%)
Females-1*	1 (0.8%)	7 (5.6%)	18 (14.5%)	78 (62.9%)	20 (16.1%)
IND/AUT schools-2*	-	2 (5.1%)	3 (7.7%)	23 (59.0%)	11 (28.2%)
GOV schools-1*	2 (1.0%)	10 (5.0%)	34 (17.1%)	119 (59.8%)	34 (17.1%)
GAD schools	-	4 (8.2%)	7 (14.3%)	29 (59.2%)	9 (18.4%)
LESSEXP years-1*	2 (1.9%)	9 (8.6%)	14 (13.3%)	58 (55.2%)	22 (21.0%)
EXP years-1*	-	6 (7.2%)	10 (12.0%)	50 (60.2%)	17 (20.5%)
MOREEXP years-1*	-	1 (1.0%)	20 (20.2%)	63 (63.6%)	15 (15.2%)
Total	2 (0.7%)	16 (5.6%)	44 (15.3%)	171 (59.6%)	54 (18.8%)
Q#26					
Males-3*	-	9 (5.6%)	23 (14.2%)	82 (50.6%)	48 (29.6%)
Females-2*	2 (1.6%)	6 (4.9%)	14 (11.4%)	74 (60.2%)	27 (22.0%)
IND/AUT schools-2*	-	1 (2.6%)	3 (7.7%)	22 (56.4%)	13 (33.3%)
GOV schools-3*	2 (1.0%)	11 (5.6%)	27 (13.7%)	108 (54.8%)	49 (24.9%)
GAD schools	-	3 (6.1%)	7 (14.3%)	26 (53.1%)	13 (26.5%)
LESSEXP years-1*	2 (1.9%)	7 (6.7%)	18 (17.1%)	51 (48.6%)	27 (25.7%)
EXP years-2*	-	4 (4.9%)	10 (12.2%)	48 (58.5%)	20 (24.4%)
MOREEXP years-2*	-	4 (4.1%)	9 (9.2%)	57 (58.2%)	28 (28.6%)
Total	2 (0.7%)	15 (5.3%)	37 (13.0%)	156 (54.7%)	75 (26.3%)

*Missing Responses

RAW DATA FOR SCALED RESPONSES CONTINUED
(Presented by Frequency and Percentage)

	Strongly Disagree 1	Disagree 2	Undecided 3	Agree 4	Strongly Agree 5
Q#27					
Males-2*	1 (0.6%)	20 (12.3%)	38 (23.3%)	75 (46.0%)	29 (17.8%)
Females-2*	1 (0.8%)	16 (13.0%)	26 (21.1%)	67 (54.5%)	13 (10.6%)
IND/AUT schools-2*	-	4 (10.3%)	6 (15.4%)	22 (56.4%)	7 (17.9%)
GOV schools-2*	1 (0.5%)	27 (13.6%)	47 (23.7%)	95 (48.0%)	28 (14.1%)
GAD schools	1 (2.0%)	5 (10.2%)	11 (22.4%)	25 (51.0%)	7 (14.3%)
LESSEXP years-2*	1 (1.0%)	20 (19.2%)	33 (31.7%)	34 (32.7%)	16 (15.4%)
EXP years-1*	1 (1.2%)	12 (14.5%)	10 (12.0%)	49 (59.0%)	11 (13.3%)
MOREEXP years-1*	-	4 (4.0%)	21 (21.2%)	59 (59.6%)	15 (15.2%)
Total	2 (0.7%)	36 (12.6%)	64 (22.3%)	142 (49.7%)	42 (14.7%)
Q#28					
Males-2*	-	11 (6.7%)	33 (20.2%)	96 (58.8%)	23 (14.1%)
Females-1*	1 (0.8%)	9 (7.3%)	24 (19.4%)	79 (63.7%)	11 (8.9%)
IND/AUT schools-2*	-	1 (2.6%)	2 (5.1%)	33 (84.6%)	3 (7.7%)
GOV schools-1*	1 (0.5%)	17 (8.5%)	47 (23.6%)	111 (55.8%)	23 (11.6%)
GAD schools	-	2 (4.1%)	8 (16.3%)	31 (63.3%)	8 (16.3%)
LESSEXP years-1*	1 (1.0%)	11 (10.5%)	23 (21.9%)	58 (55.2%)	12 (11.4%)
EXP years-1*	-	8 (9.6%)	14 (16.9%)	52 (62.7%)	9 (10.8%)
MOREEXP years-1*	-	1 (1.0%)	20 (20.2%)	65 (65.7%)	13 (13.1%)
Total	1 (0.3%)	20 (7.0%)	57 (19.9%)	175 (61.0%)	34 (11.8%)
Q#29					
Males-3*	-	10 (6.2%)	19 (11.7%)	94 (58.0%)	39 (24.1%)
Females-1*	-	7 (5.6%)	17 (13.7%)	78 (62.9%)	22 (17.7%)
IND/AUT schools-1*	-	3 (7.5%)	2 (5.0%)	26 (65.0%)	9 (22.5%)
GOV schools-2*	-	14 (7.1%)	27 (13.6%)	117 (59.1%)	40 (20.2%)
GAD schools-1*	-	-	7 (14.6%)	29 (60.4%)	12 (25.0%)
LESSEXP years-2*	-	7 (6.7%)	14 (13.5%)	65 (62.5%)	18 (17.3%)
EXP years-1*	-	7 (8.4%)	9 (10.8%)	46 (55.4%)	21 (25.3%)
MOREEXP years-1*	-	3 (3.0%)	13 (13.1%)	61 (61.6%)	22 (22.2%)
Total	-	17 (6.0%)	36 (12.6%)	172 (60.1%)	61 (21.3%)
Q#30					
Males-3*	3 (1.9%)	18 (11.1%)	22 (13.6%)	101 (62.3%)	18 (11.1%)
Females-1*	1 (0.8%)	9 (7.3%)	23 (18.5%)	76 (61.3%)	15 (12.1%)
IND/AUT schools-1*	2 (5.0%)	8 (20.0%)	4 (10.0%)	22 (55.0%)	4 (10.0%)
GOV schools-2*	2 (1.0%)	15 (7.5%)	32 (16.2%)	124 (62.2%)	25 (12.6%)
GAD schools-1*	-	4 (8.3%)	9 (18.8%)	31 (64.6%)	4 (8.3%)
LESSEXP years-2*	-	9 (8.7%)	15 (14.4%)	70 (67.3%)	10 (9.6%)
EXP years-1*	4 (4.8%)	8 (9.6%)	17 (20.5%)	46 (55.4)	8 (9.6%)
MOREEXP years-1*	-	10 (10.1%)	13 (13.1%)	61 (61.6%)	15 (15.2%)
Total	4 (1.4%)	27 (9.5%)	45 (15.7%)	177 (61.9%)	33 (11.5%)

