

An Investigation into the Influence of the HPE
Curriculum on the Participation of Year 12
Students in Extra-Curricular Physical Activity

By: Larbi Moutrib

A thesis submitted to the University of Canterbury in fulfilment of the
requirement for the degree of Doctor of Philosophy in Education

University of Canterbury

2017

Acknowledgements

I would like to take this opportunity to thank all the students and teachers who took part in this study. They were all highly dedicated and cooperative, their enthusiasm made working on this project more enjoyable than anticipated. I also wish to extend my sincere thanks to my friends and to my extended family. Your support and encouragements kept me wanting to learn more about science and knowledge, and to seek higher educational grounds no matter where I am or what year it is. To My research supervisors Dr Billy O'Steen and Dr David Small, your support and guidance over the past five years has given me the inspiration to continue to improve my academic skills and to believe in my potential to engage in more academic work in the future.

Dedications

I wish to dedicate this personal accomplishment to all my mentors who guided me through the process of growing up. I am lucky to have had the chance to learn from excellent leaders from within formal learning environments and others at informal settings. These mentors' names and relationship (to me) are listed below: I am confident that they are proud of me as I have always been proud of them too.

Don Esteban: Primary teacher (Larache, Morocco)

Mr Abbas Fares: Psychology Lecturer (Fes, Morocco)

Mr Michael Faure: Pedagogy Lecturer (Fes, Morocco)

Mr Bob Gidlow: Sociology Lecturer (Lincoln University, NZ)

Mr Pat Devlin: Outdoor recreation Lecturer (Lincoln University, NZ)

Grant Cushman: Urban recreation Lecturer (Lincoln University, NZ)

Rick Mansell: Management Lecturer (Lincoln University, NZ)

Rhimou Moutrib: Aunt

Fadila Moutrib: Aunt

Hossein Sabbah: Elder brother

Baa Laarbi: Uncle

Abdoulwahab Benmoussa: Uncle

Statement of Authorship and resources

This thesis contains no material without due acknowledgment in the main text, nor does it contain material that was extracted in whole or in part from a thesis by which I have qualified for or been awarded another degree or diploma.

No other person's work has been used without due acknowledgement in the main text of the thesis.

This thesis has not been submitted for the award of any degree or diploma in any other tertiary institutions.

All research procedures reported in this thesis received the approval of the relevant Ethics Committees,

Signed: -----

Larbi Moutrib

Date: -----30/11/17-----

Table of Contents

Acknowledgements	i
Dedications.....	ii
Statement of Authorship and resources.....	iii
List of Figures.....	x
List of Appendices.....	x
List if Abbreviations	xi
Abstract.....	1
Chapter One	2
Introduction and Definition of terms.....	2
1.1. Introduction: Researcher’s background.....	2
1.2. Rationale.....	6
1.3. Significance	8
1.4. Definition of key terms.....	10
1.4.1. Physical Education.....	11
1.4.2. Sport.....	12
1.4.3. Leisure.....	15
1.4.4. Physical Activity (PA)	17
1.4.4.1. PA domains	18
1.4.4.2. Intensity of PA	18
1.4.4.3. The health recommended PA levels.....	19
1.5. Extra-curricular Physical Activity (ECPA)	20
1.6. Curriculum.....	20
1.6.1. Types of curriculum.....	21
1.6.1.1. The hidden curriculum	21
1.6.1.2. The planned curriculum	21
1.6.1.3. The received curriculum.....	21
1.6.1.4. The formal curriculum	22
1.6.1.5. The informal curriculum	22
1.6.2. Curriculum ideologies.....	22

1.6.2.1. The scholar academic ideology	22
1.6.2.2. The social efficiency ideology	23
1.6.2.3. The learner centred ideology	23
1.6.2.4 The social reconstruction ideology	24
1.6.3. Curriculum rationales.....	24
1. Foundationalism:	25
2. Conventionalism:.....	25
3. Instrumentalism:	26
4. Technical rationality:.....	26
5. Critical pedagogy:	27
6. Postmodernism:	27
1.6.4. Thesis organisation	29
Chapter Two.....	30
Literature Review	30
2.1. Introduction	30
2.2. The 2007 New Zealand Curriculum	30
2.3. Review of the New Zealand HPE Curriculum literature	35
2.4. Discourse analysis of the NZHPE curriculum.....	42
2.5. NZHPEC implementation challenges.....	48
2.6. The influence of the HPEC on the ECPA of secondary school students	52
2.7. Psychological factors affecting participation in ECPA	53
2.7.1. Theory of Habit.....	53
2.7.2. Theories of motivation.....	56
2.8. Peer influence on participation in PA.....	57
2.9. The influence of early learning experiences on participation in PA	58
2.10. Transport availability and participation in PA	61
2.11. PE and ECPA programmes and opportunities.....	61
2.12. Parental influence on participation in sport.....	64
2.13. The role of the Health sector in promoting PA	65
2.14. The role of government sponsored PA programmes	67
Research Questions.....	69
Chapter Three	70

Methodology and Theoretical Framework	70
3.1. Theoretical Framework.....	70
3.2. Methodology.....	81
3.2.1. Rationale.....	81
3.3. Stage one (quantitative).....	83
3.3.1. Procedure.....	83
3.3.2. Participants	84
3.3.3. Instrument: Physical Activity Survey (PAS)	84
3.3.4. Limitations	85
3.4. Stage two: Qualitative	86
3.4.1. HoDs-HPE interviews	86
3.4.1.1. Procedure	86
3.4.1.2. Participants.....	86
3.5. Individual student interviews	87
3.5.1. Procedure	87
3.5.2. Participants.....	88
3.6. Students' group-interviews.....	88
3.6.1. Procedure	88
3.6.2. Participants.....	91
Chapter Four.....	92
Results	92
4.1. Physical activity survey results	92
4.1.1. Sample.....	92
4.1.2. Student's perceived levels of participation in ECPA.....	93
4.1.3. The students' perceived levels of PA.....	95
4.1.4. Comparison of the PAs that are available at school and those that are accessible outside school	95
4.1.5. The cost of taking part in ECPA	96
4.1.6. Work and participation in ECPA	97
4.1.7. Students' familiarity with programmes and resources available for recess.....	98
4.1.8. Extra-curricular activities of non-PE students	98
4.2. Results of the teachers' interviews	99

4.2.1. Year 12 students perceived levels of participation in ECPAs	102
4.2.2. Is there a connection between what year 12 students do in extra-curricular PA and what they learn from HPE?.....	104
4.2.3. Which HPE policies and practices encourage participation in ECPAs?.....	105
4.2.4. Which HPE policies and practices constrain participation in ECPAs?	106
4.2.5. The role and status of the secondary school sports coordinators.....	108
4.3. Individual student interview results.....	110
4.3.1. Participants.....	110
4.3.2. Results.....	111
4.3.3. The perceived levels of participation of year 12 students in MVPA.....	112
4.3.4. The connection between year 12 students' participation in PE and ECPA	113
4.3.5. Factors encouraging student's participation in ECPAs	114
4.3.6. Factors constraining participation in ECPA	116
4.4. Students' group interviews: results.....	118
4.4.1. Participants.....	118
4.4.2. Group-interviews results	119
Chapter Five.....	124
Discussion of the results.....	124
5.1. Introduction	124
5.1.1. What is the rationale for the inclusion of the goal of expecting “students to demonstrate an increasing sense of incorporating regular and enjoyable PA into their lifestyle” in the curriculum?.....	125
5.1.2. What school practices are in place for teaching students the incorporation of regular PA in their lifestyles?.....	127
5.1.3. Is there a system in place for monitoring the students' PA levels?	133
5.2. Discussion of findings relating to the four research questions.....	134
5.2.1. The perceived levels of PA of year 12 students.....	134
5.2.2. How significant is the relationship between PE and participation in ECPA?	137
5.2.3. Which HPE practices encourage participation in regular PA?	140
5.2.4. Which practices inhibit participation in regular PA?.....	142
5.3. The regional sports trusts and sports coordinators.....	144
Chapter Six.....	149

6.1.	Discussion summary.....	149
6.2.	Future Recommendations and suggestions	152
6.3.	Limitations.....	157
6.4.	Conclusions and closing statement.....	159
References.....		160
Appendices:		171

List of Tables

Table A:	Health and Physical Education Achievement Objectives
Table B:	Sports participation phases
Table C:	Trends of sports participation in NZ
Table D:	Survey participants
Table E:	Subjects' perceived levels of participation in 6 forms of ECPAs
Table F:	Subjects' perceived levels of PA
Table G:	Students' perceptions of most available and accessible activities inside and outside school
Table H:	Cost of participation in SSS
Table I:	Comparison of participation in 3 types of ECPA between students who work and those who don't
Table J:	Subjects' familiarity with the recess programmes and resources in their schools
Table K:	Extra-curricular activities of Non-PE students
Table L:	Teachers interviewed
Table M:	Students participating in the individual interviews
Table N:	Participants in the group-interviews
Table O:	Suggestions

List of Figures

Figure A: Graphic representation of the link between the HPE curriculum goals, strands, and learning-levels.

List of Appendices

- Appendix A:** An example of the extra-curricular activities that are offered to children from an intermediate school in Christchurch
- Appendix B:** Ethical Approval Letter
- Appendix C:** Copy of the questionnaire for students taking NCEA HPE
- Appendix D:** Copy of the questionnaire for students NOT taking NCEA HPE
- Appendix E:** Copy of the Information Letter to the Principals and BoTs
- Appendix F:** Consent form for the principal and BoTs
- Appendix G:** Copy of the information letter to the HPE HoDs
- Appendix H:** Consent form for the HPE HoDs
- Appendix I:** Copy of the Information Letter to the parents
- Appendix J:** Parents' Consent form
- Appendix K:** Students' Consent form (for the survey)
- Appendix L:** Students' Consent form (for the interviews)
- Appendix M:** Teacher's interview-questions
- Appendix N:** Student's interview-questions

List of Abbreviations

Abbreviation	Definition
BoT	Board of trustees
CST	Critical social theory
ECPA	Extra-curricular physical activity
HoD	Head of department
HPE	Health and physical education
MOE	Ministry of education
MPA	Moderate physical activity
n	Sample size
NCEA	National certificate of educational achievement
MVPA	Moderate to vigorous physical activity
NZC	New Zealand curriculum
NZCT	New Zealand Community Trust
NZSSSC	New Zealand secondary school sport council
PA	Physical activity
PE	Physical education
SSS	Secondary school sport
VPA	Vigorous physical activity
WHO	World health organisation
Youth	People aged 7 to 17

Abstract

Schools are perceived as perfect settings for encouraging students to adopt the universally recommended levels of physical activity (PA) (Haerens et al., 2009). However, the learning area of health and physical education (HPE) -previously called- physical education and sports (PES) has seen some radical reforms over the past 30 years. These reforms transformed the core objectives of PES, and the role of schools in promoting PA.

The aim of this study is to examine the discrepancy between the essential role that is attributed to HPE in the promotion of active lifestyles (Ministry of Education, 2007) and the decreasing numbers of senior secondary school students participating in extra-curricular physical activities (ECPA) (New Zealand Secondary School Council, 2010; Adolescent Health Research Group, 2001, 2008, 2012).

The relationship between what students do in HPE and what they carry over into their lifestyles is yet to be adequately investigated (Yelling et al., 2000.; Telema et al., 2005.; Shen et al., 2007; Haerens et al., 2009; Walhead et al., 20010;). Findings from this study could contribute to broadening the debate amongst both academics and practitioners about the relationship between HPE and ECPA and to enhancing their interventions.

Mixed research methods were used to collect data for this study. First a survey was conducted to gather demographic information about 162 year 12 students from five different high schools. This was followed by interviewing four individual students, four groups of students, and four heads of HPE departments about their perceptions of the 2007 HPE curriculum (2007 HPEC). Findings from this study indicate that it is very difficult to measure whether the core objective of leading students into active lifestyles is achieved or not. More research is needed into the reasons why students pursue PA in New Zealand and how it is possible to maintain their participation at the health recommended levels.

Chapter One

Introduction and Definition of terms

1.1. Introduction: Researcher's background

Engaging in a significant milestone such as carrying out a doctoral research project is not an event that was born out of a single instance of creative thought or a stroke of genius. It followed various personal attempts at learning and a multitude of experiences in parenting, teaching, coaching, and officiating in sport. Hence, my past, my values and my behaviours have a significant influence on my involvement in examining the relationship between HPE policies and the extra-curricular physical activity (ECPA) of year 12 students. For the readers to understand the rationale and the content of this thesis, it might be helpful that I use this introduction to present a summary of my personal background and the reasons which led me to engage in this project.

In terms of my identity, I am of Afro-Euro-Arab origin. I was born in a small town in the North of Morocco called Larache. My connection to education literally started from birth, because I was born inside the premises of a high school where my father resided and worked as a care-taker. By growing around students and teachers, I developed a strong attachment to learning environments and to play, in particular. As I had unrestricted access to the school's recreational and sporting facilities from a young-age, I played many team sports (notably: football, handball, volleyball and basketball) on daily basis and for very long periods of time. This led me to participate in representative sports at a fairly young-age (17). Ironically, I quickly became dissatisfied with the elitist spirit of sports competitions and never saw myself as someone who would work within commercial or elite sports organisations nor in teaching physical education and sports. So, after gaining my Baccalaureate (University Entrance Certificate), I tried studying English literature at University. This immediately turned into a disappointment (bad conditions: students' strikes, political unrest, lack of funds). So, I applied for entry into teachers' college and passed a highly

contested examination to become a PES teacher in 1982. From then on, my motivation and dedication to learning physical and social skills, and my appreciation for scientific knowledge never stopped growing.

Regarding my educational and professional development, I studied under four totally different schooling systems. My first primary school was Spanish/Catholic. Then, I (was) moved to an Arabic and French school (bilingual). My teacher-training school was French, and when I moved to New Zealand in 1990, I studied Sport, Recreation and Tourism Management in English. My learning experiences took me to nine different cities and two totally different countries (Fiji and New Zealand). My participation in sports and coaching has also taken me to more places and nations. This high rate of mobility led me to embrace diversity and appreciate what I have learned from others.

However, there are aspects of formal education that are making me increasingly sceptical about the current state of schools and their place in society. I am starting to view schools as factories that are run by business people whose main objective is the production of labour. In my subjective view, concepts such as learning-for-life, cooperation and creativity seem to be gradually becoming extinct within schools. The cutting of funds for humanities and arts programmes and the increase in funding for vocational institutions is evidence of the lack of importance that is dedicated to personal development and creativity in contrast with preparing students for work.

In the case of HPE and community-recreation management which are the areas that I have been closely involved with throughout most of my career in New Zealand, I witnessed a significant number of perplexing situations. In my initial visits (from 1990 to 1997) to various high schools as a PE reliever, sports coordinator and coach, I was pleasantly surprised by the abundance of the facilities and resources that were available for the implementation of PES programmes. But, as the years went by and my involvement in PE and sports increased, I started to notice things that didn't make sense to me at all. For instance, I learned that the annual rugby game between the two biggest schools in Timaru is called *the Blood-game*. This is

intended to reflect the levels of aggression and violence that characterise the game. I also attended some school competitions (specifically for minor sports) that were run in poor conditions such as having no referees, no officials, and no apparent rationale. What intrigued me the most was the incidents of violence between rugby players (and sometimes spectators) within the confines of reputable institutions. In Christchurch, for example, the level of violence and delinquency (mainly drunkenness) required police intervention and the arrest of three supporters in 2008 during a game between Boys High School and Christ's College and this happened on the school grounds of Christ College. Three years later, the local police had to breath-test spectators before they went into Rugby Park to watch a rugby game between the same two schools.

Looking at participation from within the context of intra-curricular PA, most schools –at present- have a sports and recreation coordinator who plans and assists students in implementing programmes during recess and other breaks. These programmes are highly valuable for encouraging students to be regularly active. However, following numerous visits to schools over lunch breaks and over other recess times, I rarely noticed students doing PA in an organised and structured form. What I often observed was that groups of students get given a basketball or a rugby ball and they just play spontaneously and freely. There is of course nothing wrong with students having a bit of spontaneous fun and exercise during their breaks, but when they do so with inappropriate skills and equipment they risk injury and in some cases losing or breaking valuable gear and equipment. They could also acquire social and physical skills and habits that are not necessarily coherent with the basic values of education. Guedes (2007) observed that “many after-school programs lack a systematic approach or curriculum for developing fundamental skills and health-related fitness work that prepare children to enjoy being active throughout life. This work should be done within the physical education curriculum, to address the needs of all students” (p.31).

What tends to happen with the role of the sports coordinators is that they end up spending most of their working hours coaching sports teams and

managing them during competitive events (transport, officiating, coaching etc.).

In my experience, it is the chaos that reigns in many school sporting-contests and recess periods (such as those mentioned above) that puts off many students, teachers and parents from taking part in valuable ECPAs. Other possible factors such as the focus on literacy and numeracy could also play a role in how ECPA is perceived and implemented.

It is this type of complexity, which I am alluding to above that motivates me to want to learn and find out more about the state and status of HPE in schools. I am particularly interested in finding out more about the role that schools play in encouraging young people to adopt and maintain physically active lifestyles. Hence, I embarked on this quest of discovering what kind of impact does one of the core objectives of HPE have on the participation of students in ECPA. The centrality of facilitating the adoption and maintenance of active lifestyles by students is widely expressed in the 2007 curriculum guidelines.

1.2. Rationale

New Zealand is a place where people like all sorts of physical activities and sports in particular (Pope, 2007; Siedentop, 2007). The current HPEC advises schools and HPE teachers to encourage students' participation in all forms of PAs in and outside school. In fact, one of the main goals of the HPEC is to lead students to incorporate regular and enjoyable PA in their lifestyle (MOE, 2007). Given the direction that is taken by recent successive governments in terms of educational policy, it might be reasonable to question the validity of various claims and goals of the HPEC including the one mentioned above which forms one of the core objectives of HPE.

Since the mid-1980s, for example, schools have been getting less and less funds for the humanities, social sciences, arts (which include a number of artistic and creative forms of physical expression i.e., dance) and special needs programmes. On the other hand, more attention has been dedicated to establishing Charter schools, and performance-based incentives for schools and teachers. These signs contradict the equality and social justice values which are also included in the HPEC (MOE, 2007). Hence, it is important to examine the relationship between policy and practice in HPE and determine to what degree the existing practices are aligned with the curriculum goals and values.

Citing Tinning and Fitzelarence (1990), Burrows commented that: "... physical education is of marginal relevance for many young people who enjoy sports and physical activity beyond schools and that finding ways of connecting up what transpires in school-based health and physical education to the lives of young people outside school is imperative" (2005, 13-14). This imperative to examine the relationship between what happens in HPE at schools and what happens outside is one of the main reasons for embarking on this project.

A second reason for engaging in this project is closely related to the first and it is about finding out why are the numbers of students and volunteer teachers and parents participating in Secondary School Sport Competitions dropping (New Zealand Secondary Schools Sport Council (NZSSSC), 2011)

despite the goals of the curriculum and the known benefits of participation in regular PA? Answering this question can also go a long way towards explaining whether the rhetoric of the HPE curriculum is backed up by scientific evidence or whether it is just a manifestation of hegemonic structures that are deeply rooted in Western society. In the context of HPE in New Zealand, Frechow et al. (2014) wrote that: "...it is often argued that the processes of curriculum development and the documents that they produce are hegemonic in character; that is, that they reflect the dominant ideas and ideals of those in positions of power and privilege. They can be seen as instruments tuned to maintain the status quo, or worse, to increase the divide between the haves and the have-nots. Each cycle of curriculum reform can thus be seen as a test of political belief and will and to reflect the prevailing social conditions within a society" (p.72).

Thirdly, in between the times that I spent in the field as a practitioner (teaching, coaching and officiating) and as a researcher (completing my Master's' degree and my Doctoral thesis) in the fields of sports and recreation management and physical education respectively, I could not avoid noticing that there is some kind of disconnect between scientists and practitioners. This could possibly be one of the reasons why Stothart (2005) suggested that: "While academics have made profound on-going contributions to academic, scholarly and professional leadership, it is noticeable that a significant proportion have not provided consistent contributions to the physical education profession ... An increase in contributions from more academics in the tertiary sector would serve to enhance and elevate the status and accessibility of physical education in New Zealand" (p.96).

Unsurprisingly, this dichotomy between scientists and practitioners in the field of physical education was raising concerns in the U.S. as well. Guedes (2007) wrote that: "Since the crisis that emerged in physical education in the 1960s and 1970s, and the growing discontent between the scientists and practitioners, the pedagogical discipline of physical education has been too isolated from the academic dialogue about the aim of the field. As a result, pedagogy professionals and practitioners have been unable to assume their rightful responsibility of advocating and defining the nature of the field at

the school level. This also includes taking the lead in educating parents, administrators, faculty and staff about physical education class, its curriculum, designed outcomes, and benefits” (p.47).

My own observations and the concerns of the scholars presented above have motivated me to want to challenge this traditional dichotomy that has prevailed in the field of physical education for far too long.

The three elements described above combine, equally, to raise my curiosity and motivation to examine the discrepancies that appear to be reflected in the relationship between HPE policy and practice.

1.3. Significance

This project has the potential to make three significant contributions to the process of planning and decision making in the learning area of HPE. First, it is intended to serve as an informative tool for students, parents and teachers. No matter how effective the curriculum guidelines are, these stakeholders have the right and duty to make informed decisions and contributions that have long lasting impact on who they are and what they will be in the future as Boards of Trustees usually include representatives from the students, teachers and parents.

Making decisions on informed choices is a measure that can be used to distinguish between democratic and non-democratic practices. For instance, if a BOTs wanted to raise the profile of a school and increase its funding sources, a member of the board (or more) may suggest that success in inter-school competitions can make those goals more achievable. However, success in those contests could be an advantage for elite sporting-students. But, it could also be gained at the expense of mass-participation in ECPA. If all members of the board are informed of the advantages and the disadvantages of putting school resources at the disposal of a minority at the expense of the majority, and if they reach consensus over a decision, their decision-making process will be more democratic than if they were only informed about the advantages of elite participation.

Therefore, informing the stakeholders about some of the aspects of HPE and sport that can be deceiving to the unsuspecting minds (such as gender discrimination, violence, illegal dealing and use of performance-enhancing drugs) can contribute

to expanding the debate and the pool of information that planners can resort to, before making decisions of high relevance and importance to HPE.

The second significant aspect of this project is that it is conducted with students who have nearly completed their entire primary and secondary schooling stages (from year 1 to year 12) under the 1999 and 2007 HPECs which saw the most radical changes in HPE policy such as the amalgamation of PE, Home Economics and Health education into one single learning area. Some of the teachers that were interviewed in this project also had varying experiences with implementing the curriculum guidelines in times of both stability and transition (between reforms). Getting statements directly from students and teachers about their perceptions of the HPE practices that are prevailing in their schools can explain or help understand some of the existing findings from the quantitative research that attempts to measure the adherence levels of young people to PA, or the frequencies of participation of young people in various PAs. Up to now, I have not come across any studies that talked directly to students or teachers about their perceptions of the curriculum in general or about their PA patterns in New Zealand. In the U.S. too, Portman (2003) commented that: “To date no one has asked students if their physical education experience has helped or hindered participation in regular physical activity” (p.152).

The third significant aspect of this project is that it is deliberately guided by the intention of drawing on as many theories and fields of inquiry as possible to examine the relationship between HPE and ECPAs. Guedes (2007) rightly suggested that there needs to be greater ‘integration’ of the fields of history, biology, anthropology, economics, psychology and sociology into inquiries concerning PA benefits, sedentary behaviour and obesity. One could also draw on findings from the sports, recreation and leisure theories which are closely related to PA and which have made major scientific strides over the past 40 years.

1.4. Definition of key terms

Before reviewing the existing literature about the influence of the curriculum on the ECPA of students, it is necessary to define the meanings of the concepts of PE, sport, leisure, PA and curriculum. Because as it will later become evident, there are various opinions about what some of these concepts mean and it is better to clarify at the start of this review what they should be taken to signify throughout the rest of this thesis.

Sport was proven to be highly complex and particularly divisive in New Zealand HPE teaching circles (Pope, 2013; Stothart, 2005). Providing a clear argument for distinguishing between sport and PE is seen as helpful in this section, and it will serve three much needed purposes. The first is to clarify and re-affirm the role of PE as an educational learning area that has the potential to achieve the moral and social goals that it stands for. The second is to single out which negative aspects of sport can be anti-pedagogical. Meaning which aspects of sport can act as antagonisms that contradict and inhibit the achievement of some of the core goals and values of the education curriculum. By drawing a definite line between PE and the elements of sport such as marginalization and winning at all costs, PE programmes can still use sports as mediums for learning but, PE teachers would need to have sufficient training and resources to use for the adaptation of sports to events that are exclusively educational.

Additionally, there are widespread calls from various parts of the world seeking more investigation of the carry-over effect of PE practices on the students' lifestyles (Findlay et al., 2010; Laasko and Talema, 2008). The main reason for this is that leading students to active lifestyles is one of the core objectives of PE. So, for students and PE teachers to achieve the core goals of their learning area, it is important that they are clear about what these goals are, and that they have a high degree of consensus about how to achieve them.

1.4.1. Physical Education

The 2007 NZEC defines physical education as follows: “In physical education, the focus is on movement and its contribution to the development of individuals and communities. By learning in, through and about movement, students gain an understanding that movement is integral to human expression and that it can contribute to people’s pleasure and enhance their lives. They learn to understand, appreciate, and move their bodies, relate to others, and demonstrate constructive attitudes and values. This learning takes place as they engage in play, games, sport, exercise, recreation, adventure, and expressive movement in diverse physical and social environments” (NZC, 23).

The above definition and the complementary material provided in the curriculum comprehensively explains and describes all the eight learning areas that form the curriculum.

The centrality of movement and physical expression, in general, is illustrated in writings from across the globe. In the U.S., for example, Bates and Eccles (2008) wrote that physical education is “a school subject [planned sequential program of curricula and instruction] that is designed to help children and youth develop the skills, knowledge and attitudes necessary for participating in active, healthy living” (p.18).

Furthermore, “The content of physical education curriculum ...typically includes learning outcomes that are most likely achieved through participation in games, sports, dance, and outdoor pursuits, as well [as] those that lend themselves to participation in lifestyle activities such as walking, strength training and yoga” (Bates and Eccles, 2008, 19).

While major consideration (here and abroad) is given to movement and to the amount of moderate to vigorous physical activity in teaching PE, a study in New Zealand found that less than half of the physical education lesson time is actually spent on physical activity (Grant and Olson, 1990). Similarly, Curtner-Smith et al., (1996) found that during PE classes, pupils only spent 20.9% engaging in moderate to vigorous activity. In New Zealand, Sterling and Belk (2002) wrote that “18% of physical education time is likely to be

spent on management issues” (p.71). This is happening across many parts of the world (Hardman, 2008), and despite the significant contribution that physical activity makes to young people’s lives when lessons are organised and presented with moderate to vigorous physical activity (MVPA) in mind (Fairclough and Stratton, 2005).

The low rates of MVPA in PE classes continue to exist and could be caused by the following factors (which are based on observations made from an extended period of teaching PES at high school levels in both Morocco and New Zealand):

- PE classes are generally scheduled as one-hour periods. Usually, at least 10 minutes of the hour are lost in transitions between periods (5 minutes in coming to PE class, and 5 minutes at the end of class to allow students to get cleaned, get changed and move on to their next classes).
- The fitness levels of students are varied, PE teachers are always careful not to overload the students who are not fit. Therefore, they include short rest intervals in their classes to allow all participants to recover and get ready for the next bursts of MVPA.
- Some of the time from PE classes is often spent organising space (i.e., setting-up work stations, moving between stations, packing-up), providing instructions and feedback, and sometimes dealing with the students’ questions and attitudes. All these pedagogical elements reduce the time that students spend in movement during a PE class. Other factors such as student inquiries or incidents like injury can also reduce the amount of MVPA during practical HPE classes.

1.4.2. Sport

Defining sport is not a simple task (Marjoribanks and Farquharson, 2012). But, in the context of this study, sport is looked upon both as a sum, or a group of games and activities, and as a process that is transforming and transformed by society. More importantly, it is some of the negative elements of the sport process that will be discussed with more detail in this definition to illustrate the need to keep them away from educational environments such as schools. Marjoribanks and Farquharson (2012)

provided a definition of sport that reflects its meaning both as an activity and as a process, they wrote:

“Sport is defined ... as constituted by activities that:

- [are] organised or institutionalized;
- involve physical activity and skill;
- involve competition and reward
- are inextricably linked to their social, political and economic context, and will both be influenced by that context and will influence that context and;
- are the outcomes of social processes, such that they can be transformed over time and will vary by location” (p. 6).

As activities like football or skateboarding are neutral in essence, they form no restrictions on who can use them or not, but, as processes, they can not only determine who plays them or who doesn't, but they can also determine who profits from their implementation. On the event of the Olympics, for example, Berg (2008) wrote that: “But all this pageantry obscures the Olympics' essential purpose—first and foremost, the Games are designed to shine glory upon the nations that hold them. National politicians and government use the Olympics to achieve their individual or national goals” (p. 15).

Many politicians (i.e., General Franco of Spain; Putin of Russia) are known for using sports as a vehicle for calming the public distrust and agitation towards the governing elite. Other politicians (i.e., current New Zealand Prime minister) are also known for attending major sporting events to lobby for public support and claim some sort of credit for the success of the national teams or athletes.

Sport at the commercial and elite levels is not immune to being used for lobbying for political power, or corruption (Jennings 1996, 2007). It has even changed the nature and rules of some sports such as cricket. For commercial purposes, the sport of cricket has been transformed from a five-day game to a one-day game (50 overs per innings) to a 20-over game.

Sport is also a big entertainment industry. In the U.S. for example, “professional sports are the 10th largest industry generating \$220 billion a year” (Zirin in Eitzen, 2012, 3). The problem with the commercialization of sport is that it has turned winning contests and making financial profits into the main goals for participation.

Eitzen (2012) wrote that: “Money is often the key motivator of athletes. Players and owners give their primary allegiance to money rather than to the sport or to the fans. Modern sport, whether professional, big-time college, or Olympic, is “corporate sport”. The original purpose of sport –pleasure in the activity- has been lost in the process” (p. 209).

By transforming the goals of participation in sport from intrinsic motivations such as the joy of taking part in the activity into extrinsic motivations such as making financial profits, the methods that were used to play, teach and coach sports had to change too. They had to adapt to the corporate demand for breeding the athletes and the stars of the future.

Elite athletes, for example, train long hours and under conditions that are not suitable for everyone. In some countries like the U.S., China and Russia the grooming and development of gymnasts for the Olympics begins as early as the ages of three or four. The rigorous and often military-style coaching that these young people endure can have a long lasting negative effect on their bone and muscle growth, and even on their emotional and social skills. Then there are the examples of elite tennis players and jumpers who use repetitive training methods requiring the overuse of a specific limb or muscle group such as the dominant arm (for a tennis player) or the thigh (for a high jumper) to a point where they, actually, cause themselves balance problems and they end up with one arm or one leg bigger and stronger than the other. While some might find it hard to see the difference between sport and PE, because they both consist of playing games or activities, it is the overall profit-making goal of the (process of) sport and the methods been used for its promotion that make it counter-productive to educational practices.

In summary, sport has its advantages and benefits too, its positive contributions should not be discounted or permanently dismissed, it is its misuse that is not coherent with the more social and democratic values of

school. Zerlin (in Eitzen, 2012) suggested that: “sports are neither to be defended nor vilified. Instead we need to look at sports for what they are, so we can take apart the disgusting, the beautiful, the ridiculous, and even the radical” (p,7). Hence, PE has every reason to continue using sports activities and encourage participation in sport. But, it needs to explicitly distance itself from the anti-social and anti-educational practices of sport.

Under the current NZC guidelines, schools (and teachers) are required to provide learning and career guidance to students so that they can channel their potential into the right paths, those that suit their goals and abilities. So, students at senior secondary levels in particular, need to be informed of the advantages and disadvantages of working in the sport industry. Some jobs in sports demand working unsociable hours (evenings and weekends and extensive travel) as well as dealing with suspicious elements such gambling agents, illegal dealers of performance enhancing drugs and sponsors from breweries and tobacco companies.

1.4.3. Leisure

Leisure too is a complex concept that is hard to define. However, there are three kinds of contrasting ways of defining it which are not that difficult to follow. Like sport, leisure can be thought of as ‘*unobligated time*’, more specifically, the segment of time that we spend free from the responsibilities of work or study in the case of students (Gidlow, 1993). The problem with this definition is that, for some people, what they do away from work is not really freely chosen. They might spend that time doing housework, or other forms of non-paid jobs.

The second definition of leisure considers the concept as a ‘*freely chosen activity*’. This definition is based on the idea that unobligated time is a vehicle for the expression of freely chosen activities such as art, sport and socializing (Henderson, 1989). Given the possibilities that some activities such as arts and sports can mean leisure for some and work for others, it becomes clear that this definition has also got its shortcomings.

The third definition of leisure considers the concept as a ‘*state of mind*’, a state of consciousness that represents enjoyment, or happiness to a larger

extent. Csikszentmihalyi (1991) calls this state 'Flow'. He suggested that leisure is not determined by what time of the day it is or what activity we are taking part of, but by how we feel during the activity.

There are a number of internal and external conditions that can be present or come into play during work or away from it that influence how leisure is experienced. While some activities are more conducive to experiencing that state of mind than others, the two types of conditions listed below must be present for the manifestation of flow or the optimal leisure experience:

Internal conditions:

- The ability of the participant to match his/her skills to the opportunities around them
- The ability of the participant to read feedback that others fail to notice
- Having the ability to concentrate and not be distracted
- The ability to not be afraid of losing the '*Self*', allowing the ego to easily slip out of consciousness

External conditions:

- The activities have clear goals and manageable rules
- The activities make it possible for the participant to adjust opportunities for action to match his/her abilities
- The activities provide clear information about how the participant is doing
- The activities allow for the screening out of distractions and make concentration possible. (Csikszentmihalyi, 1991).

This type of definition of leisure was also criticised by Gidlow (1993) for being limited by narrowing the experience of leisure to individual predispositions and ignoring the prevailing economic, political and cultural structures of society. Gidlow (1993) went on to explain that it is the multi-dimensional nature of leisure that makes it difficult to find conformity over the ways that it is defined. What is more interesting about Gidlow's (1993) comments is that he suggested that instead of searching for definitional

conformity over the meaning of leisure, it is perhaps more important that researchers and sociologists “recognise the strengths and limitations of the definition(s) they chose to work with, to be consistent in their use of definitions and careful in the generalizations they make from them” (1993, 162).

1.4.4. Physical Activity (PA)

The commonly used definition of PA is simple and widely accepted among practitioners. It suggests that PA is “any bodily movement that is produced by skeletal muscles and that results in caloric expenditure” (Madisson et al., 2010, 4). In the educational context, PA is defined as a behaviour consisting of bodily movement that requires energy expenditure above the normal physiological (muscular, cardiorespiratory) requirements of a typical school day.

The implementation of PA in schools takes three important considerations into account. They are:

- Regular instruction in physical education, co-curricular activities and recess.
- Physical education classes are offered with moderate to vigorous physical activity being an integral part of the class.
- Co-curricular activities include physical activity integrated into areas of the school program—classroom, gymnasium and/or outdoor activity spaces. (Tennessee Department of Education, 2012).

The World Health Organization’s (WHO) definition of PA extends beyond the boundaries of school and suggests that: “For children and young people...physical activity includes play, games, sports, transportation, recreation, physical education or planned exercise, in the context of family, school, and community activities” (WHO, 2002, 7).

There are, however, two dimensions of PA that need mentioning here. They are the context or the domain in which PA is undertaken and the intensity of the activities that people take part of.

1.4.4.1. PA domains

According to the WHO (2002) there are four types of domains in which PA are often undertaken:

- 1) Occupational PA: this is about the physical activity that people do while at work. In the case of students, their PE and extra-curricular PA count as occupational.
- 2) Active travel: walking, running, or cycling to work or school counts as another domain of PA.
- 3) PA related to domestic or household duties. This can include household maintenance activities which require caloric expenditure such as gardening, and cleaning activities that require caloric expenditure.
- 4) Leisure time PA. This context refers to the physical sports and recreation activities that people do when they are away from work.

It is important to include these domains and also to distinguish between them when trying to assess the participation of individuals in PA. For example, while some students may appear to be inactive at school (in their occupational domain) they may in fact be highly active in their leisure time and/or in their chosen form of travel to and from school, and to other destinations.

1.4.4.2. Intensity of PA

The intensity refers to the levels of effort that are required to complete a physical task or activity. One of the most commonly used measures of physical intensity is the MET (metabolic equivalent of task). This is the physiological measure expressing the energy cost of physical activities, and it is defined as the ratio of metabolic rate (the rate of energy consumption) during a specific activity in relation to each person's metabolic rate. So, for example, if a person at rest has the metabolic rate of one MET, and they take part in an activity which requires the expenditure of over six METs, they will be considered to have taken part in a vigorous physical activity. The

level of energy expenditure associated with all physical activities is determined by age, sex, fitness level, and weight.

Generally, the intensity of PA is categorised into three levels.

- 1) Light-intensity PA (LPA) = < 3 METs
- 2) Moderate-intensity PA (MPA) = 3 to 6 METs
- 3) Vigorous PA (VPA) = > 6 METs.

1.4.4.3. The health recommended PA levels

In 2004, the WHO adopted a Global Strategy on Diet, Physical Activity and Health (DPAS) which stated that: In order to improve cardio-respiratory and muscular fitness, bone health, cardiovascular and metabolic health biomarkers and reduced symptoms of anxiety and depression the following is recommended:

1. Children and young people aged 5-17 years old should accumulate at least 60 minutes of moderate- to vigorous-intensity physical activity daily.
2. Physical activity of amounts greater than 60 minutes daily will provide additional health benefits.
3. Most daily physical activity should be aerobic. Vigorous-intensity activities should be incorporated including those that strengthen muscle and bone, at least 3 times per week” (WHO, 2007, 7).

In light of the above recommendations, and taking into account the widely publicised and accepted benefits of PA, it is not difficult to understand why schools and curriculum planners insist on installing –in the students- the habit of doing regular PAs. In NZ, the PA Guidelines for children and young people aged from 5 to 18 state that through each day, they should: “do 60 minutes or more moderate- to vigorous- intensity physical activity” (Madisson et.al., 2010, 5).

1.5. Extra-curricular Physical Activity (ECPA)

In the context of this study, ECPA consist of:

1. Intramurals: The PA programmes that students take part in during recess and the lunch time breaks, these programmes provide students with a wide range of possibilities to participate in competitive and non-competitive PAs (dominantly sports) within their own school.
2. Extra-murals: The PAs that students participate in at training for, and during inter school sports competitions, and the PAs which students pursue in their leisure time. These generally relate to playing, training and competing with family, a group of peers and/or for a community group or association, or for a sports club. Individual training and exercising also fits into this category.

