

**An Investigation into the Opinions of Manitoba Public School Principals Toward
the Instructional Physical Education Program**

by

**Gordon C. Poulton
0741150**

**A Thesis
Submitted to the Faculty of Graduate Studies
In Partial Fulfillment of the Requirement for the
Degree of Masters of Education
Department of Curriculum : Mathematics and Natural Sciences
Faculty of Education
University of Manitoba**

(c) June 1997



**National Library
of Canada**

**Acquisitions and
Bibliographic Services**

**395 Wellington Street
Ottawa ON K1A 0N4
Canada**

**Bibliothèque nationale
du Canada**

**Acquisitions et
services bibliographiques**

**395, rue Wellington
Ottawa ON K1A 0N4
Canada**

Your file Votre référence

Our file Notre référence

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-23461-4

**THE UNIVERSITY OF MANITOBA
FACULTY OF GRADUATE STUDIES

COPYRIGHT PERMISSION PAGE**

**AN INVESTIGATION INTO THE OPINIONS OF MANITOBA PUBLIC SCHOOL
PRINCIPALS TOWARD THE INSTRUCTIONAL PHYSICAL EDUCATION PROGRAM**

BY

GORDON C. POULTON

**A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University
of Manitoba in partial fulfillment of the requirements of the degree
of
MASTER OF EDUCATION**

Gordon C. Poulton 1997 (c)

**Permission has been granted to the Library of The University of Manitoba to lend or sell
copies of this thesis/practicum, to the National Library of Canada to microfilm this thesis
and to lend or sell copies of the film, and to Dissertations Abstracts International to publish
an abstract of this thesis/practicum.**

**The author reserves other publication rights, and neither this thesis/practicum nor
extensive extracts from it may be printed or otherwise reproduced without the author's
written permission.**

Acknowledgments

I would like to take this opportunity to thank Dr. Dexter Harvey for his guidance and support during the past few years. His patience and flexibility and above all his expertise, has made this an exceptional learning experience.

Thank-you to Dr. Sheldon Rosenstock and Dr. James Welsh, my committee members, for their review and comments on my final draft.

Thank-you to the principals who made the effort and took the time to complete and return my survey. The interest you have shown in the study is greatly appreciated.

To the executive and members of MPETA and MPESA, thank you for your support and the interest you have shown in my study.

A special thank you to my wife, Darcey, for putting up with a graduate student in the house who has managed to drag out his graduate program to the maximum. Better days are now ahead!!

ABSTRACT

The purpose of this study was to investigate the opinion of principals toward the physical education instructional program. A modified Wear Attitude Inventory (Wear, 1951) was the survey instrument used to measure an individual's over-all opinion toward physical education, and his or her opinion toward the General, Physical, Emotional and Social outcomes associated with physical education. Composite scores for the thirty-nine statements in the survey were calculated along with sub-scores for the categories related to the outcomes or objectives of physical education. Subjects for the study were principals of public schools in the Province of Manitoba. The response rate from the 677 principals who received the survey was 59 percent. Principals' opinions were compared using the variables, gender, school location, school level, personal activity level, physical education degree and Quality Daily Physical Education Award winners. Analysis showed that on composite scores principals have a highly favorable over-all opinion toward physical education. The analysis of variance and t-test procedures found that principals who work in schools that house a combination of grades that include Early Years to Middle Years, have a higher opinion toward the emotional outcomes of physical education. Principals who have a degree in Physical Education or their school has received a QDPE Award, have a very favorable opinion toward physical education.

TABLE OF CONTENTS

Acknowledgments.....	i
Abstract.....	ii
List of Tables.....	v
Chapter One.....	1
Introduction.....	1
Purpose of Study.....	5
The Research Question.....	5
Limitations.....	6
Delimitations.....	7
Chapter Two.....	8
Related Literature.....	8
Chapter Three.....	14
Procedures.....	14
Research Question One.....	19
Research Question Two.....	21
Research Question Three.....	21
Chapter Four.....	22
Findings.....	22
Research Question One.....	24
Research Question Two.....	27

Research Question Three.....	28
Trends.....	30
Chapter Five.....	31
 Summary.....	31
 Conclusion.....	32
 Recommendations.....	35
References.....	37
Appendices.....	43
 Appendix A.....	44
 Appendix B.....	45
 Appendix C.....	46
 Appendix D.....	49
 Appendix E.....	51
 Appendix F.....	52

LIST OF TABLES

Table 1 :	Demographic Information.....	23
Table 2 :	Descriptive Statistics for Composite Scores of the Total Sample.....	24
Table 3 :	School Level Analysis of Variance Scores.....	25
Table 4 :	Gender T-test Scores.....	26
Table 5 :	School Location T-test Scores.....	26
Table 6 :	Personal Activity Level T-test Scores.....	27
Table 7 :	QDPE Award T-test Scores.....	28
Table 8 :	Phy. Ed. Degree vs No Phy. Ed. Degree T-test Scores.....	29

CHAPTER ONE

INTRODUCTION

Physical education in the Province of Manitoba is presently offered as a mandatory or compulsory course from Kindergarten to Senior 2. Physical educators, with the support of the Manitoba Physical Education Teachers Association (MPETA) and the Canadian Association for Health, Physical Education, Recreation and Dance (CAHPERD), have been striving to provide quality programs for students. Quality Daily Physical Education (QDPE) is a working goal for every school and is defined as, “a planned program of instruction and activity for all students on a daily basis throughout the entire year, that develops skills and attitudes towards living a healthy, active lifestyle”(CAHPERD, How You Can Make It Happen, Parents’ Information Kit). The QDPE initiative is a national recognition award developed by CAPHERD which is presented to schools who meet the necessary criteria. In support of the QDPE initiative, the Manitoba Physical Education Supervisors Association (MPESA) has distributed a brochure promoting the qualities of exemplary physical education programs. In this brochure the goal of physical education “is to provide skills and attitudes to make active living a way of life in which physical activity is valued in daily life”(Physical Education 2000, 1992). The Physical Education Presentation Package (Willoughby and Nordheim, 1994), distributed by MPESA emphasizes that time allotment, curriculum content, staff qualifications, facilities and

equipment, and extra-curricular activities are some of the issues to consider when discussing the physical education program in schools.

Numerous studies have been conducted and articles written that identify or support the benefits of physical education and the contribution that it can make to the overall education of an individual (Davis, 1996; Siedentop, 1990; Hansen, 1988; Hayes, 1988; Robbins, 1987; U.S. Surgeon General's Report, 1996). Physical education professionals in the province of Manitoba have used this research to develop informational packages and make presentations to a variety of interest groups. The past ten years in Manitoba have seen a strong effort to promote physical education and its values to the students in our educational system.

Schools striving to develop quality programs and satisfy the QDPE requirements often must overcome obstacles such as: timetabling, competition with other subjects, lack of facilities, negative teacher attitudes, lack of public awareness, loss of academic time, and reduced budgets (Hansen, 1989). Hansen (1990) also found that trustees do not see the physical education issue of sufficient political importance; they feel that it is just not an important priority.

Physical educators in the province of Manitoba, with the leadership of MPETA, MPESA, and CAHPERD and the resources they provide, have worked hard in the promotion and development of quality physical education programs for Manitoba schools.