*Missing Responses

RAW DATA FOR SCALED RESPONSES CONTINUED
(Presented by Frequency and Percentage)

	Strongly Disagree 1	Disagree 2	Undecided 3	Agree 4	Strongly Agree 5
Q#31					
Males-1*	2 (1.2%)	6 (3.7%)	26 (15.9%)	73 (44.5%)	57 (34.8%)
Females-1*	2 (1.6%)	6 (4.8%)	21 (16.9%)	64 (51.6%)	31 (25.0%)
IND/AUT schools-1*	1 (2.5%)	1 (2.5%)	1 (2.5%)	21 (52.5%)	16 (40.0%)
GOV schools-1*	3 (1.5%)	7 (3.5%)	32 (16.1%)	99 (49.7%)	58 (29.1%)
GAD schools	-	4 (8.2%)	14 (28.6%)	17 (34.7%)	14 (28.6%)
LESSEXP years-2*	3 (2.9%)	5 (4.8%)	25 (24.0%)	46 (44.2%)	25 (24.0%)
EXP years	1 (1.2%)	4 (4.8%)	9 (10.7%)	43 (51.2%)	27 (32.1%)
MOREEXP years	-	3 (3.0%)	13 (13.0%)	48 (48.0%)	36 (36.0%)
Total	4 (1.4%)	12 (4.1%)	47 (16.3%)	137 (47.6%)	88 (30.6%)
Q#32					
Males-1*	3 (1.8%)	14 (8.5%)	34 (20.7%)	76 (46.3%)	37 (22.6%)
Females-1*	2 (1.6%)	15 (12.1%)	23 (18.5%)	61 (49.2%)	23 (18.5%)
IND/AUT schools-1*	1 (2.5%)	3 (7.5%)	6 (15.0%)	18 (45.0%)	12 (30.0%)
GOV schools-1*	3 (1.5%)	18 (9.0%)	39 (119.6%)	99 (49.7%)	40 (20.1%)
GAD schools	1 (2.0%)	8 (16.3%)	12 (24.5%)	20 (40.8%)	8 (16.3%)
LESSEXP years-2*	5 (4.8%)	16 (15.4%)	27 (26.0%)	37 (35.6%)	19 (118.3%)
EXP years	-	9 (10.7%)	14 (16.7%)	45 (53.6%)	16 (19.0%)
MOREEXP years	-	4 (4.0%)	16 (16.0%)	55 (55.0%)	25 (25.0%)
Total	5 (1.7%)	29 (10.1%)	57 (19.8%)	137 (47.6%)	60 (20.8%)
Q#33					
Males-1*	3 (1.8%)	16 (9.8%)	35 (21.3%)	83 (50.6%)	27 (16.5%)
Females-1*	2 (1.6%)	15 (12.1%)	31 (25.0%)	59 (47.6%)	17 (13.7%)
IND/AUT schools-1*	1 (2.5%)	3 (7.5%)	9 (22.5%)	17 (42.5%)	10 (25.0%)
GOV schools-1*	3 (1.5%)	19 (9.5%)	45 (22.6%)	103 (51.8%)	29 (14.6%)
GAD schools	1 (2.0%)	9 (18.4%)	12 (24.5%)	22 (44.9%)	5 (10.2%)
LESSEXP years-2*	5 (4.8%)	19 (18.3%)	28 (26.9%)	40 (38.5%)	12 (11.5%)
EXP years	-	6 (7.1%)	21 (25.0%)	45 (53.6%)	12 (14.3%)
MOREEXP years	-	6 (6.0%)	17 (17.0%)	57 (57.0%)	20 (20.0%)
Total	5 (1.7%)	31 (10.8%)	66 (22.9%)	142 (49.3%)	44 (15.3%)
Q#34					
Males	2 (1.2%)	16 (9.7%)	26 (15.8%)	84 (50.9%)	37 (22.4%)
Females-1*	1 (0.8%)	12 (9.7%)	28 (22.6%)	68 (54.8%)	15 (12.1%)
IND/AUT schools-1*	-	4 (10.0%)	4 (10.0%)	21 (52.5%)	11 (27.5%)
GOV schools	1 (0.5%)	20 (10.0%)	41 (20.5%)	98 (49.0%)	40 (20.0%)
GAD schools	2 (4.1%)	4 (8.2%)	9 (18.4%)	33 (67.3%)	1 (2.0%)
LESSEXP years-1*	1 (1.0%)	17 (16.2%)	22 (21.0%)	47 (44.8%)	18 (17.1%)
EXP years	2 (2.4%)	6 (7.1%)	16 (19.0%)	48 (57.1%)	12 (14.3%)
MOREEXP years	-	5 (5.0%)	16 (16.0%)	57 (57.0%)	22 (22.0%)
Total	3 (1.0%)	28 (9.7%)	54 (18.7%)	152 (52.6%)	52 (18.0%)

*Missing Responses

RAW DATA FOR SCALED RESPONSES CONTINUED
(Presented by Frequency and Percentage)