1.6. Curriculum

Definitions of the curriculum are included in this section rather than the literature review to avoid taking the focus away from the New Zealand curriculum and the NZHPE syllabus which are the main themes of investigation in this study.

According to Hewitt (2006), “Curriculum as a word is not a recent invention. It does not simply refer to what is taught in schools or imply a listing of subjects taught. It is more complex, a word from antiquity that has evolved in meaning” (p.24). Hewitt’s statement suggests that the meaning of the curriculum has changed over the years. It has evolved to reflect the economic, political, and cultural environments in which it is embedded or developed.

In New Zealand, the Ministry of Education states that: “The New Zealand curriculum is a statement of official policy relating to teaching and learning in English-medium schools ... A parallel document, Te Marautanga o Aotearoa, will serve the same purpose for Maori-medium schools” (MOE, 2007, 6). This definition of the curriculum is rather limited in its scope. It reflects the focus of the government on the guidelines that schools need to follow to reach the educational goals which are prescribed for them. It

neglects other influences that affect the students' progress such as the activities that they take part in outside the scheduled class times or the learning that happens as a by-product of the interaction between students and teachers, between students and their peers, and between students and their parents (while they are doing homework for example).

Kelly (1999) suggested that “Any definition of the curriculum, if it is to be practically effective and productive, must offer much more than a statement about the knowledge-content or merely the subjects which schooling is to ‘teach’ or transmit” (1999, 3). He recommended that curriculum planners must look beyond the content of schooling and reflect on its rationale and its effects on students. Kelly went on to suggest that we must differentiate between various types of curricula, these are: “the hidden curriculum, the planned curriculum, the received curriculum, the formal curriculum, and the informal curriculum” (p.3).

1.6.1. Types of curriculum

1.6.1.1. The hidden curriculum

This includes the “things which pupils learn at school because of the way in which the work of the school is planned and organised, and through the materials provided, but which are not in themselves overly included in the planning or even in the consciousness of those responsible for the school arrangements” (Kelly, 1999. 4). Examples of this “type of curriculum” can be found in the way that some students learn new attitudes and the way they take on new social roles such as becoming leaders in some activities and followers in others. Gender roles can also be acquired indirectly through the interaction with others in and outside schools.

1.6.1.2. The planned curriculum

This reflects the content that is officially and explicitly stated in the syllabuses, prospectuses, and official guidelines for teaching and learning.

1.6.1.3. The received curriculum

This is about what students actually experience during learning. The NZC as well as others from other nations are full of ideal intentions and principles, but whether these are, in fact experienced by students is not easy to discern. MacDonald, for example, wrote that “the methods and documents of the

curriculum innovation have little impact on the schooling system's entrenched knowledge and practices..." (2004, 70).

1.6.1.4. The formal curriculum

This is about the activities that are scheduled as part of the learning. The periods of teaching time that are allocated for the various learning areas or subjects that are offered by schools (Kelly, 1999).

1.6.1.5. The informal curriculum

This is about the various informal activities that students take part in on a voluntary basis during recess, after school, on weekends, and during the holidays. These are often described as extra-curricular activities and they are supposed to have just as much educational value as the formal activities.

Kelly's break-down of the curriculum into various types further illustrates the difficulty which could be encountered in trying to assess the effectiveness of what happens in schools and whether the goals of the curriculum planners can be achieved or not. Admittedly, some of the goals of the curriculum are affected by other socio-economic factors that are totally unrelated to the curriculum such as advertising, electronic gaming, and social media.

One more interesting fact about the curriculum that merits inclusion in this section is the rationale or the ideology behind the planners' choices in curriculum design. According to Schiro (2008), curriculum designers usually produce their work according to one or more of the following ideologies.

1.6.2. Curriculum ideologies

1.6.2.1. The scholar academic ideology

This ideology is built on the premise that the goal of education is to "help children learn the accumulated knowledge of our culture: that of the academic disciplines" (Schiro, 2008. 4). The academic scholars view teachers as the disseminators of knowledge (the truth) to the learners in the hope that they may one day become proficient in a particular discipline. The scholars are considered as "Inquirers into the truth" (Schiro, 2008. 4) and therefore, they occupy the top of the hierarchy of the people searching for

knowledge and truth. Under this ideology, the curriculum was seen as a means of transmitting knowledge from the top to the bottom of the hierarchy.

Historically, the followers of this ideology viewed PE as a recreational subject that had no academic merit apart from giving students a break from the rigors of real academic subjects such as reading, writing, maths and science. However, in the last 2 or 3 decades, we have witnessed a total reversal of this understanding to the point where senior secondary school students are required to spend more time on studying the theories of health, PE and sports than they spend on doing actual physical activity.

1.6.2.2. The social efficiency ideology

Proponents of this ideology view schooling as a means of producing future contributing members of society. Hence, they believe that the goal of schooling is to train young people to acquire the skills and habits that they will need in the workplace and at home if they are to become productive and to regenerate orderly communities. The role of the teacher under this scenario is based on the behaviourist theory, which suggests that learning happens within a direct cause-and-effect, action-reaction, or stimulus-response context (Schiro, 2008).

In the context of PE, this ideology is reflected in situations where the main focus of the curriculum is on teaching students' functional abilities (physical skills such as balance, dexterity, coordination ...). Under this scenario, the practitioners believe that children are supposed to learn how to move "efficiently" so that they can execute their daily activities with less risk of fatigue, injury or failure. The early promoters of PE in the New Zealand schools saw the subject as a good-tool for preparing young people for war (to defend their nation) and to prepare them for work. Grant (1992) wrote that until the 1940s "most scheduled physical activity was regimented physical training for boys only, with an emphasis on military drill" (p.304).

1.6.2.3. The learner centred ideology

Under this ideology, the role of education is to cater for the needs of the learners rather than those of society or the academic disciplines. In this environment, the teacher takes on the role of a facilitator. The learner

centred programs or curricula are viewed as contexts in which the students make their own meanings of things through their interactions with the surrounding environments and with others. They are often expected to achieve that through problem solving and self-directed inquiry.

This ideology is reflected in PE classes where the content is individualised to fit the needs and motivations of students. Teachers who adopt this style present students with inventories of the facilities and resources that they have at their disposal, as well as the times that they have available to them in order to set goals together and decide on which approach(s) to adopt to increase their probabilities of reaching their goals.

1.6.2.4 The social reconstruction ideology

Social reconstructionists assume that schools should take up the responsibility of addressing the wrongs and injustices that are prevailing in society, and direct the learners towards a more equitable and satisfying way of living (Schiro, 2008). Hence, they believe that education is the social process through which society can be reshaped. Under this vision, teachers are seen more as “counsellors” whose role it is to diagnose the ills of culture and find ways of fixing them.

The current NZHPEC reflects this ideology by suggesting that students are expected to take responsibility for their actions and the actions of others. The current HPEC designers were largely influenced by the concept of transformative pedagogy of Freire (2004) which suggest that students and teachers are supposed to shape their futures and have a bigger role in democratising their environments instead of being passive.

1.6.3. Curriculum rationales

Another way of looking at the rationale(s) behind curriculum design and development is to consider the curriculum document as a “text that is made up of numerous discourses” (Rossiet al., 2009, 75). The curriculum, like textbooks, newspapers, policy statements, paintings, and photographs can be considered as a “text embodying discourses that articulate ideas, beliefs, values, and practices” (Rossi et al., 2009, 76).

According to Moore (2006) there are “six different versions of the curriculum or at least six different justifications for determining what should be included in a curriculum” (p.32). These are: foundationalism, conventionalism, instrumentalism, technical rationality, critical pedagogy, and postmodernism. These discourses are summarized below. They are deliberately presented with no comments on their merits or their validity. The main purpose for including them in this review is to illustrate the diversity of the rationales that are seen to have a degree of influence on the curriculum development and policies.

1. **Foundationalism:** This rationale is based on philosophical, psychological and sociological perspectives to justify the content that needs to be included in the curriculum and the shape that it needs to take. From the philosophical viewpoint, and according to Hirst’s (1974) theory, a rational curriculum should be based on the nature and significance of knowledge itself, and not on the predilections of pupils, the demands of society, or the whims of politicians. From the psychological viewpoint, foundationalism is exemplified in the work of Gardener (1983) who suggested that there are seven types of intelligence that need to be incorporated in the curriculum frameworks. These are: linguistic, logico-mathematical, musical, bodily kinaesthetic, spatial, interpersonal and intrapersonal. The sociological type of foundationalism is represented in the claim that normal societies (what he called non-pathological) have a common framework for guiding their activities. This in turn, merits the inclusion of these activities in the curriculum. Religion, for example, could be considered as one activity that societies have often adopted for developing curriculum content.
2. **Conventionalism:** Under this rationale, education and curriculum must have a particular service (or convenience) for society. In explaining this rationale, Moore (2006) eludes to three different groups. First, he cites the “neo-conservative traditionalists” and argued that their main focus in curriculum is on preserving a particular body of knowledge through schools and through the use of “canonical texts that constitute various disciplinary traditions.” (Moore, 2006, 34). Secondly, Moore (2006) looked at the “technical instrumentalists” who perceive that the curriculum must be constructed around the needs of the economy. According to

this tendency, education is meant to promote: “flexibility, entrepreneurship, trainability and a willingness to take part in a market economy” (Moore, 2006, 34). The third tendency that Moore (2006) uses to explain conventionalism is the “Postmodern” perspective. Postmodernists believe that knowledge is relative with no foundational principles. Therefore, they see no logic in the inclusion in the curriculum of some core values or particular forms of knowledge at the expense of others. What is common to the three curriculum rationales that are summarised above is that they emerged and prevailed at different periods of time. What they tend to neglect is that knowledge evolves over time, and that despite that there are some universal laws or principles that have been rigorously accumulated that must be included in all curricula no matter where or when educational interaction is taking place.

3. **Instrumentalism:** This rationale is similar to the one that appears to be behind the conceptualisation of the current NZC. It is based on the premise that: “the curriculum is constructed in terms of whether the experiences undergone by students contribute to the development of dispositions that allow them to live ‘the good life’ (Moore, 2006, 35). The equivalent of the ‘good life’ in the NZC is the concept of ‘wellbeing’. The problem with this view is that both these concepts mean different things for different people. For some people wellbeing could mean leading an autonomous life. For others, it could mean living a fulfilled life. For White (1982, cited in Moore, 2006), the two meanings described above could be totally different.
4. **Technical rationality:** Within this discourse, the curriculum in its content and shape, is considered to be of less significance than knowledge (Moore, 2006). And knowledge, in turn, is viewed as a vehicle for optimizing economic efficiency. Under this scenario, the curriculum is seen as ‘unproblematic’ and its main goal is efficiency. Schools are viewed as workplaces where educators are expected to be effective in achieving pre-set objectives. The problem with this rationale is that it can be neglecting of the method by which objectives are to be achieved. For example, if the curriculum designers’ main goal in New Zealand is to be placed among the top five nations in the OECD in secondary school results in maths, English and science, one could assume that the current education system would be

rightfully described as effective and perhaps efficient too. But, if one reflects at the methods by which those results are achieved, one may wonder why there are still many students, parents and teachers who dislike national testing and the ranking of students and schools.

5. **Critical pedagogy:** According to Moore (2006), this rationale came about as a “reaction to technicist and essentialist forms of knowledge” (p.36). Critical pedagogues suggest that the curriculum should facilitate the identification and uncovering of the policies and practices that constrain freedom, justice and democracy. Moore (2006) cites feminists and anti-racists as two examples of theorists who fit into this category because they not only recommend that the curriculum must include ideas about how the world works, but they also express the intention to change the world so that it fits with their views about what it should be like. In their view, critical pedagogues assume that the conventional curriculum is hegemonic in nature and acts as a medium for oppression and discrimination. Hence the role of education under critical pedagogies is to empower students to openly discuss and analyse the conventional ways of learning and to choose the methods and content that suits their needs best.

6. **Postmodernism:** Moore (2006) suggested that postmodernism might be best understood from three particular narratives. The first is “Irony”. Under this scenario, meanings or knowledge in general are never fixed or absolute and that the educators’ position can never be definitive or natural. This implies that the curriculum content and the teaching/learning methods must evolve and adapt continuously to the economic, technological and societal changes. The second narrative is “Tragic”. Under this scenario, any attempt to view the world outside the modernist perspectives is “bound to be ambiguous, unsettling and incomplete”. The third scenario is “Parodic”. In this context, the role of educators is to just “play the game”, meaning that there is no need for educators to hold on to tradition or any fixed positions about the curriculum. The world is fast evolving and society will be better served by learning to adapt and change according to the new technological demands and the high values that are currently placed on individual choice and freedom.

All these discourses that are described above can be separately or simultaneously affecting the motivations of the policy makers and planners. As Moore (2006) explained “It would be perverse to suggest that curriculum theorists and policy makers charged with developing curricula in real-life settings operate through one of these discourses without reference to the others. Indeed, curriculum-making is always embedded in policy-making processes and maybe understood as a series of negotiations and compromises between different interests rather than as the creation of a comprehensive, perfectly formed and coherent set of prescriptions” (p.32).

Finally, in this section, it is important to point out that the word discourse in the context of this study is viewed as: “a regular, recurrent pattern of language that both shapes and reflects the user’s basic intellectual commitments” (Sparkes, as cited in Rossi, 2009, 75).

Rossi’s (2009) discourse analysis of the Australian HPE curriculum will be expanded on further in the section about the NZHPEC. Australia and NZ have many historic (colonial) and economic ties that can be helpful in understanding their current state of affairs.

One last but highly important characteristic of curricula –especially in the developed countries- is that the people who design them are often aware of the regional differences between schools in terms of resources, needs, and priorities. Therefore, they explicitly encourage students, parents and educators to participate in the decision-making processes in their schools and adopt some kind of flexibility in their implementation of the curriculum guidelines. In the “Values” section of the New Zealand curriculum, for example, it is stated that “The specific ways in which these [curriculum] values find expression in an individual school will be guided by dialogue between the school and its community. They should be evident in the school’s philosophy, structures, curriculum, classrooms, and relationships” (MOE, 2007, 10). Furthermore, according to the School Curriculum Design and Review (MOE, 2007), it is made clear that the national curriculum “gives schools the scope, flexibility, and authority they need to design and shape their curriculum so that teaching and learning are meaningful and beneficial to their particular communities of students” (p.37). What is

somehow contradicting to this acknowledgement in regional differences in learning is the adoption of national [achievement] standards at the senior levels of high school in New Zealand. These standards and other assessment structures will be reflected upon in the next section.

1.6.4. Thesis organisation

Chapter Two of this thesis presents a literature review outlining past and current theories about the relationship between HPE and ECPA. The main goal of the literature review is to illustrate the complexity of this relationship and the large number of factors that interact together to determine why students get involved in ECPA and how they do so. Chapter Three describes the theoretical framework and the methodology that are adopted in this study and the reasons for which they were chosen. Chapter Four contains a summary of the results which were collected through a quantitative survey and through interviewing students and teachers. The fifth chapter includes a discussion of the results as well as a summary of the theoretical and practical implications drawn from the study. The sixth chapter presents future recommendations about the study of the curriculum and PA, and some closing statements by the author.

Chapter Two

Literature Review

2.1. Introduction

There is an abundance of literature about the 2007 HPEC and the PA habits of students in New Zealand and abroad. However, very few studies have looked at the relationship between the HPE curriculum and its influence on students' lifestyles by engaging and listening directly to the voices and opinions of students and teachers.

The theories and topics that are included in this chapter are selected on the basis of their importance and relevance to the core HPE objective of leading students to becoming physically active in their lifestyles. The literature that is covered in the following sections was chosen with the intention of integrating some of the current concepts and methodologies in the design of a survey and the conduct of interviews with students and teachers. Results and examples from other studies are drawn upon to illustrate their relevance and importance to the theme of this research.

2.2. The 2007 New Zealand Curriculum

In her foreword statement in the 2007 NZC, the then Secretary for Education Ms Karen Sewell emphasised that the current curriculum is an “outcomes-focused” document that follows in the lines of the 1992 curriculum. She added that the current curriculum came about in response to the increasing diversity of the New Zealand population, the increasing technological sophistication, and the increasing complexity of the demands of the workplace. But, before presenting further details about the NZC and discussing some of its content, it is important to note that it is presented in two languages/forms: English and Maori (Te Marautanga o Aotearoa). Both these curriculum documents reflect or represent the official policy statements regarding learning and teaching in the NZ schools (NZ curriculum, 2007, 6).

From November 2007 onwards, schools in New Zealand were asked to gradually introduce and follow the guiding principles of a new curriculum with the intention to fully implementing them by February 2010. The Education Review Office (ERO) has since conducted multiple reviews to monitor the implementation of the curriculum and assess whether it is achieving the goals that it was set out to accomplish or not. In 2011, for example, ERO investigated a sample of 113 schools to find out to what extent the curriculum principles were implemented. Findings from this review showed that the curriculum principles were highly evident in about a third of the schools investigated, 35% of the sample showed some evidence, and 33% showed minimal or no evidence of following the curriculum principles (ERO, 2012, 1). The variability of these results and the relatively short period between the full implementation of the 2007 NZC by schools and the present indicate that it might take few more years before one can get a true reflection on the merits and the impacts of the 2007 NZC.

It might also be worth noting that the NZC has seen some frequent reforms over the last 27 years (Soutter et al., 2012; Ovens, 2010). As Thrupp indicated: “In the late 1980’s, there was an abrupt switch in education policy from the exceptionally egalitarian and democratic Curriculum Review instigated by Russell Marshall ... to the market-oriented education policy heralded by the Tomorrow’s Schools reforms” (2010, xviii). Another notable observation about the curriculum reforms was made by Bolstad and Gilbert (2008) who wrote that: “the shift in the senior curriculum involves a shift away from an approach that is, at least in theory, learner centred to one that is knowledge centred” (p.13). This switch in policy has had significant impacts on the ways in which the current curriculum was conceived, written, and implemented.

For the purposes of this study, I will solely focus on one significant perspective about the way in which the curriculum is written and presented. Ovens (2010) has noted that the 2007 curriculum is “organised in much the same way as a strategic plan guiding a corporate business” (p.28). Whether the structure and the language of the curriculum were intended to reflect this strategic perspective by design, or whether this happened by coincidence (which I doubt), it is hard to detect what is it exactly that the government

and the curriculum planners are expecting from the stakeholders in the education sector. On the structural aspect of the curriculum, for example, some learning outcomes don't seem to follow a progressive cohesion and appear to be included in the syllabus mix with little consideration about how they relate or affect one another.

For instance, after students are expected to: "Demonstrate an increasing sense of responsibility for incorporating regular and enjoyable physical activity in their personal lifestyle to enhance well-being" at the level four (strand 1, Personal Health and Physical Development, MOE 2007, fold-out chart) of learning. They go onto level five (strand 2, Movement Concepts and Motor Skills, MOE, 2007, fold-out chart) and then they are supposed to: "Investigate and experience ways in which scientific, technological, and environmental knowledge and resources assist in and influence people's participation in regular physical activity". This begs the question of what comes first in normal learning-contexts: Investigating or demonstrating?

As I will argue later (in the section about the HPEC), some of the curriculum goals are contradictory in nature. Most of its objectives are broad, potentially unrealistic, challenging to assess if they can be achieved or not, and difficult to determine who is responsible for their achievement. Even the competencies which are supposed to form the core of the curriculum guidelines are presented with no clear rationale for their importance, or their inclusion. On this matter, Hipkins and Vaughan (2002) wrote that: "Competencies have become a ubiquitous feature of contemporary official curriculum documents, albeit variously named. However, despite their widespread use, they have been largely under-theorised in curriculum terms. Rather, they are usually named in curriculum documents without reference to the reason for their selection, and are left to take on a life of their own" (p.114).

The lack of scientific evidence (which I will discuss later in the discourse analysis of the curriculum) behind the numerous reforms affecting the curriculum gives credibility to the view that since the mid-1980s, successive governments are being more concerned with the economic value of education rather than its societal role. As Fitzsimons (in Thrupp, 2010)

commented: “A feature of the Labour and National policy environment is a close alignment with OECD recommendations for economic growth, with government priorities for education increasingly oriented towards achieving a competitive place in the international economy” (p.215). Narrowing the role of education to economic recovery and growth is turning students into human capital and marginalising the cultural, social, and relational attributes of schooling (Reid, 2011). This approach to teaching and learning appears to fit within the social efficiency ideology in planning which was described earlier.

In a more critical view of the recent curriculum reforms in New Zealand and abroad, Ball (2012) wrote that: “...business is now directly engaged with education policy in a number of different ways and these engagements are part of complex processes affecting education policy, which include new modes of philosophy and aid for educational development, market processes of capital growth and expansion and the search by business for new opportunities for profit” (p.11),

One of Ball’s (2012) findings (which intrigued me) is the fact that New Zealand is one of the leading countries in institutionalizing liberal curriculum reforms. He wrote that: “In general terms, the UK, the USA, Australia, Chile, India, New Zealand and in some ways China are probably the most active sites of box axes of reform...and are reform laboratories from which experiments are exported around the globe” (p.12).

Another two major educational policies that need to be included in this section are, the National Certificate for Educational Achievement (NCEA) and the National Standards for primary schooling (years 1 to 8).

The NCEA is New Zealand’s national qualification for senior high school students. It was gradually introduced into the schooling system between 2002 and 2004. Senior secondary school students can attain this qualification at three levels (1, 2, and 3). They can also qualify for scholarships in their chosen area of learning if they are in the top-bracket of achievers among their peers, and they may have to sit some form of external examination to be awarded a scholarship.

At each level of the NCEA students need to gain a specific number of credits by satisfactorily demonstrating that they are competent at completing some form of performance criteria (assessment). Some of the assessments at these levels can be done externally. The grades that are achieved by students can be obtained at three levels: ‘achieved’, ‘achieved with merit’, and ‘achieved with excellence’. Unlike NCEA, Unit Standards are assessed internally, and they only indicate whether a student is competent or not at certain performance criteria.

These initiatives are similar to those adopted in the U.S (from 2002) and other Western nations. Tienken (2013) wrote that: “The use of standardization in education to forward neoliberal agendas is an increasing policy lever in countries around the globe including the US, England, and Australia”. However, he is highly critical of these initiatives because he sees them as ‘banking models’ of education. The term ‘banking’ that he used is borrowed from the theory of Freire (2000) which suggests that students can be used as banks where knowledge and skills are deposited or passed on to students with the intension of gaining interest or benefits when students graduate and enter the workforce. Furthermore, Tienken (2013) argued that: “State mandated, standardized, socially-unconscious curriculum standards enforced with high stakes, standardized tests, is one way that education bureaucrats and policy makers apply the banking model to children in the public education system” (p.297).

This weakness in the national testing measures and their role has prompted some students, parents and teachers in Seattle, for example, to boycott standardized tests in reading and maths from January of 2013 (Russo, 2013). In May of the same year, schools in Seattle won a court order against their state’s board of education and abolished standardized-tests (Goodman, 2013).

It appears that New Zealand is following on the path of the U.S. in terms of ranking schools and allocating funds. The privatization of the education sector in the U.S. started well before New Zealand, and grants and other forms of funding over there are allocated to schools on the basis of their performances in national ranking tables which are in turn based on students’

test results. Hence there were incidents in the U.S. where schools were found to be inflating their students' results to gain grants. A first incident of this nature was made public in New Zealand when the Parua Bay School in Whangarei was caught faking national standards results in December of 2013 (Day, 2014).

Penny et al., (2012) rightly questioned the impact of national tests and standards on the quality of the HPE programmes and initiatives. They argued that there are “significant limitations inherent in contemporary political and professional thinking about quality physical education” (p.423). They went on to suggest that “... amidst a global prominence of ‘standard discourses’ in education policy arenas, where education has been reconceptualised as a commodity in a consumer and market context ... there is a heightened need for more attention to be directed towards articulating, and been able to demonstrate quality” (p.423).

As I have tried to demonstrate in this section about the 2007 curriculum, and as I intend to re-affirm in the following sections of this review, “Education is not a free-floating set of abstract principles arising from neutral politics” (Fitzsimons, 2010, 213). It is a complex process that is influenced by a multitude of communities, politicians, interest groups, and even by some global organisations and corporate groups (i.e., UNESCO, OECD, Microsoft). These interests have a direct impact on the curriculum in general as well as the specific HPE curriculum. Also, the curriculum theories are extensive and have been in existence as long as schools came to exist (Flinders and Thornton, 2004). However, it is the relationship between the curriculum and ECPA that constitutes the theme of this research and that is where most of the focus of this review is dedicated to.

2.3. Review of the New Zealand HPE Curriculum literature

In the context of this study, it is important to mention that the 2007 NZ HPE Curriculum (NZHPEC) is presented and discussed as a slightly upgraded version of the 1999 curriculum. The core principles of the 1999 document have not changed (Culpan, 2008). Therefore, some of the post-1999 and pre-

2007 reviews and analysis of the current education curriculum are perceived to still hold a significant degree of reliability.

It is also important to add that each single learning area including HPE is best understood in the wider context of education. According to the 2007 NZC, all of the learning areas must be implemented with the expectation of achieving the following Key Competencies: thinking, using language and symbols, managing self, relating to others, and participating and contributing.

The above Competencies are seen as inter-dependent and must be used or pursued in combination. The students are expected to be made aware of their relevance and any evaluation of the curriculum must take them into account (MOE, 2007). Besides these five competencies, the HPE curriculum places equal –if not higher- importance on the concept of wellbeing (see Figure A for a graphic illustration of the relationship between HPE syllabus and the curriculum guidelines). It states that HPE is a learning area that focuses on “the well-being of the students themselves, of other people, and of society through learning in health-related and movement contexts” (MOE, 2007, 22). In order to achieve this primary goal, the 2007 HPE curriculum includes various achievement Objectives which are listed in the table below. These appear to further demonstrate the centrality of PA to the HPE curriculum.

Table A: Health and Physical Education Achievement Objectives

Curriculum Levels	Regular Physical Activity Objectives	Movement Skills Objectives
1	Participate in creative and regular physical activities and identify enjoyable experiences	Develop a wide range of movement skills, using a variety of equipment and play-environments
2	Experience creative, regular, and enjoyable physical activities and describe the benefits to well-being.	Practise movement skills and demonstrate the ability to link them in order to perform movement sequences
3	Maintain regular participation in enjoyable physical activities in a range of environments and describe how these assist in the promotion of well-being.	Develop more complex movement sequences and strategies in a range of situations
4	Demonstrate an increasing sense of responsibility for incorporating regular	Demonstrate consistency and control of movement in a range of situations

	and enjoyable physical activity into their personal lifestyle to enhance well-being	
5	Experience a range of personally enjoyable physical activities and describe how varying levels of involvement affect well-being and lifestyle balance	Acquire and apply complex motor skills by using basic principles of motor learning
6	Choose and maintain on-going involvement in appropriate physical activities and examine factors influencing their participation	Acquire, apply, and refine specialised motor skills by using the principles of motor skill learning
7	Plan, implement, and evaluate a physical activity programme and examine factors used to justify physical activity as a means of enhancing well-being	Appraise specialized motor skills and adapt them to extend physical competence and recreational opportunities.
8	Critically examine commercial products and programmes that promote physical activity and relate this to personal participation in programmes intended to meet their current well-being needs	Devise, apply, and evaluate strategies to improve physical activity performance for themselves and others

. Adapted from the 2007 NZC

The above representations of HPE as a learning area clearly shows the close relationship between health and movement and the importance of wellbeing for all. One of the primary objectives of the HPE curriculum is to facilitate the adoption, among young people, of physically active lifestyles. According to the HPE curriculum, by the time students reach the learning level 4 (11-15 years old) they will be expected to: “demonstrate an increasing sense of responsibility for incorporating regular and enjoyable physical activity into their personal lifestyle to enhance well-being” (MOE, 2007, p.20).

While there is consensus among health, sport and education practitioners in New Zealand and abroad that regular physical activity leads to wellbeing, there is very little data about which particular HPE initiatives or practices encourage physical activity among young people when they are away from schools (Haerens et al., 2009.; Telema et al., 2005.; Yelling et al., 2000). The existing government reviews and reports about the curriculum tend to suggest that it is more suitable than its predecessors in fulfilling the needs of the students and society as a whole. The Monitoring and Evaluating Curriculum Implementation (MOE, 2011) document states that: “The New Zealand Curriculum is well regarded by educators across the system. They

generally view it positively and consider it to be a high-quality document that is an improvement on the previous curriculum” (Ministry of Education, 2011, 73). Furthermore, Smith and Philpot (2011) wrote that: “Taking a more philosophical tack now, the NZCF and more specifically the NZHPE statement has generally been well received and has had a positive, although variable, impact for the two subject areas in the tertiary sector. The widespread acceptance and promotion of the concept of ‘hauora’ has had the most impact since its introduction in the NZHPE statement” (p.76).

Despite the two positive examples referred to above, many concerned educators and scholars (Burrows, 2005; Culpan, 2005; Stothart, 2005; Tinning, 2009; Ovens, 2010; Pope, 2013) have voiced some valid concerns about the weaknesses and the negative impact that the latest curriculum reforms are having on the state and the status of HPE in New Zealand.

In the following section, I will draw on examples from some international as well as some national studies to illustrate the difficulties that are challenging for the implementation of the HPEC, and that researchers and practitioners in the field are still trying to shed some light on. Some of these challenges can present a major obstacle in the quest for promoting active lifestyles among students. Before that, I invite the readers to refer to Figure A which I have put together to illustrate the relationship between various levels of the curriculum.

Figure A is intended to help the reader in placing the students within the learning and teaching contexts. For example, a year 12 student who is about 17 years-old, He or she may or may not be taking any HPE classes at all. That is because the learning area of HPE is an elective subject from years 11 to 13.

To gain the NCEA credits that are required for entrance into tertiary levels, students can elect and enrol for any number of subjects they chose to as long as they pass national assessments in numeracy and literacy. So, a year 12 student, for example, can enrol in PE to gain credits for literacy.

The overall objective of HPE is to help students achieve wellbeing/hauora, this is represented at the top of figure A. The five competencies that are

listed at the second row of the figure are taught concurrently and in no specific order. At the primary and intermediate stages of schooling, the hours spent in movement or in doing HPE vary depending on many factors (i.e., students' needs, levels of learning, availability of resources, weather conditions, etc.). What is standard at senior levels of HPE is that students spend four hours per week learning about their subject of choosing (i.e., outdoor recreation or sports studies)

With regard to the eight curriculum levels, students do not necessarily move along them in an ascending form (upwards from one to the next), they can, for example, be in year 5 and fit into the level 1 of the curriculum. The curriculum levels overlap and serve mainly as a guiding tool to determine the skill and fitness levels of students. The curriculum explicitly advises schools to adopt learning methods and structures that best suit their communities. So, some schools, for example, may offer courses or subjects that other schools may not provide. In the case of HPE at senior secondary school levels, some schools may offer the subject of sport studies as an NCEA subject one year and cancel it the following year. Or there may be no outdoor recreation classes offered at some schools. The reasons for offering any HPE strand or not at senior secondary levels vary greatly and depend on the conditions of each individual school.

Figure A: Graphic representation of the link between the HPE curriculum goals, strands, and learning-levels.

SPIRITUAL —————→ MENTAL/ EMOTIONAL —————→				WELLBEING HAUORA						←———— PHYSICAL ←———— SOCIAL				
				COMPETENCIES										
		THINKING		USING LANGUAGE, SYMBOLS & TEXT						MANAGING SELF				
				RELATING TO OTHERS				PARTICIPATING & CONTRIBUTING						
LEARNING AREA						HEALTH & PHYSICAL EDUCATION								
3 SUB-AREAS		1 PHYSICAL EDUCATION				2 HEALTH EDUCATION				3 HOME ECONOMICS				
4 STRANDS/OBJS		1 PERS.HEA.& PHYS.DEVPT				2 MOV'T CONCEPTS & MOT.SKILLS				3 RELATIONS WITH OTHERS		4 H COM & ENV		
7 THEMES		1 MENTAL HEALTH				2 FOOD & NUTRITION				3 SEXUALITY EDUCATION		4 OUTDOOR. ED		
		5 PHYSICAL ACTIVITY				6 BODY CARE & PHY SAFETY				7 SPORT STUDIES				
2 COMPULSORY ACTIVITIES				1 BASIC AQUATIC SKILLS										
				2 COOKING SKILLS										
										8				
										7				
								6						
						5								
				4										
				3										
		2												
C.LEVELS	1													
											HPE. OPTIONAL			
NCEA											Lev.1	Lev.2	Lev.3	
Hrs/HED									1	1	4	4	4	
Hrs/HEC									1	1	4	4	4	
Hrs/PE	4	4	5	5	5	5	5-6	5-6	3	3	4	4	4	
SCH.YEA	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	
STAGE	PRIMARY						INTERMEDIATE		SECONDARY					
AGE	6	7	8	9	10	11	12	13	14	15	16	17	18	
EXTRA-CURRICULAR PHYSICAL-ACTIVITIES			1 LEISURE-TIME PHYSICAL ACTIVITY. 2 ACTIVE-TRAVEL. 3 PHYSICAL ACTIVITY RELATED TO HOUSEHOLD/DOMESTIC DUTIES (or school in the case of students)											

*The HPE class-hours vary between schools, therefore the above numbers are approximates

**Age also varies between students. The numbers are only used for clarifications.

Legend

- OBJS	objectives
- PERS.HEA. & PHYS.DEVPT	personal health and physical development
- MOVT CONCEPTS & MOT.SKILLS	movement concepts and motor skills
- H COM & ENV	health community and environment
- OUTDOOR. ED	outdoor education
- Hrs/HED	(weekly) hours in health education
- Hrs/HEC	(weekly) hours in home economics
- Hrs/PE	(weekly) hours in physical education
- SCH.YEA	school year

2.4. Discourse analysis of the NZHPE curriculum

Thompson (2009) suggested that: “There is a need to probe and open up curriculum, to express various conceptualisations of curriculum, some which may contradict each other, and, examine the commonplace use of this jargon and its associated impact on teaching and learning in HPE” (p.xix). To do this, she simply recommended that we examine the language and meanings that are included in the curriculum.

In slightly similar fashion, Kelly (1999) argued that: “it is an important function of Curriculum Studies to analyse critically the language in which official pronouncements are made and, perhaps more critically, the ways in which the language we are encouraged to use when debating educational issues is being manipulated” (p.40). Kelly’s argument suggested that there is some kind of manipulation that can be hidden or disguised by the assertions that are often presented in official documents. He later explained that some official statements can be written in the form of empirical claims without any scientific evidence to back them up.

To compare Kelly’s last claim with some elements of the NZHPEC, I will first refer to statements that were published in the New Zealand Physical Educator by Associate Professor Ian Culpan, who alongside Mr Gillian Tasker were the two main 1999 NZHPEC developers. The statements which I intend to analyse are relatively long. But, their relevance to this review will be lost if they are downsized or broken down into small segments.

Culpan wrote that:

“The developers of the [1999] NZHPE wanted school physical education programmes to encourage students to move skilfully, engage in enjoyable, physically active lifestyles, and reflect and critique the social context in which they do this. Driving the curriculum was a desire to promote socially just and equitable practices and societies. In trying to achieve this, the developers set out to:

- Provide a broader vision of Physical Education where the culture of movement can be seen as valued and legitimate educative practice;
- Encourage the development of more holistic practices for Physical Education by making use of the critical and humanistic dimensions of learning;
- Provide alternative visions about what school Physical Education could be, what it might mean to be physically educated, and what knowledge, skills, attitudes, and values are needed to achieve this in a holistic manner;
- Capture the potential of Physical Education by providing a socio-ecological value orientation and anchoring it in social critique that acknowledges the inner-relatedness of science, social, moral, and ethical dimensions;
- Engender debate and discussion around hidden curriculum discourse such as healthism, competition, elitism, body construction, sport, and bi-culturalism;
- Integrate an acknowledgement of both national and international cultural orientations and practices.” (2008, 52-53).

By reading the above statements, it can be inferred that the vision and the goals of the 1999 NZHPEC were new (meaning that they were absent from the pre-1999 practices), and/or that they were perhaps not implemented “satisfactorily” within the New Zealand schools, and that perhaps the PE teachers had a narrow vision of their educational role(s). In either case, there is no empirical evidence showing that the goals and recommended practices in the 1999 NZHPEC were not already widely implemented in New Zealand for over 60 years at least.

Theories about holistic learning methods, group dynamics, the benefits of active living, and morality in schools became abundant from the turn of the 20th century. While PE teachers (across the globe) were not explicitly telling society that their role was mainly educational, they were well adept at managing their learning environments in ways that stimulate cooperation

and social justice. As Stodhart (2005) and Tinning (2009) suggested, these types of outcomes were by-products of the educational interaction.

Furthermore, students learn faster and easier about their body-image and elitism when they are out playing, and solving problems in the open spaces rather than inside classroom walls and with a teacher presenting them with more abstract concepts on top of what they already get in maths and physics.

Tinning (2009) described the above statements as the aspects that give PE its uniqueness. He wrote: “Maybe it is worth considering that PE (as movement and play) can offer young people a sense of escape from the ‘real’ of the classroom. In this regard, the more that PE identifies itself with the makers of the academic curriculum such as assessment regimes that favour written and textual literacies, the more it might be alienating many of the young people it seeks to befriend. PE should play to its uniqueness. The literacies it develops are not the same as those of classroom-based academic subjects and we need to be more confident championing this uniqueness” (p.12).

As to the implementation of holistic teaching and learning methods which is mentioned twice in Culpan’s (2008) suggestions, the lack of expansion on what they mean and how they are to be implemented makes them appear as though they are simple and easy to adopt. The reality, though, may not be that simple.

Holistic teaching and learning requires high levels of cooperation between all the stakeholders, especially between teachers of different subjects, and in all parts of the educational process (in curriculum design, implementation and evaluation). For instance, with greater cooperation between maths, physics and PE, students can learn about addition, multiplication, the theory of levers, and gravity during PE sessions. This can be achieved through the use of score cards and gymnastics and pole vault.

Holistic teaching and learning also requires high-levels of flexibility in the forms of programme-delivery (diversity of available spaces and methods). Most importantly, it requires the availability of unlimited human as well as

teaching resources (books, materials, equipment, facilities, etc.). In real holistic environments (if they exist at all), the availability of students, teachers, and parents extends beyond the curricular times and into what students do, or wish to do while they are away from school as well.

Furthermore, while it has been noticed that (in New Zealand and Australia) some school subjects were clustered into learning areas “most curriculum reform projects, including those associated with key learning areas have retained a subject focus or, at least, facilitate the ongoing subject divisions of the past” (Macdonald, 2004, 77). This retention of the old subject divisions is counterproductive to holistic teaching and learning.

If one takes into account the funding cuts that have been targeted at the education sector in New Zealand since the mid-eighties, the teachers complaints of being over-worked and under-paid, the relatively high percentages of parents in full time employment (in comparison with parents in developing and in some European countries), “the institutionalization of knowledge via disciplines and subjects” (McDonald, 2004, 77), and the gradual decrease of the numbers of parents involved in extra-curricular activities (NZSSSC, 2010), it would be hard to imagine how it could be possible to create holistic learning environments in New Zealand.