Yet, in 1994 the Minister of Education released a document called "A Blueprint For Action" that proposed that physical education at the senior level be reduced to a supplementary or optional status. Although the proposal maintained the compulsory status of physical education from kindergarten to grade eight, the reduction in the status of physical education at the senior 1 and 2 levels was a serious step backward. "In effect, this would have shifted physical education closer to the margins, and perhaps even to extinction, as local jurisdictions would have exercised their options to include or cut programs and to replace specialists with generalists" (Johns, p.16, 1995). Fortunately, with successful lobbying and a forceful presentation by Manitoba Physical Educators and members of the QDPE Coalition (Appendix A), the Minister reversed the proposal and in the next document "Renewing Education: New Directions" (1995), physical education was restored to its original status at the senior level.

This attempt to marginalize the subject of physical education has brought the profession and it's supporters to the realization that they must rally together to promote the importance of physical education during this time of educational reform. Perhaps the first place to begin this rally is within each individual school. Robbins (1987) found

schools that have quality daily physical education programs indicated that a key factor in the implementation and nurturing of the program was a committed individual. Often this individual was a specialist, a physical education teacher, who had the support of his/her administrator. In addition, teachers and administrators must be willing to change curriculum to meet the needs and interests of students (Rice, 1988). Principals should be promoting physical education as part of the curriculum, not removing it.

The intent of this study is to obtain information about the opinions of principals in Manitoba toward physical education. The hypothesis is that principals in Manitoba have a positive opinion toward physical education, and believe it to be an important component of the educational curriculum. Principals are in the position to make decisions on a daily basis that can have a direct impact on the programs in their schools. These decisions can be with regard to funding, timetabling, staffing, and/or philosophy. According to Sallis et al. (1996), a majority of administrators were satisfied that students enjoyed being physically active and believed that high quality physical education would contribute to academic and health related outcomes. If principals do have a positive opinion of physical education and recognize the contribution it can make to the over-all education of students, they can become a very important and necessary ally against the attempts to relegate physical education to a supplementary subject in the curriculum.

Purpose of the Study

The purpose of this study was to determine the opinions of public school principals, in the province of Manitoba, toward the physical education instructional program. It included public school principals from the different levels of the school system, early years to senior years. The study was intended to provide some insight into the number of principals in the province of Manitoba who have a supportive opinion toward the instructional physical education program and the level of support that might exist among the principals.

Research Questions

The following research questions were the focus of this study on the opinions of principals in the province of Manitoba..

1. What are the differences in opinion of principals toward the physical education instructional program when comparing them by school level, rural and urban location, gender, and personal physical activity level?
2. What are the differences in opinion of principals toward the physical education instructional program when comparing principals whose school has received a

Quality Daily Physical Education Award and those whose school has not received a Quality Daily Physical Education Award?

3. What are the differences in opinion of principals toward the physical education instructional program when comparing principals who have a degree in physical education and those who do not have a degree in physical education?

For the purpose of this study, opinion was measured on five components. These five components included: the total or composite score, the General outcome score, the Emotional outcome score, the Social outcome score, and the Physical outcome score.

Limitations

The following were the limitations of study:

1. The instrument was a self reporting survey. Therefore, there is no way of knowing whether the principals were presenting accurate responses.
2. The survey was a one time measurement of the principals' opinion toward physical education.
3. Due to the initial response rate, principals who did not reply to the survey were not contacted and given a second opportunity to participate in the study.

Delimitations

1. Results from this study indicate only opinions of the public school principals in the province of Manitoba. Further study would be necessary to extend any conclusions to a larger group of individuals.
2. The instrument was validated by Carlos Wear in 1951. It is assumed that this modified instrument is valid.

CHAPTER TWO

RELATED LITERATURE

Physical education professionals in Manitoba have united together by becoming active members within organizations such as the Manitoba Physical Education Teachers Association (MPETA), the Manitoba Physical Education Supervisors Association (MPESA), Canadian Association for Health, Physical Education, Recreation and Dance (CAHPERD) and Canadian Intramural Recreation Association (CIRA) and subcommittees for Quality Daily Physical Education (QDPE). These organizations, together with the coalition groups in support of physical education, are working in concert to promote the benefits and values of physical education in the overall education of youth. Hansen (1989) feels that the organization of physical educators, who strive for quality programs with common goals, objectives and increased time in the gym, will encourage administrators to give increased consideration to physical education. If individuals such as principals, who are major decision-makers in our educational system, are enlisted to support consistent sequential goals and objectives, opportunities to be successful will be increased.

Although there is not a great deal of research, the knowledge about the perception of principals towards physical education could help in the planning and restructuring of the physical education curriculum. Most individuals in the field of education believe that

principals can have an immense influence on the programs in their schools, especially the instructional programs. Furthermore, if a difference of opinion exists between the principal and the physical education staff, the success of the physical education curriculum will be jeopardized (Gorman, 1977). To get principals to consider supporting the concept of quality physical education as an integral part of the curriculum, it is necessary that physical educators increase communication with administrators, persistently conveying the message of the values and benefits of physical education and the unique contribution it makes to education (Gorman, 1977; Griffey, 1987).

Principals with an unfavorable attitude or opinion towards physical education can be obstacles to reaching desired goals and objectives. If a goal of quality daily physical education is to have a minimum of 150 minutes of physical education per week (Physical Education 2000, 1992), administrators who do not fully support or understand the importance of the physical education program will not provide adequate facilities, timetabling, or budget (Ballance, 1980).

Sallis et al. (1996) found administrators within their study were generally satisfied with the present program of physical education in their schools. Administrators felt that a high-quality program would lead to specific outcomes related to educational and health related goals and that teacher training or motivation was a significant factor in successful implementation of the curriculum. The most common barriers to the development of a

quality program, according to this study, were scheduling problems, lack of time and a lack of teacher training. Also, administrators would seriously consider change to physical education programming if there were a better curriculum, state initiated programs, and additional funding.

The Wear Attitude Inventory, constructed by Carlos Wear (1951) to evaluate the attitudes of an individual toward physical education, has been used to measure the attitude toward physical education of administrators (Gordon, 1973), teachers, administrators, and ninth grade students (Ballance, 1980), male and female senior high students (Townes, 1979), male and female college students (Wear, 1951, 1954, Keogh, 1961, 1962,) and junior high school boys (Campbell, 1967).

Townes (1979), using the Wear Attitude Inventory, found that teachers, administrators and students agree that physical education is a worthwhile requirement in the school curriculum. Administrators in Ballance's study (1980) felt that the emotional and social benefits of physical education outweighed the physical and mental benefits.

Also using the Wear Attitude Inventory, Gordon (1973) found that selected administrators in the state of California had a favorable attitude toward the subject of physical education at the secondary level and that they believed physical activity to be very

important in everyday life. Gordon concluded that physical education should be a required credit course that is graded for those students at the secondary level.

Siendentop (1987) stated, "too few people care about high school physical education" and there are "few expectations and little support from high school administrators and parents" for the programs (p.24). He does feel, there are examples in all levels of education including both rural and urban situations, where quality programs are gaining the respect of their school administrator.

In another article on problems in secondary school physical education, Lambert (1987) concludes that teachers and administrators must combine in a joint effort to aid in the development of quality physical education programs. Teachers must have extensive knowledge in the field of physical education, administrators must give teachers support in the form of long-term professional development opportunities and teachers and administrators must collaborate in an effort to increase the public awareness of physical education programs.

The establishment of exemplary physical education programs is a vision of Templin (1987). The characteristics of such programs would include: student achievement, warm learning settings, appropriate class management strategies, appropriate involvement by students in learning tasks, supportive administrators, collegial staff relations and

teacher/coaches committed to both effective teaching and coaching. . Quality programs would result in students recognizing the lifetime value of physical activity and eventually physical education being removed from its marginal status in the curriculum.