	Strongly Disagree 1	Disagree 2	Undecided 3	Agree 4	Strongly Agree 5
Q#35					
Males	5 (3.0%)	44 (26.7%)	38 (23.0%)	58 (35.2%)	20 (12.1%)
Females-1*	5 (4.0%)	31 (25.0%)	39 (31.5%)	35 (28.2%)	14 (11.3%)
IND/AUT schools	3 (7.3%)	17 (41.5%)	9 (22.0%)	9 (22.0%)	3 (7.3%)
GOV schools-1*	5 (2.5%)	44 (22.1%)	52 (26.1%)	72 (36.2%)	26 (13.1%)
GAD schools	2 (4.1%)	14 (28.6%)	16 (32.7%)	12 (24.5%)	5 (10.2%)
LESSEXP years	5 (4.7%)	26 (24.5%)	24 (22.6%)	41 (38.7%)	10 (9.4%)
EXP years-1*	3 (3.6%)	21 (25.3%)	23 (27.7%)	25 (30.1%)	11 (13.3%)
MOREEXP years	2 (2.0%)	28 (28.0%)	30 (30.0%)	27 (27.0%)	13 (13.0%)
Total	10 (3.5%)	75 (26.0%)	77 (26.6%)	93 (32.2%)	34 (11.7%)
Q#36					
Males	-	16 (9.7%)	34 (20.6%)	96 (58.2%)	19 (11.5%)
Females-1*	-	7 (5.6%)	45 (36.3%)	63 (50.8%)	9 (7.3%)
IND/AUT schools	-	2 (4.9%)	8 (19.5%)	23 (56.1%)	8 (19.5%)
GOV schools	-	19 (9.5%)	60 (30.0%)	102 (51.0%)	19 (9.5%)
GAD schools-1*	-	2 (4.2%)	11 (22.9%)	34 (70.8%)	1 (2.1%)
LESSEXP years	-	14 (13.2%)	27 (25.5%)	57 (53.8%)	8 (7.5%)
EXP years	-	5 (6.0%)	28 (33.3%)	43 (51.2%)	8 (9.5%)
MOREEXP years-1*	-	4 (4.0%)	24 (24.2%)	59 (59.6%)	12 (12.1%)
Total	-	23 (8.0%)	79 (27.3%)	159 (55.0%)	28 (9.7%)
Q#37					
Males	3 (1.8%)	20 (12.1%)	48 (29.1%)	75 (45.5%)	19 (11.5%)
Females	-	15 (12.0%)	36 (28.8%)	65 (52.0%)	9 (7.2%)
IND/AUT schools	-	2 (4.9%)	7 (17.1%)	22 (53.7%)	10 (24.4%)
GOV schools	2 (1.0%)	25 (12.5%)	66 (33.0%)	92 (46.0%)	15 (7.5%)
GAD schools	1 (2.0%)	8 (16.3%)	11 (22.4%)	26 (53.1%)	3 (6.1%)
LESSEXP years	1 (0.9%)	15 (14.2%)	35 (33.0%)	46 (43.4%)	9 (8.5%)
EXP years	1 (1.2%)	12 (14.3%)	27 (32.1%)	40 (47.6%)	4 (4.8%)
MOREEXP years	1 (1.0%)	8 (8.0%)	22 (22.0%)	54 (54.0%)	15 (15.0%)
Total	3 (1.0%)	35 (12.0%)	84 (29.0%)	140 (48.3%)	28 (9.7%)
Q#38					
Males	1 (0.6%)	4 (2.4%)	27 (16.4%)	87 (52.7%)	46 (27.9%)
Females	1 (0.8%)	2 (1.6%)	15 (12.0%)	63 (50.4%)	44 (35.2%)
IND/AUT schools	-	1 (2.4%)	5 (12.2%)	25 (61.0%)	10 (24.4%)
GOV schools	1 (0.5%)	4 (2.0%)	31 (15.5%)	99 (49.5%)	65 (32.5%)
GAD schools	1 (2.0%)	1 (2.0%)	6 (12.2%)	26 (53.1%)	15 (30.6%)
LESSEXP years	1 (0.9%)	4 (3.8%)	18 (17.0%)	57 (53.8%)	26 (24.5%)
EXP years	1 (1.2%)	-	13 (15.5%)	48 (57.1%)	22 (26.2%)
MOREEXP years	-	2 (2.0%)	11 (11.0%)	45 (45.0%)	42 (42.0%)
Total	2 (0.7%)	6 (2.1%)	42 (14.5%)	150 (51.7%)	90 (31.0%)

*Missing Responses

RAW DATA FOR SCALED RESPONSES CONTINUED
(Presented by Frequency and Percentage)

	Strongly Disagree 1	Disagree 2	Undecided 3	Agree 4	Strongly Agree 5
Q#39					
Males	5 (3.0%)	66 (40.0%)	37 (22.4%)	48 (29.1%)	9 (5.5%)
Females	1 (0.8%)	41 (32.8%)	34 (27.2%)	31 (24.8%)	18 (14.4%)
IND/AUT schools	-	20 (48.8%)	8 (19.5%)	9 (22.0%)	4 (9.8%)
GOV schools	6 (3.0%)	73 (36.5%)	49 (24.5%)	54 (27.0%)	18 (9.0%)
GAD schools	-	14 (28.6%)	14 (28.6%)	16 (32.7%)	5 (10.2%)
LESSEXP years	3 (2.8%)	37 (34.9%)	32 (30.2%)	24 (22.6%)	10 (9.4%)
EXP years	-	40 (47.6%)	21 (25.0%)	16 (19.0%)	7 (8.3%)
MOREEXP years	3 (3.0%)	30 (30.0%)	18 (18.0%)	39 (39.0%)	10 (10.0%)
Total	6 (2.1%)	107 (36.9%)	71 (24.5%)	79 (27.2%)	27 (9.3%)
Q#40					
Males	9 (5.5%)	15 (9.1%)	17 (10.3%)	86 (52.1%)	38 (23.0%)
Females	3 (2.4%)	17 (13.6%)	13 (10.4%)	60 (48.0%)	32 (25.6%)
IND/AUT schools	4 (9.8%)	7 (17.1%)	3 (7.3%)	20 (48.8%)	7 (17.1%)
GOV schools	5 (2.5%)	18 (9.0%)	14 (7.0%)	107 (53.5%)	56 (28.9%)
GAD schools	3 (6.1%)	7 (14.3%)	13 (26.5%)	19 (38.8%)	7 (14.3%)
LESSEXP years	5 (4.7%)	16 (15.1%)	16 (15.1%)	49 (46.2%)	20 (18.9%)
EXP years	6 (7.1%)	9 (10.7%)	6 (7.1%)	44 (52.4%)	19 (22.6%)
MOREEXP years	1 (1.0%)	7 (7.0%)	8 (8.0%)	53 (53.0%)	31 (31.0%)
Total	12 (4.1%)	32 (11.0%)	30 (10.4%)	146 (50.4%)	70 (24.1%)
	Very Little 1	Little 2	Undecided 3	Much 4	Very Much 5
Q#41					
Males - 1*	5 (3.0%)	26 (15.9%)	31 (18.9%)	74 (45.1%)	28 (17.1%)
Females-1*	8 (6.5%)	28 (22.6%)	20 (16.1%)	43 (34.7%)	25 (20.2%)
IND/AUT schools	-	9 (22.0%)	3 (7.3%)	14 (34.1%)	15 (36.6%)
GOV schools-2*	10 (5.1%)	41 (20.7%)	42 (21.2%)	76 (38.4%)	29 (14.6%)
GAD schools	3 (6.1%)	4 (8.2%)	6 (12.2%)	27 (55.1%)	9 (18.4%)
LESSEXP years-1*	8 (7.6%)	28 (26.7%)	19 (18.1%)	33 (31.4%)	17 (16.2%)
EXP years	3 (3.6%)	14 (16.7%)	14 (16.7%)	40 (47.6%)	13 (15.5%)
MOREEXP years-1*	2 (2.0%)	12 (12.1%)	18 (18.2%)	44 (44.4%)	23 (23.2%)
Total	13 (4.5%)	54 (18.8%)	51 (17.7%)	117 (40.6%)	53 (18.4%)
Q#42					
Males-1*	3 (1.8%)	14 (8.5%)	46 (28.0%)	79 (48.2%)	22 (13.4%)
Females-1*	6 (4.8%)	22 (17.7%)	32 (25.8%)	49 (39.5%)	15 (12.1%)
IND/AUT schools	1 (2.4%)	7 (17.1%)	7 (17.1%)	19 (46.3%)	7 (17.1%)
GOV schools-2*	6 (3.0%)	23 (11.6%)	57 (28.8%)	87 (43.9%)	25 (12.6%)
GAD schools	2 (4.1%)	6 (12.2%)	14 (28.6%)	22 (44.9%)	5 (10.2%)
LESSEXP years-1*	7 (6.7%)	17 (16.2%)	30 (28.6%)	41 (39.0%)	10 (9.5%)
EXP years	1 (1.2%)	10 (11.9%)	26 (31.0%)	36 (42.9%)	11 (13.1%)
MOREEXP years-1*	1 (1.0%)	9 (9.1%)	22 (22.2%)	51 (51.5%)	16 (16.2%)
Total	9 (3.1%)	36 (12.5%)	78 (27.1%)	128 (44.4%)	37 (12.9%)