More importantly in this context, why is it that the learning area of HPE is expected to employ more holistic approaches to teaching while the whole education system is heading into a totally opposite direction? Namely the ranking of students on the basis of national tests and the premature clustering of students into career paths knowing that many students may begin tertiary studies while they are still exploring which career might be best suited for them.

Secondly in this discourse analysis, it is perhaps relevant to ask why the word “play” is only mentioned once (at level 1) within a total of 114 achievement-objectives that are listed under the HPE syllabus and across 8 levels of learning? The role of play in learning affective as well as social

skills is fundamental in the context of PE, especially in the early stages of schooling (Dyson, 2014; Smith, 2010). Similarly, the word “games” is also rarely used in the syllabus. In fact, it is only mentioned three times within the 114 HPE objectives (once at level 1 and twice at level 2). However, there are a number of words that are used in the 2007 HPE syllabus and that could have the same contextual-meaning as play and games. These are words like: physical-activity, activity, environment, context, and practices. The near-omission or disguise of the words play and games from the curriculum document raises the two following questions: 1. why de-emphasise the role of play and games in schooling in the HPE syllabus? 2. did this happen deliberately or by coincidence?

Possible answers to the above questions could be related to the intention of the curriculum designers to avoid the portrayal of PE as “free, or unstructured-time”, and to strengthen the academic position of HPE in schools. Hence, if this action was intentional, it is perhaps justifiable given PE’s long history of struggling to raise its profile to a similar level as those of other learning areas such as maths or physics, or English (Thomson & Emerson 2005). But, this under-valuation of PE is only perceived by those who don’t know enough about it, not those who are supposed to teach it. This counter-productive campaign of transforming PE into an academic subject has pushed the area of PE into a deeper state of misinterpretation and confusion (Tinning, 2009).

Thirdly in this section, I want to draw attention to a comprehensive study from Australia which explored and analysed the relationship between some of the goals of the PE syllabus in Queensland, and the language or text that is used to express how these goals might be achieved (Rossi et al., 2009). This analysis was part of a more extensive study about the relationship between teacher identity and curriculum reform which was commissioned by the Queensland government.

In their analysis, Rossi et al. (2009) found that: “In the case of the Queensland document, its emancipatory ambition is stated up front as a kind

of register of its political lineage. Its socially liberal agenda reflects the political correctness of the time of its writing. However, the language of the rest of the document fails to support its apparent ambition” (p.86). One of the many examples that these researchers used to substantiate their findings relates to outcome 3.5 of Strand One of the Queensland syllabus. This states that: “Students describe features of places where they live and work and play that influence the health of themselves and others and propose ways they can help the people who are responsible for keeping these places healthy” (Rossi et al., 2009, 86).

According to Rossi et al., (2009) while these types of outcomes are well intended and fit with the curriculum rationale, they “seem to be co-dependent on a level of economic comfort, perhaps even advantage. Moreover, they appear to be founded on essentially monocultural European norms and standards” (p.84). Rossi et al., (2009) correctly point out that while schools in Queensland may be populated by predominantly white middle-class students, there are other minority groups such as Aborigines, migrants and working-class students who might have different needs and motivations, and whose needs and aspirations might be neglected and marginalised.

The learning outcomes that are included in the NZC are hardly different from those listed in the Queensland syllabus (the similarities between the two are astonishing. They could be easily suspected for being produced by the same source). Therefore, it might be fair to assume that they too might be failing to serve their liberal agenda. Below is an example of the similarity between the languages used in both contexts.

Under Strand 4, Health, Community and Environment, of Level 4 of the 2007 NZHPEC, students will:

“Specify individual responsibilities and take collective action for the care and safety of other people in their school and in the wider community” (MOE, 2007, HPE fold out chart).

The above example is even harder to understand or believe than the learning outcome that is cited from the Queensland example. While students in Queensland were required or expected to “propose ways” to help others, their Kiwi counterparts are expected to actually “take collective action” for the care and safety of others. While both these expectations are based on sound moral values, it is perhaps difficult to envisage how students would cope with such responsibilities and how it would be possible to measure such achievements.

Dedicating space for the analysis of the discourse that is used in the NZHPEC is just as important as exploring some of the practical or implementation constraints that are inherent in it. In the next section I will present some of the practical complexities of the NZHPEC that have raised the attention and intervention of many New Zealand scholars and practitioners.

2.5. NZHPEC implementation challenges

One of the first contentious issues relating to the implementation of the 2007 NZHPEC is coping with the merger of PE with Health Education and Home Economics. Stothart (2005) wrote that: “The arbitrary lumping together of health education, physical education and home economics...has not been notably successful for any of these components. For physical education it has meant (in many cases) a time tabling conundrum for schools and a reduction in teaching time for each component” (p.98). While some critics may choose to discredit Stothart’s comments because they are subjective, one must not ignore his wide experience and leadership in the field of PE in New Zealand. Besides, his comments were proven to be correct and backed up by a major international study by Hardman (2008), which included findings from New Zealand.

A global survey about PE in schools has found that between 2000 and 2007, about 17% of the time allocated to PE has been lost following the educational reforms that occurred around the world (Hardman, 2008). This

significant reduction in time spent doing PE is not only attributed to the merger of PE with Health Education and Home Economics, but also to the push by many educators for an improvement of the status of PE by turning it into an academic subject and requiring students to take a higher level of literacy. As a result of this, students now, have less contact with PE teachers who have usually been the main and most qualified agents for the promotion of physically active lifestyles.

In criticising the merger of PE with other subjects and attempting to turn it into an academic subject, Tinning (2009) argued that: “Thinking about bodies in scientific ways has led to the marginalization of the embodied, kinaesthetic, sensuous, and aesthetic pleasures of experience/of in movement. Accordingly, the unique contribution of PE is increasingly overlooked” (p.11). Tinning’s argument is highly relevant to this study because, as it will be shown later, it is the elements of learning physical (not written) skills, accomplishment and joy that provide the intrinsic motivation that is needed to attract students to PA and make them want to do it more regularly. Furthermore, Burrows (2005) commented that it is actually disturbing that the revised competency framework (which is currently adopted in New Zealand) does not meet the needs of students because of the ‘disappearance’ of the physical aspect of HPE.

The second aspect of the curriculum that has a direct impact on the physical activity levels of students is related to the rationale behind the curriculum changes since the mid-eighties. According to some critics (i.e., Lauder et al., as cited in Culpan, 1998), the centre-right policies adopted by both Labour and National governments over the last three decades are turning education into a commodity. They commented that the strategies of promoting individual responsibility, cutting government spending and labour costs, the encouragement of competition and the promotion of increased productivity have led to the commodification of education. What this means is that schools are getting less funds for basic as well as extra-curricular resources. Schools have also been tempted and obliged to compete for resources

including students. And because of increasing teacher workloads for no remuneration, some PE programmes (namely extra-curricular sports and outdoor recreation programmes) have been out-sourced.

To add more pressure to an already deteriorating situation in schools, the 2012 budget released by the New Zealand government included new cuts to the funds for special education programs, a move for increased class sizes, and incentive bonuses for teachers who are deemed to be “good performers”. This free market ideology, which has guided curriculum principles since 1984, is pushing schools to contract out some of their programs to other agencies including the private sector to save funds.

Pope (2007), for example, has noted that a private provider “offers a range of curricular and extra-curricular sporting and PE programmes to schools. This pay to play option has had a presence in many parts of the country since 2007. It would seem that HPE is now up for grabs” (p. 8). As a matter of fact, it could be argued that these types of providers came to life well before the turn of the millennium. I personally remember working in schools in the mid-nineties that hired private outdoor instructors for programmes like rock-climbing, and abseiling, kayaking. The only difference in the situation as it currently stands is that in the past, schools used to pay for the costs of such programmes. But, nowadays, it is the students and their parents who fork out the cost.

In many cases the quality of the private programmes – especially sports and recreation programmes - that schools purchase has been questioned because they are implemented by people who have little or no educational training (Stothart, 2005). In the specific case of secondary school sports competitions, which are funded by the NZSSSC and run by Regional Sports Trusts, a number of highly publicized incidents such as player poaching, violence, cheating, and elitist competition may be causing large numbers of students to drop out from participation. These types of incidents completely contradict the basic values and principles of PE. They may even play a role in pushing students, who need PA the most, from taking part in secondary

school sports. Figures published by the SSSC show that participation in school sport has dropped by 7% for girls and 4% for boys between 2000 and 2010 (NZSSSC, 2011, 5).

The infiltration of the private sector, and other seemingly non-profit organisations, such as the Regional Sports Trusts into the HPE learning area has also come about as a result of the demise of the Department of Education (in 1989) and the Physical Education Advisory Service (in 2007). These bodies were the main advocates for the students' and teachers' interests in HPE. Their functions are now filled by private research and marketing consultants (who may have some academic background) that are occasionally hired to primarily keep the costs of schooling down.

Hence, children in the last decade have become accustomed to receiving lists of extra physical activities that they can take part in, but at a cost. The more exciting or thrilling the activity that a student chooses, the more expensive it is (see Appendix A for a list provided to students by a local intermediate school). The increasing costs of participation in extra-curricular PA, and the lack of educational training of the private sports and recreation providers may have had a big influence on the declining of levels of participation in extra-curricular PA among students. The 2012 Youth survey found that participation-costs is one of the main reasons stopping 14.3% of secondary school students from participating in a sports team or clubs outside school (Youth 2012 survey, 71).

The issues of the reduction in the time allocated for PE in high schools, the hand-over of the management of school sports to independent organizations, and the increasing costs of participation in extra-curricular activity are all relevant to this study. Their impact on the PA levels of 14-17 years old students is one of the main purposes for carrying out this research project.

2.6. The influence of the HPEC on the ECPA of secondary school students

Through the curriculum and other forms of official guidelines, countries across the globe acknowledge that schools play a major role in preparing students for active lifestyles. Haerens et al., (2009) wrote that: "... schools are considered as preferred environments for promoting physical activity among adolescents [9-10]. Schools offer many opportunities for adolescents to engage in physical activities (i.e., physical education classes, extracurricular physical activities, and recess periods) and adolescents spend large amounts of time at school" (p.1). While many studies have demonstrated that schools, or school PE programmes are in effect having a positive impact of the participation of students in regular physical activity (Cale and Harris, 2006, Kimball et al., 2009; Sun et al., 2013; Hagger et al., 2003; Bryan and Solmon, 2007), there is still a need for more empirical inquiry into the variables that accurately predict the influences on the PA patterns of adolescents (Park and Kim, 2008, Haerens et al, 2009).

The lack of conclusive evidence about the correlation between what students do while they are in PE at school and what they do when they are away from it (Fuller et al., 2011) is due to the fact that the existing studies are based on a multitude of theoretical frameworks and investigating methods which makes it hard to compare and/or generalise findings (Harris and Cale, 1997). More specifically, Harris and Cale (1997) wrote that: "comparisons across studies are problematic due to much variation in sample characteristics and study design" (p.94).

While most academics suggest that longitudinal studies have more validity in predicting youth behaviour in relation to PA (Park & Kim, 2008), there are very few studies that engage in this quest. One of the most cited longitudinal studies in the literature comes from Finland (Telama et al., 2005a). The rest of the available literature is mostly quantitative and based on asking students to recall and/or record their PA behaviours. As it will be shown in the following parts of this review, there are a number of

“demographic, psychological, social, and physical environmental correlates with youth PA” (Hoefler et al, 2001, 48). Including these factors in this literature review illustrates the interdependence between what students do at school and what they do while they are away from it. Never the less, there is a need to reaffirm at this point that the HPEC is not some kind of legislation or rule-book that requires implementation to the letter. As Bowes & Ovens (2014) have rightly indicated: “...there is increasing evidence that what happens in Health and Physical Education (HPE) classrooms reflects teachers’ entrenched knowledge, practices and recent professional learning more than the impact of curriculum policy documents (Armour & Yelling, 2004; Betchel & O’Sullivan, 2006; Petrie, 2008). This is not to suggest that curriculum policy does not influence curriculum practice, but rather an acknowledgement that curriculum practice emerges and is enacted with students as a result of a broad range of factors and forces operating at various levels of the education system” (p.21).

2.7. Psychological factors affecting participation in ECPA

2.7.1. Theory of Habit

A promising and yet little-known theory about the adoption of regular PA is Aarts et al.’s (1997) model of exercise habit formation. According to these researchers, PA is a habit similar to other behaviours such as brushing teeth, wearing seat-belts, eating non-fattening foods and using contraceptives that people are taught from a young age in order to maintain good health. Aarts et al.’s (1997) model is based on the theories of reasoned action and planned behaviour which suggest that attitude (i.e., the desirability of the behaviour which is supposed to be based on a personal trade-off between the perceived positive and negative consequences of performing the behaviour), subjective norms (representing the experienced social pressure) and perceived behaviour control (representing one’s perception of how easy or difficult it is to perform the behaviour) are the pre-requisites of behavioural intentions which in turn are supposed to precede behaviour.

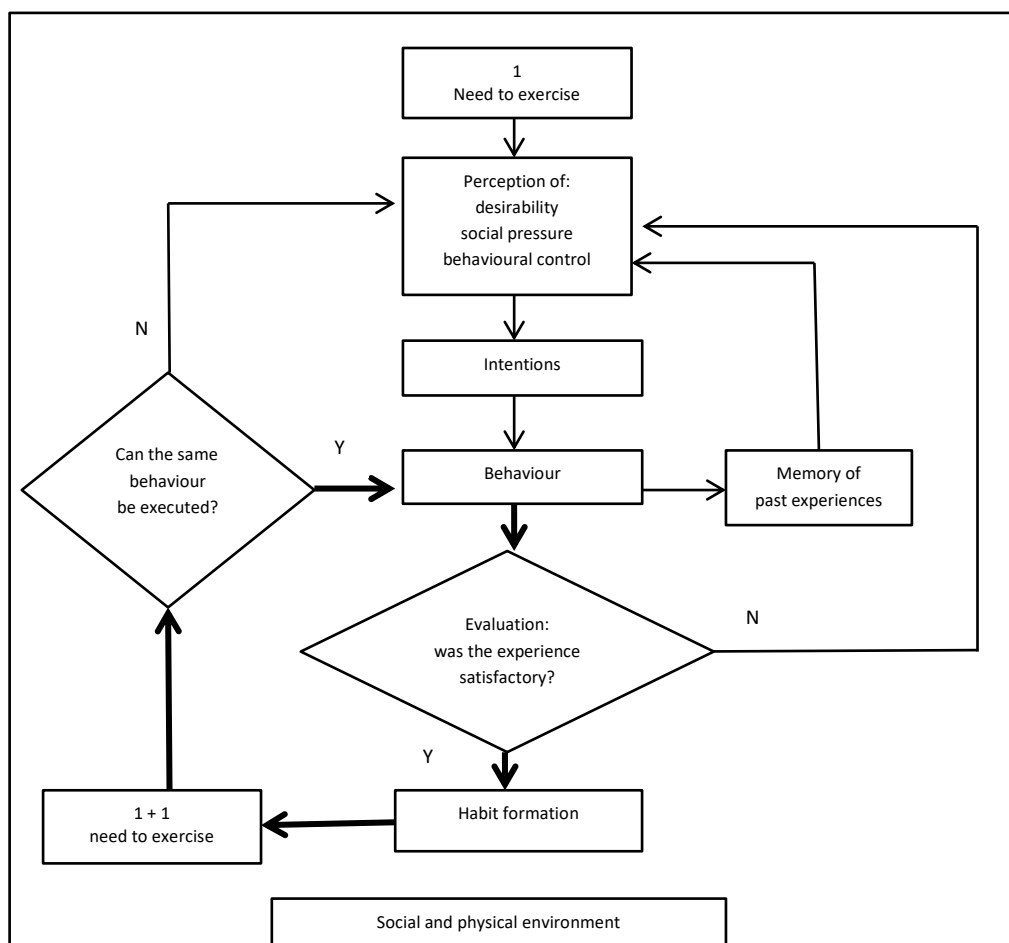
However, Aarts et al., (1997) found that these latter theories neglect a crucial aspect of PA which relates to its repetitive nature. Additionally, they are critical of the reasoned action and planned behaviour theories because they tend to assume that exercise behaviour is deliberate and based on the individual's conscious choice and intentions. This led Aarts et al., to consider Triandis (1980) theory which suggested that deliberate intentions may become irrelevant in triggering behaviour when the behaviour has been performed repeatedly in the past and has become habitual. In other words, Triandis suggested that habitual behaviour is triggered automatically and without deliberate information processing and reasoning. Furthermore, Aarts et al., based their habit formation model on the theory of Dishman (1982) who observed that initiating an exercise routine is reliably predictable from attitudinal variables but persistence in exercising is typically not. This led Aarts et al, to conclude that repeated exercise behaviours are more likely to be determined by habit rather than reasoned action. They go on further to explain that “when habits are formed, subsequent behaviour may be associated with, and automatically triggered by, the specific situational cues that normally precede it” (Aarts et al., 1997, 366).

This explanation is highly applicable to participation in some forms of physical exercise that are largely dependent on favourable weather conditions such as surfing, kayaking, hiking, outdoor basketball. This means that, in the context of physical exercise behaviour, if a person, for example, has developed the habit of jogging three times a week for a period of 45 minutes a session, and on the basis of an earlier reasoned process, his/her decision to go out running will not involve the assessment of the pros and cons of the behaviour nor the checking of attitudes and behavioural control, instead, his/her action will be triggered automatically by specific situational cues such as the availability of free-time and the suitability of weather conditions.

Aarts et al.'s (1997) model of exercise habit formation becomes more admissible and perhaps easier to understand when it is contrasted with the

results from a study by Telama et al, (2005b) which found that there is a positive correlation between children's participation in PA at a young-age and their participation in adulthood. The following figure illustrates Aarts et al.'s (1997) model of exercise habit formation. It is intended to show that starting to exercise is largely determined by deliberate decision making, and that after a period of continuous repetition, reasoned considerations become redundant and replaced by automatic action.

Figure 2: Model of physical exercise and habit formation from Aarts et al., 1997.



The bold arrows (in the figure) indicate the formation process. Although the exit arrows of the diamond-shaped boxes suggest a deterministic model, the theoretically proposed contingencies are probabilistic (Aarts et al., 1997).

2.7.2. Theories of motivation

Studies from the U.S. in particular, suggest that school plays a major role in motivating students to take part in extra-curricular PA (Hagger et al., 2003; Zhang et al., 2011; Shen et al., 2007). Taking into account the importance of intrinsic motivation for participation in PA, researchers and practitioners are using motivation theory to understand how to create learning environments that foster higher levels of self-determination among students. Based on the Self-Determination Theory which was framed by Deci and Ryan (1985, 1995, 2000), researchers have found that: “intrinsic motivation is considered to be the most desirable form of motivation regarding adherence because physical activity participation is based on appreciation of the activity itself rather than appreciation for benefits provided by the activity” (Zhang et al. 2011, 52).

To understand how people move from extrinsically motivated behaviours toward actions which are more self-determined, Deci and Ryan (2000) developed a continuum of levels of motivation which has two extremities. At one end of the continuum there is intrinsic motivation and at the other there is extrinsic motivation. The latter extremity is a state during which individuals do not make any effort to engage in an activity or behaviour. In between these two ends, there are levels of extrinsic motivation which include external regulation, interjected regulation, identified regulation, and integrated regulation (Deci and Ryan as cited in Bryan and Solomon, 2007).

The different levels of motivation included in the continuum illustrate the degree to which individuals internalize behaviour (Deci & Ryan, 2000). Therefore, one of the biggest challenges that PE teachers face is to find ways of influencing students to internalize the positive stimulations of joy and pleasure that can be induced from participation in PA. Thus, Self-Determination Theory is useful for this research project because it provides a theoretical framework from which a survey or part of it can be designed to understand the levels of motivation that drives students to participate in PA.

An Australian study of 16 to 17 year olds found that the main role of PE is to provide fun and a release from other obligations such as the rigors of class-work (Macdonald et al., 2009). Ultimately, what children and young people throughout the globe want from participation in physical activities such as sport is well summarized in the following statements which were made by Siedentop (2007):

- Youth want to participate. They would rather play in a losing team than sit and watch on a winning team.
- Youth want to get better at their sports. A growing sense of competence in a valued activity is a central developmental task of adolescence.
- They want to be among friends. Voluntary participation in leisure sport as an adult has a strong social component. Social outcomes are prominent at every level of amateur sport. Why should we expect less at junior sport?
- They want to have fun. Teens often report “no fun” as the biggest reason for dropping out of sport (p.21).

If serious consideration is given to the reasons for which children and young people choose to participate in PE and in all other forms of PA, it might become easier to attract them to participate regularly in PA. The importance of motivation for participation in PA also reflects the primary role that teachers have in encouraging students to take part in PE and in ECPA.

2.8. Peer influence on participation in PA

Another extensive review of the literature from the U.S. about the relationship between peer/and or friend variables and physical activity among adolescents found that research completed between 2002 and 2012 “consistently demonstrated that peer support is associated with PA, and emerging evidence also indicates that the ‘power’ of peer support to influence PA may be greater for at-risk/overweight youths than low-risk

youths” (Fitzgerald et al., 2012, 954). This finding is consistent with the views of Storch et al., (2006) who found that the close interactions that are developed between students in PA create valuable opportunities for cooperation, encouragement, support, companionship and recreation. At the same time, peer victimization and social isolation can inhibit students from taking part in PA.

According to the NZ Youth 2012 survey, 10.1% and 10.7 % of 16 and 17 years olds respectively cited the absence of friends as one of the reasons why they don’t participate in sports teams or clubs outside school. Under the current structure of the senior NZC, students have the choice to elect HPE as one of their NCEA subjects or not. Those who opt out of HPE end up doing very little PA at school if any. Considering that no more than 20% of the (this is a very generous estimate) choose HPE for their NCEA, the other 80% of senior students become –perhaps unintentionally- deprived of one of the best opportunities to participate in PA and to have fun with their peers within the school environment.

Some schools are aware of this weakness in the curriculum and provide short term PE or sport and recreation programmes for the students who are not doing NCEA HPE. But, others (mostly schools from poorer deciles) may not have the time or the resources to do so. To provide an idea about the level of participation of students in PE at senior levels, the Youth 2012 survey found that in the New Zealand schools, 62.5% of 15 years olds attended PE in the last seven days (before the completion of the survey), 40.1% of 16 year olds, and 26.3% of 17 years and older did the same. This is another clear example of how participation in PA gradually drops as students move up the senior stages of high school.

2.9. The influence of early learning experiences on participation in PA

In an article which aimed to demonstrate how a review of research evidence relating to PE, sport and the learning experiences for lifelong PA participation revealed structural problems with the delivery of PE and youth

sport in England and Wales, Kirk (2005) found that “the early years [of schooling] are critical years for the development of physical competencies that place individuals in a position to access and engage in the physical culture of society” (p.242). This conclusion was based on the work of Cote’ and Hay (2002) who suggested that young people are socialised into sports’ participation according to a set pattern. Looking at sports participation from a developmental perspective, Cote’ and Hay (2002) found that young peoples’ participation in organised sports goes through three phases. The general characteristics of these phases are summarised in the table below.

Table B: Sports participation phases from Cote’ and Hay (2002)

	1.The sampling Phase	2.The specializing phase	3.The investment phase
Ages (approximates)	7-12	13-15	15 and over
Motivations	Fun and enjoyment (just from playing with others and learning new skills)	From fun to enjoyment and savouring success and winning	Competitive success
Range of activities participated in	Wide range of activities	Reduced range to 2 or 3 activities	Focus on one activity
Training/learning Emphasis	Play (not training)	From deliberate play to training and improving levels of performance. Increasing intensity and frequency of training	Deliberate practice and intensive training.

Recognising these developmental phases of participation in sport and in PA in general is highly important for the planning and implementation of PE and all forms of physical recreation programmes. If schools are to maintain high levels of participation of students in PE and in ECPA at all levels, they need to take their motivations seriously, especially at the early learning stages (primary and intermediate schooling). The focus in those stages needs to

remain on providing students with a diversity of programmes and activities, and on making “having fun and learning new skills”, which Stothart (2005) described as the “essence of physical education”, the primary objects of any PE teaching strategy.

To further illustrate the importance of early learning in the maintenance of regular PA, Godin and Shephard (1986) suggested that PA during childhood is vital to developing the positive attitudes that make such activities enjoyable, and to sustaining active lifestyles during adulthood. They describe this process as the early socialization towards PA. Telama et al., (2005b) have also suggested that “Persistent physical activity at a young age and participation in youth sport markedly increases the probability of physical activity in adulthood” (p.116).

Looking at this issue from a different perspective, and precisely at the risk that can incur by not having access to PE or dropping from participation in PE at an early age, Hardman (2008) wrote that “When access to physical education programmes ends at an earlier age, pupils are vulnerable to disengaging from physical activity with a consequence that they do not continue with it in later life and there may be insufficient time to embed either the skills or the habits for regular engagement in physical activity throughout the lifespan” (p.7).

Unfortunately, in New Zealand and in many other countries, primary school PE programmes tend to be run by non-specialized PE teachers and with inconsistent provision, dedication and commitment. Hence it is difficult for primary schools to maintain progressive long-term programmes that facilitate the transition of pupils into intermediate and secondary school levels. On this matter, Kirk (2005) wrote that: “research suggest that primary schools are, by themselves, unable to deliver quality experiences, while the contribution of PE specialists in secondary schools may come too late to impact a majority of children in relation to their competence, perceptions and motivations” (p.240).

2.10. Transport availability and participation in PA

According to the Youth 2012 survey, about 12.1% of the respondents reported that they can't participate in a sports team or club outside school because "they can't get there" (2012, 71). This finding is supported by results from another study from the U.S. which investigated 1678 students (712 boys and 966 girls) aged 13 and their parents and found that "parent provision of transport and the child's use of activity locations were associated with adolescents' total PA and participation in different sports teams and activity classes" (Hoefer et al., 2001, 50-51). While the latest OECD data (2006) shows that New Zealand is ranked third highest amongst OECD countries in terms of vehicle ownership per person, and 92% of New Zealand households have access to a motor vehicle (NZTA, 2014), parents who work full time and those who have more than two children at school-age may struggle to consistently take their children to sports and recreational venues.

Most sports competitions for both primary and secondary schools in New Zealand take place on Tuesday and Wednesday afternoons, and some secondary school events take place on Friday evenings. However, most schools do actually provide buses for students to get to and from sports events during ECPA. It is often the minority sports that struggle for membership and funds which tend to be the ones that are usually left to improvise for providing transportation for their students.

2.11. PE and ECPA programmes and opportunities

Cale (2000) surveyed 42 PE HoDs in Britain about a number of questions relating to the promotion of physical activity in schools. One of the key questions that the teachers were presented with was about the nature (or the type) of physical activities that they offered in their schools. It was found that "the extra-curricular activities offered tended to mirror curricular activities, with major and competitive team games dominating. Just 40

percent of schools offered exercise activities such as aerobics, circuit training or weight training to pupils ... and only a third run non-competitive events or displays” (Cale, 2000, 83).

By emphasising or focusing on competitive games in both the curricular and extra-curricular school programmes, Cale (2000) argued that schools may be excluding many students who need PA the most from participation in extra-curricular activity. This argument was supported by the fact that 41% of the teachers’ surveyed reported that they only partially offered extra-curricular activities which were attractive to all students.

Similarly to Cale (2000), it was observed that “curricular offerings tend to focus on skill-related over health-related activities and the majority of instructional units taught emphasize team sports” Derrick (2008, 196).

Like their British counterparts, New Zealand schools place a high importance on competitive games or sports like rugby, netball and cricket. In fact, senior high school rugby competitions are televised on weekly basis and have major commercial sponsors and followers. But, a browse through the findings from the 2007-08 Active NZ Survey, for example, clearly shows that people 16 years and older tend to participate more regularly in less team games and competitive activities during their leisure time.

Table C: A comparison of the percentages of the 10 sports and recreational activities that most New Zealand’s adults participate in with their participation in other popular/professional sports: Adapted from the 2007-08 Active NZ Survey.

	Most popular recreational Activities	Participation Percentages (%)	Other semi-professional and professional sports/Activities	Participation Percentages (%)
1	Walking	64.1	Tennis	9.3
2	Gardening	43.1	Cricket (total)	7.3
3	Swimming	34.7	Football (total)	6.8

4	Equipment-based exercise	26.6	Touch rugby	6.7
5	Cycling (total)	22.7	Netball (total)	6.5
6	Cycling (cycling/biking)	19.6	Basketball	6.3
7	Fishing (total)	19.5	Rugby	5.7
8	Jogging/running	17.6	Volleyball	4.4
9	Dance	16.8	Athletics (track and field)	2.4
10	Fishing (marine/saltwater)	16.6	Rugby league	2.1

The reason why more people tend to participate in the activities on the left column in the above table than the ones on the right column is that the activities on the left are easier to plan and implement. They usually require less structure or organization, minimal equipment, and just one or two people to execute. These types of activities are described by Fairclough (2002) as “lifetime activities”. The activities on the right column, on the other hand, require more structure (organised space, officials, referees, etc.), they often depend on the availability and commitment of two or more players, and most of the times participants need to practice individually or with others to improve their skills and cohesion. The training commitments can place extra time pressure on the players.

In a global survey, Hardman (2008) found that despite the new focus in the latest curriculum reforms on improving the quality of PE in schools, “... the proportion of time devoted to games, track and field athletics and gymnastics, which collectively amount to 70% of PE curriculum content in both primary and secondary schools, suggests that there is continuing pre-disposition towards competitive sports-dominated, performance-related activity programmes. Such orientation runs counter to societal trends outside of school and raises issues surrounding meaning and relevance to young people as well as quality issues of programmes provided” (p.16).

Despite the existence of evidence suggesting that lifetime activities have a greater carry-over value than team games (Fairclough et al., 2002), schools appear to put most of their PE and extra-curricular resources into promoting team games and sports. In fact some schools tend to advertise the availability of elite sports and programmes and their achievements in rugby or netball or soccer to attract potential students to their schools.

Another extra factor that is affecting participation in PE and extra-curricular programmes in schools is the value and the amount of fitness tests and national forms of assessment that students take in their senior high school years. With regard to fitness tests, Cale and Harris (2009) found that “there appears to be little evidence that fitness tests promote healthy lifestyles and physical activity, motivate young people, and develop the knowledge, understanding and skills that are important to engagement in an active lifestyle. To the contrary, there is evidence to suggest that fitness testing maybe counterproductive to the goal of promoting physical activity for some youngsters” (p.105).

As to the other literacy and numeracy tests that are part of the NCEA assessments in New Zealand, some academics argue that teaching at senior secondary levels is now assessment-driven which implies that other important aspects of schooling such as promoting regular PA gets neglected for large segments of the academic year. Hipkins (2010), for example, argued that despite the flexibility afforded in the NZC for schools to adopt their own curriculum, many teachers believe that NCEA drives the curriculum rather than the other way around.

2.12. Parental influence on participation in sport

A Finnish study (Cardiovascular Risk in Young Finns) in 1980 examined the influence of parents on the participation of children in sport and in future PA. A randomly selected sample of 1881 (9-15 years old) boys and girls and their parents were followed over a period of 12 years. At each 3-year interval, they were asked to complete a short questionnaire relating to

their PA and other demographic factors (Yang et al., 1996). At the completion of the study, it was found that the parents', particularly fathers' PA has a relationship with the children's PA, especially with sports participation. More importantly, it was found that the activity of the fathers correlates with the PA habits of the children as they got older.

Similarly, the National Association of Sport and Physical Education in the U.S. (1997) found that parents who were physically active or played sports with their children, who watched their children participate in physical activities, or who took their children to physical activities or sports events had more physically active children.

There is no doubt that other factors, that are not mentioned in this review, may play a significant role in young people's participation in PA (i.e., parental economic status and/or education level), but, these don't seem to attract much attention in the existing literature. What is reflected in this review, though, is that there are a multitude of elements that could influence participation in PA either separately or simultaneously.

2.13. The role of the Health sector in promoting PA

Both the private and the public health sectors promote PA as a medium for preventing a number of health risks. The WHO estimates that about 1.9 million people die every year because of low PA levels. In 2004, the WHO adopted a Global Strategy on Diet, Physical Activity and Health (DPAS) which most members of the United Nations try to adhere to by investing vast funds and efforts in ensuring their implementation.

In New Zealand, a major study by the University of Auckland on the health and wellbeing of secondary school students (Adolescent Health Research Group, 2003) was funded by eight different agencies including the Ministry of Health.

Some of the most relevant findings from this study show that as children get older, their levels of enjoyment of sport, their membership to sports

teams, and their PA levels seem to follow a pattern of gradual decline.

These findings are summarized in table D below:

Table D: Trends of sports participation in NZ

Adapted from the Adolescent Health Research Group findings (2008, pp. 55, 77, 78).

Age	Percentages of students' enjoyment of sport in comparison with other school activities	Percentages of students doing 60 minutes or more of PA daily	Percentages of students who belong to a sports team in their community
13 or younger	68.3	14.8	39.6
14	64.7	11.2	37.4
15	58.8	11.1	36
16	55.3	9.7	35.3
17 or older	53.6	8.2	32.4

While these findings and others included in the Adolescent Health Research Group (2003, 2008, & 2013) technical reports provide a clear picture about the health and wellbeing of secondary school students in New Zealand, they offer no answers as to what causes the gradual decline of PA among students. And what influence does school have on this pattern, if any? Additionally, it is not yet possible to make comparisons between the results of the 3 Adolescent Health Research Group surveys (2003, 2008, and 2012) because some of the questions, especially the ones regarding PA, and the overall structure of the questionnaires used in the surveys have changed from one interval to the next. The changes that were made in the surveys are definitely improving the quality of the information that was gathered, however, they will become more useful when they are consistent and suitable for making comparisons.

Unlike schools, which are in the most advantageous position for promoting the benefits of PA (because they have direct access to young, diverse and captive audiences), the public health sector relies heavily on advertising campaigns (i.e., anti-smoking, obesity) that are often negative and have little impact on young people. More importantly, there is no apparent cooperation between the Health sector and schools in the area of physical activity in the last decade. Traditionally, the Health sector provided schools

with free tuition (generally by nurses) for nutrition, sexuality, CPR classes, and possibly some counselling services. Even this type of provision is now diminishing since students have qualified teachers instructing them in these areas in the health classes.

2.14. The role of government sponsored PA programmes

In this section, attention is dedicated solely to Sport NZ, the major funding provider of sport and recreation in New Zealand. Since the merger of the NZ Sports Foundation and the Hillary Commission into one entity that became SPARC, and now Sport NZ, this organization has been faced with the unrealistic (some might say impossible) task of promoting elite sport and community recreation simultaneously.

According to Sport NZ's Strategic Plan for 2012-15 (the former SPARC strategic plan 2009-2015):

“Sport NZ's Mission is to create a sport and recreation environment where there are:

- More kids in sport and recreation
- More adults in sport and recreation
- More New Zealand winners on the world stage” (www.sportnz.org.nz).

While Sport NZ has strict and explicit criteria for the allocation of funds to social and elite sports participants, it might struggle to justify which individuals and groups, and which sports get the priority when it comes to the distribution of funds. In 2013 for example, Basketball NZ has been removed from the list of sports granted priority “elite funding”. This happened despite the facts that basketball was, last year, the fastest growing sport in schools, and in spite of NZ been ranked in the top 15 teams in the world over the last decade.

Keeping in mind that it costs far less money to teach 5000 children how to swim than it costs to train and send 1 elite swimmer to the Olympics, it

becomes hard to understand how Sport NZ will complete its mission and create an environment where there are “*more kids in sport and recreation*”.

Sports NZ also publishes regular sports and recreation participation surveys (i.e., 2007-2008 Active NZ survey) which lists the number of sports and recreational activities and pursuits that Kiwis take part of. However, these types of surveys are mostly used for the solicitation in funds from the Lotteries Commission and the government and provide little if no indication as to the frequency and the reasons for participation in sports and recreational pursuits.

Finally in this literature review, I would like to reflect upon a major literature review which was intended to identify and summarise findings about the factors associated with physical activity between 1998 and 2008 (Park and Kim, 2008). The study aimed to explore the ‘determinants’ and influencing factors of PA in adolescents from the 5th to the 12th grades. Initially, this study found 222 (English written) studies that addressed the factors associated with PA. After some extensive reviews, 35 publications were considered appropriate for the review.

Some of the most interesting findings of this review are summarised below:

1. Most studies relied on self-reported data and cross-sectional study designs with descriptive statistics.
2. Few studies used theoretical frameworks.
3. Most studies did not examine the interaction effects among variables or pathways of their effects.
4. In most of the studies reviewed, self-efficacy was a positive significant predictive factor associated with PA.
5. There was consistent positive association between parental support and adolescents’ PA

6. To obtain more in-depth information on the predictive factors of participation in PA, more longitudinal studies are needed (Park and Kim, 2008, 125).

These findings indicate that more research is needed to establish consistent and reliable ways of investigating the factors that influence participation in PA. They also suggest that greater involvement of parents in PA programmes is needed because of the important roles they play in their children's lives.

The findings that are included in this review point to the conclusion that investigating the influence of the 2007 HPEC on the participation of year 12 students in ECPA is a complex process. However, the need to understand the discrepancy between the essential role which is attributed to HPE in the promotion of active lifestyles and the decreasing numbers of senior secondary school students participating in extra-curricular activities in New Zealand remains unfulfilled. Hence it is hoped that answering the following research questions will contribute to a better understanding of the state and status of HPE at senior secondary school levels.

Research Questions

- What are the perceived levels of participation of year 12 students in extra –curricular activities and are they achieving the minimum health-recommended levels of PA?
- Is there a connection between what year 12 students do in extra-curricular PA and what they learn from PE?
- Are there particular PE policy and practices that encourage participation in extra-curricular PA?
- Are there particular PE policies and practices that constrain participation in extra-curricular activities?

Chapter Three

Methodology and Theoretical Framework

3.1. Theoretical Framework

Through the course of this research project, the theoretical framework that I intended to adopt kept evolving and changing. Initially, I looked at the relationship between the 2007 NZHPE curriculum with the student's PA levels from a curriculum effectiveness perspective. I specifically intended to evaluate if the objective of leading students to adopt active lifestyles through the curriculum was being achieved or not. However, it became evident to me that many of the schooling outcomes are 'multidimensional' (Norris, 1998). Therefore, it would be difficult to find reliable measures to determine cause and effect with the learning outcomes. In terms of HPE outcomes such as becoming regularly active or adopting the recommended levels of PA, students may or may not achieve those goals because of hidden factors which have no relation to what happens in HPE classes (i.e., parental support).