Tannehill, Romar, O'Sullivan, et al. (1994) studied the attitude of students and parents towards physical education. Parental support for physical education declined from 69% in grade 9, to 63% in grade 10, to 46% in grade 11, to 37% in grade 12 and only 48% believed that physical education should be a requirement for graduation. Although 81% of the parents were satisfied with the existing program, only 12% of those parents who attended the school open house met the physical education teacher. Given this information and the recent trend to reduce the amount of time given to physical education, Tannehill et al. suggest that an informed and knowledgeable parent group who actively supports quality physical education will put pressure on the administration to ensure that the program retains its present status in the curriculum.

According to Fullan and Park (1981), the principal is the "critical person" (pg. 29) when initiating curriculum implementation or change. It is imperative that the principal be the leader or facilitator for the implementation of curriculum. Effective leadership which can support, facilitate and coordinate quality programming at the school level is an aid to implementing curriculum. Further to effective leadership, Melograno (1996) feels that teachers with specialized training must be empowered to design, revise, and evaluate

physical education curricula. Bratt (1991) also recognizes the role of the principal in developing and maintaining quality programming, adding that teacher's beliefs and philosophy must match those of the curriculum. Binda (1991) found that principals who have a concern about curricula meeting the needs and interests of students will provide teachers with the support they need. This support may come in the form of increased professional development, materials and/or a positive school climate.

The literature, limited as it might be, supports the importance of having a principal who has a positive opinion towards physical education and is willing to support the development of a quality program. This support may come in the form of timetabling, funding and/or increased professional development. If physical education teachers and principals can maintain open lines of communication, share a common philosophy, and work towards common goals and objectives, the future role of physical education in the curriculum will be a strong vital one.

CHAPTER THREE

PROCEDURES

This study investigated the opinions of principals in the province of Manitoba toward the Physical Education instructional program. Principals of all public schools in the Province of Manitoba were selected as subjects for the purpose of this study, with a principal defined as the head administrator in a school. Individuals in the position of vice-principal were not considered as subjects for the purpose of the study.

Six hundred and eighty-one survey forms (Appendix C), cover letters (Appendix B), computer scan forms, and return envelopes were mailed to principals of all Manitoba public schools in January of 1997. Principals were asked to return their responses, using the computer scan card, via mail with the postage paid return envelope or through their divisional physical education consultant by way of divisional courier. Subjects were asked to return their responses by February 1, 1997.

The survey instrument consisted of two parts, Section I, based on the Wear Attitude Inventory, (Wear, 1951) and Section II, Demographic information. The Wear Attitude Inventory, constructed by Carlos Wear consists of forty statements that ask respondents to select from five choices: A) strongly agree, B) agree, C) undecided, D)

disagree, or E) strongly disagree. Responses are scored on a 1-5 Likert scale with negative statements being scored in a reverse manner. The sum of the forty items provides an indication of the subject's attitude or opinion about physical education. A minimum score of 40 would indicate a very low opinion of physical education, while a maximum score of 200 would indicate an extremely favorable opinion of physical education. A neutral opinion would be shown by a score between 90 and 110. The instrument has a reliability of .96 and a validity of .80 (Wear 1951). Statements in the inventory were designed to fit into categories based on the outcomes or objectives related to physical education. These categories include the Physical, Emotional, Social and General outcomes.

Section I of the survey form sent to principals was a modified Wear Attitude Inventory, consisting of thirty-nine statements. After consultation with the researcher's thesis committee, statement 9 of the original Wear Inventory was omitted. Statements 4, 7, 15, 24, 33, and 38 of the original Inventory were reworded to better reflect terminology presently being used in the field of Physical Education. Changes to the wording of these statements did not alter the original intent of the statement. Principals were given the option not to respond to any statement that they did not feel comfortable answering. Of the thirty-nine statements, there is a total of twenty-two positive statements and seventeen negative statements. Scoring for the statements is as follows:

Positive Statement		Negative Statement
5	Strongly Agree	1
4	Agree	2
3	Undecided	3
2	Disagree	4
1	Strongly Disagree	5

The sum of the thirty-nine items provides an indication of the subject's overall opinion about physical education. A minimum score of 39 would indicate a very low opinion of physical education, while a maximum score of 195 would indicate an extremely favorable opinion of physical education. A neutral opinion would be shown by a score between 90 and 105. There are 12 statements (4, 7, 8, 10, 12, 14, 18, 27, 30, 32, 34, 39) with a maximum score of 60, related to the Physical outcomes of physical education, 5 statements (3, 15, 19, 33, 35) with a maximum score of 25, related the Emotional outcomes, 10 statements (2, 5, 9, 13, 20, 22, 24, 25, 31, 36) with a maximum score of 50, related to the Social outcomes and 12 statements (1, 6, 11, 16, 17, 21, 23, 26, 28, 29, 37, 38) with a maximum score of 60, related to the General outcomes (see Appendix D).

Section II of the survey contained six questions to provide the researcher with demographic information. These questions included information about the principals regarding the level of school they are presently working in, if their school is in a rural or urban location, their gender, whether or not they have a degree in Physical Education, whether or not their school has received an award for Quality Daily Physical Education, and their personal physical activity level.

Principals responding to the survey returned the completed computer card, which was then scanned to compile the raw data. From this data, demographic information was compiled along with descriptive statistics for use in the statistical analysis. Frequency scores for the following demographic information included:

- 1. Total number of principals responding.**
- 2. Number of female principals in the sample.**
- 3. Number of male principals in the sample.**
- 4. Number of principals working in a school that has any combination of grades that includes early years and middle years.**
- 5. Number of principals working in a school that has any combination of grades that includes middle years and senior years.**
- 6. Number of principals working in a Comprehensive school that includes grades K-Sr. 4.**
- 7. Number of principals from a rural area school.**
- 8. Number of principals from an urban area school.**
- 9. Number of principals whose school has received a QDPE Award.**
- 10. Number of principals whose school has not received a QDPE Award.**
- 11. Number of principals who have a Degree in Physical Education.**

12. Number of principals who do not have a Degree in Physical Education.
13. Number of principals who are active less than three times per week.
14. Number of principals who are active three or more times per week.

Using the 1 to 5 scoring format mentioned earlier, the subjects' composite scores were calculated from the responses to each of the 39 statements in the survey. Subscores were also compiled for the Physical, Social, Emotional and General categories related to the outcomes of physical education.

Statistical analysis was performed using the Statistical Analysis System (SAS Institute, Inc. 1990). The descriptive statistics of mean and standard deviation were used for analysis to identify levels of significant difference. For the purpose of this analysis an alpha level of .05 was used. This level of significance to reject or accept the null hypothesis was used to reduce the probability of obtaining results from chance or error. A number of conditions associated with the subjects and the instrument can exist that could increase the possibility of error. It is preferable to the researcher to make a Type II error and accept the null hypothesis, finding no differences exist, rather than a Type I error and claim differences exist when in fact they really don't.

When analyzing data, only those returns that indicated a response for the variable being investigated were accepted. For example, only those returns that indicate male or female were used for any statistical analysis involving the gender variable. This would explain sample size changes across variables. There were also three subjects identified as outliers. These three responses did not fall within the normal distribution curve of responses and therefore were eliminated from the data for the purpose of analysis.