*Missing Responses

RAW DATA FOR SCALED RESPONSES CONTINUED
(Presented by Frequency and Percentage)

	Very Little 1	Little 2	Undecided 3	Much 4	Very Much 5
Q#43					
Males-1*	3 (1.8%)	19 (11.6%)	29 (17.7%)	87 (53.0%)	26 (15.9%)
Females-1*	4 (3.2%)	14 (11.3%)	33 (26.6%)	57 (46.0%)	16 (12.9%)
IND/AUT schools	-	4 (9.8%)	7 (17.1%)	20 (48.8%)	10 (24.4%)
GOV schools-2*	6 (3.0%)	25 (12.6%)	44 (22.2%)	97 (49.0%)	26 (13.1%)
GAD schools	1 (2.0%)	4 (8.2%)	11 (22.4%)	27 (55.1%)	6 (12.2%)
LESSEXP years-1*	5 (4.8%)	17 (16.2%)	26 (24.8%)	42 (40.0%)	15 (14.3%)
EXP years	1 (1.2%)	10 (111.9%)	19 (22.6%)	45 (53.6%)	9 (10.7%)
MOREEXP years-1*	1 (1.0%)	6 (6.1%)	17 (17.2%)	57 (57.6%)	18 (18.2%)
Total	7 (2.4%)	33 (11.5%)	62 (21.5%)	144 (50.0%)	42 (14.6%)
Q#44					
Males	5 (3.0%)	19 (11.5%)	48 (29.1%)	73 (44.2%)	20 (12.1%)
Females-1*	6 (4.8%)	22 (17.7%)	45 (36.3%)	44 (35.5%)	7 (5.6%)
IND/AUT schools	2 (4.9%)	6 (14.6%)	13 (31.7%)	16 (39.0%)	4 (9.8%)
GOV schools-1*	8 (4.0%)	29 (14.6%)	61 (30.7%)	80 (40.2%)	21 (10.6%)
GAD schools	1 (2.0%)	6 (12.2%)	19 (38.8%)	21 (42.9%)	2 (4.1%)
LESSEXP years	5 (4.7%)	25 (23.6%)	35 (33.0%)	34 (32.1%)	7 (6.6%)
EXP years-1*	3 (3.6%)	12 (14.5%)	28 (33.7%)	36 (43.4%)	4 (4.8%)
MOREEXP years	3 (3.0%)	4 (4.0%)	30 (30.0%)	47 (47.0%)	16 (16.0%)
Total	11 (3.8%)	41 (14.2%)	93 (32.2%)	117 (40.5%)	27 (9.3%)
Q#45					
Males	3 (1.8%)	14 (8.5%)	24 (14.5%)	94 (57.0%)	30 (18.2%)
Females-1*	1 (0.8%)	17 (13.7%)	12 (9.7%)	84 (67.7%)	10 (8.1%)
IND/AUT schools	-	6 (14.6%)	2 (4.9%)	27 (65.9%)	6 (14.6%)
GOV schools-1*	4 (2.0%)	21 (10.6%)	27 (13.6%)	117 (58.8%)	30 (15.1%)
GAD schools	-	4 (8.22%)	7 (14.3%)	34 (69.4%)	4 (8.2%)
LESSEXP years	4 (3.8%)	17 (16.0%)	13 (12.3%)	58 (54.7%)	14 (13.2%)
EXP years-1*	-	8 (9.6%)	12 (114.5%)	59 (71.1%)	4 (4.8%)
MOREEXP years	-	6 (6.0%)	11 (11.0%)	61 (61.0%)	22 (22.0%)
Total	4 (1.4%)	31 (10.7%)	36 (12.5%)	178 (61.6%)	40 (13.8%)
Q#46					
Males	-	7 (4.2%)	15 (9.1%)	107 (64.8%)	36 (21.8%)
Females-1*	-	4 (3.2%)	5 (4.0%)	100 (80.6%)	15 (12.1%)
IND/AUT schools	-	2 (4.9%)	1 (2.4%)	31 (75.6%)	7 (17.1%)
GOV schools-1*	-	6 (3.0%)	16 (8.0%)	141 (70.9%)	36 (18.11%)
GAD schools	-	3 (6.1%)	3 (6.1%)	35 (71.4%)	8 (16.3%)
LESSEXP years	-	8 (7.5%)	6 (5.7%)	75 (70.8%)	17 (16.0%)
EXP years-1*	-	1 (1.2%)	5 (6.0%)	67 (80.7%)	10 (12.0%)
MOREEXP years	-	2 (2.0%)	9 (9.0%)	65 (65.0%)	24 (24.0%)
Total	-	11 (3.8%)	20 (6.9%)	207 (71.6%)	51 (17.7%)

*Missing Responses

RAW DATA FOR SCALED RESPONSES CONTINUED
(Presented by Frequency and Percentage)