Secondly, relying on a single cohort of schools and students' attitudes and behaviours over a set period -for evaluation- tends to undermine the historic developments, the past experiences that students had before the time of the evaluation. In the case of physical activity, it is widely accepted that students develop a great deal of their skills and attitudes from a young-age. So, measuring their rates of participation and the reasons for which they participate at a later stage can be an "acute problem" (Goldstein, 1997, 369). And thirdly, measuring the effectiveness of schools and students in achieving the goals of the curriculum is difficult because one needs to consider the historic background of students and institutions as well. Institutions are also affected by economic and cultural factors that sometimes force them to adjust their goals and policies. This is one of the

main reasons why many researchers recommend the use of longitudinal studies in investigating PA behaviour.

As there are more factors that have significant influences on young people's PA habits, it became imperative that I explore the theme of this study from other alternative frameworks. So, I resorted to exploring the use of the theories of curriculum ideologies as a lens from which to understand and analyse the PE and PA relationship. This became necessary because I was starting to believe that it is the values and beliefs of the planners and curriculum designers that must have the most critical influence on the implementation and evaluation of the NZHPEC.

What transpired from this change of direction was that while the curriculum appears to reflect a socio-ecological perspective that was initiated by academics and in consultation with teachers, parents and students, it seems that many policies such as making PE optional at senior secondary levels and national testing with NCEA contradict the perspective that is proclaimed by the academics and experts on the field.

Culpan (2005), for example, wrote an extensive article titled "What is it all about? The Muddled Puzzle" in which he questions the move away from the socio-ecological direction that was intended to be pursued in HPE practices. This started to shed some doubts in my mind over which ideological path is undertaken by the New Zealand education planners. This uncertainty was compounded by the provision of new policies such as the introduction of Charter schools, zoning, and the cutting of funds for arts and humanities programmes. In terms of HPE, some big schools developed sports academies which recruit students from other zones mainly for their talent in sport and for the potentiality of strengthening the school's performances in SSS.

In addition to this, for one to be able to determine which ideology is prevailing in the design and implementation of curriculum policies with greater validity, one must spend considerable time inside the schools and

attend as many activities as possible, because ideological tendencies and practices can be easily misunderstood if one does not participate in the environment where they occur. Unfortunately, in the time that I had for data collection, it was very difficult to engage in intensive field work within the Canterbury area schools because the 2010-11 earthquakes led to research access restrictions due to very difficult circumstances such as building-safety checks, mergers, relocations. Hence, I kept searching for an all-encompassing theoretical framework that would enable me to analyse the PE/PA relationship from as many angles as possible within the parameters of access, time, and alignment with my research questions.

This led me to the exploration of the social critical theories (SCT) as a framework. I came across the work of Paulo Freire and his ‘followers’ on numerous occasions during my literature reviews and I became gradually convinced that the broad approach taken by SCT in analysing educational contexts would be most suitable for studying the relationship between HPEC and PA.

SCTs place high importance on the role of education in society. They view schools as environments that can transform and improve people’s lives rather than places where people are trained to follow the directives of the dominant class and culture (Tienken, 2013).

One of the SCT’s main strengths is that they view education as a mean of empowering and freeing people from the constraints of marginalisation and from capitalist hegemony to some extent. This characteristic of SCT is one that I find rather idealistic (placing high responsibility on teachers) if not invasive (telling students what to do). To some extent, SCT invites scrutiny of the tension between exposing students to experiences and information that helps them grow and develop, and inciting them to take a specific stance or action in dealing with daily situations or other social phenomena.

In the *Pedagogy of Hope*, Freire (1994) emphasised the importance of hope as a medium that is necessary for finding energy to fight against injustices,

and to dream of new and powerful possibilities. There are often references made to Freire's SCT as "transformational" because of its rejection of the compliance and maintenance of the status-quo and its focus on improving people's lives (Tienken, 2013, 296). Similarly, the 2007 HPEC suggests that students need to address social issues, and take appropriate action to promote equality and other moral ideals.

The reservations that I have with regards to these altruistic goals of both Freire and the HPEC are as follows. One, is it right to give students the answers for everything (including how to deal with social issues)? Isn't it better to inform them (allow them to explore and discover) of the realities as they are and let them choose the right course of action? This could lead them to making better future-judgments about their choices and the risks they can be prepared to take.

Secondly, not all educators are the same. They too tend to have unique motivations, tendencies or ideologies. So, if they try to advocate for an issue or encourage students to take a specific action towards a certain issue, and if they do so from two contrasting perspectives (i.e., liberal versus conservative), the students might end up getting confused and lose confidence in both sources. Thirdly, if we tell students how to think and what to do, we will become no different than the curriculum planners who claim that schools are supposed to lead students to wellbeing, and that exams, rankings and increasing future job-prospects are the keys to reaching wellbeing.

With the above reservations in mind, and following valuable advice from other colleagues, I was pointed to look at John Dewey's theory of "experiential education" and to its relevance to current curriculum reforms and practices. As it turned out, Dewey's life, work and theory could not be any more relevant to this project.

Dewey's language and writings are uncomplicated and easy to follow by both academics and practitioners. He simply views education as either

traditional or progressive, or something in between (contextualism).

According to Dewey (1997), a traditional education system or environment is one where “The subject-matter of education consists of information and of skills that have been worked out in the past; therefore, the chief business of the school is to transmit them to the new generation” (p.17). By contrast, a progressive education is based on “more active, collaborative, and experiential modes of learning, greater choice of educational goals and subject matters, and the placing of educational policy more generally on a politically liberal and scientifically secure basis” (Fairfield, 2009, 13).

Progressivism is historically associated with the “early and middle decades of the twentieth century in North America and Europe, and with the writings of Jean-Jacques Rousseau, Herbert Spencer, Jean Piaget, John Dewey, William Heard Kilpatrick, and Clarence Kingsley” (Fairfield, 2009, 13). The core premises of progressivism were conceived of in reaction against traditional methods that were devised for the Industrial Revolution as “direct and whole-class instruction, memorization and learning by rote, standardized subject matters and standardized tests, emphasis on grades and competition, and a traditional curriculum of information and skills considered useful in later life” (Fairfield, 2009, 13).

Because the concept of ‘experience’ is a fundamental tenet of Dewey’s theory, it is important to explore how he defines it before getting into more details about the other basic principles of his theory and their applicability to this study.

According to Dewey, experience is: “that free interaction of individual human beings with surrounding conditions, especially the human surroundings, which develops and satisfies need and desire by increasing knowledge of things as they are” (in Hickmann, 2009, 4). By pointing to the specific importance of human surroundings or social interaction, Dewey does not exclude the importance of “nature’ or human interactions with the environment. He additionally pointed out that: “nature, can no longer be simply thought of as strictly ‘external’ to experiencing subjects.

Nature is an affair of affairs, the dynamic and changing arena of organismic change and adaptation” (in Hildebrand, 2008, 38).

Hence, Dewey views experience as a combination of equally important interactions between humans with others and with nature. The experiences consist of internal elements, such as instincts, and emotions and external elements (such as others and/or nature). However, he insisted that experience by itself or even activity within the experiences provided are not enough for creating progressive educative environments. He wrote that: “Everything depends upon the quality of the experience which is had. The quality of any experience has two aspects. There is an immediate aspect of agreeableness or disagreeableness, and there is its influence upon later experience” (Dewey, 1997, 27). These two aspects of experience form the key criteria from Dewey’s theoretical framework, they are highly suitable for evaluating the quality of the students’ experiences in HPE.

Dewey’s definition of experience was aptly summarized by Boisvert (1998), he wrote that: “We are active, multidimensional participants in our milieu. This active participation, together with its outcomes are what Dewey terms “experience”. Experimentation, reflection, and awareness of consequences are its watchwords. Experiencing is the human mode of being in the world. It designates in a summary fashion, the complex of all which is distinctively human” (p.124).

Another equally notable finding about Dewey and his philosophy is the fact that he was highly critical of the forms of dualisms or extremism that characterize philosophical and scientific thinking (Pappas, 2010). He suggested that educational philosophy is not exempt from theorizing in terms of extreme opposites (1997). Furthermore, he suggested that: “the modern world has suffered because in so many matters philosophy has offered only an arbitrary choice between hard and fast opposites” (Pappas, 2010, 299).

Therefore, it might be misleading to think that Dewey contradicted himself by considering educational environments as either traditional or progressive. He, in fact, stated that some traditional schools might adopt or implement, albeit inconsistently, some progressive methods (i.e., involving students in setting learning-goals and objectives). Similarly, progressive schools might occasionally follow traditional methods (i.e., using repetition to teach new skills).

To resolve this possible misinterpretation of Dewey's understanding of extreme dualisms, he suggested that each educational environment is unique and its quality must be judged by considering the context in which it is manifested. He commented that: "Context matters in a profound way in all areas of life where judgment is needed. Whether a feature of an action counts as a reason to do it (or not) is dependent on the context" (Pappaz, in Hickman, 2009, 299).

Dewey (1997) preferred to use the terms educative or mis-educative to describe educational contexts and methods. In Dewey's view, a mis-educative experience is one "that has the effect of arresting or distorting the growth of further experience" (1997, 23). By contrast, an educative experience is one that promotes and encourages individual growth and communal involvement.

More importantly, Dewey (1997) developed a sound concept for differentiating between what is educative and what is not. He called it the experiential continuum. He wrote that "This principle is involved... in every attempt to discriminate between experiences that are worthwhile educationally and those that are not" (p.33). He added that discrimination between what is good and bad is not only necessary for criticising the mis-educative methods, but also for initiating and conducting a different type" (p.33). One that is conducive to growth and fulfilment, one where "the most important attitude that can be formed is that of desire to go on learning" (1997, 48).

At the core of the principle of ‘the experiential continuum’ (which Dewey interchangeably calls the category of continuity) is the concept of habit. Dewey wrote that: “at bottom, this principle rests upon the fact of habit, when habit is interpreted biologically. The basic characteristic of habit is that every experience enacted and undergone modifies the one who acts and undergoes, while this modification affects, whether we wish it or not, the quality of subsequent experiences” (1997, 35). In other words, every educative action or environment has an influence on students, this influence could become habitual and continuously affect present and future experiences.

The principle of experiential continuum can be used for assessing the quality of educative experiences. By examining which school practices inhibit participation in PA and which ones encourages it, one could gain some insight on the quality of experiences that students are presented with and how they affect their future participation. Hence, the experiential continuum is highly relevant to the questions that are raised in this thesis and the relationship between PA and the curriculum.

Pappas (2010) suggested that Dewey’s philosophical framework can help educators move beyond extreme ideologies and conflicting methods. Hence, instead of trying to shed light on whether the 2007 HPE curriculum has any influence of the PA of students or not, this study will concentrate on the actual experiences of teachers and students and explore the factors that significantly affect their participation in PA at one specific segment of time and within the boundaries of their schools and communities. As it was demonstrated in the literature review, it might be futile to try to measure the PA levels of students given the lack of time and of accurate measurement tools. Within the discussion of the findings of this study, greater attention will be dedicated to distinguishing between the HPE curriculum policies and practices that are progressive and coherent with the curriculum’s intended goals, and those that might still languish in the traditional models of learning. By clarifying which factors enhance the

students' PA experiences (and consequently stand a higher prospect of becoming habitual), and which ones constrain it, educators can work on eliminating the negative experiences and consolidating the positive ones.

Dewey's theory of education is immense in scope and depth, it would be impossible to present it in full in this section of the thesis. However, it might be helpful to review some of his views on life in general and on education and learning to further illustrate the relevance of his theoretical framework to the topic of this thesis.

According to Hickman (2009): "Dewey further believes that it is only within the context of a democratic community that human beings can become responsible and fulfilled citizens. For him, the goal of life is neither wealth, nor travel, nor leisure, nor retirement, nor accumulating stuff, nor personal salvation. The goal of life is simply participating in the process of mutual fulfilment; and it is achievable only within a democratic community. In a democratic world, he writes, there are no "fixed order of species, grades or degrees." On the contrary, "every existence deserving the name of existence has something unique and irreplaceable about it, that it does not exist to illustrate a principle, to realize a universal or to embody a kind or class" (p.49). This view illustrates the high value that Dewey places on democracy and on its significance for a fulfilling life. He appreciated this concept to the extent where he saw it as a "way of life" (Boisvert, 1998, Hickman et al, 2009).

In fact, Dewey valued democracy so highly that he integrated it with the concept of learning. Hickman et al, (2009) wrote that: "In the Deweyan scheme, learning is the accompaniment of continuous activities or occupations which have a social aim and utilize the materials of typical social situations... All education which develops power to share effectively in social life is moral. It forms a character which not only does the particular deed socially necessary but one which is interested in that continuous readjustment which is essential to growth. Interest in learning from all the contacts of life is the essential moral interest" (p.43).

This suggests that for Dewey (1997), learning is not just another isolated part of daily life, but it is a moral imperative that it is integrated and intertwined with all aspects of living. Hence, learning within democratic environments would enhance the learner's quality of life. This is reflected in the following question which Dewey raised to emphasize the relationship between democracy and the quality of life. He asked: "can we find any reason that does not ultimately come to the belief that democratic social arrangements promote a better quality of human experience, one which is more widely accessible and enjoyed, than do non democratic and anti-democratic forms of social life?" (1997, 34).

In accordance with the above views of Dewey on democracy and education, he wrote that: "The school is fundamentally an institution erected by society to do a certain specific work, to exercise a certain specific function in maintaining the life and advancing the welfare of society" (in Hildebrand, 2008,136). In relation to the issue of advancing the welfare of society, Dewey viewed vocational education as counterproductive or mis-educative. He commented that preparing students for work "aggravates social class differences" (in Hildebrand, 2008,131). He justifies this by asserting that some students may possess limited skill and opportunities to complete particular tasks or jobs, while others may benefit from more generous conditions and dispositions. Preparing both these groups for a vocation and under the same conditions will highly likely increase the divide between them.

Dewey favours the idea of training students for occupations, a form or type of activity that reproduces or runs in complementarity with other forms of work that the students undertake in other aspects of their social lives (Hildebrand, 2008,131). By involving students in occupational projects, they are likely to encounter complex situations of their own making which they will have to resolve. And, by solving problems or overcoming obstacles, students realize that making progress requires observation and hypothesis-formation.

Additionally, Dewey suggested that by using trial and error (of ideas and hypothesis), students will develop new analytical skills (to determine their mistakes), and new forms of inquiry (to find solutions). In Dewey's view, this direct involvement of students with inquiry is central in education (in Hildebrand, 2008).

In spite of the vast educational literature that has emerged in recent decades from a variety of disciplines and theoretical approaches, I became convinced that Dewey's philosophical framework is the most suited for understanding and analysing the information gathered in this thesis. The advantage from using this framework is that it first allows the researcher to integrate multiple theoretical perspectives (Leonardo, 2004) such as sociology, psychology, leisure studies and pedagogy to critique the existing policies and practices.

Additionally, Dewey's framework fits coherently with the use of mixed research methods because it allows for the adoption of flexible ways of integrating the available literature with analysis of the gathered data. In practical terms, I will try to determine which of the students' and teachers' experiences in HPE are perceived to be agreeable and disagreeable, and what kind of influences will their current experiences have on their future experiences.

By uncovering where the teachers and students views about the influence that the HPEC has on their ECPA sits within Dewey's framework, it would be possible to determine whether the goal of leading students to active lifestyles through HPE is realistic and achievable or whether it is rhetorical and imitating of other neoliberal education trends (i.e., privatizing education and focusing on the student's career paths) that are dominating the globe at the present-time.

3.2. Methodology

There are many purposes for which it is almost imperative to adopt standard-research methods in the pursuit of scientific investigation or study. One of the main reasons for employing a specific method for conducting research is that other fellow students and researchers can later replicate your work (as they may have some interest in the field that you are investigating). It is also important to adopt a specific method in research to allow others to make comparisons with findings from other studies.

In the context of this study, the main purpose is to explore the influence of the 2007 HPEC on the ECPA of year 12 students and on the goal of preparing them for participation in enjoyable lifelong physical activity. The questions that are raised do not only reflect my own interest in the field of HPE, but they also bind me to adopt one or more methods in conducting my investigation. As Wheeler wrote: “Beyond particles, beyond fields of force, beyond geometry, beyond space and time themselves, is the ultimate constituent [of all there is], the still more ethereal act of observer-participation” (in Csikszentmihalyi, 1994, 61). Besides my own personal connections to the topic at hand, I am also compelled by findings from the existing literature, to adopt mixed research methods for the completion of this project. Reasons for this stance are presented in the following section.

3.2.1. *Rationale*

Because participation in HPE and ECPA is a process rather than a stable outcome, it has characteristics that are hard to measure (e.g., frequency, intensity, duration, mode, location). It is also a transitional phenomenon which makes it almost impossible, even for longitudinal studies to determine whether physical education and sports participation are reliable in predicting the PA levels of young people with certainty. McKenzie suggested that to assess PA, “various techniques and procedures, including

self-report, electronic motion sensors, heart-rate monitors, and direct observation, have been developed, and are being improved. No one method is suitable for all circumstances” (1999, 16).

Within the context of HPE in New Zealand, Wattchow et al. (2014) cited Sparkes (1992-2002) who suggested that “sport and physical activity researchers need to embrace alternative methodological approaches to counterbalance the dominance of scientism in these fields” (p.2). This suggestion is well founded given the fact that the three main studies that monitor participation in PA in New Zealand are all of a quantitative nature (Spark NZ, 2007-08, Youth, 2001 Survey, and NZSSC, 2010 Survey). To counterbalance this ‘scientism’ in PA research, Dyson (2014) argued that: “We need more collaborative approaches with participant involvement. We do too much research “on” and not enough research “with” teachers, students, administrators, and parents. We need research methodologies that include both quantitative and qualitative methods” (p.150).

To illustrate the need for a change of direction in the adoption of research methods, Johnson and Onwuegbuuzie wrote that: “Today’s research world is becoming increasingly, complex, and dynamic; therefore, many researchers need to complement one method with another, and all researchers need a solid understanding of multiple methods used by other scholars to facilitate communication, to promote collaboration, and to provide superior research. Taking a non-purist or compatibilist or mixed position allows researchers to mix and match design components that offer the best chance of answering their research questions” (2004, 15).

On the basis of the above recommendations, both qualitative and quantitative methods were used in this study. The purpose for employing two forms of collecting data was to delve into all possible circumstances that could explain the nature of the relationship between the HPEC and the students’ PA behaviours while they are away from school. Hence the data-

collection phase was conducted in two stages: quantitative and qualitative. Ethical approval for adopting the methods described above was obtained from the appropriate authority on the 11th of January, 2013 (see Appendix B for a copy of the ethical approval letter).

3.3. Stage one (quantitative)

3.3.1. Procedure

Initially, information packs containing invitations for participation in the study, summaries about the study-procedures, consent forms, and self-addressed free-post return-envelopes were sent out to the principals and the Boards of Trustees of the 10 selected schools. These administrators were given a period of four weeks to reply to the researcher. If they accepted the invitation to participate in the study, they were requested to sign the consent forms and return them to the researcher by post. The consent forms included a section requiring these administrators to supply the researcher with the contact details of the HoDs-HPE in order to liaise with the researcher and determine the best ways for administering the survey and conducting the interviews (see Appendices E to N for copies of the information letters and consent forms that were sent out to the participants).

At the end of the four weeks waiting period, one out of the 10 schools sought for participation accepted the invitation to take part in the study. Another school declined to participate and the other eight schools contacted did not reply to the invitation at all. In the ensuing two weeks, the researcher contacted the HoDs-HPE of the eight schools who did not reply to the initial invitations directly by email and by telephone. This resulted in recruiting and gaining the consent of four more schools for participation in the project. Gradually, the researcher set up 40 minute meetings with the five HoDs-HPE who consented to take part in the study and collaborate with the researcher. These meetings were hosted in the five

participating schools and were used to set the dates and times for the administration of the surveys and the interviews.

After meeting with the HoDs-HPE, and discussing the survey procedures, they consented to administer the survey during PE class-time. They figured that HPE and the questionnaires were relevant to what students learn in their courses and therefore they saw it fit to complete the survey during class time. The HoDs of HPE were given up to four weeks to administer the surveys and were asked to try and engage both the students who were doing NCEA-PE, and those who weren't. The researcher stayed in contact with the HoDs-HPE by telephone and email, and collected the questionnaires within the intended four week period. The questionnaires were later stored in the researcher's locker in his (secure) office at the College of Education at the University of Canterbury.

3.3.2. Participants

In 2013, Christchurch had a total of 33 High Schools: 11 composite schools [years 1-13], seven secondary schools with intermediate, and 15 High Schools [years 9-13] (MOE, 2014). All Year 12 students and all the HoDs-HPE from 10 purposely selected co-educational schools in Christchurch were invited to take part in the survey. These schools were selected because they are co-educational and provide the opportunity for having both genders represented in the study. The five schools that accepted to participate in the study come from varying Deciles ranging from 2 to 8. They are located in four different suburbs of Christchurch, and their sizes vary from small to large. One school, for example, had only one class of year 12 students and another had more than five year 12 classes.

3.3.3. Instrument: Physical Activity Survey (PAS)

The physical activity survey (PAS) was developed with the purpose of getting as much information as possible about the profile of year 12

students as well as their perceived levels of participation in PA within and outside school. The questionnaire that was used for the survey was designed in two versions because HPE is an optional learning area at year 12 and some participants took it as one of their NCEA options while others did not (see Appendices C and D for copies of the questionnaires). The two questionnaires were formulated on the basis of the existing literature about the relationship between schooling and PA in general. All possible variables that were found to have some sort of significance in this relationship were included in the questionnaires. Questions about some of the HPE policies and practices in the participating schools were also incorporated in the PAS to provide an insight into the state of HPE within them. The approximate duration for the completion of the questionnaire was 10 to 15 minutes. The questionnaires were completed by the students during PE class time and under the supervision of their PE teachers. The supervising teachers were briefed and familiarized with the content of the questionnaires a priori.

3.3.4. Limitations

The whole data collection phase was completed in the last two terms of 2013. This is relatively, not very long after the 4th of September 2010 and the 22nd of February 2011 earthquakes which disabled between 25% to 50% (depending on their proximity from the epicentres of the quakes) of the regional sports and recreational facilities. Some high schools had to close their premises for extended periods of time and move to new temporary facilities. Other affected schools merged with schools which remained safe for use after the earthquakes (Gorrie, 2011).

The above situation, plus the continuous and long process of negotiations between the MOE and the Canterbury schools over the governments' plans to close some schools in the region, build new ones, and merge others have kept most school officials and parents highly occupied with lobbying and strategizing. Therefore, it was expected (and justifiable) that not many

schools would have the time nor the resources to assist in conducting research involving their staff and students.

In addition to the restricting impacts of the earthquakes, the completion of the survey and the interviews required the consent, collaboration, and participation of administrators, teachers, students, and their parents. Therefore, it was highly probable that the interests and availability of one or more of those groups may not fit with the time during which the data was collected and subsequently limit the number of participants willing to take part in this study.

3.4. Stage two: Qualitative

3.4.1. HoDs-HPE interviews

3.4.1.1. Procedure

The teacher-interviews were semi-structured and consist of eight questions that revolve around the four research questions which were presented at the end of the literature review chapter. See Appendix K for a list of the teachers' interview questions.

At times during the interviews, the interviewees answered some pre-set questions indirectly or they referred to ideas that needed more expansion and clarifications. Hence, some of the pre-planned interview questions were reconfigured during the interviews to adjust and maintain a coherent and progressive conversation between the researcher and the interviewees. Some new and unprepared questions were also raised during the interviews to preserve the natural flow of conversation between the subjects and the interviewer.

3.4.1.2. Participants

One of the five teachers who initially consented to take part in the interviews had a career change in the middle of the year. She became harder to track down (by phone or email), so after a short period of trying, she was

considered unavailable for participation in the study. The other four teachers (three females and one male) took part in the interviews as scheduled. Three teachers invited the researcher to their own offices for the interviews and one teacher accepted the researcher's offer to conduct the interview at one of the College of Education interview rooms. For confidentiality purposes, the names of the participants are replaced by letters from the alphabet and ranging from A to D. The participants were ranked from A to D according to their experiences, with A being the most experienced and D the least experienced. The following table provides some demographic information about the teachers.

Table L: Teachers interviewed

Schools/ teachers	Female	Male	Teaching experience	Interview location
A	1		18+ years*	Teachers' office
B	1		11 + years*	Teachers' office
C	1		10 + years*	University of Canterbury interview room
D		1	4 years*	Teachers' office

* The teaching experience figures are approximates

3.5. Individual student interviews

3.5.1. Procedure

The individual students' interviews were semi-structured and consisted of 8 to 12 questions revolving around the four main research questions which are included in the last section of the literature review.

All the individual students' interviews were conducted during recess periods. They lasted between 25 and 45 minutes. The students were briefed prior to the commencement of the interviews of their right to withdraw from the interview if they wished to. They were also informed of the

confidentiality of the process and the nature of the questions that would be presented and discussed during the interviews.

3.5.2. Participants

Students were purposefully selected for the interviews to represent both genders, students who take PE as an NCEA option and those who don't, and students who perceived themselves active and those who are moderately active or inactive.

Mixing the profiles of the participants in the individual and group interviews was intended to attract varying statements and views from the subjects about their PE and ECPA practices. The table below shows some of the demographic information about the students that were interviewed.

Table M: Students participating in the individual interviews

Students	Female	Male	PE student	Non-PE student	Perceived level of PA
A	X			X	Inactive
B		X	X		Very active
C		X		X	Moderately active
D		X		X	Moderately active

3.6. Students' group-interviews

3.6.1. Procedure

The purpose for interviewing students in groups and discussing some questions about their ECPAs was to find out if their views as group-members will be any different from the way they presented their views as individuals. It was also hoped that the group situation will encourage the students to feel more confident about themselves and express their views

knowing that their class mates are there to qualify their statements and discuss them further if needed.

The participants were purposefully selected to include both genders and students who are active as well as those who are moderately active or inactive. The process of recruiting participants for the group interviews was challenging because it took between 4 to 8 weeks to find students who were available at the same time. Hence, some of the participating groups were not as heterogeneous as they were intended to be. Even the numbers of subjects that represented each group varied from one school to the other. All the group interviews were carried out at recess time and within the confines of the participating schools.

Following the collection, coding, recording, and analysis of the survey results, interviews were concurrently conducted with HoDs-HPE, individual students and groups of students from each of the four schools that consented to take part in the interviews.

The students' and HoDs-HPE interviews were scheduled during recess periods or at the end of the school day. They lasted between 35 and 55 minutes. They were conducted and audio-recorded by the researcher himself. All the interviews were recorded and transcribed within a week of their completion.

To analyse the quantitative data, SPSS was used to provide frequencies and cross-tabulations relating to variables such as the students' perceptions of their PA levels and to compare these levels between students taking PE as an NCEA subject and those who do not. It is important to reaffirm, at this point, that the data gathered in the PAS survey is exclusively used with the purpose of selecting and categorizing the participating students into diverse segments for the interviews. No generalisations are intended to be made or inferred from the quantitative data because, the views that are directly heard from the students proved to represent a more nuanced description of their

situations than their answers on the questionnaire. However, the questionnaire is still valuable in providing information on the overall state of HPE within the schools surveyed.

To examine and discuss the qualitative data, I adopted Lindlof and Taylor's (2002) recommendations which suggest that the data analysis process should follow three core stages: data management, data reduction and conceptual development.

During the data management phase, I coded and categorised the data into four main topics reflecting the research questions. These were: the students' perceptions of their PA levels, the carry-over effect of PE into lifestyle, the factors encouraging participation in PA and finally those that inhibit participation in PA. Other relevant information that may not fall into those categories but appeared to shed more light on the topic of this study was also highlighted and coded.

During the data-analysis phase, information was reduced by assigning values prioritizing the comments and statements that were made by the interviewees. In the third phase, some themes and patterns of meanings emerged which had clear similarities with the existing literature or had some close grounding in the socio-cultural context of New Zealand. It is these themes that I intend to conceptualise and include in this discussion. The table below shows the make-up of the groups.

3.6.2. Participants

Table N: Participants in the group-interviews

Groups	Fem	Male	PE student	Non-PE student	Perceived level of PA
A	A1			X	Inactive
	A2		X		Very active
		A3		X	Moderately active
		A4	X		Inactive
B	B1		X		Very active
		B2	X		Very active
		B3	X		Very active
C	C1		X		Very active
	C2			X	Inactive
		C3	X		Very active
		C4		X	Moderately active
		C5		X	Inactive
D		D1	X		Very active
		D2	X		Very active
		D3		X	Inactive
Totals	5	10	9	6	

The letters ABCD are the names that were assigned to each individual group for and the group members were assigned numbers from 1 to 5 confidentiality purposes.

Chapter Four

Results

Introduction

4.1. Physical activity survey results

The data collected in this survey was coded, recorded and analysed by using the Statistics Package for Social Sciences (SPSS). The data which reflect the profile of the participants and their perceived PA levels was collected for the purposes of categorising the sample into groups of physically active and moderately active plus inactive subjects. This categorisation was used to select participants for interviews conducted in stage two of the study. The results from the survey were also used to find if there are any particular variables affecting participation in ECPA that may need further discussion or clarifications during the interviews with staff and students. Hence, the results that are presented in this section are selected on the basis of their relevance to findings from the existing literature and to the questions which were raised in the qualitative phase of the study.

4.1.1. Sample

A total of 162 year 12 students ($n = 162$) participated in the PAS. They attended five different local high schools which had the combined total of 5044 students. 62.25% (3140) of those were enrolled at senior levels (years 11,12 and 13). 40.98% (1287) of the senior students from the participating schools were enrolled in one or more of the HPE strands that were available within their schools. The exact number of Year 12 students taking HPE for NCEA examinations within the participating schools is not possible to obtain because of confidentiality regulations. After making direct inquiries to the MOE about these numbers, I was informed that they were confidential because students pay fees for taking NCEA examinations and disclosing the

students' enrolments in the examinations will compromise the schools' and the students' financial privacy.

The number of students from each participating school is represented in the table below.

Table D: Survey participants

Schools	Gender	Total participants	Female	Male	PE students	Non-PE students
1	coed	27	17	10	15	12
2	coed	16	9	7	3	13
3	coed	42	11	31	27	15
4	coed	26	13	13	14	12
5	coed	51	26	25	32	19
Total		162	76	86	91	71

4.1.2. Student's perceived levels of participation in ECPA

The first important set of results from the survey relates to the perceived levels of participation of the students in ECPA. It was needed to establish if students participate in ECPA at all, and at what levels before finding out if there is a connection between what they do at school and what they do in their own free time.

Overall, the results show that the students' participation is relatively high in all forms of ECPA. On average, 55.9% of the subjects took part in one or more forms of the 6 ECPAs that are included in the table below. It must be noted, though, that the high number of subjects walking, biking, scooting or skating to school has pushed the participation average up by a significant margin. The frequency and intensity of participation in ECPA were not measured in this survey.

Table E: Students' perceived levels of participation in 6 forms of ECPAs

6 forms of ECPAs	NCEA-PE students	Other students	Tot out of 162	Females	Males
1.Walk/bike/scoot/skate to school	n=61 37.6%	n=49 30.2%	n=110 67.9%	n=39 24%	n=71 43.8%
2. Participation in secondary school sports	n=49 30.2%	n=16 9.8%	n=65 40.1%	n=27 16.6%	n=38 23.4%
3. Participation in Intra-murals	n=48 29.6%	n=15 0.92%	n=63 38.8%	n=24 14.8%	n=39 24%
4. Sports clubs membership	n=47 29%	n=19 1.17%	n=66 40.7%	n=24 14.8%	n=42 25.9%
5. Individual participation	n=74 45.6%	n=53 32.7%	n=127 78.3%	n=56 34.5%	n=71 43.8%
6. Participation with family	n=68 41.9%	n=45 27.7	n=113 69.7%	n=49 30.2%	n=64 38.2%
Combined averages	n=57.8 35.6%	n=32.8 20.2%	90.6 55.9.3%	n=36.5 22.5%	n=54.1 33.4%

The results shown in Table E also indicate that the respondents' levels of participation in ECPA varies largely according to their gender and to whether they are doing PE as an NCEA subject or not. Male students take part in more ECPA than their female counterparts (males: 33.4%, females: 22.5%), and the students who are taking PE as an NCEA subject do more ECPA than the other students who are not (PE students: 35.6%, Non PE students: 20.2%).

In terms of participation in secondary school sports competitions and in intra-murals, which are two forms of PA that are generally sanctioned and encouraged by schools, a variation between the participation levels of students doing PE as an NCEA subject and those who don't was also evident. Results from this survey found that 30.2% of PE students take part in SSS while their non-PE counterparts represent 9.8%. Similarly, 29.6% of the PE students take part in intra-murals while only 9.2% of their counterparts are involved in intra-murals.

4.1.3. The students' perceived levels of PA

In addition to asking the subjects about their participation in various forms of ECPA, they were requested to rate their personal levels of PA. As indicated in F table below, the results show clear variations (once more) in the PA levels of participation between males and females and PE and non-PE students. Overall, more than half of the subjects (53.1%) rated themselves as “moderately active”, 34.6% described themselves as “very active”, and 11.1% as “inactive”.

Table F: Students' perceived levels of PA.

Perceived levels of PA	NCEA-PE students	Other students	Tot out of 162	Females	Males
Very active	n=49 30.2%	n=7 4.3%	n=56 34.6%	n=8 4.9%	n=48 29.6%
Moderately active	n=40 24.6%	n=46 28.4%	n=86 53.1%	n=52 32.1%	n=34 20.9%
Inactive	n=1 0.6%	n=17 10.5%	n=18 11.1%	n=14 8.6%	n=4 2.5%
Missing	-----	-----	n=2 1.2%	-----	-----

4.1.4. Comparison of the PAs that are available at school and those that are accessible outside school

The question of which activities were mostly available and accessible to students while they are at school and on their own free time was raised in the survey to verify if there are any similarities between students' pursuits in and outside school. The existence of similarities in these pursuits would suggest that students have the opportunity to transfer some the skills learned at school into their preferred activities outside school. As it is indicated in the table below, four out the seven most consistently available activities at school are different from the ones that are available for students in their free time. The students were able to choose more than one activity therefore the percentages in the results don't add up to 100%.

Table G: Students' perceptions of most available and accessible activities inside and outside school

	Activities mostly available and accessible at school	%		Activities mostly available and accessible outside school	%
1	Basketball	74.7%	1	Swimming	42.6%
2	Soccer (indoors & outdoors)	64.2%	2	Jogging	42%
3	Rugby/touch/league	63.6%	3	Weights/gym	41%
4	Netball	59.3%	4	Rugby/touch/league	35.8%
5	Weights/gym	54.3%	5	Soccer (indoors & outdoors)	35.8%
6	Volleyball	53.1%	6	Cycling	31.5%
7	Hockey	51.2%	7	Scooting/skateboarding	30.2%

4.1.5. The cost of taking part in ECPA

The cost of taking part in ECPA (paying registration fees, buying uniforms or other equipment, contributing to the transportation expenses etc.) is another variable that was encountered in the existing literature as having a direct influence on whether students participate in ECPA or not. Hence, the subjects were asked to indicate if their schools charge them for taking part in SSS. Results from this survey show that a majority 61% of the subjects believe that participation in SSS is partially free. While 22.8% of the respondents think that it is not free at all. The complete figures relating to this variable are represented in the table below.

Table H: Cost of participation in SSS

Participation in SSS is:	n=subjects	% out of 158
Free	4	2.4%
Partially free	99	61%
Not free at all	37	22.8%
Don't know	18	11.1%
Missing	4	2.4%

4.1.6. Work and participation in ECPA

One more variable that proved to have a significant influence on the subjects' participation in ECPA is their work status. Results from this survey show that 34 % of the participants were taking up part-time (paid work) while they are studying (high school students are not supposed to work more than 30 hours per week by law). This result is significant because, as it is shown in the table below, the rates of participation in SSS, intra-murals, and club sports by students who are working are about 10% lower than those who don't work.

Table I: Comparison of participation in 3 types of ECPA between students who work and those who don't

	% participating in SSS	% participating In intramurals	% of sports clubs members
Students in paid-work	18/55 – 32%	18/55 – 32%	19/55 – 34.5%
Other students	47/107 – 43.9%	45/107 – 42%	47/107 – 43.9

4.1.7. Students' familiarity with programmes and resources available for recess

Several questions relating to the students' familiarity with the intramurals and resources that are offered by their schools were raised in the survey. The results indicate that a relatively high number of students (between 35.2% and 45.6%) are unsure or don't know about basic information concerning participation in recess activities. These results are summarised in the table below:

Table J: Subjects' familiarity with the recess programmes and resources in their schools

Questions	Yes	No	Unsure & Don't know
Does your school provide its students with equipment and facilities for fitness, play or sports during recess (long breaks from class)?	56.8%	8%	35.2%
Does your school provide supervisors for fitness, play or sports during recess?	30%	25.3%	43.2%
Does your school have a culture of encouraging students to do Physical Activities during recess times?	28.4%	22.8%	45.6%

4.1.8. Extra-curricular activities of non-PE students

Finally, in this section, it is worth noting what students who are not taking PE as an NCEA option (n=71) do for their extra-curricular activities. Results from the PAS show that 32.3% of the non-PE students do sport and exercise as an extra-curricular activity and the same percentage of this segment do not do any extra-curricular activities at all. The variety of the ECA that are offered by schools makes the participation percentages appear low. That is because students have a wide variety of academic, artistic and recreational activities in which to participate.

Table K: Extra-curricular activities of Non PE students

Extra-curricular activities taken part-of	Numbers participating	Percentage
Sport and exercise	23	32.3%
Do not participate in any activities	23	32.3%
Music	15	21.1%
Reading & writing	12	16.9%
Drama % theatre	11	15.4%
Visual-arts	8	11.2%
Study-groups	7	9.8%
Other activities	6	8.4%
Outdoor education	4	5.6%
Dance & rhythmic gymnastics	1	1.4%

As well as serving as a tool for selecting students for participation in the individual and group-interviews, the results presented above helped in prioritizing topics for discussion during the interviews.

4.2. Results of the teachers' interviews

The interviews started by seeking the HoDs-HPE overall impressions of the 2007 curriculum. They were specifically asked to compare it with the previous curriculum and to describe its suitability for the needs of the students as well as its effectiveness with regard to achieving its goals. The teachers' replies to the above questions were almost identical. They consisted of two basic responses.

The first was that they are all satisfied with the overall values and principles of the 2007 curriculum. They specifically referred to its flexibility and to its focus on the socio-cultural aspects of learning as positive elements.

Secondly, there was also a unanimous view amongst the teachers that the NCEA assessments tend to take the priority over the curriculum at the senior stages of high school. The words and the tone by which the teachers expressed this second view suggested that this assessment issue is something that needs addressing in the future. The following are a representative sample of the teachers' answers and comments about the 2007 curriculum.

Teacher A:

"... it allows you to probably have a little bit more freedom for each school, and a little bit of creativity. Once you hit Y11 you don't really follow it because assessment NCEA takes over. So, you're more driven by the assessment than you are by the curriculum at all."

Teacher C:

"So, for me, the 2007 curriculum is much more holistic in that it is asking me to have a look around at what else they [the students] are doing as well. And I think it is also bringing in 'learning to learn' kind of functions so rather than just subject-specific content that it is driving."