Research Question One

Research question one compared the opinions of principles when investigating the variables of gender, school location, school level and personal activity level. Using the mean and standard deviation for these four variables, a Factorial Analysis of Variance (3x2x2x2) was run to establish significant differences between variables at the .05 level. Analysis was performed for the composite scores of the total sample and the four sub-scores in the General, Social, Emotional and Physical categories. A one way analysis of variance was used to analyze the three classes of school level, while t-tests were used to compare the variables of school location, gender, and personal activity level.

The school location variable was compressed into two groups: rural and urban. The choices included on the survey were, A) 3,000 or less B) 3,001-6,000 C) 6,001-15,000 D) 15,001 or more and E) Winnipeg. For the purpose of this study a principal whose school was located in the City of Winnipeg was placed in the Urban category and a

principal whose school was located in a community outside of Winnipeg was placed in the Rural category.

Another second variable investigated in this research question involved school level. Principals were given five choices from which to indicate their present work environment: A) - Early Years (K-4), B) - Elementary (K-6), C) - Middle Years/Jr. High, D) - Senior Years/High School, and E) - Comprehensive (K-Sr.4). Due the diverse distribution of grade level groupings presently in the province of Manitoba, response to this question did not indicate concise groupings of elementary, middle years and senior years. Although it is the intent of the Department of Education to have three levels of schools: Early Years, Middle Years, and Senior Years, responses from the principals show that there is an overlap with regards to where the grades of middle schools are located. Grades associated with the middle years are sometimes located with elementary grades, sometimes located with senior grades, and there are still some schools who are in the junior high school configuration. Therefore it was decided to place principals into groupings according to the grade configuration of their school. The following three categories were decided upon: (1) Early Years - Middle Years (this included any principal who worked in a school that had any combination of early years to middle years grades), (2) Middle Years -Senior Years (this included any principal who worked in a school that had any combination of middle years and senior years grades) and (3) Comprehensive Schools (this included any principal who worked in a school that had grades K-Sr. 4). All

analyses involving the variable of school level used these three categories. A one way analysis of variance was run to determine any significant levels of difference of opinion between principals at different school levels. Further analysis of this variable using a Tukey Studentized multiple comparison, examined all pairwise differences.

The variable of personal activity level was compressed into two categories, 1) less than three times per week and 2) three or more times per week for the purpose of analysis. The last variable of gender, was analyzed for comparison between male and female opinions toward physical education.

Research Question Two

Research question two, dealt with the opinions of principals whose school has been awarded the QDPE award as compared to those principals whose school had not been awarded the QDPE award. T-tests were run on the composite scores and the sub-scores for the General, Social, Emotional, and Physical categories.

Research Question Three

Research question three investigated the differences of opinion between principals based on whether or not they hold a degree in physical education. For statistical analysis, five t-tests were run for the composite scores and four sub-scores of the outcome categories.

CHAPTER FOUR

FINDINGS

Surveys were mailed out to 681 public school principals in the province of Manitoba. Four surveys of the original mail out were returned “school closed” and of the remaining 677 surveys, 400 were returned to the investigator. This resulted in a return rate of 59%. Using the information from Section II of the survey the following demographic information was obtained (See Table 1). The sample includes 224 principals who work in an Early Years/Middle Years configuration, 104 principals who work in a Middle Years/Senior Years configuration and 68 principals who work in a Comprehensive school. A total of 257 principals work outside the City of Winnipeg area (rural) and 137 principals work in the City of Winnipeg (urban). There were 117 females and 268 males who participated in the survey. The sample includes 47 principals who have a degree in Physical Education, while 348 do not have a degree in Physical Education. There were 66 principals whose school has received the Quality Daily Physical Education Award in the past five years, and 322 principals whose school has not received the QDPE Award. Two hundred and eight principals say they are physically active less than three times per week, 177 principals reported that they are physically active three or more times per week. Also included in Table 1 is the number of individuals who chose not to respond in each of the demographic categories.

Table 1
Demographic Information

		N	%
Total Sample		400	59
School Level	Early Years/Middle Years	224	56.5
	Middle Years/Senior Years	104	26.3
	Comprehensive Schools	68	17.2
	Missing	4	
School Location	Rural	257	65.2
	Urban	137	34.7
	Missing	6	
Gender	Female	117	30.4
	Male	268	69.6
	Missing	15	
Phy. Ed. Degree	Yes	47	11.9
	No	348	88.1
	Missing	5	
QDPE Award	Yes	66	17.0
	No	322	83.0
	Missing	12	
Physical Activity	Less than 3 times/wk.	208	54.1
	3 or more times/wk.	177	45.9
	Missing	15	

Table 2 shows the descriptive statistics of mean and standard deviation for the composite score plus the sub-scores of the four outcome categories for the total sample. As stated earlier, an extremely favorable opinion toward physical education would be represented by a score of 195 and a neutral opinion represented by a score between 90 and 105. The mean score for the sample is 163.55, with a standard deviation of 14.65. This indicates that overall the subjects in the study had a favorable opinion toward the physical education instructional program.

Table 2**Descriptive Statistics for Composite Scores of the Total Sample**

	N	Mean	Std Dev.
Total	365	163.55	14.65
Physical	386	51.96	4.45
General	379	49.36	5.54
Social	382	40.36	4.46
Emotional	389	21.68	2.16

Research Question One

Research question one inquires into the differences in opinion of principals toward the physical education instructional program when comparing their school level, rural and urban location, gender, and personal activity level. When the factorial analysis of variance ($3 \times 2 \times 2 \times 2$) was run to analyze these variables, some cells lacked enough subjects to provide adequate statistical information. Therefore the factorial analysis was not used. As mentioned in Chapter 3, the principals' responses to school level were collapsed into 3 new categories: 1) Early Years/Middle Year, 2) Middle Years/Senior Years and 3) Comprehensive. Statistical analysis of these three variables using a one way analysis of variance (Table 3) found a significant level of difference with $F=4.04$, df of 2,385 and $p=0.0184$. This significant difference was found in the Emotional variable. Further analysis using a Tukey Studentized Range Multiple Comparison procedure examined all possible pairwise differences. The significant difference was found to be between the Early Years/Middle Years grouping and the Comprehensive grouping. This indicated that principals in the Early years/Middle years level have a more favorable opinion toward the

physical education instructional program when it comes to the emotional outcomes of physical education.

Table 3

School Level Analysis of Variance Scores

	p	df	Early/Middle Yr Mean	Middle/Sr. Yr Mean	Comp Mean
Total	0.26	2,362	164.42	163.36	160.97
General	0.22	2,375	49.65	49.45	48.28
Physical	0.33	2,382	52.25	51.54	51.61
Social	0.44	2,379	40.52	40.44	39.73
Emotional	0.02	2,385	21.94	21.43	21.19

*p<.05

Since the factorial analysis of variance could not be employed due to insufficient cell numbers, t-tests were run on the variables of study in research question one. The series of t-tests run on the variables of gender (Table 4) and school location (Table 5) revealed that there were no significant levels of difference. Although the males in the study scored slightly higher in four of the five categories related to the outcomes of physical education (females scored higher in the emotional outcome), results indicate that both the female and male principals in this study have a similar opinion toward physical education. The urban principals scored slightly higher than their rural counterparts in all five categories, however, the difference was not enough to reach a statistically significant level.