	Very Little 1	Little 2	Undecided 3	Much 4	Very Much 5
Q#47					
Males	1 (0.6%)	11 (6.7%)	18 (10.9%)	101 (61.2%)	34 (20.6%)
Females-1*	1 (0.8%)	4 (3.2%)	10 (8.1%)	97 (78.2%)	12 (9.7%)
IND/AUT schools	-	3 (7.3%)	1 (2.4%)	30 (73.2%)	7 (17.1%)
GOV schools-1*	2 (1.0%)	11 (5.5%)	20 (10.1%)	136 (68.3%)	30 (15.11%)
GAD schools	-	1 (2.0%)	7 (14.3%)	32 (65.3%)	9 (18.4%)
LESSEXP years	1 (0.9%)	12 (11.3%)	7 (6.6%)	73 (68.9%)	13 (12.3%)
EXP years-1*	-	3 (3.6%)	10 (12.0%)	58 (69.9%)	12 (14.5%)
MOREEXP years	1 (1.0%)	-	11 (11.0%)	67 (67.0%)	21 (21.0%)
Total	2 (0.7%)	15 (5.2%)	28 (9.7%)	198 (68.5%)	46 (15.9%)
Q#48					
Males	5 (3.0%)	18 (10.9%)	45 (27.3%)	76 (46.1%)	21 (12.7%)
Females-1*	3 (2.4%)	16 (12.9%)	38 (30.6%)	59 (47.6%)	8 (6.5%)
IND/AUT schools	-	8 (19.5%)	8 (19.5%)	21 (51.2%)	4 (9.8%)
GOV schools-1*	8 (4.0%)	23 (11.6%)	63 (31.7%)	85 (42.7%)	20 (10.1%)
GAD schools	-	3 (6.1%)	12 (24.5%)	29 (59.2%)	5 (10.2%)
LESSEXP years	7 (6.6%)	7 (6.6%)	15 (14.2%)	31 (29.2%)	46 (43.4%)
EXP years-1*	-	9 (10.8%)	27 (32.5%)	41 (49.4%)	6 (7.2%)
MOREEXP years	1 (1.0%)	10 (10.0%)	25 (25.0%)	48 (48.0%)	16 (16.0%)
Total	8 (2.8%)	34 (11.8%)	83 (28.7%)	135 (46.7%)	29 (10.0%)
Q#49					
Males	-	5 (3.0%)	9 (5.5%)	89 (53.9%)	62 (37.6%)
Females-1*	1 (0.8%)	4 (3.2%)	4 (3.2%)	86 (69.4%)	29 (23.4%)
IND/AUT schools	-	2 (4.9%)	1 (2.4%)	20 (48.8%)	18 (43.9%)
GOV schools-1*	1 (0.5%)	7 (3.5%)	9 (4.5%)	120 (60.3%)	62 (31.2%)
GAD schools	-	-	3 (6.1%)	35 (71.4%)	11 (22.4%)
LESSEXP years	1 (0.9%)	6 (5.7%)	5 (4.7%)	61 (57.5%)	33 (31.1%)
EXP years-1*	-	2 (2.4%)	3 (3.6%)	50 (60.2%)	28 (33.7%)
MOREEXP years	-	1 (1.0%)	5 (5.0%)	64 (64.0%)	30 (30.0%)
Total	1 (0.3%)	9 (3.1%)	13 (4.5%)	175 (60.6%)	91 (31.5%)
Q#50					
Males - 1*	-	5 (3.0%)	8 (4.9%)	87 (53.0%)	64 (39.0%)
Females-1*	-	1 (0.8%)	7 (5.6%)	85 (68.5%)	31 (25.0%)
IND/AUT schools	-	2 (4.9%)	3 (7.3%)	24 (58.5%)	12 (29.3%)
GOV schools-2*	-	3 (1.5%)	11 (5.6%)	116 (58.6%)	68 (34.3%)
GAD schools	-	1 (2.0%)	1 (2.0%)	32 (65.3%)	15 (30.6%)
LESSEXP years	-	3 (2.8%)	9 (8.5%)	67 (63.2%)	27 (25.5%)
EXP years-2*	-	2 (2.4%)	3 (3.7%)	49 (59.8%)	28 (34.1%)
MOREEXP years	-	1 (1.0%)	3 (3.0%)	56 (56.0%)	40 (40.0%)
Total	-	6 (2.1%)	15 (5.2%)	172 (59.7%)	95 (33.0%)

*Missing Responses

RAW DATA FOR SCALED RESPONSES CONTINUED
(Presented by Frequency and Percentage)

	Very Little 1	Little 2	Undecided 3	Much 4	Very Much 5
Q#51					
Males	2 (1.2%)	19 (11.5%)	29 (17.6%)	93 (56.4%)	22 (13.3%)
Females-1*	1 (0.8%)	11 (8.9%)	14 (11.3%)	79 (63.7%)	19 (15.3%)
IND/AUT schools	-	4 (9.8%)	4 (9.8%)	23 (56.1%)	10 (24.4%)
GOV schools-1*	3 (1.5%)	21 (10.6%)	33 (16.6%)	118 (59.3%)	24 (12.1%)
GAD schools	-	5 (10.2%)	6 (12.2%)	31 (63.3%)	7 (14.3%)
LESSEXP years	3 (2.8%)	15 (14.2%)	18 (17.0%)	54 (50.9%)	16 (15.1%)
EXP years-1*	-	3 (3.6%)	11 (13.3%)	58 (69.9%)	11 (13.3%)
MOREEXP years	-	12 (12.0%)	14 (14.0%)	60 (60.0%)	14 (14.0%)
Total	3 (1.0%)	30 (10.4%)	43 (14.9%)	172 (59.5%)	41 (14.2%)
Q#52					
Males	-	13 (7.9%)	20 (12.1%)	94 (57.0%)	38 (23.0%)
Females-1*	-	7 (5.6%)	9 (7.3%)	82 (66.1%)	26 (21.0%)
IND/AUT schools	-	1 (2.4%)	3 (7.3%)	26 (63.4%)	11 (26.8%)
GOV schools-1*	-	15 (7.5%)	24 (12.1%)	118 (59.3%)	42 (21.1%)
GAD schools	-	4 (8.2%)	2 (4.1%)	32 (65.3%)	11 (22.4%)
LESSEXP years	-	10 (9.4%)	18 (17.0%)	57 (53.8%)	21 (19.8%)
EXP years-1*	-	3 (3.6%)	5 (6.0%)	58 (69.9%)	17 (20.5%)
MOREEXP years	-	7 (7.0%)	6 (6.0%)	61 (61.0%)	26 (26.0%)
Total	-	20 (6.9%)	29 (10.0%)	176 (60.9%)	64 (22.2%)
Q#53					
Males - 1*	5 (3.0%)	27 (16.5%)	43 (26.2%)	73 (44.5%)	16 (9.8%)
Females-2*	4 (3.3%)	20 (16.3%)	50 (40.7%)	40 (32.5%)	9 (7.2%)
IND/AUT schools	1 (2.4%)	5 (12.2%)	12 (29.3%)	17 (41.5%)	6 (14.6%)
GOV schools-2*	8 (4.0%)	33 (16.7%)	64 (32.3%)	77 (38.9%)	16 (8.1%)
GAD schools-1*	-	9 (18.8%)	17 (35.4%)	19 (39.6%)	3 (6.3%)
LESSEXP years-1*	7 (6.7%)	16 (15.2%)	41 (39.0%)	30 (28.6%)	11 (10.5%)
EXP years-2*	1 (1.2%)	16 (19.5%)	26 (31.7%)	34 (41.5%)	5 (6.1%)
MOREEXP years	1 (1.0%)	15 (15.0%)	26 (26.0%)	49 (49.0%)	9 (9.0%)
Total	9 (3.1%)	47 (16.4%)	93 (32.4%)	113 (39.4%)	25 (8.7%)