"I think, however, [that] there are a lot of schools out there who don't open the curriculum, who will use the NZQA framework as the strategy that guides their teaching and learning, teaching to the test."

Teacher D:

"With year 9 and 10 we work really hard to push the curriculum into their content. The teachers before me had done a really effective job of that in particular, especially the key competencies and creating units around them, they were pretty explicit. It [the curriculum] made it a challenge, I think, for senior students because they find it really assessment-driven because they find assessments hard, and we spend most of the time teaching content in our context, whatever that is, to the assessments – which I hate, personally, but it's the only way to get them through at this stage."

Teacher B:

“I think it’s [the curriculum] good, I like the underpinning values. I like the key competencies that are required. I would say there’s perhaps a paradox in that there’s this expectation to teach these values, which I think is a good thing, and I think the values are a good thing.”

Unlike the feedback from the first three teachers (A, C and D), teacher B included a highly interesting remark regarding the curriculum. She described the curriculum’s focus on some important social and moral values as a “*paradox*”. Because she later explained that if these values (such as social justice, gender equality, environmental sustainability) are so important, the whole society should be aware of them and taking responsibility towards promoting them, not just the schools. She went on to add that in her view, it is “*a challenge*” to “*teach them [moral values] explicitly because they don’t exist within our community.*”

So, to recapitulate the overall impressions of the HoDs-HPE who were interviewed towards the 2007 curriculum, one must assume (from their comments) that they are satisfied with its moral and social perspectives and with its flexibility. At the same time they view the focus on assessments (NCEA qualifications) as a counter-productive factor to the effective implementation of the HPE curriculum.

As to the question of how did the HoDs-HPE compare the current HPE curriculum to its predecessors. Teacher D could not comment on the issue because he did not experience working under the previous curriculum. Teachers B and C thought that the 2007 curriculum is not that different from the 1999 curriculum. But, teacher A, who had over 18 years of experience in teaching, mentioned that:

“It’s changed a lot and I think technology and stuff, but we’d like to see the kids ‘doing’. But what’s being removed [since 1999], I think, is a lot of the fundamentals, so the basics, even your simple ‘catch and throw’, ‘hitting

and striking', just your own movement like balance, somersaults, forward rolls, kids can't do them now."

Teacher B on the other hand commented that:

"I think for us, within PE and Health, it was an easy transition into the 2007 curriculum because it was, we felt, very similar to what we already had with the [1999] Health and PE curriculum."

Teacher C indicated that:

"I haven't found any major differences between the 2007 and the 1999 curriculums for PE and Health. But, I think it is all about interpretation."

From seeking the HoDs-HPE general views on the current curriculum, the interview focused on the core research questions. These questions were not presented to the teachers in a uniform way, but they were adapted to suit the unique context of each interview. Hence, the rest of the results of the teachers' interviews are reported under the four following themes.

4.2.1. Year 12 students perceived levels of participation in ECPAs

The interviews with the HoDs-HPE revealed that they have no accurate way or formal mechanisms for determining the levels of PA of the students. Hence their estimates or their perceptions about the PA levels of students are rather mixed. So, teacher C, for example, mentioned that:

"... if I have a look around the students I teach, they do a lot of physical activity. They do a reasonable amount of organized sport... I think there's a lot of unmeasured physical activity going on... I think a lot of students are moderately to vigorously active often... from my point of view, we can't kick students out of the gym until 6pm at night. They'd stay until 10pm, they really would. So from my point of view we're pretty active."

Teacher B on the other hand, said:

“I’m not convinced that our Y12 students are really following those recommendations and doing enough activity in general... I think that there are some [students] that just through taking PE and outdoor education at Y12, you know, they’re doing that 5 hours a week anyhow. I think that the ones we see are taking PE and that take Outdoor Ed, so maybe they’re the exception to the rule”.

The comments made by teacher B were supported by those presented by teacher D who mentioned that:

“Generally, there’s a majority of PE students who are doing the recommended levels purely through doing sports. So, they have trainings, they have games... Our non-PE students, it’s a stereotype, but generally are ones who won’t be on sports teams and won’t be doing anything physical whatsoever. They might walk to school, but that’s probably the extent of it.”

By contrast with the above views, Teacher A added a new dimension to this issue of the students’ levels of PA. She expressed that:

“For us, we have kids from all different schools come here, the push [for regular PA] isn’t there, so no it [participation in PA] is dropping, girls in particular.”

Teacher A was the only interviewee to refer to the fact that girls are doing less PA than boys. She also mentioned that her school’s concern over the low participation of senior students in PA has pushed her department to introduce a new compulsory subject called: Recreation, Wellbeing and Sport to the Year 11 syllabus. Teacher D also indicated that his department started a new outdoor education to compensate for the low levels of participation in PA at senior levels.

4.2.2. *Is there a connection between what year 12 students do in extra-curricular PA and what they learn from HPE?*

This question is highly important in the context of this study. Answering it will go a long way towards determining what kind of influence the curriculum has on the students' participation in ECPA.

In summary, there were three types of answers that represented the teacher's views towards this question.

1. According to some teachers, having a positive and direct impact on the students' lifestyles is one of their main goals. So, when teacher A, for example, was asked about the role of HPE in preparing students for active lifestyles, she replied:

“That is one of our main goals, we are trying... Have we got it right? I don't know, it's evolving, our students are evolving, we have to make changes. Every year is different...”

This reply confirms the centrality of the role of HPE in having a positive impact on the students' lifestyles. It also reflects the uncertainty about measuring the HPE impact on students which is included in point 2 that is presented next. This uncertainty was evident by teacher D who indicated that the carry-over effect of HPE on lifestyle is one of the reasons why HPE exists. He commented that:

“It's idealistic. Ideally it would be fantastic. It's certainly one of the motivators as to why we're here, one of them anyway.”

2. The teachers were not so sure whether the impact of HPE practices on students can be measured or how that could be done. So, when they were asked to provide examples of situations where they notice some elements of the carry-over effect of HPE on their students' lifestyles, they were clearly unsure about which examples would be more appropriate to refer to.

Teacher D, for example, said that he can only think of examples

“anecdotally, there’s no quantitative evidence” to record or describe what students transfer from school practices into their lifestyles. As an interviewer, I had to provide examples (of situations where students apply what they learn in HPE while they are away from school) for the interviewees myself, and ask them if they would consider them to be valid or not, or if they could expand on whether they are aware of similar situations or examples.

3. In principle, all the teachers that were interviewed acknowledged that their students report (informally) that they regularly transfer some of the principles and skills that they learn from their HPE practices into their personal activities while they are away from school. Here are some of the examples that were referred to by the teachers.

Teacher A:

“Yes, we have kids that are now working at a recreation centre as swim coaches and lifeguards...they are taking some of the leadership skills from the senior courses and applying them at their jobs.”

Teacher B was more assertive about the carry over effect of PE into the students’ lifestyles, she claimed that:

“Yes, there is carry-over from PE into lifestyle. So being involved in training programmes and seeing, and some engage fully, some not so much, but seeing the benefits in being in training programmes for things. I think it does help them to incorporate that into their lifestyle.”

4.2.3. Which HPE policies and practices encourage participation in ECPAs?

It was not possible to detect from the interviews if the schools had any specific policies targeting the practice of regular physical activity. Besides the scheduled HPE hours, the only other avenue for students to participate in PA is to join school sports teams and/or play freely at recess. While these opportunities existed in all the schools that were visited, there was no mandate or explicit practice that specifically or directly encourage students

to adopt and maintain regular participation in PA and that required them and/or their parents to take advantage of the opportunities that exist within schools. So, during the interviews, the teachers referred to the role of the parents as a pivotal factor in participation.

All the teachers that were interviewed stressed, in no uncertain terms, that parents play a crucial role in encouraging their children to participate in PA. Teacher D said that:

“... yes, there are opportunities, there are clubs all around us, there are organizations, and while some kids do take them, it’s their parents who drive it”.

Furthermore, two of the teachers interviewed expressed that they would like to see more parental involvement in school activity in general and in school sports, in particular. Teacher A made this plea rather clearly by asking:

“...how many parents support their children in sports? Yes, there are the ones that have always been, but there are a lot of parents that you don’t see ...”.

Teacher C also commented on the lack of parental involvement in secondary school activities by saying that:

“... from my experience, parents will walk in the gate and will welcome themselves into primary schools, and it seems that a lot of parents are scared of secondary schools and don’t want to come in.”

4.2.4. Which HPE policies and practices constrain participation in ECPAs?

There were two main obstacles that the teachers referred to during the interviews. The first was the focus on written assessments and negligence of PA during extended periods of senior schooling. The second was the increasing cost of participation in ECPA. There are other less pertinent factors that were mentioned during the interviews such as ‘*role modelling*’, lack of continuity between what students did at primary school and what

they are expected to do at secondary levels and the low accreditations for PE assignments in comparison with other school subjects.

According to one teacher (A), society in general and teachers (of all subjects) would have more positive influences on students if they practiced regular PA themselves and if they joined the students, occasionally at least, in some of their ECPAs.

With regard to the constraining impact of assessments, teacher A noted that:

“We’re taking away the teaching moments, especially with the Y11 upwards... we are so driven by assessment that the kids go “if it’s worth credits, I’ll do it [PA], if it’s not worth credits, I’m not going to do it”.

Teacher B also referred to assessment demands as a constraint, she stated that:

“I think that when they get busy with exams they don’t have a lot of time for physical activity. Or when they get busy with assignments, there’s not a lot of time to do physical activity. So, for example with my Y13s, having just done a training programme – it was a 10 week training programme – they hit busy periods where they didn’t keep the training programme up because they had too much on.”

As to the costs of participation as a barrier for participation in PA, teacher D affirmed that:

“The barrier is always money. So when you talk about fitness or you talk about other organizations that are providing a service, like a gym, a fitness centre or a swimming pool, or holiday programme, the money is always the barrier”.

Teacher B also mentioned that:

“I think cost is a huge issue, and for a number of students that is an issue. I think, obviously, that depends on the sport that they play...”

This means that some school sports’ competitions (like hockey which is played on artificial grass courts) are more expensive to take part of than others (like rugby which gets subsidies from the national rugby union).

4.2.5. The role and status of the secondary school sports coordinators

One last but highly important result that came out of the teachers' interviews relates to the area of extracurricular sports and how they are managed. This issue is important because it is directly related to the theme of this thesis and because it sheds light on the question of the alignment of the HPE goals with those of extra-curricular physical activity programmes.

Because most teachers are or claim to be overloaded with work, and because schools struggle for funding extra-curricular programmes, they are hiring sports coordinators to plan, implement and (presumably) evaluate ECPAs.

The conditions under which these coordinators are recruited (salaries/wages, training, length of employment, weekly work-hours) and their roles (fund raising, coaching, supervising recess activities, administration, and liaising with HPE staff) in general vary from one school to the other. While the state of ECPA in schools is highly dependent on the role and outputs of sports coordinators, there is almost no mention of them in the existing literature. Hence,

Here is what teacher C said about the sports coordinators:

“In my experience I think the sports coordinator role, in general, is quite problematic... I also find that if the sports coordinator is not teacher-trained, they're not even interested in asking questions or learning, or coming and talking with teachers about the learning. Sport coordinators don't tend to sit in on lessons and actually experience it. There's a lack of wanting to know and wanting to learn, and it seems like a lack of their role, which is to support and anchor onto curriculum and further develop it, and I don't think sport coordinators seem to value the education aspect of being physical or being healthy and having a balanced Hauora, I don't think a lot of them even think about engaging with the thoughts”.

Teacher C continued:

“I think that’s problematic, because it just creates a whole lot of equity issues across schools to do with what’s provided at the school. For example, a smaller secondary school will have a part-time coordinator who, in my experience, will often work well over their hours, will often work late at night or weekends, and be paid an absolutely disgusting amount and will burn out. And I think that’s highly irresponsible, I think it’s unfair, I think it’s inequitable and it disadvantages students and I think they are a highly valuable resource that are [is] treated like mud”.

It is worth adding in this context that teacher A has well over 10 years of teaching experience, that she worked in three different high schools on both islands of New Zealand, and that she held a leadership position within one of the national physical education forums which monitors the evolution of PE in New Zealand and publishes research and teaching materials on regular basis.

To conclude this section about the teacher’s interviews, it is important to indicate that the interviewees appeared to have read, understood and reflected on the theme of the interview (which they were briefed on in the information letters that were sent out to them) before the interviews. They also expressed genuine interest in the questions which they were presented with and gave their answers in the most thoughtful and analytical ways.

As an interviewer, my general impression at the end of the interviews, was that these teachers loved and cared about their roles, their students and their learning areas (subjects). They also gave me the impression that despite their contentment with the curriculum reforms and the progress that they were making, they see that there is more room for improving the state and status of HPE in their schools, and that they would be prepared and happy to contribute to such eventuality.

4.3. Individual student interview results

The individual students' interviews were semi-structured and consisted of 8 to 12 questions revolving around the four main research questions which are included in the last section of the literature review.

All the individual students' interviews were conducted during recess periods. They lasted between 25 and 45 minutes. The students were briefed prior to the commencement of the interviews of their right to withdraw from the interview if they wished to. They were also informed of the confidentiality of the process and the nature of the questions that would be presented and discussed during the interviews.

4.3.1. Participants

Students were purposefully selected for the interviews to represent both genders, students who take PE as an NCEA option, those who don't, and students who perceived themselves active and those who are moderately active or inactive.

Mixing the profiles of the participants in the individual and group interviews was intended to attract varying statements and views from the subjects about their PE and ECPA practices. The table below shows some of the demographic information about the students that were interviewed.

Table M: Students participating in the individual interviews

Students	Fem	Male	HPE student	Non-HPE student	Perceived level of PA
A	X			X	Inactive
B		X	X		Very active
C		X		X	Moderately active
D		X		X	Moderately active

4.3.2. Results

At the start of the individual students' interviews, the participants were asked to elaborate on whether they were informed about the recommended levels of PA amongst young people their age or not. They were also asked to indicate how they learned about these recommendations if they were ever informed about them at all.

The students' answers to these two initial questions were mixed. Student A expressed that she was meant to "do 30 minutes of exercise a day or something like that". As to how she learned about these recommendations, she replied:

"Um, it's always been said throughout primary school, yeah primary, kindy [kindergarten], they've always said it, "push play", all those sorts of things".

Student D also mentioned being informed of the PA recommendations at his early years of schooling, but his answer to the question was broad and did not exactly mention how much weekly PA was recommended to him. He explained that:

"Yeah, with primary school there was a big focus on going outside, always making sure you do, you know at lunchtime you'd always exercise, that's one thing. Then secondly, it would always be about if you don't do enough exercise there's a lot of risks, especially they'd always mention Diabetes as a main issue that they'd talk about through school. So the last one, to do with being informed of good health and whatever, it was probably to do with swimming, so swimming really helped with a lot of health things as well. So that's the sort of things I was informed about".

By contrast with the previous two answers, student B stated that he was aware of the recommended PA levels, but not through school or the health sector. He said:

“Not from the industry, but I have read few articles about health and fitness online and all that”.

Similarly to the progression of the teachers’ interviews, students were asked to present their views and comments about the four main research questions.

4.3.3. The perceived levels of participation of year 12 students in MVPA

Students were asked to indicate how much moderate to vigorous PA they were doing per a week over the current academic year so that later on in the interview, they would be asked to elaborate on which factors help them or inhibit them from doing regular PA. They were also asked this question to corroborate their answers with those which they provided in the survey and those provided by their teachers and their peers.

Student A (who described herself as inactive in the survey) explained that:

“I get a bit of a sweat up when I’m working but I wouldn’t call working physical exercise, it’s just because it’s a hot environment. Probably nothing, I’m really lazy”.

Student B (who rated himself as very active in the survey) said:

“On average, I don’t know, over the last few [weeks] with exams I’ve taken a big step back, but before that I’d spend maybe about 5 hours a week doing vigorous exercise, doing weights, running etc...”

Student B mentioned how his participation dropped because of his commitments to exam preparations. This factor is important and will be followed up further when the question of the impact of the assessments on the students’ participation in PA is discussed.

Student C (who rated himself as moderately active in the survey) described his participation in PA as follows:

“Say on a weekly basis I probably do go to the gym three times, so that would be an hour to two hours each time to go to the gym, and I try to go

for a run, like up Rapaki [a hilly walking track]. But this year I started off doing that maybe once a week, not so much anymore since I've been going to the gym and I've been trying to bulk instead of get endurance".

Student D (who rated himself as moderately active in the survey) summarized his PA routines in the following statement:

"So, I probably do, well biking to school every day, and at lunchtime, most lunchtimes if it's not raining I'll play football, so that's an hour. That's only what I do though; I don't do any after school".

It is evident from the above answers and comments that, these Year 12 students appear to be well aware of their participation habits in PA. Student A was the only one who was quite unsure and appeared hesitant in her replies.

4.3.4. The connection between year 12 students' participation in PE and ECPA

According to the four students that were interviewed, the HPE curriculum and the school programmes in general do have an influence on their participation in ECPA. Even student A who claimed that school initiatives and recommendations tend to have the opposite effect on her admitted that she knew other students at her school who would transfer some of the skills they learn at school into their lifestyles. Here is what student A said about her own experiences with regard to the contributions that the HPE practices make to her lifestyle:

"No. Well, me personally, no. If a teacher told me, "A [student name], I think you'd be great at ballet", then I'd be like "that's great, you can have that opinion, but I'm not going to do it". They have in there [the curriculum?] the sort of times that students are meant to be asleep by. That has no effect on when I'm going to go to sleep. I find that the school curriculum, like some of the stuff I just don't agree with, and so I just won't do it. Like if they say you have to do one sport, it's hard to do one sport when you have no friends that are doing a sport."

When Student A was asked to reflect on whether the HPE practices had any influence on her friends or other students that she may know in her school she replied:

“Yeah there are students here that are like “yeah I’m going to do everything and I’m going to try everything the school has to offer” and they really get involved. But those are the students that are going for like Head Boy or Head Girl”.

The other three interviewees did not only acknowledge the influence of the HPE practices on their participation, they even referred to specific examples that demonstrate this influence. Student B, for example, said:

“Yeah, there was something about the dosage, Suzy [the PE teacher] was talking about it with weights, you might as well do it once every two days instead of doing it every day, and like just do heavier sets instead of more and things like that”.

Student C described the influence of HPE practices on his behaviours in the following way:

“I suppose being exposed to new games and drills in PE lessons. It might encourage you [to] play those games in lunchtime or with your friends at other times or something, it might inspire you. But I guess, yeah, taking the subject PE does encourage me because I’m more exposed to PE, so yes.”

4.3.5. Factors encouraging student’s participation in ECPAs

The interviewees evoked a number of factors that they saw as encouraging for their participation in ECPA. They mainly referred to peer-influence (friends) as one of the main encouraging factors for participation. However, they mentioned the New Zealand culture (which schools and parents are a part of) as well as other driving factors such as enjoyment.

According to student A:

“NZ is very much a sports based country, I think, and we’re very into our rugby and like my brothers for instance, they both do rugby and they want to do swimming and they want to do all these different sports, I think it’s just a culture that you need to try everything to see what you’re good at...”

Student C referred to media influence (culture) amongst other factors such as parents, he said:

“I guess the other big factors were parents or schools, because I was interested, because of my environment being in NZ and having a lot of the media coverage about rugby and league”.

In terms of parental influence on participation, student B said:

“Well dad sort of set up the gym in the garage and all that, but apart from that we don’t really need facilities, we’ve got it all at home, so [societal influence is] pretty minimal I guess, apart from family”.

Student A referred to parental encouragements too by adding:

“And also parents saying: give this a go”.

The third encouraging factor that was mentioned by students is the peer-influence (friends). Student A said:

“... and if your friends, like when you’re, like my brother’s nine and he came home one day and was like “my best mate’s going to do soccer, I want to do soccer”, so he did soccer”.

Similarly, Student C said:

“... especially, I guess, friends, because my first sport was soccer with my friends at school...”

Student A referred to another highly interesting factor which is age. She said:

“... the younger you are the easier it is to get into something”.

The last encouraging factor for participation in ECPA that one of the interviewed- students described was “enjoyment. Student B said:

“... I don’t know why [I participate in PA), I just enjoy it ... it clears my head, you know, after sitting in front of the computer for a bit you need to do something otherwise you just get bored”.

In my view, the statements presented above did not reflect any clear or direct influence that school may have had on the interviewees in encouraging participation in PA. They are more descriptive of the reasons why the students participate in PA. But, since the reasons for which students participate in PA could be described as motivating factors, it would be possible to consider them as encouraging factors. Because, motivations for repeating experiences are usually triggered by their relevance to, and their agreeability with previous experiences. Additionally, despite the fact that parents and friends do not form a direct relationship with schools, they often interact with the teachers within and outside (in the context of SSS) school to facilitate and promote participation in PA. It is this interaction within and outside schools that makes them play a significant role in encouraging participation in PA.

4.3.6. Factors constraining participation in ECPA

During the interviews, students were asked to think of and explain any factors that may inhibit them or their friends from participation in ECPA. As it is shown in this section, the students indicated that there is a variety factors that appear to constrain them or others from participation.

Student A (who is inactive) expressed that having two part-time jobs is the main factor that stops her from taking part in ECPAs. She also added that lack of confidence in her athletic abilities, and the fear from embarrassment in front of others prevents her from joining school teams. Here is how she explained these expressions:

“I would do physical activity or like a sport or something, but I don’t have the skills and I find that I’m far too embarrassed to sign up for something if I don’t think I’m good enough”.

For student B who is very active, the electronic media is what seems to present him with the major obstacle towards participation. He stated that:

“I’d say the internet is a big distraction, you know, you get on there for five minutes, and you’re on there... two hours, Youtube, Facebook etc.”.

He also added that exam preparation and homework tend to prevent him from exercising sometimes. He explained:

“... also, just exams and school and whatever, I mean if I’ve got homework and all that I won’t have time to go to the garage [gymnasium] or whatever, it depends on the days”.

Students C and D referred to the competitiveness of some school and club competitions as the main reasons that put them off participation in PA.

Student C:

“... so, an example would be probably soccer, because just going from being all fun and winning and then going into a harder competition and it being very competitive and having to win and being up against harder players, we lost a lot of games, and it was definitely the parents, and I guess the coach, that bring the negativity or something”.

Students D:

“... all I remember with competitive sports is that there was a lot of anger and it was just, I don’t want to be surrounded with it... it ruins the whole experience for later on”.

As it is reflected in the above comments, there is a variety of elements and experiences that students consider as limiting factors for participation in ECPA.

4.4. Students' group interviews: results

4.4.1. Participants

The purpose from interviewing students in groups and discussing some questions about their ECPAs was to find out if their views as group-members will be any different from the way they presented their views as individuals.

Similarly, to the individual interviews, the participants were purposefully selected to include both genders and students who are active as well as those who are moderately active or inactive. The process of recruiting participants for the group interviews was challenging because it took between 4 to 8 weeks to find students who are available at the same time. Hence, some of the participating groups were not as heterogeneous as they were intended to be. Even the numbers of subjects that represented each group varied from one school to the other. All the group interviews were carried out at recess time and within the confines of the participating schools. The table below shows the make-up of the groups.

Table N: Participants in the group-interviews

Groups	Fem	Male	PE student	Non-PE student	Perceived level of PA
A	AA			X	Inactive
	AB		X		Very active
		AC		X	Moderately active
		AD	X		Inactive
B	BA		X		Very active
		BB	X		Very active
		BC	X		Very active
C	CA		X		Very active
	CB			X	Inactive
		CC	X		Very active
		CD		X	Moderately active
		CE		X	Inactive
D		DA	X		Very active
		DB	X		Very active
		DC		X	Inactive
Totals	5	10	9	6	

4.4.2. Group-interviews results

Overall, the group interviews yielded similar outcomes to those obtained from the individual interviews. There were, however, three notable findings

regarding the participation in ECPA that were not mentioned in previous interviews and that I will report and focus on in this section.

First, some members of group A who came from a lower decile school, which is located closer to the area where the 2010 and 2011 earthquakes caused significant damage to homes and other recreational infrastructures reported that their recreational pursuits were constrained by the closure of their neighbouring recreational facilities and the disintegration of some of the sports clubs operating in their area. They also referred to traffic and transportation problems that affected them. When a student (AC), for example, was queried about why his level of participation in ECPA dropped, he replied:

“I used to play soccer, but I didn’t do it anymore because I moved house and then relocated house again because of the earthquake, and then just... it stopped [the earthquake] most things from happening, like roads and things, from travel”.

Another student from the same group (AB) as the above said:

“Well, I used to do kick-boxing, that was just before the earthquakes, and I started going to the gym lots, I was going to the gym and in the earth-quake, it fell down, and I didn’t want to go to kick-boxing because I thought that [the gym] was going to fall on me as well”.

The second significant finding came from group B which was made up of three very active students, who came from a relatively high decile school, played representative sports at school and at provincial levels, and were all taking HPE as an NCEA subject. These students appeared to possess high levels of intrinsic motivation for participation in PA, as well as confidence in their abilities to balance their commitments to their studies with the demands of their sport and recreational activities.

When these three students were asked if they have noticed any changes in their participation patterns in PA throughout their schooling, they all replied

in the affirmative and indicated that they were currently exercising and training more than they did when they were younger. They attributed that to the fact that they were becoming more skilful and more advanced in their chosen sports, and that they had to maintain regular/consistent training routines to be able to continue improving. Here is what some of them said about their participation patterns throughout their schooling.

Student BB said:

“Yeah, I think I’ve progressed over the years because I’ve become better at my football, so I train more, so I get better as well”.

Student BC said:

“I train more than I used to, especially this year there’s been heaps of training”.

Student BA added:

“Yeah, I do the same, train every day. That’s for athletics”.

When these students were asked why they are very active? They presented different motivations. Student BB explained:

“Just for the fun of it I suppose. I like doing it because I like it, yeah, it keeps me fit. I like staying fit and healthy”.

Student BC added:

“Just the fun of it, and enjoying it with mates... Yeah, and competition as well”.

Unlike the other two students, student BA made reference to achievement and learning as other motivating factors, she said:

“Yeah, kind of like excelling in my sport, and getting better, seeing the progression of it”.

The third significant finding came from group C which was made up of students with a mix range of PA levels (active, moderate, inactive) and who attended a mid-range Decile. Towards the end of the discussions with this group, I asked the members if they could make any suggestions for improving the state of the ECPA practices in schools. One of them (CA) replied:

“Yeah, instead of just like [providing] opportunities for people who are already motivated to do a sport, you really want to try to motivate the people who don’t do sports regularly, because that’s what I’ve found, is that really there are things there for people who are already motivated to do a sport, like who will go out and try and find like say a club to play, but people who don’t do it, they don’t know anything about it, so they just won’t”.

This comment was also referred to by one of the students from group B albeit in a different way. When asked about the organisation of secondary school sports, student (BA) said:

“I find that it is well organized, but it’s for those who know what they’re doing. So, for others who want to start up the sport, they can’t because they don’t know what they’re doing and there’s nothing to help them develop their skills...”

She added:

“Yeah, because I know people who want to start up but they can’t go compete because they’ll just lose, and they don’t know how to start competing or anything. So, there’s like no skills there for them to...”

It must be added here that this phenomenon is perhaps only descriptive of some sports that may have insufficient technical support such as athletics which the students above was talking about. Student BC from the same group clarified that by indicating that the sport of basketball which he pursued had opportunities for all levels of students. He said:

“For basketball there’s about, there’s way more social leagues than there is for the really competitive ones, so there’s heaps of opportunities for that in basketball, I don’t know about others”.

The results that are presented above indicate that there are many interrelated factors that influence the ECPA patterns of year 12 students. To a large extent, they show that during assessment periods the students’ levels of participation drop. They also reveal that the cost of participation can be inhibiting as well as other factors such as the elitist nature of SSS competitions. These results will be discussed further and with greater detail in the next chapter.

Chapter Five

Discussion of the results

5.1. Introduction

While a lot of effort went into considering all the information that was gathered through both stages (quantitative and qualitative) of this project, it is impractical and impossible to include and analyse all the gathered data in this current chapter. Some of the views and opinions which were presented by the teachers and students may have been widely discussed in the existing literature and it would be redundant to discuss them again in this context. Other findings were not clear enough to form any kind of direct relevance to the topic at hand, and do not warrant their inclusion in the discussion. Hence, the researcher has deliberately attempted to make meaning of the results by systematically applying methods which reveal significant patterns in the gathered data.

However, before engaging in the analysis and discussion of the results, it is helpful to frame the perimeters of the discussion and lay out the key points and questions which are to be discussed. Therefore, I wish to reiterate that the main purpose of this study is to find out whether the 2007 HPE curriculum is achieving its goal of encouraging students to incorporate regular and enjoyable PA in their lifestyles or not. To get this process of inquiry under way, I will start by exploring what were the intentions of the curriculum designers' for including the above goal in the curriculum. Later, I will describe some of the practices that are in place for realising those intentions, and if and how those practices are monitored. Finally, in this chapter, I will discuss the findings of this study in relation to the four research questions which were outlined in Chapter Two, and in relation to Dewey's theoretical framework of experiential education, which was described in Chapter Three.

In this chapter, Dewey's framework is primarily adopted as a tool for organizing and communicating the students' and teachers' views and ideas about HPE policies and practices, and on how they relate to their PA habits. Carver (1996) strongly emphasized that a Deweyan framework is "not an evaluation instrument and it does not provide a recipe for developing programs. It does provide a structure for thinking about overarching goals, specific objectives, activities, qualifications of staff, selection of students, expectations for student experience, and potential changes for programs and organizations" (p.155). Hence, the points of discussion and the comments that are made in the next sections are not intended for making generalisations about other schools.

5.1.1. What is the rationale for the inclusion of the goal of expecting "students to demonstrate an increasing sense of incorporating regular and enjoyable PA into their lifestyle" in the curriculum?

The answers to this question are widely published in the existing literature. Firstly, schools are rightly conceived of as the perfect settings for promoting PA (Beetes et.al., 2010; Cale, 2000; Fairbrough, 2005; Fox, 1996; Jago, and Baranowski; 2004; and Pate et.al., 2006). The related points were suggested by the British National Centre for Health and Fitness (BHF):

- Schools provide one of the few opportunities to address the full range of individuals in a population, and a last chance to access, at no extra cost, a captive audience.
- Schools provide a range of opportunities for pupils to engage in physical activity, such as break-time, travel to and from school, physical education lessons and extra-curricular clubs.
- Elements of the traditional school curriculum relate directly to health.
- Any positive impact schools have on young people has the potential added benefit of having a lifetime, as well as an immediate effect (BHF, 2007. 1).

From a broader perspective, and as Dewey (1938) pointed to, schools are part of a greater learning and socializing environment where growth, individuality, and social coherence and welfare are moral obligations.

Secondly, the curriculum designers encourage PA in schools because of its proven benefits for the participants. According to numerous studies, regular PA provides immediate to long-term benefits for the participants in terms of health (Fairclough and Stratton, 2005), academic achievement (BHF, 2007), improved self-esteem –psychological- (Findlay et al., 2009) and social coherence –such as improved behaviour, increased attendance and the development of other social skills (BHF, 2007, 1).

In New Zealand, the implementation of the HPEC is also viewed as a primary mean by which students can achieve wellbeing, haoura, and many other social benefits. However, by initiating HPE practices for good intentions schools are not automatically guaranteed a positive transformation in the students' behaviours and/or achievements. As Pope (2011) noted: “The educational benefits claimed for physical education and/or school sport are numerous and widespread, but scrutiny would suggest such claims are highly situational and seldom backed by empirical support” (p.274). This suggests that some schools may operate under favourable conditions and may have greater chances of reaping the benefits of maintaining regular PA practices within their confines. But, others may not be so lucky if their policies and practices lack the supporting structures that make the implementation of sound practices possible.

Furthermore, Ovens (2010) argued that the nature of physical education in the New Zealand secondary schools “both shapes, and is shaped by the assessment structures provided by the [NZQA] framework” (p. 31). He went on to suggest that the curriculum designer's goal of initiating a socio-critical curriculum is ‘thwarted’ by the existing assessment structures. In the context of Dewey's framework of education, it is possible to describe the NZHPEC as both traditional (focuses on testing and ranking of students and teachers)

and it is also progressive because of its intent on promoting socio-critical values in schools.

By taking the above observations and comments in mind, it is difficult to see how it would be possible to raise the state and status of PE in New Zealand to a better position than the one it currently holds. What could possibly lead to greater progress in the future is more academic scrutiny of the existing practices and the willingness to challenge them for the betterment of education, and of society in general. This process has been underway in many other parts of the world (i.e., Seattle parents and teachers rejecting national testing) and some New Zealand scholars such as Clive Pope, Lisette Burrows and Bevan Grant, among others, being critical and regular commentators on the existing HPE practices.

There is also a need for greater cooperation between academics and practitioners in the quest of enhancing the quality of the HPE programmes and their delivery. All of the teachers that were interviewed in this study indicated that their relationships with other schools and educative institutions are minimal to non-existent. One of the five schools visited, though, had a shared venture with the city council and a private-business entity which gave the school access to some valuable facilities in exchange for space allocated to communal recreation and parking. This last example proves that schools can benefit from entering in partnerships with other institutions.

5.1.2. What school practices are in place for teaching students the incorporation of regular PA in their lifestyles?

The 2007 curriculum is flexible about which practices are to be followed in order to adhere to its principles or achieve its objectives. Schools are entitled and obliged, in some ways, to adopt practices that suit their students, and suit their communities best. In the context of HPE, some schools may, in fact, have some very good and successful programmes,

while others may struggle to implement the curriculum guidelines (ERO, 2012). Besides, since the goal of expecting students to incorporate regular and enjoyable PA in their lifestyles is very broad, schools and teachers may (rightly) interpret it in a variety of ways. In the context of the New Zealand education system, there are three practical initiatives for teaching and learning how to be regularly active.

The first is the implementation of HPE and ECPA programmes. However, the time that is actually spent on doing PA is reduced from what it used to be when two to three hours of PE a week were mandated for all students and at all secondary levels. Even senior students who are currently doing HPE as an NCEA option expressed that they were doing 70% theory and 30% practical work at school. This very limited opportunity for participation in PA is undoubtedly insufficient and counterproductive, especially because at senior secondary school level, students start to develop a preference for one or two activities and may need ample practice-time and encouragement to maintain their interest in PA and to enhance their skills.

Besides HPE classes, secondary school sport competitions form a major segment of the students' ECPAs. Students can choose to join a favourite school association or team and participate in a multitude of events, tournaments and championships (local, regional, and national). These events run all year round and involve children from the ages of seven to eighteen (or to when they finish high school). The diversity of SSS that are provided for schools is rich and ranges from minor sports (such as softball and handball) to major sports (such as rugby and netball).

Despite the moral and social stands that are made in the curriculum, especially those regarding communal values, cooperation and fair-play, there is ample evidence to indicate that participation in SSS is tarnished by incidents of violence, abuse, and marginalisation. Participation in SSS reflects a contradiction that schools and teachers have struggled to resolve for several years because of the relationship between sport and PE. Pope (2011) rightly made the comment that the struggle between sport and PE is

an ‘enduring curse’ that appears to discourage some teachers and students from participation in school sports competitions. One of the possible reasons for the enduring struggles in SSS could be the conflict in values that are guiding HPE within schools and outside (in the sporting fields). Schools, for example, highly value cooperation and respecting others, while some SSS environments can be motivated by the desire to winning at all cost, including disrespecting other participants and the ethics of fair play.

In one of the interviews conducted for this study, a student said that “*competitiveness is off-putting*”. Another strong word that was mentioned in the interviews is “*anger*” on the side-lines. These kinds of observations or messages were seen as negative by the interviewees and made them no longer interested in participating in SSS.

The two examples mentioned above accurately reflect Dewey’s view that disagreeable experiences have a negative impact on future interest in learning.

At the governance levels (leadership and management) of SSS, there is a highly contentious and grey area that is interesting to raise here, and that contradicts the moral and social values of the NZHPEC. While the curriculum designers insist on turning PE into a medium for the promotion of social justice, greater community involvement, and the wellbeing of others, they handed the management of SSS to the regional community trusts which are in turn fully sponsored by the New Zealand Community Trust (NZCT), a brand name that is meant to represent the gambling consortium of NZ. In other words, SSS are (largely) funded and managed by a gambling consortium (schools still pay levies to take part in SSS competitions).

What is odd about this relationship is that we have various organisations such as the Problem-Gambling Foundation, the churches, and government social services that spend considerable efforts and resources to inform the public that gambling is a dangerous epidemic and yet schools are happy to

take money and services from the instigators and promoters of gambling. This contrast between the principles and values of the curriculum, and what is happening in the field is further proof that the economy trumps education and that the rhetoric of the curriculum is not immune from the influences of the neoliberal agendas of recent governments.

For more information on the above matter that some educators might find interesting, churches in New Zealand also seek and accept significant financial grants from the NZCT. However, the Christchurch Diocese of the Anglican Church is the only organisation in the country that has (so far) reviewed its stance on this matter and decided (in 2013) to stop taking money from NZGC and denounce the practice as immoral (McLure, 2013). I am invoking this precedent in this section with the hope that schools can take a leaf from the Anglican Church's book and publicly state where they exactly stand with their values towards gambling and procuring funds from the NZCT. The necessity to align the goals of HPE with those of SSS was rightly called for by Culpan who wrote that: "if schools offered organized school sport programmes in addition to the mandatory scheduled timetabled physical education, then like physical activity within physical education, it needs to be conceptualized and practiced as having an educative function totally consistent with the philosophy of the physical education curriculum" (2005, 10).

Then, there is the issue of the credit structures and weightings that are adopted by most schools and seem to devalue the status of HPE. One of the interviewed teachers made this problematic situation clearer by saying that: "Some of our assessments, if you compare them to geography or other subjects, are so content-heavy that the actual value of the credits is too low compared to how much work they're doing. I mean they might do a whole term and put this huge package together for you and get four credits for it. They go to music and somebody in the choir gets 16 credits for being in the choir". Other teachers participating in this study made similar comments too.

What this finding implies is that despite the curriculum designers' intent on making HPE look academic, their attempts are failing and the status of HPE remains below where it should be, or below par in comparison with the rest of the learning areas.

The second educational initiative that is available for enhancing learning in HPE (and other subjects) is: The Online Learning Centre or Te Kete Ipurangi (TKI), which is a bilingual (English and Maori) portal plus web community that provides educational material for teachers, school Boards of Trustees and the wider education sector. It was made available by the Ministry of Education to all these stakeholders. Some of the material shared and diffused through this resource enables HPE teachers to monitor their practices and align them with the curriculum guidelines.

The third type of initiative concerns the teachers and education administrators only. It is related to the information that is shared by these parties for their own professional development. Some of this information is sought after by staff individually, and some is shared through union meetings, professional conferences, and the MOE website.