Table 4**Gender T-test Scores**

	p	df	Female Mean	Male Mean
Total	0.93	185.9	163.50	163.65
General	0.66	197.0	49.20	49.48
Physical	0.24	195.5	52.42	51.81
Social	0.56	200.9	40.20	40.50
Emotional	0.19	226.6	21.89	21.58

Table 5**School Location T-test Scores**

	p	df	Rural Mean	Urban Mean
Total	0.21	294.5	162.67	164.68
General	0.06	325.6	48.90	50.01
Physical	0.24	307.9	51.71	52.27
Social	0.72	294.7	40.28	40.45
Emotional	0.05	317.9	21.49	21.94

The t-tests comparing principals who are physically active less than three times per week to those who are physically active three or more times per week also showed no statistically significant differences when looking at the total sample, or any of the outcomes categories related to physical education (Table 6). The principals who indicated they were active 3 or more times per week scored higher in all five categories, however the difference did not reach a statistically significant level.

Table 6**Personal Activity Level T-test Scores**

	p	df	Activity<3 Mean	Activity 3+ Mean
Total	0.24	320.6	162.79	164.63
General	0.26	336.3	49.12	49.76
Physical	0.29	346.1	51.78	52.27
Social	0.38	333.6	40.23	40.64
Emotional	0.33	349.3	21.58	21.80

Research Question Two

Research question two asks what are the differences in opinion of principals toward the physical education instructional program when comparing principals whose school had received a Quality Daily Physical Education Award and those whose school had not received a Quality Daily Physical Education Award. To determine if any statistically significant differences of opinion existed between these two groups, five t-tests were run (see Table 7). Statistically significant differences were found in two variables. The Total variable had a $p=0.0323$ with 89.1 degrees of freedom, while the General variable had a $p=0.0163$ and a 93.2 degrees of freedom. This indicates that principals whose school had received the QDPE Award have a more favorable opinion toward the overall physical education program than those principals whose school had not received the QDPE Award. Principals whose school had received the QDPE Award also have a more favorable opinion toward the General outcomes associated with physical education.

There is no statistically significant difference in opinion between these two groups of principals with regard to the Physical, Social and Emotional outcomes of physical education even though the principals whose school has received a QDPE Award had a higher mean score in each of these categories.

Table 7

QDPE Award T-test Scores

	p	df	QDPE Mean	No QDPE Mean
Total	0.03*	89.1	167.27	163.13
General	0.02*	93.2	50.94	49.16
Physical	0.22	89.7	52.63	51.89
Social	0.11	97.2	41.18	40.29
Emotional	0.08	89.8	22.13	21.61

* $p < .05$

Research Question Three

Research question three investigates whether or not there is a difference in opinion between principals who have a degree in Physical Education and those principals who do not have a degree in Physical Education. Again five t-tests (Total Sample, General, Physical, Social, and Emotional Outcomes) were run to determine levels of significance when looking at this variable. Results of the t-tests are shown in Table 8. Significant differences were found in all five tests, as indicated in the $p < .05$. Principals who have a degree in Physical Education have a more favorable opinion in all aspects, toward the

physical education instructional program than their counterparts, who do not have a degree in physical education.

Table 8

Phy. Ed. Degree vs No Phy. Ed. Degree T-test scores

	p	df	Degree Means	No Degree Means
Total	0.0001*	57.9	173.27	162.21
General	0.0001*	58.3	52.91	48.90
Physical	0.0012*	56.5	54.11	51.66
Social	0.0001*	56.7	42.98	40.01
Emotional	0.0079*	62.2	22.41	21.58

* $p < .05$

This study has found significant differences between principals' opinions toward the physical education instructional program. There is a definite difference in opinion between those principals who hold a degree in Physical Education and those who do not hold a degree in Physical education. This significance is identified for the total sample and for all the categories related to outcomes of physical education (General, Physical, Social and Emotional). Also found was a significant differences between principals at different school levels. Principals of schools with Early years/Middle years students have a more favorable opinion toward the emotional outcomes of physical education than do the principals of comprehensive schools housing students from K to Senior years.

Trends

Although a statistically significant difference in opinion was not found between a number of the variables, close examination of the mean scores reveals some trends or tendencies that are present. After examining the mean scores, males tend to score higher than do the females, although the females did score higher on the emotional outcome category related to physical education. Principals working in comprehensive schools scored the lowest in four of the five variables. Only in the physical outcome category did they not obtain the low mean. Although it was not statistically significant, males tend to score higher than females, urban principals tend to score higher than rural principals, and those principals who are active tend to score higher than those who are not as active.

The results of this study have shown that principals in the province of Manitoba definitely have an opinion about physical education instructional programs and this opinion is highly favorable. The number of principals participating in the study has resulted in a satisfactory representation of public school principals in Manitoba. The mean score of 163.55 for the total sample indicates this favorable opinion. It is also important to note how consistent the principals were with regard to their responses, both in the composite scores and in each of the categories related to the outcomes or objectives of physical education. By looking at the standard deviation scores (Appendix F), it can be seen that the distribution of scores for each of the variables are grouped closely about the mean.

CHAPTER FIVE

Summary

The public school principals of Manitoba were surveyed, using a modified Wear Attitude Inventory, to investigate their opinions toward the physical education instructional program. A principal's opinion toward physical education was identified by the score obtained from their responses to statements in the instrument. The study looked at the total score, plus the scores for categories of the general outcomes, physical outcomes, social outcomes and emotional outcomes related to physical education. A comparison of the opinions of principals was made for the following variables: school levels, location of school, gender of principal, personal activity level of principal, principals who have a physical education degree, and principals whose schools have received a QDPE award. Six hundred and seventy-seven principals received the survey, with four hundred surveys returned to the investigator. This was a response rate of 59%. Using the SAS statistics program, the descriptive statistics of mean and standard deviation were employed to run one way analysis of variance and t-tests on the total score and the subscores for the categories associated with the outcomes of physical education. With the maximum total score possible being 195 and the minimum total score possible 39, the mean score for the total sample was calculated at 163.55, with a standard deviation of 14.65.

The mean score of 163.55 for the total sample, indicates highly favorable opinions toward physical education. It was also found that principals who work in a school with lower grade levels have a more positive opinion toward the emotional outcomes of physical education, than do principals who work in schools with higher grade levels. The gender of the principal, their personal activity level, and/or the location of the school does not result in any significant differences in the opinions of Manitoba principals toward physical education. Principals, who have a physical education degree or their school has received a QDPE award, indicate a highly favorable opinion toward physical education.

Conclusions

Principals are thought of as the “critical person” (Fullan and Park, 1981) or the “committed individual” (Robbins, 1987) that have a direct influence on programming within a school. They can be a major force in the implementation of curriculum and/or the development of quality physical education programming. Manitoba principals, who have indicated favorable opinions toward physical education, should be encouraged to aid in the development and/or continued delivery of quality physical education programs within the educational curriculum.

Principals in Manitoba, as a group, have indicated a very favorable opinion toward physical education. Principals, no matter what level they work at, whether they work in a rural or urban setting, or whether they are female or male, all indicate favorable opinions toward physical education. The information obtained in this study suggests that Manitoba principals have a good understanding of the goals and objectives of physical education and they recognize the contributions that physical education can make to the education of their students.

The findings of this study concur with those of Sallis et al. (1996), that principals are generally satisfied with the physical education programs and that they support the goals and objectives of physical education. The principals in this study, who work in schools with early year students, have identified the emotional outcomes of physical education as an important objective for the students in their charge. This suggests that principals understand and value the benefits physical education can bring to the emotional development of younger students.

The 12% of the principals, who have a physical education degree, have indicated significantly positive opinions toward physical education. These principals are members of a larger group, that has also indicated positive opinions toward physical education, and appear ready to publicly give their support to physical education. Principals with a degree in physical education should be proactive within the principal's association with regard to

developing a working relationship with groups such as MPETA and MPESA.