*Missing Responses

RAW DATA FOR SCALED RESPONSES IN SECTION III
(Presented by Frequency and Percentage)

	Not Important 1	Somewhat Important 2	Important 3	Very Important 4
Q#56				
Males	1 (1.0%)	4 (4.2%)	31 (32.3%)	60 (62.5%)
Females-1*	-	6 (8.6%)	24 (34.3%)	40 (57.1%)
IND/AUT schools	-	1 (5.3%)	8 (42.1%)	10 (52.6%)
GOV schools-1*	1 (0.9%)	9 (7.8%)	31 (26.7%)	75 (64.7%)
GAD schools	-	-	16 (51.6%)	15 (48.4%)
LESSEXP years-1*	-	2 (3.3%)	17 (28.3%)	41 (68.3%)
EXP years	1 (1.9%)	5 (9.3%)	19 (35.2%)	29 (53.7%)
MOREEXP years	-	3 (5.8%)	19 (36.5%)	30 (57.7%)
Total	1 (0.6%)	10 (6.0%)	55 (33.1%)	100 (60.3%)
Q#57				
Males	1 (1.0%)	7 (7.3%)	40 (41.7%)	48 (50.0%)
Females-1*	-	8 (11.4%)	22 (31.4%)	40 (57.1%)
IND/AUT schools	-	2 (10.5%)	7 (36.8%)	10 (52.6%)
GOV schools-1*	1 (0.9%)	10 (8.6%)	38 (32.8%)	67 (57.8%)
GAD schools	-	3 (9.7%)	17 (54.8%)	11 (35.5%)
LESSEXP years-1*	-	4 (6.7%)	17 (28.3%)	39 (65.0%)
EXP years	1 (1.9%)	7 (13.0%)	22 (40.7%)	24 (44.4%)
MOREEXP years	-	4 (7.7%)	23 (44.2%)	25 (48.1%)
Total	1 (0.6%)	15 (9.0%)	62 (37.4%)	88 (53.0%)
Q#58				
Males	2 (2.1%)	3 (3.1%)	31 (32.3%)	60 (62.5%)
Females-1*	1 (1.4%)	3 (4.3%)	20 (28.6%)	46 (65.7%)
IND/AUT schools	2 (10.5%)	1 (5.3%)	4 (21.1%)	12 (63.2%)
GOV schools-1*	1 (0.9%)	4 (3.4%)	37 (31.9%)	74 (63.8%)
GAD schools	-	1 (3.2%)	10 (32.3%)	20 (64.5%)
LESSEXP years-1*	1 (1.7%)	3 (5.0%)	17 (28.3%)	39 (65.0%)
EXP years	2 (3.7%)	1 (1.9%)	21 (38.9%)	30 (55.6%)
MOREEXP years	-	2 (3.8%)	13 (25.0%)	37 (71.2%)
Total	3 (1.8%)	6 (3.6%)	51 (30.7%)	106 (63.9%)
Q#59				
Males-6*	1 (1.0%)	16 (17.8%)	40 (44.4%)	33 (36.7%)
Females-5*	1 (1.5%)	15 (22.7%)	25 (37.9%)	25 (37.9%)
IND/AUT schools-1*	-	5 (27.8%)	4 (22.2%)	9 (50.0%)
GOV schools-8*	2 (1.8%)	20 (18.3%)	48 (44.0%)	39 (35.8%)
GAD schools-2*	-	6 (20.7%)	13 (44.8%)	10 (34.5%)
LESSEXP years-5*	1 (1.8%)	12 (21.4%)	19 (33.9%)	24 (42.9%)
EXP years-1*	1 (1.9%)	10 (18.9%)	21 (39.6%)	21 (39.6%)
MOREEXP years-5*	-	9 (19.1%)	25 (53.2%)	13 (27.7%)
Total	2 (1.2%)	31 (19.9%)	65 (41.7%)	58 (37.2%)

*Missing Responses

RAW DATA FOR SCALED RESPONSES CONTINUED
(Presented by Frequency and Percentage)

	Not Important 1	Somewhat Important 2	Important 3	Very Important 4
Q#60				
Males-1*	2 (2.1%)	8 (8.4%)	43 (45.3%)	42 (44.2%)
Females-2*	2 (2.9%)	7 (10.1%)	30 (43.5%)	30 (43.5%)
IND/AUT schools-1*	-	1 (5.6%)	5 (27.8%)	12 (66.7%)
GOV schools-2*	3 (2.6%)	10 (8.7%)	52 (45.2%)	50 (43.5%)
GAD schools	1 (3.2%)	4 (12.9%)	16 (51.6%)	10 (32.3%)
LESSEX years-2*	1 (1.7%)	3 (5.1%)	27 (45.8%)	28 (47.5%)
EXP years-1*	2 (3.8%)	7 (13.2%)	20 (37.7%)	24 (45.3%)
MOREEXP years	1 (1.9%)	5 (9.6%)	26 (50.0%)	20 (38.5%)
Total	4 (2.4%)	15 (9.1%)	73 (44.5%)	72 (44.0%)
Q#61				
Males-1*	1 (1.1%)	16 (16.8%)	41 (43.2%)	37 (38.9%)
Females-2*	6 (8.7%)	12 (17.4%)	30 (43.5%)	21 (30.4%)
IND/AUT schools-1*	-	1 (5.6%)	8 (44.4%)	9 (50.0%)
GOV schools-2*	6 (5.2%)	21 (18.3%)	49 (42.6%)	39 (33.9%)
GAD schools	1 (3.2%)	6 (19.4%)	14 (45.2%)	10 (32.3%)
LESSEX years-2*	3 (5.1%)	7 (11.9%)	26 (44.1%)	23 (39.0%)
EXP years-1*	3 (5.7%)	13 (24.5%)	18 (34.0%)	19 (35.8%)
MOREEXP years	1 (1.9%)	8 (15.4%)	27 (51.9%)	16 (30.8%)
Total	7 (4.3%)	28 (17.1%)	71 (43.3%)	58 (35.3%)
Q#62				
Males-1*	3 (3.2%)	16 (16.8%)	41 (43.2%)	35 (36.8%)
Females-2*	7 (10.1%)	13 (18.8%)	29 (42.0%)	20 (29.0%)
IND/AUT schools-1*	1 (5.6%)	2 (11.1%)	8 (44.4%)	7 (38.9%)
GOV schools-2*	7 (6.1%)	21 (18.3%)	47 (40.9%)	40 (34.8%)
GAD schools	2 (6.5%)	6 (19.4%)	15 (48.4%)	8 (25.8%)
LESSEX years-1*	6 (10.0%)	10 (16.7%)	21 (35.0%)	23 (38.3%)
EXP years-2*	3 (5.8%)	12 (23.1%)	20 (38.5%)	17 (32.7%)
MOREEXP years	1 (1.9%)	7 (13.5%)	29 (55.8%)	15 (28.8%)
Total	10 (6.1%)	29 (17.7%)	70 (42.7%)	55 (33.5%)
Q#63				
Males-1*	2 (2.1%)	12 (12.6%)	44 (46.3%)	37 (38.9%)
Females-2*	4 (5.8%)	9 (13.0%)	32 (46.4%)	24 (34.8%)
IND/AUT schools-1*	-	1 (5.6%)	9 (50.0%)	8 (44.4%)
GOV schools-2*	5 (4.3%)	17 (14.8%)	50 (43.5%)	43 (37.4%)
GAD schools	1 (3.2%)	3 (9.7%)	17 (54.8%)	10 (32.2%)
LESSEX years-2*	2 (3.4%)	8 (13.6%)	28 (47.5%)	21 (35.6%)
EXP years-1*	3 (5.7%)	8 (15.1%)	22 (41.5%)	20 (37.7%)
MOREEXP years	1 (1.9%)	5 (9.6%)	26 (50.0%)	20 (38.5%)
Total	6 (3.7%)	21 (12.8%)	76 (46.3%)	61 (37.2%)