In addition to the three initiatives described above, schools in New Zealand have also got at their disposal a vast range of facilities and equipment to use for PA purposes. A very high number of the students participating in this study noted that the outdoor (89%) and indoor (92%) facilities in their schools were more than adequate or adequate for participation in PA. However, 35.2% of the participants in the PAS were unsure of the accessibility and availability of these facilities for recess and after school activities.

As it transpired from the literature review and from the opinions of two of the HPE-HoDs that were interviewed in this study, ensuring that students do the weekly recommended 60 minutes of MVPA a day is not just one of the many objectives of HPE, but it is the main reason for which they work. This pivotal measure of the role of HPE, and of the weekly recommended levels

of PA that children need to adopt to take advantage of the benefits of regular PA are perhaps spontaneously practiced among some schools. But, they do not appear to be mandated as explicit policy for every school to implement. Burrows (2005), for example, noted that there is a lack of focus on the unique benefits presented in physical activity in the current NZHPE curriculum. She wrote that: “From a health and physical education perspective the missing egg in the competency basket is one that acknowledges the centrality of the physical’ to a ‘good life’ and a ‘well-functioning society” (p.16).

Despite the centrality of regular PA to a ‘good quality of life’, some of the year 12 students who took part in this study expressed that they were never informed clearly and explicitly about the minimum recommended levels of PA. They admitted hearing about the recommendations from various sources such as TV, primary and secondary school teachers. But, they certainly appeared to be unsure of these recommendations and uncertain about the benefits of regular PA.

The above finding is consistent with the results from a National Health Survey which concluded that: “Children and young people seem to have a fair understanding of the importance of healthy nutrition and physical activity, as well as a reasonably good awareness about the existence of initiatives to improve these behaviours. They also understand the importance of eating healthy and being physically active; however, few knew how much physical activity was required to stay healthy” (Maddison et al., 2010, xi). This illustrates that while there is permanent interaction between students and between students and teachers, the dynamics of their interactions tend to exclude or neglect a key factor in encouraging participation in ECPA. That factor is the weekly recommended time spent in doing PA.

5.1.3. Is there a system in place for monitoring the students' PA levels?

The implementation of policies and practices encouraging regular PA in schools is not formally monitored and there is no accurate way of finding out whether schools are achieving the goal of leading students to incorporate regular PA in their lifestyles. This led many practitioners to the use of the International Physical Activity Questionnaire (IPAQ). This tool is used extensively across many parts of the world and its use is mainly promoted by the WHO.

In New Zealand, there are two valuable and well-respected studies monitoring the PA habits of all New Zealanders. They are the Adolescent Health Research Group surveys of 2003, 2008 and 2013, the Spark Active NZ surveys. These studies provide substantial information about the PA behaviours of young people in New Zealand. However, these surveys are completed with the use of mail-outs, telephone call-outs and the internet. Additionally, they rely heavily on the participants' ability to recall and describe their past experiences.

What is clear from the above surveys is that PA is a difficult aspect to measure. That is because consistent monitoring of the students' behaviours requires considerable time, effort, and resources.

In light of the above comments, there is possibly a need for establishing school-based wellbeing indicators that can be effectively monitored (Soutter et al., 2012). Having such indicators and clear goals will not only help the teachers to tailor their methods according to the students' needs, it could also enable students to gain feed-back and set themselves more complex challenges.

Furthermore, some of the goals of the HPE curriculum are so broad that it is almost impossible to monitor their effectiveness or identify who is responsible for their efficiency or lack of it. Consequently, it might be helpful to raise the question of who should be responsible for the

implementation and monitoring of the goals of the HPE? In Tinning's (2009) view, for example, it is perhaps unfair to hold HPE teachers accountable for outcomes that they have no control over.

This possible lack of leadership or effective management makes it imperative for the MOE and for New Zealand schools to establish accurate means of monitoring their progress towards achieving the curriculum goals. As it was indicated by Burrows (2005), "Research that investigates how New Zealand teachers are interpreting the intent of the HPE curriculum and what resources they are drawing on to make sense of its imperatives will be increasingly important if we are to improve our understanding of Health and Physical Education 'in practice' (p,12).

5.2. Discussion of findings relating to the four research questions

Answering the four research questions is intended to provide valuable insight into the relationship between the 2007 HPEC and participation in ECPA. It might also shed some light on the state and status of HPE in schools. By simultaneously integrating the quantitative and qualitative data it is hoped that the parameters of the discussion can be expanded and less restricted.

5.2.1. *The perceived levels of PA of year 12 students*

In the context of this study, describing the PA levels of year 12 students with any kind of certainty has proved to be illusive. While it was found in the PAS that 34.6% and 53.1% of the students perceived themselves to be very active and moderately active respectively, the frequencies by which they participated in VPA is comparatively low. Only 23.5% of the subjects reported that they did 60 minutes or more of VPA for 5 times or more per a week. This discrepancy could be explained by the fact that some subjects may have overestimated their PA levels, and/or they may have simply found it difficult to accurately recall their past experiences.

There are three aspects of participation in PA that came out of this study and that could be described with a more authoritative stance. The first is about the Year 12 students' participation in SSS teams or competitions. Findings from this study showed that 40.1% of the subjects took part in SSS. Secondly, all the students who were interviewed in this study admitted that their participation in PA dropped from the levels that they were at before getting into senior secondary levels except the three students who were playing school and representative sports at their respective age-groups. The teachers that were interviewed have also indicated that they noticed a drop in the levels of participation in PA at senior school stages. Thirdly, results from this study showed that boys participate in more ECPAs than girls.

The three findings that are presented above could be interpreted in the following ways. First, the 40.1% percentage of students participating in ECPA is similar to those found in the Youth 2000 surveys and the NZCT study. Whether this percentage is accurate or not is hard to determine. Some students may participate in an extra-curricular activity for just one or few more occasions and still consider their participation to be worth noting. And some schools with better resources and programmes might have higher participation numbers than others with less resources.

Considering that the 40% level of participation in ECPA is accurate enough for the purpose of this discussion, one could ask whether this figure meets the intended objectives or projected targets of schools, parents and curriculum designers. The answer to this important question had to be subjective because it is not known if schools or the BOTs or the MOE set pre-determined objectives or targets for participation in ECPA. So, even if one decides to compromise and suggest that a 50% participation in ECPA is efficient, the findings from this study and from other national surveys show a deficit of about 10%. This debate about participation percentages in ECPA could go on for much longer by using hypothetical figures, so perhaps, it is better to suggest that the MOE, BOTs and individual schools need to establish clear and explicit figures that they expect to see taking part in

ECPA. These figures could also be monitored and adjusted to suit all involved.

The second important finding which showed that participation figures in ECPA drop as students reach senior high school levels was largely caused, according to the teachers interviewed, by two main factors. The first was expressed by Teacher. D who explained that the transition between participation in PA from Primary and Intermediate into Secondary schooling is disrupted by a move away from the use of less-structured games and events and the adoption of activities (mainly popular sports) that are highly organised. Teacher. D added that at Primary schools, teachers and pupils can very much choose when they want to go outside and play, in High school, by contrast, HPE classes are set a priori and a significant part of them had to be done in class.

Another explanation for the decrease in participation after the transition into high school was related to the focus of the curriculum in years 11, 12 and 13 on assessments and NCEA examinations. Teacher A suggested that: “Once you hit year 11, you don’t really follow it [the curriculum] because NCEA assessments take over”. The students that were interviewed had also indicated that their participation in ECPA drops during assessment periods because of the time and effort that it takes to prepare for the tests.

The third finding which showed that girls are taking part in less PAs than boys is consistent with findings from most existing studies. Teacher D made the comment that: “there are ... also those teenage issues like self-consciousness, self-awareness and all that ... Year 10 is the biggest struggle for females, by the time it is year 11, they have chosen whether they will do it [PE and PA] or not”. Teacher D tried to express that perhaps teenage girls tended to be more conscious of their ‘body-image’ than boys, and that, one easy way for them to avoid negative comments on their bodies or physical expressions is to just stay away from PE and/or PA. No other reasons for the lower participation numbers of girls in PA were presented in the interviews.

These discussion points presented above reaffirm the need for considering the decline of participation in PA at senior school levels. Some of the short-term solutions such as the inclusion of new temporary programmes in the curriculum appear to have no consequence on the maintenance of regular PA. Hence, it is perhaps time to re-evaluate the position of HPE as an optional NCEA subject and find a way of making it compulsory again for students at all levels of secondary schooling.

The lack of reliable measurement or surveillance tools for PA is also an issue that requires urgent attention, not only by schools, but by the health and recreation sectors as well.

5.2.2. How significant is the relationship between PE and participation in ECPA?

According to Telama et al., (2005b), “Reliable longitudinal studies have shown that physical activity tracks from childhood and adolescence to adulthood. The correlation is not high but significant. Persistent physical activity at a young-age and participation in youth sport markedly increases the probability of physical activity in adulthood” (p.116). Belanger et al., have also stated that: “systematic reviews have identified correlates that are robustly associated with PA” (2011, 1).

In the existing literature, there appears to be a consensus that longitudinal studies (which track students from a young-age till they reach adulthood) are the most accurate in determining the degree of the carry-over effect of PE on lifestyle (Park & Kim, 2008).

Both the teachers and the students that were interviewed for this study indicated that they experienced situations that demonstrate that there is a transfer of knowledge and skills from the content of the curriculum (practice and theory) into the students’ practices while they are away from home. This result confirms Dewey’s (1938) theory which suggest that students are largely influenced by their interactions with others and with the situations that they encounter in and outside school.

While there is carry over effect from school into lifestyle, one of the interviewed teachers who worked in two low decile schools, remarked that the ‘positive’ carry-over effect that schooling has on students may not reach certain ethnic and minority groups in our society. She said: “So I think it can depend on the school culture and the culture of the teachers. There are groups that I do notice that continually come out disadvantaged, so people like Maori, Pacifica, students with special needs. It concerns me that year after year we’re not making enough of a difference for students who are continually at a disadvantage in the school system. I think a lot more needs to be done to address that and I don’t think ‘one hit contracts’ just rolled out throughout the country with a few road shows is the way to do it. There’s not enough done there”.

Teacher C’s view reflects a sense of real concern over the minority groups who are not benefiting from the HPE programmes that are available within schools. While the teacher did not extensively explain why this is occurring, she alluded to the fact that some HPE policies and or remedial initiatives are “re-active”, short-term, and perhaps emerging from political manoeuvring rather than the needs of all students. The manoeuvring concerns deregulating the economy and handing the funding of traditional social sectors such as education and health to the forces of the ‘market’ or consumers.

A second possible factor in the marginalisation of the groups mentioned above could be related to the contradicting goals of the HPE curriculum to those of the NZQAF, which institutionalised standard testing and national examinations. This possibility was echoed by Quennerstedt (2010) who wrote that: “I would argue that the shift in governance of health and physical education in the 2007 curriculum shows similarities to the shift in Swedish educational policies in the late 1990s. It is a shift from promoting a guiding regulation through underlying concepts, general aims, strands, objectives and key areas of learning in favour of regulating exclusively

through achievement objectives and levels of measurable knowledge. It is also a shift from a common educational goal to governing through a minimum achievement standard as well as a shift from a pro-active governance to a re-active governance” (p.9).

It is possible that the focus of learning on assessments and examinations may suit some students who have adequate support and resources at their disposals, but it may also be inhibiting others from taking regular interest or involvement in the ECPAs that are presented within their schools. As one of the students explained in the interviews, it felt somehow disappointing to elect HPE as an NCEA subject and then realize that only a third of the programme (course content) is practical and the rest is theoretical (class work).

Quennerstedt (2010) further commented that the core objectives of HPE may have become deluded in favor of national standards and examinations. He suggested that: “... since the achievement objectives seem to be more valued in the 2007 curriculum. Health in terms of Hauora or well-being, as well as the intrinsic value of movement and embodies aspects of learning, risks losing ground in physical education in favour of distinctly measurable forms of knowledge and levels” (p.10). From Dewey’s (1997) experiential perspective, the values of the curriculum “shape the goals of the educational programmes, and the goals in turn affect the experiences of students” (cited in Carver. 1996, 153). If the HPEC values continue to be devalued in favour of national standards and testing, important decisions about the use of resources and behaviours for cultivating the learning environment could become ineffective when students realise that the goals that are guiding their experiences are conflicting.

The marginalization of some minority groups could have been exaggerated by the continuous curriculum reforms in New Zealand which are driven by privatization and the treatment of students as human capital. As Mathis (2011) indicated: “This narrowing of the educational vision to seeing

students as human capital to be enlisted in the cause of economic recovery and growth marginalizes the important cultural, social, and relational aspects of education. It understands students as potential workers and consumers rather than as local and global citizens” (cited in Reid, 2011, 24).

In New Zealand, there is perhaps a greater need, at present, for initiating a long-term research programme that follows the progress of the same students for extended periods of time to track their PA habits. Because it is well after they finish their schooling that it would be possible to determine what effect does participation in PA have on their lifestyles.

Given the wide experience gained from completing the existing national surveys, the availability of highly developed census and statistical services, and the sports loving culture that exists in New Zealand, academics, practitioners and other health professionals may not be far away from cutting some of their expenses and joining forces to produce more comprehensive and reliable studies, and recommend better ways for maintaining participation in MVPA at adequate levels.

5.2.3. *Which HPE practices encourage participation in regular PA?*

In the case of the three students that were interviewed in this study and who are highly active, their motivations for participation are intrinsic and largely enhanced by their gradual skill development and their desire to continue to excel in their chosen sports (which they play at representative levels as well). Their school is certainly harnessing their progress by providing them with the opportunity to train, compete and take up leadership roles such as coaching and officiating. But, these students represent a minority of the school population that have the talent and the motivation to succeed in elite sport. The majority of students like to participate for enjoyment. According to this latter group, there seem to be no direct or apparent school practices inciting them to participate in PA. They mostly cited cultural influences and their parents’ and peer’s encouragement and support as key factors in their involvement in PA. As mentioned earlier, some of the parental and peer

encouragements happen within school and during interaction with teachers and the implementation of school initiatives, therefore it is inferred that schools play a significant role in encouraging participation in PA.

The factor of parental support that was referred to by both the students and the teachers that were interviewed is highly important in this study. It was made clear by these groups that parental involvement in all aspects of participation in ECPA (encouragements, financial support, coaching ...) was one of the most significant factors contributing to the maintenance of regular participation in ECPA.

That is why schools will be wiser to explicitly and consistently establish and promote the health and social benefits of regular participation in PA programmes that focus on actively involving volunteers, parents and friends, and that also complement lifetime activities (such as walking, running, swimming, cycling, etc.) rather than the highly competitive sports-contests. They could turn the high cultural value of sport in the New Zealand society to their advantage by making it more available and accessible for the unfit and the unskilled. After all, "Sport is unquestionably an important part of New Zealand's culture. For many New Zealanders, it is part of who they are and what they do" (Pope, 2007, 11).

The NZC (2007) encourages greater interaction between schools and parents, yet recent studies have found that the involvement of parents (and teachers too) in managing SSS has been dropping over the last ten years.

Teacher A related this finding to economic reasons. She mentioned that: "Parents are working too hard now, that family time has gone. So, instead of what used to be '[lets] go and play', it's gone ...we don't allow kids to walk to school now ... that's all changed and that has had an impact on us ...".

Teacher A further explained that parents have less disposable time to play with children and share some of their school activities because of work commitments (economic). And, by invoking the example of kids not walking to school anymore and the perhaps 'unwanted impact or changes',

Teacher A was referring to the occupational health and safety (OHS) regulations that scare some parents from supervising PA events or joining children at play. She explained that in the context of PA, some situations can be exaggerated or misconstrued as ‘harassment’ or ‘abuse’. The levels of friendships, competitiveness, and the emotions of excitement, joy and anxiety that can emerge in PA events often puts participants in direct and close physical contact with others, that contact can make it easier for unjustified and/or unwarranted suspicions and accusations to emerge and cause disruptions to learning. According to Teacher A, this probability is often seen by parents as a major hurdle in their participation in SSS.

From another angle, some parents may simply stay away from taking part in various SSS because of the disorganised nature of the latter. and because of the verbal and other forms of abuse that can occur on the playing fields and on the side-lines.

The explanations presented above suggest that greater cooperation between schools is needed to facilitate the running of SSS in concert with the educative goals of schools. Schools might also need to find ways of bringing parents and volunteers closer to the decision-making and management of SSS. Direct and consistent involvement of the parents and other members of the community in the activities of their children is one of the key criteria that Dewey (1938) saw as necessary for creating progressive learning environments.

5.2.4. Which practices inhibit participation in regular PA?

The students that were interviewed cited a number of obstacles that constrain them from regular participation in PA. Chiefly among these are the difficulties of balancing the assessment and study demands with those of physical activity, and the elitist nature of some SSS programmes. For others (mainly girls), the fear of failure in the execution of complex physical tasks or skills in front of their peers is another obstacle. And lastly, the increasing

cost of participation in ECPA was seen by both teachers and students as another inhibiting factor for participation.

While these obstacles may have been well documented in the existing literature (Allison et al., 1999), the one that appears to be more acute in the context of this study is the impact of the assessment driven curriculum at senior levels on the participation of students in ECPA. All the teachers who were interviewed in this study and most of the interviewed students admitted that participation in PA drops significantly during NCEA examinations and other assessment periods. Teacher A specifically expressed concern over the fact that through HPE classes, senior students get assessed for numeracy and literacy, yet their conduct and their progress in physical activities goes unchecked and unrewarded even if they make significant improvements and/or contributions to learning.

Another factor that could be playing a restricting role in the pursuit of regular participation in PA that came out of this study is the inability of schools to inform all their students about the availability of staff and resources for ECPA. Over a third of the participants in this study indicated that they were unsure or didn't know about the provision of PA programmes and facilities for recess within their schools. Schools tend to inform their students of recreational and sporting activities verbally during assemblies, electronically through their websites, and they do so too through putting written notices on notice-boards that are usually strategically placed so that most students can see them.

It is possible that students are uncertain about the availability of facilities and resources in their schools simply because they are happy with their PA habits and they don't have to use up extra time in finding out what's going on in their schools in terms of ECPA. Whatever the cause of this lack of transparency, the overall impression that was gained from the teachers and students' interviews was that SSS and other ECPAs are organised for the benefit of participants who take part in the dominant sports and who already have the interest and motivation to train and compete against other schools.

Participation for fun and enjoyment is far less promoted. Understandably, by taking away the enjoyment factor from participation in ECPAs, schools risk depriving their students from the opportunity to achieve one of the main goals for which they intend to participate.

5.3. The regional sports trusts and sports coordinators

The issue of funding and managing SSS was not anticipated or expected to emerge in the discussion of this thesis. But, because of the socio-critical nature of HPEC, the closer ties of SSS with other communities outside schools, and the big part that SSS play in the provision of the ECPA programmes, it became imperative that I explore the governance of SSS with extra interest and diligence.

The regional sports trusts are often the sole funders of SSS events and competitions. In some cases, though, parents directly contribute to their children's costs for participation or do so indirectly through assisting them in raising funds by means of seeking sponsorship or organising raffles, sausage sizzles, book sales, car boot sales etc. The sports trusts are predominantly operated by current or former athletes, coaches, officials, and teachers. As mentioned in the literature review, they are funded by the NZSSSC. The fact that the HPE teachers who have regular contact with students and who are the main agents that are responsible for the implementation of the curriculum and its objectives are absent from the regional sports trusts makes it difficult to reconcile the commercial goals of the sports trusts and the NZSSSC with the educational goals of the students, parents and teachers.

As Stothart (2005) noted "there appeared to be no person in a senior position within the central bureaucracy with appropriate experience and skill to advance the curriculum claims of physical education" (p.96). Even though Stothart (2005) was referring to the demise of the Department of Education in 1989 and its replacement by the Ministry of Education when he made the comment mentioned above, his statement would rightly apply

to the context of managing ECPAs and explains why the goals of SSS events and competitions do not align themselves with the goals of the curriculum.

The following statement which was made by Teacher C during the interviews clearly illustrates the dilemma that HPE teachers face when their students take part in ECPA. She said: “Yes, the one thing I notice from watching sports in our community, especially with our students, is that they can often end up with coaches who aren’t teachers. Coaches who want to win and who want to be aggressive and who have interpersonal skills with the students and other players and other coaches that you wouldn’t call role modelling, that you wouldn’t call about a positive bigger picture. It seems that as soon as a team is put with somebody who is not a teacher, who is what you could call an instructive role model, it can completely undo a lot of the physical education and health education that is done with students”.

The statement made above reflects a typical example of the mis-alignment between the methods adopted by some coaches and sports coordinators and those favoured by teachers and schools. This mis-alignment can lead students to confusion over the goals from participation in SSS, and in some situations, it makes the experience of participating disagreeable.

This finding is consistent with results from Penneya. et.al’s., (2015) study which concluded that: “... with regard to the staffing of programmes and support indicated for teachers in schools, it was found that in very few instances ‘experts’ who were responsible for leading the development and/or delivering of programmes in school setting had qualifications or experiences associated with school or education settings, such as previous roles as primary or secondary teachers. In contrast, it seemed that what constituted appropriate ‘expert’ knowledge was more closely aligned to sport, fitness or physical health content, than education, pedagogy and/or curriculum (including HPE) knowledge. Some 20% of the 124 programmes analysed indicated that these ‘experts’ were also available to provide professional learning opportunities” (pp.50-51).

Another important topic that is closely related to the coordination of PA is that of role-modelling. Teacher A strongly emphasized the centrality of role modelling in attracting students to participate in ECPAs, and to maintaining their participation at regular levels. She stated: “I think for kids today, seeing us do it [PA] too, and us role-model it, I think is important”.

Like teachers, sports coordinators are perceived by most students as role models. Therefore, it would be more advantageous if their interactions with students and their messages are consistent and complementary with those promoted by the rest of the teachers and other role-models in their schools.

So far in this chapter, very little attention was dedicated to the relevance of Dewey’s theoretical framework to the findings of this study, and to the points of discussion that were raised. The reason for this is that employing Dewey’s framework is better suited for exploring the relationship between the curriculum and PA from a broader perspective. One that considers, all the possible factors that influence this relationship. As suggested by Boisvert, “... a genuinely inclusive empirical method does not uncover isolated, discrete entities. Ordinary experience reveals entities in varied, multifarious forms of interrelationships” (1998, 21).

As it was shown in the literature review, there are many factors that determine the nature and dynamics of this relationship. Some of these factors are: the principles of the curriculum, the primary objective of HPE, the NZQAF for assessment, governance, the community, parents and so on. The list of factors could become more exhaustive if one persists.

Thanks to Dewey’s framework, it is possible to look closer at how some of the factors mentioned above affect one another and subsequently the implementation of HPE. For example, combining the overall objective of the curriculum to guide senior secondary students along future career pathways, the HPE stance of making wellbeing as its chief goal, and the use of national examinations, one can identify that the curriculum planners are more focused on what they believe is the best future for the younger

generations rather than what the young people want. Placing complete faith in the preparation of students for the future may occur at the expense of depriving them from their present. As Dewey explained: “The idea of using the present simply to get ready for the future contradicts itself. It omits, and even shuts out, the very conditions by which a person can be prepared for his future. We always live at the time we live and not at some other time, and only by extracting at each present time the full meaning of each present experience are we prepared for doing the same thing in the future” (1997, 49).

A second important factor in the relationship between the curriculum and PA is the positive role that teachers, parents, coaches, and other community groups and services play in the recruitment for participation and in maintaining participation at acceptable levels. Results from this study showed that while interaction between these individuals and groups was desirable, there was very little if no cooperation at all between them. In the case of one school, a teacher even saw the relationship with coaches and sports coordinators as counterproductive, or antagonistic. In Dewey’s perspective, these antagonisms can put students and staff in disagreeable situations and ultimately push them away from participation in ECPA.

The learning area of HPE itself is not immune from falling into the traditional sphere of learning. By using the subject for gaining credits in numeracy and literacy, by devaluing the students’ efforts in HPE in relation to other subjects, and by making PE optional at senior secondary levels, the essential elements of free physical expression and enjoyment are gradually disappearing from schools and depriving the students from ‘collateral learning opportunities that are unique to PE such as, tolerance, resilience, cooperation, self-confidence. Dewey commented that: “...perhaps the greatest of all pedagogical fallacies is that a person learns only the particular thing he is studying at the time. Collateral learning in the way of formation of enduring attitudes, of likes and dislikes maybe and often is much more important than the spelling lesson or lesson in geography or history that is

learned. For these attitudes are fundamentally what counts in the future. The most important attitude that can be formed is of the desire to go on learning” (1997, 48).

By viewing the relationship between the curriculum and participation in HPE from a Deweyan perspective, it is not hard to conclude that there was good intent on the part of the curriculum planners in pursuing the adoption of socio-critical (Ovens, 2010) or socio ecological (Burrows, 2005) methods for learning in HPE. But, their intent is deluded by the focus on exams, and by other elements such as the reduction in practical PE times, and the inconsistent nature of SSS. Raising more questions and debates about the issues discussed above is hoped to lead to more inquiry about how to make the goal of developing (in and with students) the illusive desire to go on learning in HPE.

Chapter Six

6.1. Discussion summary

By analysing the findings from the PAS, the teachers' and students' interviews, and the existing literature relating to the relationship between the HPE curriculum and the ECPAs of students, it was found that it is difficult to determine the influence of the HPE curriculum on the students' participation in ECPA with certainty. This could be explained by the interplay of a large number of variables that have been proven to have some degree of influence on the participation behaviours of students in PA.

The influence of school and the curriculum on the students' behaviours is perhaps minimal in comparison with other variables such as the prevailing liberal economic-ideology, the dominant culture(s) of sport and recreation, the parents' economic and educational status, and the frequency and quality of PA opportunities that are offered in schools. This lack of certainty about the role of school in preparing students for active lifestyles is further compounded by the absence of standard methods for the measurement of the carry over effect of the curriculum on the students. What has been established from the PAS and the interviews with greater confidence is that students doing PE as an NCEA option are more active than those who do not. Within the sample of this study, girls are also doing less PA than boys, and assessment workloads constrained participation for the year 12 students that were interviewed.

While the interviews with the HoDs of HPE yielded some significant results such as the focus of students on the NCEA assessments to the detriment of HPE, they cannot be generalized because schools have their own unique conditions, goals and strategies. However, the information presented in this thesis does provide a snapshot of what was happening in the area of HPE within the schools that were investigated.

The findings which were discussed in previous chapters challenge the status quo that seems to prevail in the national education sector and confirm the view that “... both physical education and vocational education have a history of marginalization and reproducing inequitable outcomes in regard to gender, class, ethnicity, etc.” (Brown & Macdonald, 2001, 352).

Hence, it could be suggested that the goal of leading students to active lifestyles through HPE is unrealistic and fits more suitably at the passive, receptive and imitative end of Tienken’s (2013) continuum. It is passive because there are no mechanisms by which to measure exactly what practices schools have in place for the promotion of active lifestyles, nor the influence of schools in implementing them. It is also receptive because the planning and decision-making processes that are adopted in curriculum designs come from the top down to the teachers and students. HPE teachers have no voice or representation in the higher levels of planning.

Perhaps some of the HPEC initiatives could be more effective if they were based on independent and contextualized analysis, and on the needs of students rather than the dynamics of market forces. For Dewey “every question regarding what should be socialized or otherwise left to market forces must be considered on its own merits” (Pappas, 2010, 299). Dewey wrote that “We have to consider the probable consequences of any proposed measure with reference to the situation, as it exists at some definite time and place in which it is to apply. There cannot be any universal rule laid down” (in Pappas, 2010, 299).

Finally, it is imitative because it blindly follows the paths taken by New Zealand’s historic allies and trading partners namely, Australia, the USA and Britain. As a country, New Zealand is rich with natural resources and has a robust history in terms of its spirited and adventurous people. Additionally, New Zealanders are known to have a great passion for outdoor recreation and all types of PA. It is disappointing to realize that these attributes are wasted or are not taken advantage of by the education and health sectors. It is even more concerning that the rates of sedentary

behaviours, obesity and drug addiction are increasing and putting greater strains on poorer families and public funds. It is this concern that has probably shifted the focus of PE from teaching and learning social and physical skills through movement and fun to trying to remedy the existing health and social problems. This view was clearly expressed by Wattchow et al. (2014) who wrote that “Health and Physical Education has become more overtly a vehicle of the ‘new public health’ agenda, itself an amalgam of positivist and socially critical approaches and, seen in this light, may be perceived as an answer to those indicators of public ill health that appear on the increase (e.g. drug abuse, teen pregnancies, youth suicides, youth depression, obesity), while at the same time addressing indicators that appear on the decrease (e.g. fitness, skill, participation)” (p.74).

The above statement reinforces Tinning’s (2009) reminder about how HPE was entrusted with more responsibilities that it should have been. He wrote: “Some years ago ... I argued that HPE was trying to do too much and that we should be more modest in our claims regarding what we can achieve through our learning area” (p.9). Historically, HPE (or PE) teachers across the globe have struggled to even get students to engage in MVPA at the health recommended levels (Hardman, 2005), so it is difficult to envisage how they could achieve the 114 objectives of the 2007 HPEC which include a variety of moral, social, political, environmental, physical, and academic goals. Motivated by findings from this study, the available literature and personal experience in teaching, I hope that the above question and others made earlier, can stimulate further critical thinking and debates over the relationship between the curriculum and HPE.

6.2. Future Recommendations and suggestions

Making future proposals, recommendations and plans is only as good as these can be realistic and have the potential to be put into practice (Dewey, 1997). Given the fact that the free market economic direction that New Zealand has been taking over the last three decades is unlikely to change in the immediate future, it is hard to make recommendations that stand little chance of turning into reality. By this I mean that it is hard to foresee a return by future governments towards a more sustainable use and equitable distribution of resources. The best that can be proposed in this section will revolve around small or short-term suggestions that may or may not have any impact on the overall state and status of HPE. This, I hope will not diminish the importance of the questions and ideas that were raised in this thesis nor the suggestions that will be made next.

Instead of making any idealistic recommendations or any radical proposals concerning HPE in this section, I will focus on the findings of this study and make suggestions that relate to them directly. I am presenting my suggestions in a table to illustrate how they relate to the results of this study and to other variables such as the strategies that could be adopted for their implementation. Before that, though, there is a fundamental question that needs to be answered.

The question is: On the basis of its significance, should we persist with the goal of expecting students to incorporate what they learn in HPE into their lifestyles despite not knowing what they exactly learn and how to measure or monitor what they learn in HPE, and what PA they do while they are away from school?

The answer to this question is a definite yes. All indicators point to the fact that there is a significant correlation between what students do in HPE, and what they do in their lifestyles. On the basis of the existing literature, there is also the unquestionable fact that schools are more suited than any other organisation for encouraging and getting young people to be regularly

active. Hence, the following suggestions are made with both long and short-term considerations in mind. These suggestions are presented in Table O inserted in the next three pages. Since the NZC is presented in the form of a strategic plan, the suggestions table is designed to reflect a strategic perspective too. It is based on the recommendations made by staff and students during the interviews and on the existing literature. These can be summarised in the following points:

- Make PE compulsory through all the schooling stages (from year 1 to year 13).
- Incorporate theories from the sport sociology, sport and recreation theory, leisure studies, and sport psychology into teacher training programmes.
- Promote and increase the use of PE programmes, such as lifetime-activities, that can easily be transferred into the students' leisure time.
- Return the management of the SSS to the teachers, students and parents. And, ensure that they all understand the difference between educational sport and commercial sport.
- Use all possible avenues to inform students of the benefits of regular participation in PA, and regularly check if the message is reaching its target(s).
- Increase the cooperation between schools and the health sector and ensure that their cooperation is directed towards the same goals.

Table O: Suggestions

Current situation (according to students, teachers and the existing literature)	Interpretation of the situation	Goal(s)	Strategies	Key performance indicators
PE policies and practices				
Students doing PE as an NCEA subject find it “too theoretical”. Up to 70% of the work is theoretical.	Students doing NCEA PE want to enhance their physical, technical, and leadership (teaching/coaching) skills. This happens on the practice fields, not the classroom.	Increase practical components of the senior PE classes.	Include practical sessions about how to play and run different PAs, and give students more opportunities to run activities.	Ratio of theory versus practice.
For NCEA students, PE is undervalued in terms of assessment credits & in comparison with other learning areas.	Teachers and students feel that PE is undervalued in relation to other subjects.	Find and adopt ways of allocating credits for improvements in skill and in leadership attributes.	Compare the allocation of credits in PE with other subjects (i.e., music), Reduce written assessments in favour of practical assessments	Numbers of students choosing PE as an NCEA option
Students not taking PE for NCEA don’t do any PE at all (unless it is short term and worth credits)	The PA levels of the majority of these students are well below the recommended daily-60 minutes.	Increase the PA levels of these students within school.	Introduce a compulsory two one-hour sessions of PE per a week, at least, Give students the choice to determine which activities to take part of.	Participation and PA levels (improving or not)
SSS policy and practices				
The % of students participating in SSSC is decreasing	Students are too busy with assessments and have little time for training and competing in sports.	Increase participation in SSSC (i.e., from 40% to 90%)	Give students credits for their involvement (as athletes, or administrators or officials) in SSSC,	Participation numbers.

			Schedule the competitions for more suitable times for the students.	
The % of staff and parents participating in SSSC is decreasing	These volunteers see no advantage in contributing to the management of SSSC. Schools have paid sports coordinators for that.	Increase teachers and parents' involvements in the management of SSS.	Compensate teachers for managing SSS, Set up regular meetings and social events for parents who are interested in managing SSS.	Contributing numbers.
Students wanting to play SSS for social reasons find it too competitive (not user friendly).	These students don't like the anti-social behaviours that occur on some of the school sanctioned events (i.e., verbal abuse).	Make participation in events more important than winning trophies or awards. Make the above clear and consistent to all contributing parties	Organise and implement events that are specifically and explicitly dedicated for participation and social interaction. Inform and train all officials about the importance of aligning the goals of SSS with the education values.	Participation numbers.
The cost of participation is gradually increasing making it harder to join in.	Many young people and their families can't afford paying extra school fees to participate in some SSSC, The NZCT is about making money from gambling, what it gives to SSS is "BAIT".	Make participation in all SSSC free to all students, Dissolve the relationship with the NZCT,	Justify and seek government funding, Seek and raise sponsorship funds from the health industry and others who share educational values with schools.	Free participation in SSS (for all).
Intramural policy and practices				
Lack of information about rules and regulations of intra-murals (i.e., availability of facilities)	Students are unsure of what resources and facilities they have at their disposal for intramurals	Raise the awareness of staff and students about the importance of intramurals for participation in PA. Inform students and staff of the	Allocate specialised staff and resources for intramurals, Use all form of media to keep students informed about available opportunities.	Participation numbers.

		facilities and equipment that are at their disposal.	Involve students in planning (even give them full charge for organising events on rotational basis).	
The % of students participating in PA intramurals is low	Intramurals are mostly unsupervised. Hence, there is no way of telling how effective they are.	Make intramural events more formal but fun to take part of.	Plan some events for after school hours (not just for recess), Organise regular and consistent events	Participation numbers.
PS: There are at least two columns that could or should be included in this table. One is for ways of monitoring the progress of the strategies and the second for adjusting the goals and strategies in case they work very well or in case they are not working as expected. However, because there is no way of figuring out what resources and how much time are at hand, it was not necessary to include them.				

6.3. Limitations

It is perhaps fitting that I start this section by acknowledging or admitting that my past experiences and my dedication to the fields of sports, recreation and PE have had a significant influence on the ways in which I approached this research project. This may have restricted my use of alternative methods that could have provided greater scope for discussion and analysis. Part of my response to such a situation is to admit that I am guilty of highlighting the problems of the HPEC more than its strengths. But, I sincerely believe that this a strength of my position, not a weakness. Because professional preservation restrain many acting scientists and practitioners from voicing their concerns about the state of education in the general and the impact of the recent curriculum reforms on HPE.

Another important limitation of this study is that it was carried out in one single city from New Zealand, and with a relatively small sample size. In addition, the province of Canterbury, where the field work was carried out for this study, has seen major structural and social transformations over the past six years which were largely caused by the earthquakes. These transformations had restricted the access to schools and students, and the amount of time that the participating schools were willing and able to provide for data collection.

The parents also form another important segment of the population that is directly affected by the physical activity patterns of young people and how they are affected by the curriculum practices. However, they were excluded from the data collection process due to the limitations placed on researchers conducting studies during the two years after the earthquakes. In sum, it was determined to not add to their burden by banking too much on a population that was perceived to be less than enthusiastic to participate. It might possibly be beneficial to include them and their views in future research of this nature.

Lastly, finding the numbers of students doing HPE as an NCEA subject after 2007 could provide an explanation as to whether there is a correlation between the demands of NCEA assessments in HPE and the students enrolment numbers in the

subject. As both students and teachers who participated in this study suggested that the NCEA credits for HPE were overestimated (or overrated) in comparison with other subjects, it would be justifiably expected or highly probable that the student enrolment numbers in NCEA-HPE will gradually drop from 2007 onwards.

Because after a few years of noticing the discrepancy between the high workloads and low credits, most students would have become aware of the overestimated demands of HPE and select other 'easier' subjects for NCEA.

Unfortunately, because of regulations regarding the confidentiality of the students' examinations, it was not possible to determine exactly how many senior students are taking HPE for NCEA qualifications. The overall numbers for students taking HPE at secondary schools is available on the MOE website. These showed no significant drop nor rise in the numbers enrolling in HPE since 2007. The total numbers of students enrolled at each of the schools that participated in this study were not reported for confidentiality as well. It is easy to identify these schools by simply comparing to the total enrolment numbers that are provided by the MOE website.

6.4. Conclusions and closing statement

One aspect of the data gathering process that was employed in this study is worth starting with. As it turned out, using mixed research methods was vindicated by the rich contributions that were made by the participants in relation to understanding the state and status of HPE in their schools. What is more interesting in the case of this study is that all participating teachers and students did not only cooperate adequately with the researcher during his visits to their schools and during the interviews, but they also did so with a positive attitude giving the impression that they actually all liked discussing the learning area of HPE, and that they felt appreciated or valued by having someone inquiring about their conditions, and that their opinions should and would be heard by decision makers.

Finally, I would like to think that this project could become one of the many initiatives that would revive and continue the debate over the role of HPE in schools. For many educators and parents, watching commercial and elite sport take over the management and implementation of PA in schools is perhaps inevitable. I hope that my arguments about the contradicting nature of the curriculum goals and practices can illustrate the need for more scrutiny about the role of HPE in schools and more alignment between policy and practice. The attempts that are made in this study to draw a clear line between the concepts of PE and sport, and to raise the issue of the sponsorship of the SSSC by the NZCT for public information and debate came as a result of some of the ambiguity that is caused by some of the anti-educational incidents such as cheating, violence and marginalisation that are creeping into schools.

I sincerely believe that the findings of this study can serve as clear reminder that defining the concepts of PE and sport is not a problem or a contentious issue, but the real issue is which one of the two we need to be valuing more in schools? As parents, children and teachers, the choice is ours. I just hope that we make the right one.