Furthermore, they should encourage their colleagues to support and aid the physical education specialist(s) in their schools in the delivery of a quality physical education program.

Only 17% of the principals responding indicated that their school has received a QDPE Award. This suggests that although they have positive opinions toward physical education, principals have not shown the necessary leadership to encourage their physical education staff to complete the application form required to receive this award. Or, if they first must make changes in their physical education program so that it can meet the criteria required for this award, they should be initiating the process with help from their divisional physical education consultant and physical education specialist.

This study has found that principals do have favorable opinions towards physical education, but they have not effectively used their position to champion the contributions that physical education makes to the over-all educational process. Results from this study could help in the development of strategies to secure the support of the Manitoba Principals Association, for quality physical education programs in our province.

Recommendations

This study set out to investigate opinions of public school principals in Manitoba. It has shown that principals have positive opinions toward the physical education instructional program and therefore, identified a group within the educational system which is a potential coalition member that supports physical education as an integral part of education. Information from this study could be used to enlist principals in Manitoba for their support at the next Forum in Physical Education. Future “Physical Education Presentation” (PEP) packages, sponsored by MPETA, could also use this information to support their cause.

Although this study has accomplished what it intended, there are still other areas that could benefit from future study. Principals have indicated their positive opinions toward physical education, however, they have not been asked to indicate what barriers, if any, presently effect the programming of physical education in the province of Manitoba. Are there specific issues related to curriculum that is preventing physical education from taking a more prominent or equal status in education? These questions, and perhaps others, could be answered through more studies. This study was a one time, self reporting survey. A more in-depth study, for example, involving interviews with principals, might result in data which will reveal more about principles and their favorable opinions toward

physical education and what the profession needs to do to reach its goal of equality in the curriculum.

Further studies to investigate the opinions of trustees, parents and students in Manitoba toward physical education would help in the collection of valuable data that could be used in the development, implementation and promotion of quality daily physical education programs. Also, study of the responses for each of the statements in this survey might reveal more information with regard to principals and physical education.

In conclusion, this study has provided the researcher with some concrete information regarding the opinions of principals toward physical education. The data show that principals, as a whole, have a highly favorable opinion toward physical education. This favorable opinion is consistent no matter the gender, school level, school location and/or personal activity level. The development, implementation, and promotion of quality physical education programs, by individuals who understand the benefits of physical education and care about the complete education of our youth, is critical. The support of the principals of Manitoba, is an important factor in making this a reality.

References

- Binda, K.P. (1991). Principals as change agents: Their role in the curriculum implementation process. Unpublished paper presented at the Canadian Society for the Study of Education, Kingston, Ontario.
- Ballance, Margaret J. (1980). Administrators, teachers and students attitude toward physical education. Unpublished Master's Thesis, North Carolina Central University, Durham, North Carolina.
- Bratt, S.J. (1991). The administrator's role in participatory curriculum development. Unpublished paper presented at the Biennial Meeting of the International Council on Educational Leadership, Shanghai, China.
- Campbell, Donald E. (1967). Wear attitude inventory applied to junior high school boys. The Research Quarterly, (39)4 pp. 888-893.
- Cox, Karen E. (1987). The physical education/athletics problem in secondary schools. Journal of Physical Education, Recreation and Dance, (58)2 pp. 27.
- Earl, Lorna M. and R.G. Stennett, (1967, July/August). Student attitudes toward physical and health education in secondary schools in Ontario. CAHPER Journal, pp. 4-11.
- Fullan, M. and Park, P. (1981). Curriculum implementation - A resource booklet. Ministry of Education Cataloguing in Publication. Ontario.
- Galt, Virginia, (1996, November 5). Schools phase out phys ed. The Globe and Mail, pp. A8.

- Gordon, A.E. (1973). Attitudes of selected administrators toward secondary school physical education. Unpublished Master's Thesis, California State University, Chico, California.
- Gorman, J.B. (1979). Perceptions of senior high school principals and physical education leaders regarding importance of selected factors in conducting quality programs of physical education," Unpublished Master's Thesis, University of Oregon, Eugene, Oregon.
- Graham, Kathy C. and Patricia Stueck, (1992, September). Decisions for middle & high school physical education. Journal of Physical Education, Recreation and Dance, pp. 65-96.
- Grant, Bevan, (1990). Influences on physical education and those who teach. CAHPER Journal, (56)2, pp. 4-9.
- Griffey, David C. (1987). Trouble for sure, A crisis-perhaps. Journal of Physical Education, Recreation and Dance, (58)2, pp. 20-21.
- Hansen, Hal, (1990). Barriers to QDPE and how to overcome them. CAHPER Journal, (56)2, pp. 16-21.
- Hansen H. and L. McKenzie, (1988). "Needs, benefits, barriers, change strategies, politics Quality daily physical education - Is it possible? CAHPER Journal, (54)2, pp. 29-38.

- Haslam, Ian R. (1988). The third wave: A future shock for physical education curriculum. CAHPER Journal, (54)4, pp. 22-26.
- Hayes, Esme, (1988). A case study in Chilliwack, B.C. CAHPER Journal, (54)2, pp. 11-15.
- Janzen, Henry, (1995, Fall). The status of physical education in Canadian public schools. CAHPERD Journal, pp. 5-9.
- Jewett, Ann, and Linda Bain, (1995). The curriculum process in physical education. Wm C. Brown Publishers, Dubuque, Iowa.
- Johns, David, (1995, Summer). Moving to the margins: physical education, Another disposable program?. CAHPERD Journal pp. 15-18.
- Keogh, Jack, (1961). "Analysis of general attitudes toward physical education. The Research Quarterly, (33)2, pp. 239-244.
- Keogh, Jack, (1962). Extreme attitudes toward physical education. The Research Quarterly, (34)1, pp. 27-33.
- Kneer, Marian E. (1987). Solutions to teacher/coach problems in secondary schools. Journal of Physical Education, Recreation and Dance, (58)2, pp. 28-29.
- Lambert, Leslie T. (1987). Secondary school physical education problems. Journal of Physical Education, Recreation and Dance, (58)2, pp. 30-34.

- Melograno, Vincent J. (1996). *Designing the physical education curriculum*. Cleveland State University: Human Kinetics.
- Norton, Candace J. (1987). High school physical education problems and possibilities. Journal of Physical Education Recreation and Dance, (58)2, pp. 19.
- Pritchard, Jay, (1987, November/December). Program planning for quality daily physical education. CAHPER Journal, pp. 14-19.
- Rice, Pamela L. (1988). Attitudes of high school students toward physical education activities, teachers, and personal health. Physical Educator, (45)2, pp. 94-99.
- Robbins, Stuart G., (1990). An overview of physical education in Canadian schools. CAPHER Journal, (56)1, pp. 4-7.
- Robbins, Stuart G. (1987). A survey of selected schools with quality daily physical education programmes. CAHPER Journal (53)6, pp. 10-11.
- Sallis, J. F., McKenzie, T. L., Bohdan, K., Philip C. (1996). Assessing district administrators' perceptions of elementary school physical education. Journal of Physical Education, Recreation and Dance, 67(8), pp. 25-29.
- SAS Institute, Inc. (1990b). SAS/STAT User's Guide (Vol.2) Version 6 (4th edition). SAS Institute, Inc. Cary, North Carolina.
- Siedentop, Daryl, (1987, February). High school physical education still an endangered species. Journal of Physical Education, Recreation & Dance, Vol 58, Number 2., pp. 24-25.