*Missing Responses

RAW DATA FOR SCALED RESPONSES CONTINUED
(Presented by Frequency and Percentage)

	Not Important 1	Somewhat Important 2	Important 3	Very Important 4
Q#64				
Males-2*	2 (2.1%)	13 (13.8%)	40 (42.6%)	39 (41.5%)
Females-3*	2 (2.9%)	6 (8.8%)	30 (44.1%)	30 (44.1%)
IND/AUT schools-1*	-	1 (5.6%)	4 (22.2%)	13 (72.2%)
GOV schools-3*	3 (2.6%)	15 (13.2%)	52 (45.6%)	44 (38.6%)
GAD schools-1*	1 (3.3%)	3 (10.0%)	14 (46.7%)	12 (40.0%)
LESSEXP years-2*	2 (3.4%)	6 (10.2%)	24 (40.7%)	27 (45.8%)
EXP years-2*	2 (3.8%)	6 (11.5%)	20 (38.5%)	24 (46.2%)
MOREEXP years-1*	-	7 (13.7%)	26 (51.0%)	18 (35.3%)
Total	4 (2.5%)	19 (11.7%)	70 (43.2%)	69 (42.6%)
Q#65				
Males-1*	1 (1.1%)	6 (6.3%)	30 (31.6%)	58 (61.1%)
Females-3*	2 (2.9%)	3 (4.4%)	17 (25.0%)	46 (67.6%)
IND/AUT schools	1 (5.3%)	1 (5.3%)	2 (10.5%)	15 (78.9%)
GOV schools-4*	1 (0.9%)	7 (6.2%)	33 (29.2%)	72 (63.7%)
GAD schools	1 (3.2%)	1 (3.2%)	12 (38.7%)	17 (54.8%)
LESSEXP years-3*	2 (3.4%)	4 (6.9%)	13 (22.4%)	39 (67.2%)
EXP years-1*	1 (1.9%)	3 (5.7%)	12 (22.6%)	37 (69.8%)
MOREEXP years	-	2 (3.8%)	22 (42.3%)	28 (53.8%)
Total	3 (1.8%)	9 (5.5%)	47 (28.9%)	104 (63.8%)
Q#66				
Males-2*	1 (1.1%)	9 (9.6%)	49 (52.1%)	35 (37.2%)
Females-2*	-	8 (11.6%)	30 (43.5%)	31 (44.9%)
IND/AUT schools-1*	-	2 (11.1%)	5 (27.8%)	11 (61.1%)
GOV schools-2*	1 (0.9%)	13 (11.3%)	58 (50.4%)	43 (37.4%)
GAD schools-1*	-	2 (6.7%)	16 (53.3%)	12 (40.0%)
LESSEXP years-1*	1 (1.7%)	7 (11.7%)	28 (46.7%)	24 (40.0%)
EXP years-3*	-	5 (9.8%)	21 (41.2%)	25 (49.0%)
MOREEXP years	-	5 (9.6%)	30 (57.7%)	17 (32.7%)
Total	1 (0.6%)	17 (10.4%)	79 (48.5%)	66 (40.5%)
Q#67				
Males-1*	3 (3.2%)	12 (12.6%)	49 (51.6%)	31 (32.6%)
Females-2*	1 (1.4%)	11 (15.9%)	20 (29.0%)	37 (53.6%)
IND/AUT schools	-	1 (5.3%)	9 (47.4%)	9 (47.4%)
GOV schools-3*	3 (2.6%)	17 (14.9%)	46 (40.4%)	48 (42.1%)
GAD schools	1 (3.2%)	5 (16.1%)	14 (45.2%)	11 (35.5%)
LESSEXP years-2*	2 (3.4%)	6 (10.2%)	21 (35.6%)	30 (50.8%)
EXP years-1*	-	7 (13.2%)	19 (35.8%)	27 (50.9%)
MOREEXP years	2 (3.8%)	10 (19.2%)	29 (55.8%)	11 (21.2%)
Total	4 (2.4%)	23 (14.0%)	69 (42.1%)	68 (41.5%)

*Missing Responses

RAW DATA FOR SCALED RESPONSES CONTINUED
(Presented by Frequency and Percentage)