References

- Aarts,H; Paulussen,T and Schaalma,H. (1997). Physical exercise habit: on the conceptualization and formation of habitual health behaviours. *Health Education Research*. 12 (3). 363-374.
- Adolescent Health Research Group. (2003). *Youth '01': New Zealand Youth: A Profile of Health and Wellbeing. Technical Report*. Auckland: The University of Auckland. www.youth2000.ac.nz
- Adolescent Health Research Group. (2008). *Youth '07': The Health and Wellbeing of Secondary School Students in New Zealand. Technical Report*. Auckland: The University of Auckland. www.youth2000.ac.nz
- Adolescent Health Research Group. (2013). *Youth '12': The Health and Wellbeing of Secondary School Students in New Zealand. Technical Report*. Auckland: The University of Auckland. www.youth2000.ac.nz
- Allison, K; Dwyer, J and Makin, S. (1999). Self-Efficacy and Participation in Vigorous Physical Activity by High School Students. *Health, Education & Behavior*. 26 (1). 12-24.
- Ball.S. (2012). *Global Education Inc: New Policy Networks and The Neo-Liberal Imagery*. MPG Books Group. U.K.
- Bates, H and Eccles, K. (2008). Wellness Curricula to Improve the Health of Children and Youth: A Review and Synthesis of Related Literature. ALBERTA EDUCATION CATALOGUING IN PUBLICATION DATA. ISBN 978-0-7785-6475-1.
- Beets, M; Wallner, M and Beighle, A. (2010). Defining Standards and Policies for Promoting Physical Activity in Afterschool Programs. *Journal of school Health*. 80 (8). 411-417.
- Belanger, M; Casey, M; Cormier, M; Filion, A; Martin, G; Aubut, F; Chouinard, P; Savoi, S and Beauchamp, J. (2011). Maintenance and Decline of Physical Activity during Adolescence: Insights from a qualitative study. *International Journal of Behavioural Nutrition and Physical Activity*. 8, 117. 1-9.
- Berg, C. (2008). Politics, not sport, is the purpose of the Olympic Games. *IPA Review*. Ipa.org.au. 15-18.
- Boisvert, R. (1998). *John Dewey: Rethinking our Time*. State University of New York Press. N.Y. U.S.A.

- Bowes, M; Ovens, A. (2014). Curriculum Rhythm and HPE Practice: Making Sense of a Complex Relationship. *Teachers and Curriculum*. Vol.14, 21-27. The University of Waikato.
- British Health and Fitness National Centre, (2007). Physical Activity, Sport and Education. www.bhfactive.org.uk.
- Brough, C. (2008). Student-centred curriculum integration and The New Zealand Curriculum. Research Information for teachers. Issue: 2. 16-21.
- Brown, S and Macdonald, D. (2011). A lost opportunity? Vocational education in physical education. *Physical Education and Sport pedagogy*. 16:4. 351-367.
- Bryan, C., and Solmon, M. (2007). Self-determination in physical education: Designing class environments to promote active lifestyles. *Journal of Teaching in Physical Education*, 26, 260-278.
- Bolstrad, R. & Gibert, J. (2008). *Disciplining and drafting, or 21st century learning? Rethinking for the New Zealand senior secondary school future*. Wellington: New Zealand Council for Educational Research).
- Burrows, L. (2005). *Proposed Key Competencies and Health and Physical Education in the New Zealand Curriculum*. Ministry of Education. Retrieved 1 May 2012 from: http://www.tki.org.nz/r/nzcurriculum/references_e.php.
- Cale, L. (2000). Physical Activity Promotion in Secondary Schools. *European Physical Education Review*. 6 (1). 71-90.
- Cale, L and Harris, J. (2006). Interventions to promote young people's physical activity: Issues, complications and recommendations for practice. *Health Education Journal*. 65 (4). 320-337.
- Cale, L and Harris, J. (2009). Fitness testing in physical education – a misdirected effort in promoting healthy lifestyles and physical activity. *Physical Education and Sport Pedagogy*. 14 (1). 89-108.
- Carver, R. (1996). Theory for practice: A framework for thinking about experiential education. *Journal of Experiential Education*, 19(1), 8–13.
- Centers for Disease Control and Prevention. (2005). *Surveillance for certain health behaviors among states and selected local areas, Behavioral Factor Surveillance System, United States, 2003. Morbidity and Mortality Weekly Report*, 54 (SS08), 1-116.
- Cote, J. and Hay, J. (2002). 'Children's Involvement in Sport: A developmental Perspective', in J.M. Silva and d. Stevens (eds) *Psychological Foundations of Sport*, pp. 484-502. Boston. U.S.A.

- Csikszentmihalyi, M. (1991). *Flow: The psychology of optimal experience*. Harper Perrenial. N.Y. U.S.A.
- Csikszentmihalyi, M. (1994). *The evolving self: Psychology for the third millennium*. Harper Perrenial. N.Y. U.S.A.
- Culpan, I. (1998). Physical education in the new curriculum: Are we agents of the state? *New Zealand Physical Educator*, 31(2), 3-8.
- Culpan, I. (2005). Physical Education: What is it all about? The Muddled Puzzle. http://www.tki.org.nz/r/nzcurriculum/whats_happening/health_physical_e.php.
- Culpan, I. (2008). Physical education and the New Zealand Curriculum: Maximizing the opportunity. *New Zealand Physical Educator*, 41(3), 51.
- Curtner-Smith, M., Kerr, I., and Clapp, A. (1996). The impact of National Curriculum Physical Education on the teaching of Health-Related Fitness: A case study in one English town. *European Journal of Physical Education*, 1: 66-83.
- Day, S. (2014). "School caught faking national standards". *Fairfax NZ News*. Article published on: 09, March 2014. www.nzta.govt.nz/resources/travel.../resource-1-facts-and-figures.pdf.
- Deci, E & Ryan, R. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum Press. NY. U.S.A.
- Deci, E, & Ryan, R. (1995). Human autonomy: The basis for true self-esteem. In Kernis, M. (Ed), *Efficacy, agency, and self-esteem*. Plenum Press. NY. U.S.A.
- Deci, E & Ryan, R. (2000). The 'what' and 'why' of goal pursuit: Human needs and the self determination of behaviour. *Psychological Inquiry*. 11. 227-268.
- Derrick, M. (2008). Curriculum Diversity and Young Adult Physical Activity: Reflections from High School Physical Education. *Physical Educator*. 65 (4). 195-213.
- Dewey, J. (1997). *Experience and Education*. Touchstone Edition. NY. U.S.A.
- Dishman, R.K. (1982). Compliance/adherence in health related-exercise. *Health Psychology*. 1. 237-267.
- Dyson, B. (2014). Quality Physical Education: A Commentary on Effective Physical Education Teaching. *Research Quarterly for Exercise and Sport*. 85. 144-152.
- ERO. (2012). The New Zealand Curriculum Principles: Foundations for Curriculum Decision-Making. www.ero.govt.nz.
- Eitzen, D. (2012). *Sport in Contemporary Society: An Anthology*. Paradigm Publishers, London, UK.

- Fairclough, S., Stratten, G., Baldwin, G. (2002). The contribution of secondary school physical education to lifetime physical activity. *European Physical Education Review*. 8 (1). 69-84.
- Fairclough, S and Stratton, G. (2005). 'Physical education makes you fit and healthy'. Physical education's contribution to young people's physical activity levels. *Health Education Research*. 20 (1). 14-23.
- Fairfield, P. (2009). *Education after Dewey*. Continuum International Publishing Group. N.Y. U.S.A.
- Findlay, L; Garner, R; Cohen, D. (2010). Patterns of Children's Participation in Unorganized Physical Activity. *Research Quarterly for Exercise and Sport*. 81 (2). 133-142.
- Fitzgerald, A., Fitzgerald, N., and Aherne, C. (2012). Do peers matter? A review of peer and/or friends' influence on physical activity among American adolescents. *Journal of Adolescence*. 35. 941-958.
- Fitzsimons, P: Education: A capital Idea, in Thrupp. M and Irwin. R. (2010). *Another Decade of New Zealand Education Policy: Where to now?* Wilf Malcolm Institute of Education Research. Waikato Print, Hamilton. NZ.
- Flinders, D. & Thornton, S. (2004). "*The Curriculum Studies Reader*". Routledge Falmer. New York. U.S.A.
- Fox, K. (1996). Physical activity promotion in secondary schools. *European Physical Education Review*. 6 (1): 71-90.
- Freire, P. (1994). *Pedagogy of liberation*. Krieger Pub C0. Fla. U.S.A.
- Freire, P. (2000). *Pedagogy of the oppressed*. (30th ed.). Continuum. NY. U.S.A.
- Freire, P. (2004). *Pedagogy of indignation*. Paradigm Publishers. London. U.K.
- Fuller, D; Sabiston, C; Karp, I. Barnett, T; O'Loughlin, J. (2011). School Sports Opportunities Influence Physical Activity in Secondary School and Beyond. *Journal of School Health*. 8 (8). 449-454.
- Gidlow, R. (1993). 'The Sociology of Leisure', in Perkins, H and Cushman, G. (1993). *Leisure, Recreational Tourism*. Longman Paul. Auckland. New Zealand.
- Gardner, H. (1983). *Frames of Mind: The Theory of Multiple Intelligences*. Basic Books. New York.
- Godin, G & Shephard, R. (1986). Psychological factors influencing intentions to exercise of young people from grades 7 to 9. *Research Quarterly for Exercise and Sport*. 57. 41-52.

- Goldstein, H. (1997). Methods in School Effectiveness Research. *School Effectiveness and School Improvement*. 8 (4), 369-395.
- Goodman, A. (2013). Seattle Teachers, Students Win Historic Victory Over Standardized Testing. DemocracyNow.org. (interview: 20.05.2013).
- Grant, B. (1992). Integrating Sport into the Physical Education Curriculum in New Zealand Secondary Schools. *The Quest*. 44. 304-316.
- Grant, B. & Olsen, J. (1990). Looking inside the physical education lesson. *SET Research Information for Teachers*, no. 1, pp. 1-5. New Zealand Association of Educational Research.
- Gorrie, A. (2011). Christchurch earthquake: 31 schools ready to reopen. *Dominion-Post*. NZPA.
- Guedes, C. (2007). Physical Education and Physical Activity: A Historical Perspective. *Journal of Physical Education, Recreation & dance*. 78 (8), 31-32 & 47-48.
- Haerens, L; Craeynest, M; Deforche, B; Maes, L; Cardon, G; and De Bourdeaudhuij, I. (2009). The Contribution of Home, Neighbourhood and School Environmental Factors in Explaining Physical Activity Among Adolescents. *Journal of Environmental and Public Health*. Article ID 320372, 10 pages. Doi: 10.1155/2009/320372.
- Hagger, M., Chatzisarantis, N., Culverhouse, T., and Biddle, S. (2003). The process by which perceived autonomy support in physical education promotes leisure-time physical activity intentions and behavior: A trans-contextual model. *Journal of Educational Psychology*, 95(4), 784-795.
- Hardman, K. (2008). Physical education in schools: A global perspective. *Kinesiology*, 40 (1), 5-28.
- Harris, J and Cale, L. (1997). How healthy is school PE? A review of the effectiveness of health-related PE programmes in schools. *Health Education Journal*. 56. 84-104.
- Henderson, K. (1989). *A Leisure of One's Own: A Feminist Perspective on Women's Leisure*. Venture Publishing. Pennsylvania. U.S.A.
- Hewitt, T. (2006). *Understanding and Shaping Curriculum: What We Teach and Why?* Sage Publications Inc. California. U.S.A.
- Hickman, L. (2009). John Dewey at 150: Continuing Relevance for a Global Milieu. *Educational Theory*. 59 (4), 375-378.
- Hickman, L.; Spadafora, G.; Burza, V.; Cambi, F.; Chiosso, G.; Nubiola, J. and Ruth Anna Putnam. (2009). *John Dewey's Educational Philosophy in International Perspective*. Southern Illinois University Press.

- Hildebrand, D. (2008). *Dewey*. Oneworld Publications. Oxford. U.K.
- Hipkins, R. and Vaughan, K. (2002). Learning curves: Meeting student needs in an evolving qualifications regime. From Cabbages to Kings: A First Report. New Zealand Council for Educational Research. Wellington.
- Hipkins, R. (2010). *The evolving NCEA*. Wellington: New Zealand Council for Educational research.
- Hirst, P.H. (1974). *Knowledge and the Curriculum: A collection of philosophical papers*. London. Routledge and Kegan Paul.
- Hoefer, W, McKenzie, T, Sallis, J, Marshall, S, and Conway, T. (2001). Parental Provision of Transportation for Adolescent Physical Activity. *American Journal of Preventive medicine*. 21 (1). 48-51.
- Jago & Barowski (2004). Non-curricular approaches for increasing physical activity in youth: a review. *Preventive Medicine*. 39 (1): 157-163.
- Jennings, A. (1996). *The New Lords of the Rings: Olympic Corruption and How to Buy Gold Medals*. DropDownDeals. UK.
- Jennings, A. (2007). *Foul! The Secret World of FIFA: Bribes, Vote Rigging and Ticket Scandals*. Harper Sport. UK.
- Johnson, B and Onwuegbuzie, A. (2004). Mixed Research Methods: A research Paradigm Whose Time Has Come. *Educational Researcher*, 33-7, pp. 14-26.
- Kelly, A. (1999). *"The Curriculum: Theory and Practice"*. Paul Chapman Publishing, London. UK.
- Kimball, J., Jenkins, J., Wallhead, T. (2009). Influence of high school physical education on university students' physical activity. *European Physical Education Review*. 15 (2). 249-267.
- Kirk, D. (2005). Physical education, youth sport and lifelong participation: the importance of early learning experiences. *European Physical Education Review*. 11 (3). 239-255.
- Laakso, L; Telama, R; Nupponen, H; Rimpela; Pere, L. (2008). Trends in leisure time physical activity among young people in Finland, 1977-2007. *European Physical Education Review*. 14 (2). 139-155.
- Leonardo, Z. (2004). Critical social theory and transformative knowledge: The functions of criticism in quality education. *Educational researcher*. 33 (6). 11-18.
- Lindlof, T and Taylor, B. (2002). *Qualitative Research Methods* (2nd Ed.). Thousand Oaks, CA; Sage.

- Macdonald, D., Abbott, R., Knez, K., and Nelson, A. (2009). Taking exercise: Cultural diversity and physically active lifestyles. *Sport, Education and Society*, 14(1), 1-20.
- MacDonald, D. (2004). Curriculum change in Health and Physical Education: The devil's perspective. *New Zealand Physical educator*. 37(1). 70-83.
- Madisson, R; Turley, M; Legge, N and Mitchelhill, G. (2010). A National Survey of Children and Young People's Physical Activity and Dietary Behaviours in New Zealand: 2008/09. Synovate. Auckland. New Zealand.
- Marjoribanks, T and Farquharson, K. (2012). *Sport and Society in the Global Age*. Palgrave MacMillan. N.Y. U.S.A.
- Mathis, W. (2011). Is Education the Key to Global Economic Competitiveness? *The Teacher Educator*. 46, 89-97.
- McClure, T, "Church says no to 'hush money'." *Fairfax NZ News*. 12, September 2013.
- McKenzie, T. (1999). School Health-Related Physical Activity Programs: What Do the Data Say? *Journal of Physical Education, Recreation & Dance*. 70 (1). 16-19.
- Ministry of Education. (2007). *New Zealand Curriculum: for English-medium teaching and learning in years 1-13*. Wellington: Learning Media Limited.
- Ministry of Education. (2011). *Monitoring and Evaluating Curriculum Implementation: Final Evaluation Report on the Implementation of The New Zealand Curriculum 2008-2009*. www.educationcounts.govt.nz/publications.
- Moore.A. (2006). *Schooling, Society and Curriculum*. Rutledge. N.Y, U.S.A.
- National Association for Sport and Physical Education. (1997). Parents say: No more excuses. *NASPE*. Vol.3.
- New Zealand Secondary Schools' Sports' Council Inc. (2011). *Annual Report 2010*. www.nzsssc.org.nz.
- Norris, N. (1998). Curriculum evaluation revisited. *Cambridge Journal of Education*. 28 (2). 207-219.
- Ovens, A. (2010). The New Zealand Curriculum: emergent insights and complex renderings. *Asia Pacific Journal of Health, Sport and Physical Education*. 1 (1). 27-32.
- Pappas. G. F. (2010). Dewey's ethical-political philosophy as resource in today's global crisis and as a guide to a post-ideological politics for the 21st century. (pp. 295-311). In M. Flamm, (2010). *Continuing Relevance of John Dewey*. Editions Rodopi. Retrieved from <http://www.ebrary.com>

- Park, H and Kim, N. (2008). Predicting Factors of Physical Activity in Adolescents: A Systematic Review. *Asian Nursing Research*. 2 (2). 113-128.
- Pate,R; Trost,S; Mullis, R; Sallis, J; Wechsler, H; & Brown, D. (2000). Community interventions to promote proper nutrition and physical activity among youth. *Preventive Medecine*. 31. 138-149.
- Pate,R; Almeida, M; McIver, K; Pfeiffer, K & Dowda, M. (2006). Validation and calibration of an accelerometer in preschool children. *Obesity*. 14, 2000-20006.
- Penneya. D; Petrieb, K and Fellowsb, S. (2015). HPE in Aotearoa New Zealand: the reconfiguration of policy and pedagogic relations and privatisation of curriculum and pedagogy. *Sport, Education and Society*, 2015 Vol. 20, No. 1, 42–56,
- Penny, D; Brooker, R; Hay, Pand Gillespie, L. (2012). Curriculum, pedagogy and assessment: three message systems of schooling and dimensions of quality physical education. *Sport, Education and Society*. 14 (4). 421-442.
- Perkins, H and Cushman, G. (1993). *Leisure, Recreation and Tourism*. Longman Paul. Auckland. New Zealand.
- Portman, P (2003). Are Physical Education Classes Encouraging Students to be Physically active? Experiences of Ninth Graders in their Semester of Required Physical Education. *Physical Educator*. 60 (3). 150-162.
- Pope, C. (2007). Happy 21st Birthday Sport Education: Where are we now? *Physical Educator*. 40-2.
- Pope, C. (2011). The Physical Education and Sport Interface: Models, maxims and maelstrom. *European Physical Education Review*. 17 (3). 273-285.
- Pope, C. (2013). The jagged edge and the changing shape of health and physical education in Aotearoa New Zealand. *Physical Education and Sport Pedagogy*. [Http://dx.doi.org/10.1080/17408989.2013.837440](http://dx.doi.org/10.1080/17408989.2013.837440).
- Quennerstedt, M. (2010). Physical education in New Zealand and Sweden: Good or bad for students' health? *Physical Educator – Journal of Physical Education New Zealand*, 3(2), 7-11.
- Ravitch. D. (2010). *The Death and Life of the Great American School System: How Testing and Choice are Undermining Education*. Basic Books. NY. U.S.A.
- Reid.A (2011). HPE and Capabilities: Towards an Active National Curriculum. *Asia Pacific Journal of Health, Sport and Physical education*. 2 (2). 79-92.
- Rossi.T, Tinning. R, McCuaig. L, Sirna. K, Hunter.L. (2009). With the best of Intentions: A Critical Discourse Analysis of Physical Education Curriculum Materials. *Journal of Teaching in Physical Education*. Human Kenetics Inc. 28, (75-89)

- Russo.A. (2013). When Parents Yank their Kids out of Standardized Tests. *The Atlantic*.
<http://www.theatlantic.com/education/archive/2013/11/>.
- Schiro, M.S. (2008). *Curriculum Theories: Conflicting Visions and Enduring Concerns*. Sage Publications, Inc. California. U.S.A.
- Shen, B., McCaughtry, N., and Martin, J. (2007). The influence of self-determination in physical education on leisure-time physical activity behavior. *Research Quarterly for Exercise and Sport*, 78(4), 328-338.
- Siedentop, D. (2007). Junior sport and the evolution of sport cultures. *Physical Educator*, 40 (2) 19-23.
- Smith. P. (2010). *Children and Play*. Wiley-Blackwell. UK.
- Smith, W. and Philpot, R. (2011). The Preparation of HPE Teachers in New Zealand. *Asia-Pacific Journal of Health, Sport and Physical education*. 2 (3/4). 71-80.
- Soutter.A, O'Steen.B. Gilmore.A. (2012). Wellbeing in the New Zealand Curriculum. *Journal of Curriculum Studies*. 44:1, 111-142
- Sparc New Zealand. Active New Zealand Survey (2007/2008). www.sparc.org.nz.
- Sport New Zealand. (n.d.). *Vision and Mission*. Retrieved 9 May 2012 from:
<http://www.sportnz.org.nz/en-nz/About-SportNZ/Who-we-are/Vision-and-Mission/>
- Stirling,J. & Belk, L. (2002). Effective teaching, quality physical education and the New Zealand Curriculum. *Journal of Physical Education New Zealand*. 35 (1), 69-75.
- Storch, E, Milsom, V, DeBraganza, N, Lewin, A, Gary, M, Geffken, R., et al., (2006). Peer victimization, psychological adjustment, and physical activity in overweight and at-risk-for-overweight youth. *Journal of Pediatric Psychology*. 32. 80-89.
- Stothart, B. (2005). Nine strikes and you're out: New Zealand physical education in crisis. *New Zealand Physical Educator*, 38(1), 95-102.
- Sun, H., Chen, A., Zhu, X., Ennis, D. (2013). Learning Science-Based Fitness Knowledge in Constructivist Physical education. *The Elementary School Journal*. 113 (2). 215-229.
- Telama, R. Yang, X., Valimaki, I., Wanne, O. and Raitakari, O. (2005.a). Physical Activity from Childhood to Adulthood: A 21-year Follow up Study. *American Journal for Preventive Medicine*. 28: 267-73.
- Telama, R. Nupponen. H. and Pieron. M. (2005.b). Physical activity among young people in the context of lifestyle. *European Physical Education Review*. 11 (2). 115-137.
- <http://www.tennessee.gov/sbe/Policies/4.206%20Physical%20Activity%20Policy>.

- Thrupp, M. and Irwin, R. (2010). *Another Decade of New Zealand education policy: Where to now*. Wilf Institution of Education Research. Hamilton. NZ.
- Tinning, R. (2009). Thinking about thinking bodies and moving minds in the context of recent HPE curriculum initiatives in New Zealand. *New Zealand Physical Educator*, 36(3), 9-13.
- Tienken, C.H. (2013). Neoliberalism, Social Darwinism, and Consumerism Masquerading as School Reform. *Interchange*. 43: 295-316.
- Thompson, M. (2009). *Health & Physical Education: Issues for Curriculum in Australia and New Zealand*. Oxford University Press. Victoria. Australia.
- Treandis, H.C. (1980). Values, attitudes, and interpersonal behaviour. In Howe, H.E., Jr and Page, M.M. (eds), *Nebraska Symposium on Motivation, 1979*. University of Nebraska Press, Lincoln, NE.
- Yang, L., Telama, R., Laakso, L. (1996). Parents' Physical Activity, Socioeconomic Status and Education as Predictors of Physical Activity and Sport among Children and Youth – A 12-Year Follow-Up Study. *International Review for the Sociology of Sport*. 31 (3) 273-291.
- Yelling, M., Penny, D., and Swaine, A. (2006). Physical activity in physical education: A case study investigation. *European Journal of Physical Education*. 5 (1). 45-66.
- Wallhead, T., Hagger, M., and Smith, D. (2010). Sport education and extracurricular sport participation: An examination using the trans-contextual model of motivation. *Research Quarterly for Exercise and Sport*, 81(4), 442-455.
- Wattchow, B.; Jeanes, R.; Alfrey, L.; Brown, T.; Cutter-Mackenzie, A.; O'Connor, J. (2014). (eds.), *The Socioecological Educator: A 21st Century Renewal of Physical, health, Environment and Outdoor Education*. DOI 10.1007/978-94-007-7167-3 4, © Springer Science & Business Media Dordrecht.
- World Health Organization. (2002). *The World Health Report 2002: reducing Risks, Promoting healthy Life*. Geneva. Switzerland.
- World Health Organization. (2004). *A Guide for Population-based Approaches to Increasing Levels of Physical Activity: implementation of the WHO Global Strategy on Diet, Physical Activity and Health*. Geneva: Switzerland.
<http://www.who.int/dietphysicalactivity/strategy/eb11344/strategy>.
- World Health Organization. (2007). *Global Recommendations on Physical Activity for Health*. Geneva: Switzerland.
- www.nzta.govt.nz/resources/travel.../resource-1-facts-and-figures.pdf.

Zhang, T., Solmon, M., Kosma, M., Carson, R., and Gu, X. (2011). Need support, need satisfaction, intrinsic motivation, and physical activity participation among middle school students. *Journal of Teaching in Physical Education*, 30, 51-68.

Appendices:

Appendix: A.

(An example-list of Extra-curricular activities that are offered to intermediate school children)

Term 2 / 3 Winter Sport & Recreation Options

Term 2 / 3 Winter Sports & Recreation Options

OPTION 1

Student's name: _____

Room:

Selected in a school team to compete at South Hagley _____
(sport)

Cost \$36 towards transport for Netball, Football, Hockey

Rugby (transport costs covered by (Mainland Foundation charity grant)

All Hockey, Football, Rugby must have red winter team socks

We are pleased to advise you that your child has been selected to represent Cobham Intermediate in the weekly winter sports competition held at Hagley Park during terms 2 and 3. Students will be travelling by bus each week, departing from school at 1.00pm. Games begin at 1.45pm and should conclude by 2.30 approx hopefully allowing students to return to school by 3.00pm. We encourage you to come and support your child and their team if you are able to.

There are expected to be nine weeks of competition (plus an allowance for three cancellations) this year on the following dates 8 May – 7 August inclusive. Copies of the rules and draws are available at www.primarysportscanterbury.org.nz Should weather or grounds not be suitable,

games will be postponed and if necessary the draw adjusted. If sport is postponed or cancelled the announcement will be made in the following ways:

- text direct to your mobile (Sport Check) refer to www.primarysportscanterbury.org.nz for details.
- on cancellations link at www.primarysportscanterbury.org.nz
- on school website www.cobham.school.nz

Each player for Hockey, Netball and Football (Soccer) is required to contribute \$36 towards covering some of the transport costs for this competition. Funding for the transport of Rugby players is provided by The Mainland Foundation and so these players will not be charged. Please make payment to the office by Tuesday 22 May.

Sports uniforms will be issued, if required, and are the responsibility of the student to ensure that they are clean and present each week. They will also require all relevant safety equipment for their sport. As part of the sports uniform students in the Rugby, Hockey, Soccer and Rippa rugby teams will need red winter sports socks. These can be sourced from various sports shops, we recommend Just Hockey 210 St Asaph Street, but please ensure that they are plain red (no stripes etc.) These are sold for around \$13 a pair.

Thank you

Sports Coordinator

Term 2 / 3 Winter Sports & Recreation Options

OPTION 2

Two paid options.

Name	Cost / Requirements		(please indicate preferences ranked 1-4 minimum)
Paid Options NB these activities operate every week regardless of weather	Action Indoor Sports	\$54 for 6 sessions. Sports could include soccer, cricket, netball etc.	
	Cardio blast	\$48 for 6 fully instructed sessions. Cardio sessions including Pump, hand weights, boxing and hand targets.	
	Circuit Gym	\$54 for 6 fully instructed sessions Cardiovascular workout with some strength training	
	Gymnastics / Trampoline	\$48 for 6 fully instructed sessions Students can get assistance for upcoming gymnastic competitions or just for personal development	
	Ice Skating	\$72 for 6 sessions All equipment provided.	
	Rock Climbing	\$93 for 6 fully instructed sessions Learning to boulder, climb and belay	
	Table tennis	\$36 for 6 sessions Non marking footwear, all other equipment provided.	
	Ten pin bowling	\$49 for 6 sessions	

		Learn to bowl and enjoy a game.	
	Active Youth	\$30 for 6 sessions Have a go at a different activity each week – Could include hip hop, Aquarobics, Zumba, Drums alive (swiss ball) etc	

NB All cost are for 2011 and are an indication only

Term 2 / 3 Winter Sports & Recreation Options

OPTION 3

One paid option and one school based option.

Name		Cost / Requirements	(please indicate preferences ranked 1-4 minimum)
Paid Options NB these activities operate every week regardless of weather	Action Indoor Sports	\$54 for 6 sessions. Sports could include soccer, cricket, netball etc.	
	Cardio blast	\$48 for 6 fully instructed sessions. Cardio sessions including Pump, hand weights, boxing and hand targets.	
	Circuit Gym	\$54 for 6 fully instructed sessions Cardiovascular workout with some strength training	
	Gymnastics / Trampoline	\$48 for 6 fully instructed sessions	
	Ice Skating	\$72 for 6 sessions All equipment provided.	
	Rock Climbing	\$93 for 6 fully instructed sessions Learning to boulder, climb and belay	
	Table tennis	\$36 for 6 sessions Non marking footwear, all other equipment provided.	
	Ten pin bowling	\$49 for 6 sessions Learn to bowl and enjoy a game.	

	Active Youth	\$30 for 6 sessions Have a go at a different activity each week – Could include hip hop, Aquarobics, Zumba, Drums alive (swiss ball) etc	
--	--------------	--	--

NB All cost are for 2011 and are an indication only

School based options Free of charge These activities are weather dependent.			(please indicate preferences ranked 1-4 minimum)
	Basketball	Based at school No cost	
	Unihoc / Street hockey	Based at school No cost	
	Netball	Based at school No cost	
	Rippa Rugby	Based at School No cost	
	Football (soccer)	Based at school No cost but shin pads recommended	
	Volleyball	Based at school No cost	
	Wheels	Roller blades, skateboards or scooters Helmet and other relevant safety gear highly recommended. Students take part at their own risk. No cost (Limited to 20 students approx)	

Term 2 / 3 Winter Sports & Recreation Options

OPTION 4

Two school based options.

Name

School based options Free of charge These activities are weather dependent.			(please indicate preferences ranked 1-4 minimum)
	Basketball	Based at school No cost	
	Unihoc / Street hockey	Based at school No cost	
	Netball	Based at school No cost	
	Rippa Rugby	Based at School No cost	
	Football (soccer)	Based at school No cost but shin pads recommended	
	Volleyball	Based at school No cost	
	Wheels	Roller blades, skateboards or scooters Helmet and other relevant safety gear highly recommended. Students take part at their own risk. No cost (Limited to 20 students approx)	

17/07/2012

Appendix B



HUMAN ETHICS COMMITTEE

Secretary, Lynda Griffioen

Email: human-ethics@canterbury.ac.nz

Ref: 2012/45/ERHEC

11 January 2013

Larbi Moutrib

College of Education

UNIVERSITY OF CANTERBURY

Dear Larbi

Thank you for providing the revised documents in support of your application to the Educational Research Human Ethics Committee. I am very pleased to inform you that your research proposal “An investigation into the influence of the PE curriculum on the participation of Year 12 students in extra-curricular physical activity” has been granted ethical approval.

Please note that this approval is subject to the incorporation of the amendments you have provided in your emails of 21 November 2012 and 10 January 2013.

Should circumstances relevant to this current application change you are required to reapply for ethical approval.

If you have any questions regarding this approval, please let me know.

We wish you well for your research.

Yours sincerely

Nicola Surtees

Chair

Educational Research Human Ethics Committee

“Please note that Ethical Approval and/or Clearance relates only to the ethical elements of the relationship between the researcher, research participants and other stakeholders. The granting of approval or clearance by the Ethical Clearance Committee should not be interpreted as comment on the methodology, legality, value or any other matters relating to this research.”

Appendix: C

**Extra-Curricular Physical Activity Survey:
For Year 12 Students Taking PE as
An NCEA Option**

June-July 2013

Only the researcher will be able to know your individual answers

Please put your name in the box below. It will be used to select 9 out of more than 600 Year 12 students from different High Schools to be interviewed in July and/or August, 2013. Your name will also be used to draw the winner of a \$30 gift (sports-gear voucher) that will be sent out to one student (from each participating school) as a show of appreciation for their time and contributions.

Students' Name

PHYSICAL ACTIVITY PARTICIPATION QUESTIONNAIRE

Thank you for taking part in this survey. By completing this questionnaire you will help us find out more about the conditions that encourage or constrain young people from participating in Extra-Curricular Physical Activities.

In this questionnaire, Extra-Curricular Physical Activity refers to all types of “movement activities” that you take part of outside the school hours. They include walking, cycling, scooting, skate boarding, jogging, playing sports, playing social games ...

The questions that are included in this questionnaire are presented in 3 sections. One is about your physical activity levels, the 2nd is about the resources and facilities you use, and the 3rd is about your views of some of your school’s programmes and practices.

Please answer all questions even if you do not consider yourself to be an active person. Some questions have helpful instructions typed in **BOLD FONT**.

Section: 1. Questions about you and your physical activities

Please tick the box that represents your answer

1. Are you?

1. Female ☐
 2. Male ☐

2. What is your age?

2.1. Years

2.2. Months

3. Are you doing any form of paid work after the school day?

3.1. Yes

☐

3.2. No

☐

4. How do you regularly get to school?

PLEASE TICK ALL ANSWERS THAT APPLY TO YOU

1. I walk ☐
 2. I bike ☐
 3. I scoot or skate ☐
 4. I drive or get dropped-off ☐
 5. I use a bus ☐
 6. Other ☐

5. How long does it usually take you to get to school?

- | | |
|-----------------------------|--------------------------|
| 1. Under 10 minutes | <input type="checkbox"/> |
| 2. Under 20 minutes | <input type="checkbox"/> |
| 3. Under 30 minutes | <input type="checkbox"/> |
| 4. 30 minutes or more | <input type="checkbox"/> |

6. How many hours of PE do you have per week?

- | | |
|------------------------|--------------------------|
| 1. One | <input type="checkbox"/> |
| 2. Two | <input type="checkbox"/> |
| 3. Three | <input type="checkbox"/> |
| 4. Four | <input type="checkbox"/> |
| 5. More than four..... | <input type="checkbox"/> |

7. How often do you participate in PE classes?

- | | |
|--|--------------------------|
| 1. All the time (except if sick) | <input type="checkbox"/> |
| 2. 80% or more of the time | <input type="checkbox"/> |
| 3. 60% or more of the time | <input type="checkbox"/> |
| 4. 50% of the time or less | <input type="checkbox"/> |

8. Do you take part in Secondary School Sports (competitions)?

- | | |
|--------------|--------------------------|
| 1. Yes | <input type="checkbox"/> |
| 2. No | <input type="checkbox"/> |

9. Do you take part in Intra-mural physical activities (semi or fully organized sports, fitness, games and recreational activities offered within your own school)?

- | | |
|--------------|--------------------------|
| 1. Yes | <input type="checkbox"/> |
| 2. No | <input type="checkbox"/> |

10. Are you a member of a sports' club or dance or fitness association from outside your school?

- | | |
|--------------|--------------------------|
| 1. Yes | <input type="checkbox"/> |
| 2. No | <input type="checkbox"/> |

11. When you are not in school, do you do any form of fitness (like Aerobics, dance, weights), exercise (long walks, swimming, running) or sports on your own (by yourself)?

- | | |
|--------------|--------------------------|
| 1. Yes | <input type="checkbox"/> |
| 2. No | <input type="checkbox"/> |

12. When you are not in school, do you do any form of fitness, exercise or sports with family and friends?

- | | |
|--------------|--------------------------|
| 1. Yes | <input type="checkbox"/> |
|--------------|--------------------------|

2. No ☐

13. On any normal week, how many times do you participate in Vigorous Physical Activities (VPA)?

VPA make you perspire and breathe hard, such as basketball, soccer, running, swimming, bicycling, dancing, and similar aerobic activities (include PE, sports, play recreation, etc).

1. Never (go to question 15 if you tick this box) ☐
2. Rarely ☐
3. Once a week ☐
4. Twice a week ☐
5. 3 times a week ☐
6. 4 times a week ☐
7. 5 times a week ☐
8. 6 times a week ☐
9. 7 times a week ☐
10. 7 times a week or more ☐
11. Unsure, don't know ☐

14. When you participate in vigorous physical activities, what is your rough estimation of the average amount of time you actually spend in movement during each session?

1. 60 minutes or more ☐
2. 50 minutes or more ☐
3. 40 minutes or more ☐
4. 30 minutes or more ☐
5. 20 minutes or more ☐
6. Under 20 minutes ☐

15. In terms of participation in all types of physical activity, do you consider yourself

1. Very active ☐
2. Moderately active ☐
3. Inactive (if you rarely or don't do PA at all) ☐

Section. 2: Questions about the student's access and the availability of health, sport, and recreation resources and facilities

16. I think that my school has **outdoor** facilities (fields & courts) that are

16.1 More than adequate

☐

16.2 Adequate

☐

16.3 Inadequate

☐

17. I think that **access** to my school's **outdoor** facilities is

17.1 More than adequate

☐

17.2 Adequate

☐

17.3 Inadequate

☐

18. I think that my school has **indoor** facilities (gymnasiums & courts) that are

18.1 More than adequate

☐

18.2 Adequate

☐

18.3 Inadequate

☐

19. I think that **access** to my school's **indoor** facilities is

19.1 More than adequate

☐

19.2 Adequate

☐

19.3 Inadequate

☐

20. How would you rate the quality of your school's changing and showering facilities?

20.1 Very good

☐

20.2 Good

☐

20.3 Average

☐

20.4 Below average

☐

21. Does your school have a secure bicycle-parking area for students?

21.1 Yes

☐

21.2 No

☐

21.3 Unsure

☐

21.4 Don't Know

☐

22. Does your school provide its students with equipment and facilities for fitness, play or sports during recess (long breaks from class)?

22.1 Yes

☐

22.2 No

☐

22.3 Unsure

☐

22.4 Don't Know

☐

23. Does your school provide supervisors for fitness, play or sports during recess?

23.1 Yes

☐

23.2 No

☐

23.3 Unsure

☐

23.4 Don't Know

☐

Section.3: Questions about the student's perceptions of the Physical Education policies and practices in their school

24. Is PE compulsory for all students in your school (from Year 9 to year 13)?

24.1 Yes

☐

24.2 No

☐

24.3 Unsure

☐

24.4 Don't Know

☐

25. Does your school require students to wear proper PE clothing during practical classes?

25.1 Yes

☐

25.2 No

☐

25.3 Unsure

☐

25.4 Don't Know

☐

26. Does your school offer NCEA qualifications in PE?

27.1 Yes

☐

27.2 No

☐

27.3 Unsure

☐

27.4 Don't Know

☐

27. Is participation in secondary school sports

1. Compulsory ☐
2. Optional ☐
3. Unsure ☐
4. Don't know ☐

28. Participation in secondary school sports competitions is:

1. Structured ☐
2. Semi-structured ☐
3. Unstructured ☐
4. Don't know ☐

29. Participation in secondary school sports is:

1. Totally-free ☐
2. Partially-free (some sports are free, others cost money) ☐
3. Not-free at all (students always pay extra fees)..... ☐
4. Do not Know ☐

30. Does your school have a culture of encouraging students to do physical activities during recess times?

31.1. Yes

☐

31.2. No

☐

31.3. Unsure

☐

31.4. Don't Know

☐

31. Does your school offer students the opportunity to take part in other Extra-Curricular Physical Activities (ECPA) like camps, ski trips, kayaking, rock climbing, cycling ...?