Siedentop, Daryl, (1990). Introduction to Physical Education, Fitness and Sport. Mayfield Publishing Co. Mountain View, California.

Tannehill, Begorah, Jan-Erik Romar, and Mary O'Sullivan, (1994). Attitudes toward physical education: Their impact on how physical education teachers make sense of their work. Journal of Teaching in Physical Education, (13), pp. 406-420.

Taylor, John L. and Eleanor N. Chiogioji, (1987). Implications of educational reform on high school PE programs. Journal of Physical Education, Recreation and Dance, (58)2, pp. 23-23.

Templin, Thomas J. (1987). Possibilities for secondary physical education. Journal of Physical Education, Recreation and Dance, (58)2. pp. 26-27.

Thompson, Linda, Larry Beauchamp and Paul Darst, (1991). What's going on in the Canadian secondary school gym? CAHPER Journal (57)4, pp. 23-27.

Trottier, Andre, (1987). Results of a national survey on physical education in the provinces. CAHPER Journal (53)6, pp. 8-9.

Townes, Ross E. (1979). Attitudes of students, teachers and administrators toward physical education as a requirement in the school curriculum. Carnegie Research Papers (1)1, pp. 17-19.

U.S. Department of Health and Human Services, (1996). Physical activity and health: A report of the surgeon general. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. Atlanta, GA.

Wear, C. L. (1955). Construction of equivalent forms of an attitude scale. The Research Quarterly, (26) pp. 113-119.

Wear, Carlos L. (1951). The evaluation of attitude toward physical education as an activity course. The Research Quarterly, (22)1, pp. 114-126.

APPENDICES

Appendix A

Coalition Groups in Support of Quality Daily Physical Education

Addictions Foundations of Manitoba	Manitoba Lung Association
Agencies for School Health	Manitoba Medical Association
Assiniboine South School Division	Manitoba Mental Health Association
Brandon School Division	Manitoba Milk Producers Marketing Board
Bureau de l'Education Francaise Division	Manitoba NDP party
Canadian Association of Health, Physical Education, Recreation and Dance	Man. Parks & Recreation Association
Canadian Intramural Recreation Assoc.	Manitoba Physical Education Supervisors' Assoc.
Canadian Physiotherapy Assoc., Mb Br.	Manitoba Physical Education Teachers' Assoc.
City of Wpg., Parks & Recreation Assoc.	Manitoba Public Health Association
College of Physical Education, Saskatoon	Manitoba Sport Directorate
Council of Health Promotion	Manitoba Sports Federation
Division Scolaire Franco Manitobaine	Manitoba Teachers' Association
Fed. provinciale des comites de parent	Norwood School Division
Flin Flon School Division	Oak Park High School, ASSD
Fort Garry School Division	PanAm Sports Medicine Centre
Frontier School Division	Physical Education Support Group
Glenlawn Collegiate	Provincial QDPE Rep, Zone 13
Healthy Child Development, Manitoba	River East School Division
Heart and Stroke Foundation of Manitoba	Rolling River School Division
Heart Health Project	Seven Oaks School Division
Home & School & Parent/Teacher Fed. of MB	Sports Medicine Council of Manitoba
Kinsmen Re-Fit Center	St. James Assiniboia School Division
Man. Association of Registered Nurses	St. Vital School Division
Man. Assoc. of School Superintendents	Transcona Springfield School Division
Manitoba Association of School Trustees	University of Brandon
Manitoba Chiropractic Association	University of Manitoba
Manitoba Education & Training	University of Winnipeg
Manitoba Fitness Directorate	Winnipeg Free Press
Manitoba Healthy Communities Network	Winnipeg Police Department
Manitoba Liberal Party	Winnipeg School Division

Source: Physical Education Presentation to the Minister Of Education, November 15, 1994.

Appendix B

Dear Principal:

I am a graduate student at the University of Manitoba in the Faculty of Education where I am completing the thesis requirements for a Master of Education Degree. I am conducting a study into the opinions of Manitoba principals toward Physical Education as a course in the curriculum. As you are aware, the Provincial Government of Manitoba has recently embarked on a program of educational reform. One area of reform that has seen suggested change is the discipline of Physical Education. The position of physical education in the curriculum, its content material and the scheduled amount of time are some of the issues that are presently being reconsidered. The purpose of this survey is to collect information about how principals in Manitoba feel about instructional physical education programming.

Enclosed with this letter is a questionnaire with 45 questions. The amount of time needed to complete the questionnaire is approximately 15 to 20 minutes. Please consider the statements only as they relate to the physical education instructional program. No reference is intended in any statement to intramural or interscholastic programs. There are no right or wrong answers, as people may vary widely in the way they feel about each statement. If there is any question that you do not feel comfortable answering please feel free to leave it blank. If you have any questions about the survey I can be contacted at the number below.

The confidentiality of individuals will be maintained at all times, with data being reported in a manner that maintains anonymity. Data received from the survey will be used for statistical analysis and discussion. No attempt will be made to connect any person with any paper. The thesis and research findings will be made available to all interested participants. You can receive a summary of the study simply by contacting me by phone at the number below or by e-mail - gpoulton@mbnet.mb.ca

For further information on the proposed study contact me at 488-9499. My supervisor is Dr. Dexter Harvey, Dept. of Curriculum, Mathematics and Natural Sciences. He may be contacted at 474-9223

Thank you for your support in this endeavor.

Actively yours,

**Gordon C. Poulton
Graduate Student
University of Manitoba**

APPENDIX C

PRINCIPALS' SURVEY

Thank you for taking time to complete and return the following survey. Below you will find some statements about physical education. I would like to know how you feel about each statement using the following choices: A- Strongly Agree B- Agree C- Undecided D- Disagree E- Strongly Disagree. Using a pencil, record your responses on the enclosed IBM card. Please return the card in the envelope provided by January 31, 1997. Your input in this survey is very much appreciated. This information will be received in complete anonymity and will remain strictly confidential.

SECTION I

- | A | B | C | D | E |
|----------------|-------|-----------|----------|-------------------|
| Strongly Agree | Agree | Undecided | Disagree | Strongly Disagree |
-
1. If for any reason a few subjects have to be dropped from the school program, physical education should be one the subjects dropped.
 2. Associations in physical education activities give people a better understanding of each other.
 3. Physical education activities provide no opportunities for learning to control the emotions.
 4. Engaging in regular physical activity gets one interested in practicing good health habits.
 5. Physical education is one of the more important subjects in helping to establish and maintain desirable social standards.
 6. The time spent in getting ready for and engaging in a physical education class could be more profitably spent in other ways.
 7. Regular physical activity works off harmful emotional tensions.
 8. A person's body usually has all the strength it needs without participation in physical education activities.
 9. Participation in physical education makes no contribution to the development of co-ordination and grace.
 10. Physical education in schools does not receive the emphasis that it should.
 12. Because physical skills loom large in importance in youth it is essential that a person be helped to acquire and improve such skills.
 13. Physical education classes are poor in opportunities for worthwhile social experiences.
 14. Physical activity taken regularly is good for one's general health.