	Not Important 1	Somewhat Important 2	Important 3	Very Important 4
Q#69				
Males-1*	4 (2.4%)	15 (9.1%)	70 (42.7%)	75 (45.7%)
Females-2*	-	14 (11.4%)	64 (52.0%)	45 (36.6%)
IND/AUT schools-1*	1 (2.5%)	3 (7.5%)	19 (47.5%)	17 (42.5%)
GOV schools-2*	3 (1.5%)	19 (9.6%)	97 (49.0%)	79 (39.9%)
GAD schools	-	7 (14.3%)	18 (36.7%)	24 (49.0%)
LESSEX years	1 (0.9%)	6 (5.7%)	45 (42.5%)	54 (50.9%)
EXP years-1*	1 (1.2%)	8 (9.6%)	36 (43.4%)	38 (45.8%)
MOREEXP years-2*	2 (2.0%)	15 (15.3%)	53 (54.1%)	28 (28.6%)
Total	4 (1.4%)	29 (10.1%)	134 (46.7%)	120 (41.8%)
	Not Relevant 1	Somewhat Relevant 2	Relevant 3	Very Relevant 4
Q#70				
Males-2*	-	15 (9.2%)	79 (48.5%)	69 (42.3%)
Females-1*	-	13 (10.5%)	65 (52.4%)	46 (37.1%)
IND/AUT schools-2*	-	2 (5.1%)	20 (51.3%)	17 (43.6%)
GOV schools-1*	-	20 (10.1%)	103 (51.8%)	76 (38.2%)
GAD schools	-	6 (12.2%)	21 (42.9%)	22 (44.9%)
LESSEX years-1*	-	7 (6.7%)	53 (50.5%)	45 (42.5%)
EXP years	-	9 (10.7%)	38 (45.2%)	37 (44.0%)
MOREEXP years-2*	-	12 (12.2)	53 (54.1%)	33 (33.7%)
Total	-	28 (9.8%)	144 (50.2%)	115 (40.0%)
	Not Important 1	Somewhat Important 2	Important 3	Very Important 4
Q#71				
Males-2*	12 (7.4%)	34 (20.9%)	75 (46.0%)	42 (25.8%)
Females-2*	2 (1.6%)	41 (33.3%)	58 (47.2%)	22 (17.9%)
IND/AUT schools-2*	1 (2.6%)	9 (23.1%)	18 (46.2%)	11 (28.2%)
GOV schools-2*	12 (6.1%)	54 (27.3%)	92 (46.5%)	40 (20.2%)
GAD schools	1 (2.0%)	12 (24.5%)	23 (46.9%)	13 (26.5%)
LESSEX years-1*	4 (3.8%)	30 (28.6%)	46 (43.8%)	25 (23.8%)
EXP years	3 (3.6%)	22 (26.2%)	46 (54.8%)	13 (15.5%)
MOREEXP years-3*	7 (7.2%)	23 (23.7%)	41 (42.3%)	26 (26.8%)
Total	14 (4.9%)	75 (26.2%)	133 (46.5%)	64 (22.4%)

*Missing Responses

RAW DATA FOR SCALED RESPONSES CONTINUED
(Presented by Frequency and Percentage)

	Most Unfair 1	Unfair 2	Fair 3	Most Unfair 4
Q#72				
Males-6*	2 (1.3%)	21 (13.2%)	106 (66.7%)	30 (18.9%)
Females-8*	2 (1.7%)	11 (9.4%)	90 (76.9%)	14 (12.0%)
IND/AUT schools-3*	-	6 (15.8%)	28 (73.7%)	4 (10.5%)
GOV schools-10*	4 (2.1%)	22 (11.6%)	132 (69.5%)	32 (16.8%)
GAD schools-1*	-	4 (8.3%)	36 (75.0%)	8 (16.7%)
LESSEXP years-6*	1 (1.0%)	10 (10.0%)	71 (71.0%)	18 (18.0%)
EXP years-2*	1 (1.2%)	13 (15.9%)	59 (72.0%)	9 (11.0%)
MOREEXP years-6*	2 (2.1%)	9 (9.6%)	66 (70.2%)	17 (18.1%)
Total	4 (1.5%)	32 (11.6%)	196 (71.0%)	44 (15.9%)
Q#73				
Males-6*	5 (3.1%)	51 (32.1%)	94 (59.1%)	9 (5.7%)
Females-9*	3 (2.6%)	44 (37.9%)	63 (54.3%)	6 (5.2%)
IND/AUT schools-3*	2 (5.3%)	16 (42.1%)	19 (50.0%)	1 (2.7%)
GOV schools-11*	6 (3.2%)	58 (30.7%)	114 (60.3%)	11 (5.8%)
GAD schools-1*	-	21 (43.8%)	24 (50.0%)	3 (6.3%)
LESSEXP years-7*	2 (2.0%)	37 (37.4%)	55 (55.6%)	5 (5.1%)
EXP years-2*	2 (2.4%)	36 (43.9%)	41 (50.0%)	3 (3.7%)
MOREEXP years-6*	4 (4.3%)	22 (23.4%)	61 (64.9%)	7 (7.4%)
Total	8 (2.9%)	95 (34.5%)	157 (57.1%)	15 (5.5%)
Q#74				
Males-6*	3 (1.9%)	41 (25.8%)	101 (63.5%)	14 (8.8%)
Females-9*	4 (3.4%)	39 (33.6%)	70 (60.3%)	3 (2.6%)
IND/AUT schools-4*	-	14 (37.8%)	22 (59.5%)	1 (2.7%)
GOV schools-10*	6 (3.2%)	53 (27.9%)	118 (62.1%)	13 (6.8%)
GAD schools-1*	1 (2.1%)	13 (27.1%)	31 (64.6%)	3 (6.3%)
LESSEXP years-8*	3 (3.1%)	32 (32.7%)	56 (57.1%)	7 (7.1%)
EXP years-2*	-	32 (39.0%)	47 (57.3%)	3 (3.7%)
MOREEXP years-5*	4 (4.2%)	16 (16.8%)	68 (71.6%)	7 (7.4%)
Total	7 (2.5%)	80 (29.1%)	171 (62.2%)	17 (6.2%)
Q#75				
Males-6*	10 (6.3%)	46 (28.9%)	87 (54.7%)	16 (10.1%)
Females-10*	6 (5.2%)	36 (31.3%)	69 (60.0%)	4 (3.5%)
IND/AUT schools-3*	4 (10.5%)	9 (23.7%)	24 (63.2%)	1 (2.6%)
GOV schools-12*	11 (5.9%)	56 (29.8%)	108 (57.4%)	13 (6.9%)
GAD schools-1*	1 (2.1%)	17 (35.4%)	24 (50.0%)	6 (12.5%)
LESSEXP years-7*	4 (4.0%)	37 (37.4%)	53 (53.5%)	5 (5.1%)
EXP years-3*	8 (9.9%)	32 (39.5%)	40 (49.4%)	1 (1.2%)
MOREEXP years-6*	4 (4.3%)	13 (13.8%)	63 (67.0%)	14 (14.9%)
Total	16 (5.9%)	82 (29.9%)	156 (56.9%)	20 (7.3%)

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