32.1 Yes

☐

32.2. No

☐

32.3. Unsure

☐

32.4. Don't Know

☐

32. In your school, which of the following activities are mostly available & accessible to take part in during P.E?

PLEASE TICK ALL ANSWERS THAT APPLY TO YOU

- | | | | |
|----------------------------|--------------------------|---------------------------------------|--------------------------|
| 1. Aerobics/Dance ----- | <input type="checkbox"/> | 16. Hockey ----- | <input type="checkbox"/> |
| 2. Athletics ----- | <input type="checkbox"/> | 17. Netball ----- | <input type="checkbox"/> |
| 3. Swimming ----- | <input type="checkbox"/> | 18. Rock-climbing ----- | <input type="checkbox"/> |
| 4. Basketball ----- | <input type="checkbox"/> | 19. Rugby/Touch/League ----- | <input type="checkbox"/> |
| 5. Baseball/Softball----- | <input type="checkbox"/> | 20. Skiing----- | <input type="checkbox"/> |
| 6. Canoeing/Kayaking-- | <input type="checkbox"/> | 21. Soccer (indoors & outdoors) ----- | <input type="checkbox"/> |
| 7. Cricket ----- | <input type="checkbox"/> | 22. Tennis ----- | <input type="checkbox"/> |
| 8. Cycling ----- | <input type="checkbox"/> | 23. Volley ball ----- | <input type="checkbox"/> |
| 9. Golf ----- | <input type="checkbox"/> | 24. Walking/Hiking/Orienteering ----- | <input type="checkbox"/> |
| 10. Gymnastics ----- | <input type="checkbox"/> | 25. Sailing ----- | <input type="checkbox"/> |
| 11. Water-Polo----- | <input type="checkbox"/> | 26. Ultimate Frisbee ----- | <input type="checkbox"/> |
| 12. Surfing----- | <input type="checkbox"/> | 27. Scooting/skateboarding ----- | <input type="checkbox"/> |
| 13. Jogging ----- | <input type="checkbox"/> | 28. Other ----- | <input type="checkbox"/> |
| 14. Weights/Gym ----- | <input type="checkbox"/> | 29. Unsure/don't know ----- | <input type="checkbox"/> |
| 15. Circuit-training ----- | <input type="checkbox"/> | | |

33. In your own free-time (time spent away from school), which of the following activities are mostly available & accessible for you to take part in?

PLEASE TICK ALL ANSWERS THAT APPLY TO YOU

- | | | | |
|----------------------------|--------------------------|---------------------------------------|--------------------------|
| 1. Aerobics/Dance ----- | <input type="checkbox"/> | 16. Hockey ----- | <input type="checkbox"/> |
| 2. Athletics ----- | <input type="checkbox"/> | 17. Netball ----- | <input type="checkbox"/> |
| 3. Swimming ----- | <input type="checkbox"/> | 18. Rock-climbing ----- | <input type="checkbox"/> |
| 4. Basketball ----- | <input type="checkbox"/> | 19. Rugby/Touch/League ----- | <input type="checkbox"/> |
| 5. Baseball/Softball----- | <input type="checkbox"/> | 20. Skiing----- | <input type="checkbox"/> |
| 6. Canoeing/Kayaking-- | <input type="checkbox"/> | 21. Soccer (indoors & outdoors) ----- | <input type="checkbox"/> |
| 7. Cricket ----- | <input type="checkbox"/> | 22. Tennis ----- | <input type="checkbox"/> |
| 8. Cycling ----- | <input type="checkbox"/> | 23. Volley ball ----- | <input type="checkbox"/> |
| 9. Golf ----- | <input type="checkbox"/> | 24. Walking/Hiking/Orienteering ----- | <input type="checkbox"/> |
| 10. Gymnastics ----- | <input type="checkbox"/> | 25. Sailing ----- | <input type="checkbox"/> |
| 11. Water-Polo----- | <input type="checkbox"/> | 26. Ultimate Frisbee ----- | <input type="checkbox"/> |
| 12. Surfing----- | <input type="checkbox"/> | 27. Scooting/skateboarding ----- | <input type="checkbox"/> |
| 13. Jogging ----- | <input type="checkbox"/> | 28. Other ----- | <input type="checkbox"/> |
| 14. Weights/Gym ----- | <input type="checkbox"/> | 29. Unsure/don't know ----- | <input type="checkbox"/> |
| 15. Circuit-training ----- | <input type="checkbox"/> | | |

34. Does your school reward and/or recognise students' achievements in sports and physical activities?

34.1. Yes

☐

34.2. No

☐

34.3. Unsure

☐

34.4. Don't Know

☐

35. I stay informed about PE programmes and ECPA events that are provided by my school through

PLEASE TICK ALL ANSWERS THAT APPLY TO YOU

35.1. School Newsletters ☐

35.2. Posters/Flyers ☐

35.3. My Parents ☐

35.4. My school Teachers ☐

35.5. School Website ☐

35.6. Classmates & friends ☐

35.7. Other media (Twitter, Txt, Facebook...) ☐

You have completed the questionnaire

Thank you for your cooperation.

Please check that you have answered every question, and return the questionnaire to your Head of HPE In the provided envelop.

Appendix D**Extra-Curricular Physical Activity Survey:****For Year 12 Students who are NOT****Taking PE as an NCEA Option****June-July 2013**

Only the researcher will be able to know your individual answers

Please put your name in the box below. It will be used to select 9 out of more than 600 Year 12 students from 9 different High Schools to be interviewed in July, and/or August 2013. Your name will also be used to draw the winner of a \$30 gift (sports-gear voucher) that will be sent out to one student (from each participating school) as a show of appreciation for their time and contributions.

Students' Name

PHYSICAL ACTIVITY PARTICIPATION QUESTIONNAIRE

FOR YEAR 12 STUDENTS NOT DOING PE (AS AN OPTION FOR NCEA EXAMS)

Thank you for taking part in this survey. By completing this questionnaire you will help us find out more about the conditions that encourage or constrain young people from participating in Extra-Curricular Physical Activities.

In this questionnaire, Extra-Curricular Physical Activity refers to all types of “movement activities” that you take part of outside the school hours. They include walking, cycling, scooting, skate boarding, jogging, playing sports, playing social games ...

Please answer all questions even if you do not consider yourself to be an active person. Some questions have helpful instructions typed in **BOLD FONT**.

Section: 1. Questions about you and your physical activities

Please tick the box that represents your answer

1. Are you?

- | | |
|-----------------|--------------------------|
| 1. Female | <input type="checkbox"/> |
| 2. Male | <input type="checkbox"/> |

2. What is your age?

2.1. Years

2.2. Months

3. Are you doing any form of paid work after the school day?

3.1. Yes

3.2. No

4. How do you regularly get to school?

PLEASE TICK ALL ANSWERS THAT APPLY TO YOU

- | | |
|-------------------------------------|--------------------------|
| 1. I walk | <input type="checkbox"/> |
| 2. I bike | <input type="checkbox"/> |
| 3. I scoot or skate | <input type="checkbox"/> |
| 4. I drive or get dropped-off | <input type="checkbox"/> |
| 5. I use a bus | <input type="checkbox"/> |
| 6. Other | <input type="checkbox"/> |

5. How long does it usually take you to get to school?

- | | |
|-----------------------------|--------------------------|
| 1. Under 10 minutes | <input type="checkbox"/> |
| 2. Under 20 minutes | <input type="checkbox"/> |
| 3. Under 30 minutes | <input type="checkbox"/> |
| 4. 30 minutes or more | <input type="checkbox"/> |

6. Which of the following extra-curricular activities (ECA) are provided and/or encouraged at your school?

PLEASE TICK ALL ANSWERS THAT APPLY TO YOU

- | | | | |
|-----------------------------------|--------------------------|----------------------------|--------------------------|
| 1. Sports/Exercise | <input type="checkbox"/> | 8. Chess | <input type="checkbox"/> |
| 2. Outdoor Recreation | <input type="checkbox"/> | 9. Study-groups | <input type="checkbox"/> |
| 3. Music | <input type="checkbox"/> | 10. All of the above | <input type="checkbox"/> |
| 4. Drama/theatre | <input type="checkbox"/> | 11. Do not know..... | <input type="checkbox"/> |
| 5. Visual Arts | <input type="checkbox"/> | 12. Other..... | <input type="checkbox"/> |
| 6. Reading/writing | <input type="checkbox"/> | 13. What is it? | <input type="text"/> |
| 7. Dance/rhythmic-gymnastics..... | <input type="checkbox"/> | | |

7. Do you take part in any of the following Extra-curricular activities?

PLEASE TICK ALL ANSWERS THAT APPLY TO YOU

- | | | | |
|-----------------------------------|--------------------------|--------------------------------------|--------------------------|
| 1. Sports/Exercise | <input type="checkbox"/> | 8. Chess | <input type="checkbox"/> |
| 2. Outdoor Recreation | <input type="checkbox"/> | 9. Study-groups | <input type="checkbox"/> |
| 3. Music | <input type="checkbox"/> | 10. All of the above | <input type="checkbox"/> |
| 4. Drama/theatre | <input type="checkbox"/> | 11. Do not participate in any ECA .. | <input type="checkbox"/> |
| 5. Visual Arts | <input type="checkbox"/> | 12. Other..... | <input type="checkbox"/> |
| 6. Reading/writing | <input type="checkbox"/> | 13. What is it? | <input type="text"/> |
| 7. Dance/rhythmic-gymnastics..... | <input type="checkbox"/> | | |

8. Do you take part in Secondary School Sports (competitions)?

- | | |
|--------------|--------------------------|
| 1. Yes | <input type="checkbox"/> |
| 2. No | <input type="checkbox"/> |

9. Do you take part in Intra-mural physical activities (semi or fully organized sports, fitness, games and recreational activities offered within your own school)?

- | | |
|--------------|--------------------------|
| 1. Yes | <input type="checkbox"/> |
| 2. No | <input type="checkbox"/> |

10. Are you a member of a sports' club or dance or fitness association from outside your school?

1. Yes ☐
2. No ☐

11. When you are not in school, do you do any form of fitness (like Aerobics, dance, weights), exercise (long walks, swimming, running) or sports on your own (by yourself)?

1. Yes ☐
2. No ☐

12. When you are not in school, do you do any form of fitness, exercise or sports with family and friends?

1. Yes ☐
2. No ☐

13. In terms of participation in all types of Physical Activity, do you consider yourself

1. Very active ☐
2. Moderately active ☐
3. Inactive (if you rarely or don't do PA at all) ☐

Section. 2: Questions about the student's access and the availability of health, sport, and recreation resources and facilities

14. I think that my school has **outdoor** facilities (fields & courts) that are

14.1 More than adequate

☐

14.2 Adequate

☐

14.3 Inadequate

☐

15. I think that **access** to my school's **outdoor** facilities is

15.1 More than adequate

☐

15.2 Adequate

☐

15.3 Inadequate

☐

16. I think that my school has **indoor** facilities (gymnasiums & courts) that are

16.1 More than adequate

☐

16.2 Adequate

☐

16.3 Inadequate

☐

17. I think that **access** to my school's **indoor** facilities is

17.1 More than adequate

☐

17.2 Adequate

☐

17.3 Inadequate

☐

18. How would you rate the quality of your school's changing and showering facilities?

18.1 Very good

☐

18.2 Good

☐

18.3 Average

☐

18.4 Below average

☐

19. Does your school have a secure bicycle-parking area for students?

19.1 Yes

☐

19.2 No

☐

19.3 Unsure

☐

19.4 Don't Know

☐

20. Does your school provide the students with equipment and facilities for fitness, play or sports during recess (long breaks from class)?

20.1 Yes

☐

20.2 No

☐

20.3 Unsure

☐

20.4 Don't Know

☐

21. Does your school provide supervisors for fitness, play or sports during recess?

21.1 Yes

☐

21.2 No

☐

21.3 Unsure

☐

21.4 Don't Know

☐

Section.3: Questions about the student's perceptions of the Physical Education policies and practices in their school

22. Is participation in secondary school sports competitions:

1. Compulsory ☐
2. Optional ☐
3. Unsure ☐
4. Don't know ☐

23. Participation in secondary school sports competitions is:

1. Structured ☐
2. Semi-structured ☐
3. Unstructured ☐
4. Don't know ☐

24. Participation in secondary school sports is:

1. Totally-free ☐
2. Partially-free (some sports are free, others cost money) ☐
3. Not-free at all (students always pay extra fees)..... ☐
4. Do not know ☐

25. Does your school have a culture of encouraging students to do physical activities during recess times?

25.1. Yes

☐

25.2. No

☐

25.3. Unsure

☐

25.4. Don't Know

☐**26. Does your school offer students the opportunity to take part in other Extra-Curricular Physical Activities (ECPA) like camps, ski trips, kayaking, rock climbing, cycling ...?**

26.1 Yes

☐

26.2. No

☐

26.3. Unsure

☐

26.4. Don't Know

☐**27. In your school, which of the following activities are mostly available & accessible to take part in during P.E?****PLEASE TICK ALL ANSWERS THAT APPLY TO YOU**

- | | | | |
|----------------------------|--------------------------|---------------------------------------|--------------------------|
| 1. Aerobics/Dance ----- | <input type="checkbox"/> | 16. Hockey ----- | <input type="checkbox"/> |
| 2. Athletics ----- | <input type="checkbox"/> | 17. Netball ----- | <input type="checkbox"/> |
| 3. Swimming ----- | <input type="checkbox"/> | 18. Rock-climbing ----- | <input type="checkbox"/> |
| 4. Basketball ----- | <input type="checkbox"/> | 19. Rugby/Touch/League ----- | <input type="checkbox"/> |
| 5. Baseball/Softball----- | <input type="checkbox"/> | 20. Skiing----- | <input type="checkbox"/> |
| 6. Canoeing/Kayaking--- | <input type="checkbox"/> | 21. Soccer (indoors & outdoors) ----- | <input type="checkbox"/> |
| 7. Cricket ----- | <input type="checkbox"/> | 22. Tennis ----- | <input type="checkbox"/> |
| 8. Cycling ----- | <input type="checkbox"/> | 23. Volley ball ----- | <input type="checkbox"/> |
| 9. Golf ----- | <input type="checkbox"/> | 24. Walking/Hiking/Orienteering ----- | <input type="checkbox"/> |
| 10. Gymnastics ----- | <input type="checkbox"/> | 25. Sailing ----- | <input type="checkbox"/> |
| 11. Water-Polo----- | <input type="checkbox"/> | 26. Ultimate Frisbee ----- | <input type="checkbox"/> |
| 12. Surfing----- | <input type="checkbox"/> | 27. Scooting/skateboarding ----- | <input type="checkbox"/> |
| 13. Jogging----- | <input type="checkbox"/> | 28. Other ----- | <input type="checkbox"/> |
| 14. Weights/Gym ----- | <input type="checkbox"/> | 29. Do not know ----- | <input type="checkbox"/> |
| 15. Circuit-training ----- | <input type="checkbox"/> | | |

28. In your own free-time (time spent away from school), which of the following activities are mostly available & accessible for you to take part in?

PLEASE TICK ALL ANSWERS THAT APPLY TO YOU

- | | | | |
|----------------------------|--------------------------|---------------------------------------|--------------------------|
| 1. Aerobics/Dance ----- | <input type="checkbox"/> | 16. Hockey ----- | <input type="checkbox"/> |
| 2. Athletics ----- | <input type="checkbox"/> | 17. Netball ----- | <input type="checkbox"/> |
| 3. Swimming ----- | <input type="checkbox"/> | 18. Rock-climbing ----- | <input type="checkbox"/> |
| 4. Basketball ----- | <input type="checkbox"/> | 19. Rugby/Touch/League ----- | <input type="checkbox"/> |
| 5. Baseball/Softball----- | <input type="checkbox"/> | 20. Skiing----- | <input type="checkbox"/> |
| 6. Canoeing/Kayaking-- | <input type="checkbox"/> | 21. Soccer (indoors & outdoors) ----- | <input type="checkbox"/> |
| 7. Cricket ----- | <input type="checkbox"/> | 22. Tennis ----- | <input type="checkbox"/> |
| 8. Cycling ----- | <input type="checkbox"/> | 23. Volley ball ----- | <input type="checkbox"/> |
| 9. Golf ----- | <input type="checkbox"/> | 24. Walking/Hiking/Orienteering ----- | <input type="checkbox"/> |
| 10. Gymnastics ----- | <input type="checkbox"/> | 25. Sailing ----- | <input type="checkbox"/> |
| 11. Water-Polo----- | <input type="checkbox"/> | 26. Ultimate Frisbee ----- | <input type="checkbox"/> |
| 12. Surfing----- | <input type="checkbox"/> | 27. Scooting/skateboarding ----- | <input type="checkbox"/> |
| 13. Jogging ----- | <input type="checkbox"/> | 28. Other ----- | <input type="checkbox"/> |
| 14. Weights/Gym ----- | <input type="checkbox"/> | 29. Do not know ----- | <input type="checkbox"/> |
| 15. Circuit-training ----- | <input type="checkbox"/> | | |

29. Does your school reward and/or recognise students' achievements in sports and Physical Activities?

29.1. Yes

☐

29.2. No

☐

29.3. Unsure

☐

29.4. Don't Know

☐

30. I stay informed about PE programmes and ECPA events that are provided by my school through:

PLEASE TICK ALL ANSWERS THAT APPLY TO YOU

- | | |
|---|--------------------------|
| 30.1. School Newsletters | <input type="checkbox"/> |
| 30.2. Posters/Flyers | <input type="checkbox"/> |
| 30.3. My Parents | <input type="checkbox"/> |
| 30.4. My school Teachers | <input type="checkbox"/> |
| 30.5. School Website | <input type="checkbox"/> |
| 30.6. Classmates & friends | <input type="checkbox"/> |
| 30.7. Other media (Twitter, Txt, Facebook...) | <input type="checkbox"/> |

You have completed the questionnaire

Thank you for your cooperation.

Please check that you have answered every question, and return the questionnaire to your Head of HPE In the provided envelop.

Appendix E

Larbi Moutrib

Telephone: +64 3 357 9075 Mb: 027 290 1173

Email: larbi.moutrib@pg.canterbury.ac.nz

Date: 30/07/2013

Information Letter for the Principal and/or Board of Trustees Chair

Dear Sir/Madam

My name is Larbi Moutrib. As a requirement for the completion of a PhD programme that I am taking at the College of Education (University of Canterbury), I am carrying out a survey about the influence of Physical Education (PE) on the maintenance and increase of the recommended levels of physical activity (PA) among secondary school students. I have taught PE and Sports and Recreation Management in various secondary and tertiary institutions in NZ and abroad, and I have conducted 2 educational research projects in the past.

I would like to invite the HoD of HPE and all Year 12 students at your school to participate in my current study. If you agree that they can be asked to take part in this study,

- The HoD of HPE will be invited to a 30 minute interview, and to assist with handing out and collecting the questionnaires to and from all Year 12 students.
- All Year 12 students will be invited to complete a (take-home) questionnaire about the PE curriculum and their participation in Extra-curricular Physical activities. The questionnaire is presented in two versions (one for students doing PE and one for those who don't), and will take approximately 15 minutes to complete.
- After the collection of the questionnaires and comparing the results of the PA levels of all participants, 9 out of the surveyed students (3 highly active, 3 moderately active, and 3 inactive) will be invited to participate in semi-structured and recorded interviews.
- As a show of appreciation for the Year 12 students' time and contributions, one student from each of the participating schools will win a \$30 sports-gear voucher following a draw which will take place on the data collection date.

Please note that participation in this study is voluntary. The HoD of HPE and Year 12 students will have the right to withdraw from it at any time without penalty. If they chose to withdraw, I will do my best to remove any information relating to them, provided this is practically achievable.

I will take particular care to ensure the confidentiality of all data gathered for this study. I will also ensure the anonymity of all participants in publications of the findings. All raw data will be held securely and kept for a minimum period of 5 years following completion of the project and then destroyed. The results of this research may be used to revise and improve programmes in PE. The results will also be reported internationally at conferences and in PE teaching journals. All participants will be able to request a summary of the study.

If you have any questions about the study, please contact me (see details above) or my Senior Supervisor, Dr Billy O'Steen at billy.osteen@canterbury.ac.nz or 03-364-2851. If you have a complaint about the study, you may contact: The Chair, Educational Research Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz). If you agree for members of your school to participate in this study, please complete the attached consent form and return it to me in the envelope provided by the 30th of August, 2013.

I am looking forward to working with you and thank you in advance for your contributions.

Larbi Moutrib

Summaries of the questionnaires and Interviews

A. Overview of the questionnaires:

The Extra-Curricular Physical Activity Survey is intended to record data about the Year 12 students' profiles and their opinions about:

- The resources and facilities that are available to them for PE and ECPA,
- Their levels of participation in ECPA,
- And some of the general PE policies adopted in their schools (i.e., clothing, showering...)

B. Overview of the Interviews:

The interviews with staff and students will be the main source of gathering information about the relationship between PE and ECPA. They will be semi-structured with allowance made for the addition of new (unprepared) questions to be raised if the participants find it more suitable to extensively deliberate on particular aspects of their experiences.

Most of the interview-questions are based on existing literature, they are divided into three categories which cover the curriculum, environment, and PE practices.

In total, the researcher will prepare 4 different interviews: one for the HoD of HPE and three for the students. The table below includes a summary of the topics and type of questions which will be presented and discussed during the interviews.

Participants	Curriculum Questions/topics	Environment Questions/topics	Policy & Practice Questions/topics	Expected duration
HoD-HPE	<ul style="list-style-type: none"> . Students' understanding of the contributions of PE to the curriculum. . Students' understanding of the contributions of PE to wellbeing . Status and state of PE 	<ul style="list-style-type: none"> . Access to school facilities . Cooperation with other teachers . Cooperation with other community organizations . Time left for PA after homework & exams 	<ul style="list-style-type: none"> . Cohesion between PE goals and the goals of other leisure and recreation providers . Type of activities available for ECPA . Impact of curriculum changes 	30 minutes max
Active students	<ul style="list-style-type: none"> . Awareness of PE's health benefits . Positive aspects of the HPE curriculum . Negative aspects 	<ul style="list-style-type: none"> . Which environment factors encourage PA & Why? . Importance of parental support . Time left for PA after homework & exams 	<ul style="list-style-type: none"> . Which PE activities are carried over into lifestyle? . Practices encouraging participation in ECPA 	30 minutes max
Moderately-active students	<ul style="list-style-type: none"> . Awareness of PE's health benefits . Positive aspects of the HPE curriculum 	<ul style="list-style-type: none"> . Which environment factors encourage PA . Which environment factors inhibit PA& Why? 	<ul style="list-style-type: none"> . Which PE activities are hard to carry-over into lifestyle? 	30 minutes max

	. Negative aspects	. Time left for PA after homework & exams		
Inactive/sedentary students	. Awareness of PE's health benefits . Positive aspects of the HPE curriculum . Negative aspects	. Which environment factors inhibit PA & Why? . Time left for PA after homework & exams	. Which initiatives would motivate the "inactive" to participate?	30 minutes max

Appendix F



College of Education
 Larbi Moutrib
 University of Canterbury
 Dovedale Avenue
 Ph. 03 357 9075 or 027 290 1173
 Email: larbi.moutrib@pg.canterbury.ac.nz

Date: 30/07/2013

The Influence of the PE Curriculum on the Participation of Year 12 Students in Extra-Curricular Physical Activity

Consent Form for the Principal and/or Board of Trustees Chair

(Please tick each box)

- ☐ I have read the information letter and understand what will be required of me if I grant the HoD of HPE and Year 12 students in the school my consent to participate in this project.
- ☐ I have read the information letter and understand that all information collected will only be accessed by the researcher and that it will be kept confidential and secure.
- ☐ I understand that neither I, nor my school, will be identified in any presentations or publications that draw on this research.
- ☐ I understand that my school's participation is voluntary and that participants may choose to withdraw at any time.
- ☐ I understand that I can receive a report on the findings of the study. I have written my e.mail address below for the report to be sent to.
- ☐ I understand that I can get more information about this project from the researcher and that I can contact Dr Billy O'Steen (senior supervisor) at billy.osteen@canterbury.ac.nz , ph: 03-364-2851 or the Educational Research Human Ethics Committee if I have any complaints about the research at: Chair, Educational Research Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz).
- ☐ I and the school's BOT grant you my initial approval for contacting the HoD of HPE at my school and making arrangements for future procedures: His/her name is:
 Ph. Number: e-mail:

Principal's name: _____

Name of High School: _____

Signature: _____

Date: _____

Email address for report: _____

Please return this consent form in the sealed envelope I have provided by August , 2013.

Appendix G



Larbi Moutrib

Telephone: +64 3 351 1448 or 027 290 1173

Email: larbi.moutrib@pg.canterbury.ac.nz

The Influence of the 2007 NZ PE Curriculum on the Participation of Year 12 Students in Extra-Curricular Physical Activity

Date: 30/07/2013

Information letter for the HoD of HPE

My name is Larbi Moutrib. As a requirement for the completion of a PhD programme that I am taking at the College of Education (University of Canterbury), I am carrying out a survey about the influence of Physical Education (PE) on the maintenance and increase of the recommended levels of physical activity (PA) among secondary school students. I have taught PE and Sports and Recreation Management in various secondary and tertiary institutions in NZ and abroad, and I have conducted 2 educational research projects in the past.

I would like to invite you to participate in my present study. If you agree, you will be asked to:

- participate in a 30 minute (audio) recorded interview with the researcher, and
- liaise between the researcher and all Year 12 students from your school so that they can be invited to complete a (take-home) questionnaire about the influence of the school's implementation of the NZ PE curriculum on their participation in Extra-Curricular PA.
- The questionnaire is presented in two versions: one for students doing PE and one for those who don't, It will be completed in less than 15 minutes. Please check the back of this page for summaries of the questionnaires and the interviews.
- As a show of appreciation for the Year 12 students' time and contributions, one student from each of the participating schools will win a \$30 sports-gear voucher following a draw which will take place on the data collection date.

After analysing the results of the Year 12 students' questionnaires, I intend to invite up to 9 students for follow-up interviews. These 9 students will be selected according to low, medium, and high extra-curricular PA as reported on their surveys.

Please note that participation in this study is voluntary. You have the right to withdraw from the study at any time without penalty. If you withdraw, I will do my best to remove any information relating to you, provided this is practically achievable.

I will take particular care to ensure the confidentiality of all data gathered for this study. I will also take care to ensure their anonymity in publications of the findings. All the raw data will be held securely and kept for a minimum period of 5 years following completion of the project and then destroyed.

The results of this research may be used to revise and improve programmes in PE. The results will also be reported internationally at conferences and in PE teaching journals. All participants will be able to request a summary of the study. If you have any questions about the study, please contact me (details above) or my Senior Supervisor, Dr Billy O'Steen at billy.osteen@canterbury.ac.nz or 03-364-2851. If you have a complaint about the study, you may contact the: Chair, Educational Research Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz).

If you agree to participate in this study, please complete the attached consent form and return it to me in the provided envelop by the **end of August, 2013**.

I am looking forward to working with you and thank you in advance for your contributions.

Larbi Moutrib

Summaries of the questionnaires and Interviews

C. Overview of the questionnaires:

The Extra-Curricular Physical Activity Survey is intended to record data about the Year 12 students' profiles and their opinions about:

- The resources and facilities that are available to them for PE and ECPA,
- Their levels of participation in ECPA,
- And some of the general PE policies adopted in their schools (i.e., clothing, access...)

D. Overview of the Interviews:

The interviews with staff and students will be the main source of gathering information about the relationship between PE and ECPA. They will be semi-structured with allowance made for the addition of new (unprepared) questions to be raised if the participants find it more suitable to extensively deliberate on particular aspects of their experiences.

Most of the interview-questions are based on existing literature, they are divided into three categories which cover the curriculum, environment, and PE practices.

In total, the researcher will prepare 4 different interviews: one for the HoD of HPE and three for the students. The table below includes a summary of the topics and type of questions which will be presented and discussed during the interviews.

Participants	Curriculum Questions/topics	Environment Questions/topics	Policy & Practice Questions/topics	Expected duration
HoD-HPE	. Students' understanding of the contributions of PE to the curriculum. . Students' understanding of the contributions of PE to wellbeing . Status and state of PE	. Access to school facilities . Cooperation with other teachers . Cooperation with other community organizations . Time left for PA after homework & exams	. Cohesion between PE goals and the goals of other leisure and recreation providers . Type of activities available for ECPA . Impact of curriculum changes	30 minutes max
Active students (. Awareness of PE's health benefits . Positive aspects of the HPE curriculum . Negative aspects	. Which environment factors encourage PA & Why? . Importance of parental support . Time left for PA after homework & exams	. Which PE activities are carried over into lifestyle? . Practices encouraging participation in ECPA	30 minutes max
Moderately-active students	. Awareness of PE's health benefits . Positive aspects of the HPE curriculum . Negative aspects	. Which environment factors encourage PA . Which environment factors inhibit PA & Why? . Time left for PA after homework & exams	. Which PE activities are hard to carry-over into lifestyle?	30 minutes max
Inactive/sedentary students	. Awareness of PE's health benefits . Positive aspects of the HPE curriculum . Negative aspects	. Which environment factors inhibit PA & Why? . Time left for PA after homework & exams	. Which initiatives would motivate the "inactive" to participate?	30 minutes max

Larbi Moutrib

Telephone: +64 3 351 1448 or 027 290 1173

Email: larbi.moutrib@pg.canterbury.ac.nz

Appendix H

Date: 30/07/2013

An Investigation into the Influence of the 2007 NZ PE Curriculum on the Participation of Year 12 Students in Extra-Curricular Physical Activity

Consent Form for the HoD of HPE

(Please tick each box)

- ☐ I have read the information letter and understand what will be required of me if I participate in this project.
- ☐ I understand that all information collected will only be accessed by the researcher and that it will be kept confidential and secure.
- ☐ I understand that neither I, nor my school, will be identified in any presentations or publications that draw on this research.
- ☐ I understand that my participation is voluntary and I may choose to withdraw at any time.
- ☐ I understand that I can receive a report on the findings of the study. I have written my email address below for the report to be sent to.
- ☐ I understand that I can get more information about this project from the researcher and that I can contact the Educational Research Human Ethics Committee if I have any complaints about the research at: Chair, Educational Research Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz).
- ☐ I agree to participate in this research and my Principal and BOT have also given approval on their Consent form.

Full name (teacher): _____

School: _____

Signature: _____

Date: _____

Email address for follow-ups and project reports if required: _____

Please return this consent form in the sealed envelope by the end of August, 2013.

Appendix I

Larbi Moutrib
 Telephone: +64 3 351 1448
 Email: larbi.moutrib@pg.canterbury.ac.nz



Date: 30/07/2013

The Influence of the 2007 NZ PE Curriculum on the Participation Of Year 12 Students in Extra-Curricular Physical Activity Information letter for Parents of Year 12 Students

My name is Larbi Moutrib, I am investigating strategies to increase and maintain the recommended levels of physical activity (PA) among secondary school students as a requirement for the completion of a Ph.D programme at the College of Education, University of Canterbury. I have taught Physical Education (PE) and Sports and Recreation Management at various secondary and tertiary institutions in NZ and abroad, and I have conducted 2 educational research projects in the past.

I would like to invite your daughter/son to participate in my current study. If you grant your child permission to do so, she/he will be:

- Invited to complete a (take-home) questionnaire about the influence of the Physical Education Curriculum on their participation in Extra-Curricular Physical Activity. The questionnaire will take approximately 15 minutes.
- At a later stage, 9 out of the total students surveyed (estimated to be over 200) will be invited for a 40 minutes interview (about physical activity) with the researcher.
- As a show of appreciation for the year 12 students time and contributions, 1 student from each school will win a \$30 sports voucher (the draw for the voucher will be completed at the time when the questionnaires are collected).

Please note that your child's participation in this study is voluntary. She/he has the right to withdraw from the study at any time without penalty. If she/he does withdraw, I will do my best to remove any information relating to your child, provided this is practically achievable.

I will take particular care to ensure the confidentiality of all data gathered for this study. I will also take care to ensure your child's anonymity in publications of the findings. All the raw data will be held securely and kept for a minimum period of 5 years following completion of the project and then destroyed. The results of this research may be used to revise and improve programmes in PE. The results will also be reported internationally at conferences and in PE teaching journals. All participants will be able to request a summary of the study.

If you have any questions about the study, please contact me (details above). If you have a complaint about the study, you may contact: The Chair, Educational Research Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz).

If you grant permission for your child to participate in this study, please complete the attached consent form and return it to me in the envelope provided by August 2013.

Thank you in advance for your consideration.

Larbi Moutrib

Appendix J

Larbi Moutrib
University of Canterbury
Dovedale Avenue
Ph. 03 351 1448 or 027 290 1173
Email: larbi.moutrib@pg.canterbury.ac.nz



Date: 30/07/2013

An Investigation into the Influence of the 2007 NZ PE Curriculum on the Participation of Year12 Students in Extra-Curricular Physical Activity

Consent Form for Parents

(Please tick each box)

- ☐ I have read the information letter and understand what will be required of my son/daughter if he/she participates in this project.
- ☐ I have read the information letter and understand that all information collected will only be accessed by the researcher and that it will be kept confidential and secure.
- ☐ I understand that neither I, nor my child's school, will be identified in any presentations or publications that draw on this research.
- ☐ I understand that my child's participation is voluntary and that he/she may choose to withdraw at any time.
- ☐ I understand that I can receive a report on the findings of the study. I have written my email address below as I'm interested in receiving a copy of it.
- ☐ I understand that I can get more information about this project from the researcher and that I can contact the Educational Research Human Ethics Committee if I have any complaints about the research at: Chair, Educational Research Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz).
- ☐ I agree for my son/daughter to participate in this research.

Full name (parent): _____

Name of son/daughter: _____

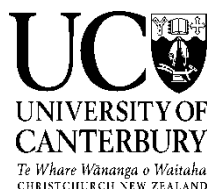
Signature : _____

Date: _____

Email address for report: _____

Please return this consent form in the sealed envelope to the researcher.

Appendix K



Larbi Moutrib
 University of Canterbury
 Dovedale Avenue
 Ph. 03 351 1448 or 027 290 1173
 e.mail: larbi.moutrib@pg.canterbury.ac.nz
 Date: Yet to be determined

An Investigation into the Influence of the 2007 NZ PE Curriculum on the Participation of Year12 Students in Extra-Curricular Physical Activity

Interview Consent-Form for Students

(Please tick each box)

- ☐ I have read the information letter and understand what will be required of me if I participate in this project.
- ☐ I have read the information sheet and understand that all information collected will only be accessed by the researcher and that it will be kept confidential and secure.
- ☐ I understand that neither I, nor my school, will be identified in any presentations or publications that draw on this research.
- ☐ I understand that my participation is voluntary and that I may choose to withdraw at any time.
- ☐ I understand that I can receive a report on the findings of the study. I have written my email address below for the report to be sent to.
- ☐ I understand that I can get more information about this project from the researcher and that I can contact the Educational Research Human Ethics Committee if I have any complaints about the research at: Chair, Educational Research Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz).
- ☐ I agree to participate in this research

Full name: _____
 Signature: _____
 Date: _____
 Email address for report: _____

Please return this consent form in the sealed envelope to the researcher.

Larbi Moutrib
 College of Education
 University of Canterbury
 Dovedale Avenue
 Ph. 03 351 1448 or 027 290 1173
 Email: larbi.moutrib@pg.canterbury.ac.nz
 Date: 14/02/2013



An Investigation into the Influence of the 2007 NZ PE Curriculum on the Participation of Year 12 Students in Extra-Curricular Physical Activity

Survey Consent Form for Students

(Please tick each box)

- ☐ I have read the information letter and understand what will be required of me if I participate in this project.
- ☐ I have read the information sheet and understand that all information collected will only be accessed by the researcher and that it will be kept confidential and secure.
- ☐ I understand that neither I, nor my school, will be identified in any presentations or publications that draw on this research.
- ☐ I understand that my participation is voluntary and I may choose to withdraw at any time.
- ☐ I understand that I can receive a report on the findings of the study. I have written my email address below for the report to be sent to.
- ☐ I understand that I can get more information about this project from the researcher and that I can contact the Educational Research Human Ethics Committee if I have any complaints about the research at: Chair, Educational Research Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz).
- ☐ I agree to participate in this research and my parents have also given approval on their Consent-form.

Full name (student): _____
 Class: _____
 HOD of HPE: _____
 Signature: _____
 Date: _____
 Email address for report: _____

Please return this consent form in the sealed envelope to your HOD of HPE.

Appendix M

Teacher's Interview-questions:

1. What are your overall impressions of the 2007 curriculum?
 - Is it working? Suitable for the needs of the students? Better than its predecessor?
2. What are your overall impressions of the extra-curricular Physical Activity (ECPA) of year 12 students?
 - Do they meet the World Health Organisation (WHO) recommendations?
3. How would you describe the role of PE in preparing students for active lifestyles?
 - What is working? What is not?
4. Two major NZ surveys show a gradual decline in students' participation in secondary school sports (SSS). What causes this decline (in your opinion)?
5. How do the policies and practices of SSS fit with the policies and practices that you promote in HPE?
 - Do they complement each other?
6. What impact do the NCEA exams have on the participation of students in PE & ECPA?
 - None? Constraining? Encouraging?
7. Most relevant studies indicate that the main reason for which students participate in PE and Sport is FUN. Do you think that the current curriculum provides enough opportunities for fun or free-expression?
8. How would you describe your schools' relationship with the following groups or organisations:
 - a. Sports coordinators
 - b. Other schools
 - c. Health sector
 - d. Other non-profit and commercial providers

Thanks

Appendix N

Students' individual and group-interviews (questions):

Q.1: Are you informed of the health and education sectors recommendations for young people to do 5 x 60 minutes of moderate to vigorous physical activity per a week?

If yes, how were you informed?

Q.2: Roughly, how much moderate to vigorous PA you do per a week?

Q.3: Where there in changes in the frequency of your participation in PA throughout your schooling?

Q.4: In your opinion, which factors have the most influence on your participation in extra-curricular physical activity (ECPA)? Parents, teachers, money, facilities?

Q.5: Which factors constrain/may restrict your participation in ECPA? barriers?

Q.6: How would you rate the contribution(s) of the curriculum/your schooling to your participation in ECPA? Or what valuable skills you learned from PE that help you participate in ECPA?

Q.7: How do you find the balance between the demands of school assessments and the adoption of regular PA?

Q.8: How would you rate the contributions of society (family, clubs, friends, government ...) as a whole to your participation in ECPA?

Q.9: If you were asked to make recommendations for improving the state of PE in schools, what suggestions would you make?

Q.10: Are there any important questions about the PE curriculum and ECPA that I may have neglected and that you may wish to talk about before we finish this interview?