A	B	C	D	E
Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree

15. A person would be better off emotionally if he/she did not participate in physical education.
16. Skill in active games or sports is not necessary for leading the fullest kind of life.
17. It is possible to make physical education a valuable subject by proper selection of activities.
18. Physical education does more harm physically than it does good.
19. Developing a physical skill brings mental relaxation and relief.
20. Associating with others in some physical education activity is fun.
21. Physical education classes provide nothing which will be of value outside of the class.
22. Physical education classes provide situations for the formation of attitudes which will make one a better citizen.
23. There should be a minimum of 150 minutes per cycle devoted to physical education in schools.
24. Physical education situations are among the poorest for making friends.
25. Belonging to a group, for which opportunity is provided in team activities, is a desirable experience for a person.
26. There is not enough value coming from physical education to justify the time consumed.
27. Physical education is an important subject in helping a person gain and maintain all-round good health.
28. Physical education skills make worthwhile contributions to the enrichment of living.
29. No definite beneficial results come from participation in physical education activities.
30. People get all the physical exercise they need in just taking care of their daily work.
31. Engaging in group physical education activities is desirable for proper personality development.
32. All students will profit from 30 minutes of physical education each day.
33. Physical education activities tend to upset a person emotionally.
34. Physical education makes a valuable contribution toward building up an adequate reserve of strength and endurance for everyday living.

A	B	C	D	E
Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree

-
35. For its contributions to mental and emotional well-being physical education should be included in the program of every school.
36. Physical education tears down sociability by encouraging people to attempt to surpass each other in many of the activities.
37. I would advise everyone to take physical education.
38. Participation in physical education activities makes for a more wholesome outlook on life.
39. As far as improving physical health is concerned a physical education class is a waste of time.
-

Section II

40. What best reflects the type of school you presently work in?
 A - Early Years(K-4) B - Elementary(K-6) C - Middle Years/Jr. High
 D - Senior Years/High School E - Comprehensive(K-Sr.4)
41. What best reflects the population of the community where your school is located ?
 A - 3,000 or less B - 3,001-6,000 C - 6,001-15,000
 D - 15,001 or more E - Winnipeg
42. Gender?
 A - Female B - Male
43. Do you have a degree in Physical Education?
 A - Yes B - No
44. Has your school been awarded the CAHPERD, Quality Daily Physical Education Award within the past 5 years?
 A - Yes B - No
45. Do you participate in regular physical activity that raises your heart and breathing rate above normal levels for a period of 30 minutes or more?
 A - 0 times/wk B - 1-2 times/wk C - 3-4 times/wk D - 5-7 times/wk

Thank you for taking the time to complete this questionnaire. All information received is done so with complete anonymity.

If you have any questions please contact Gord Poulton at 204-488-9499 (evening) or e-mail - gpoulton@mbnet.mb.ca

Please return the completed IBM bubble sheet in the return envelope by **January 31, 1997.**

Appendix D

Statements Associated with the Outcomes of Physical Education

General Outcomes

- #1. If for any reason a few subjects have to be dropped from the school program, physical education should be one the subjects dropped.
- #6. The time spent in getting ready for and engaging in a physical education class could be more profitably spent in other ways.
- #11. Physical education in schools does not receive the emphasis that it should.
- #16. Skill in active games or sports is not necessary for leading the fullest kind of life.
- #17. It is possible to make physical education a valuable subject by proper selection of activities.
- #21. Physical education classes provide nothing which will be of value outside of the class.
- #23. There should be a minimum of 150 minutes per cycle devoted to physical education in schools.
- #26. There is not enough value coming from physical education to justify the time consumed.
- #28. Physical education skills make worthwhile contributions to the enrichment of living.
- #29. No definite beneficial results come from participation in physical education activities.
- #37. I would advise everyone to take physical education.
- #38. Participation in physical education activities makes for a more wholesome outlook on life.

Social Outcomes

- #2. Associations in physical education activities give people a better understanding of each other.
- #5. Physical education is one of the more important subjects in helping to establish and maintain desirable social standards.
- #9. Participation in physical education activities tends to make one a more socially desirable person.
- #13. Physical education classes are poor in opportunities for worthwhile social experiences.
- #20. Associating with others in some physical education activity is fun.
- #22. Physical education classes provide situations for the formation of attitudes which will make one a better citizen.
- #24. Physical education situations are among the poorest for making friends.
- #25. Belonging to a group, for which opportunity is provided in team activities, is a desirable experience for a person.

- #31. Engaging in group physical education activities is desirable for proper personality development.
- #36. Physical education tears down sociability by encouraging people to attempt to surpass each other in many of the activities.

Emotional Outcomes

- #3. Physical education activities provide no opportunities for learning to control the emotions.
- #15. A person would be better off emotionally if he/she did not participate in physical education.
- #19. Developing a physical skill brings mental relaxation and relief.
- #33. Physical education activities tend to upset a person emotionally.
- #35. For its contributions to mental and emotional well-being physical education should be included in the program of every school.

Physical Outcomes

- #4. Engaging in regular physical activity gets one interested in practicing good health habits.
- #7. Regular physical activity works off harmful emotional tensions.
- #8. A person's body usually has all the strength it needs without participation in physical education activities.
- #10. Participation in physical education makes no contribution to the development of co-ordination and grace.
- #12. Because physical skills loom large in importance in youth it is essential that a person be helped to acquire and improve such skills.
- #14. Physical activity taken regularly is good for one's general health.
- #18. Physical education does more harm physically than it does good.
- #27. Physical education is an important subject in helping a person gain and maintain all-round good health.
- #30. People get all the physical exercise they need in just taking care of their daily work.
- #32. All students will profit from 30 minutes of physical education each day.
- #34. Physical education makes a valuable contribution toward building up an adequate reserve of strength and endurance for everyday living.
- #39. As far as improving physical health is concerned a physical education class is a waste of time.

APPENDIX E**MEAN SCORES**

	Total	General	Physical	Social	Emotional
Male	163.65	49.48	51.81	40.50	21.58
Female	163.50	49.19	52.42	40.20	21.89
Early/Middle yrs	164.42	49.65	52.25	40.52	21.94
Middle/Sr. yrs	163.36	49.45	51.54	40.44	21.43
Comprehensive	160.97	48.28	51.61	39.73	21.19
Rural	162.67	48.90	51.71	40.28	21.49
Urban	164.68	50.01	52.27	40.45	21.94
QDPE Award	167.27	50.94	52.63	41.18	22.13
No QDPE Award	163.13	49.16	51.89	40.29	21.61
P.E. Degree	173.27	52.91	54.11	42.98	22.41
No P.E. Degree	162.21	48.90	51.66	40.01	21.58
Activity<3x/wk	162.79	49.12	51.78	40.23	21.58
Activity 3x or more/wk	164.63	49.76	52.27	40.64	21.80

APPENDIX F

STANDARD DEVIATION SCORES

	Total	General	Physical	Social	Emotional
Male	14.46	5.38	4.41	4.41	2.20
Female	15.22	5.82	4.54	4.57	2.07
Early/Middle yrs	14.40	5.38	4.35	4.44	2.09
Middle/Sr. yrs	15.27	5.84	4.76	4.57	2.23
Comprehensive	14.44	5.60	4.26	4.37	2.19
Rural	14.25	5.60	4.30	4.25	2.12
Urban	15.21	5.44	4.65	4.78	2.19
QDPE Award	13.09	5.19	4.36	3.83	2.16
No QDPE Award	14.69	5.55	4.44	4.50	2.14
P.E. Degree	13.20	4.87	4.60	4.55	1.89
No P.E. Degree	14.35	5.47	4.36	4.33	2.17
Activity<3x/wk	13.58	5.16	4.17	4.15	2.07
Activity 3x or more/wk	15.69	5.84	4.68	4.77	2.28