

A Study of Female Attitudes  
Towards  
Physical Education and Related Activities  
Among  
Recently Arrived and Established  
Filipino Female Students at a  
Major High School

By:

Jennifer E. Campbell

A Thesis Submitted to  
The Faculty of Graduate Studies  
In the Partial Fulfilment of The  
Requirement for the Degree of  
Master of Education  
University of Manitoba  
Winnipeg, Manitoba

1991



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ISBN 0-315-76665-4

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A STUDY OF FEMALE ATTITUDES TOWARDS PHYSICAL  
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JENNIFER E. CAMPBELL

A thesis submitted to the Faculty of Graduate Studies of  
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MASTER OF EDUCATION

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Dedicated to my Parents  
for their love and support  
Lorne and Kathleen Campbell  
and  
to my closest friend who had  
her life taken away far too soon  
Robin Lee Ahrens  
(1952 - 1985)  
A former educator and  
F.B.I. Agent

"Who are you" said the caterpillar. This was not an encouraging opening for a conversation. Alice replied rather shyly, "I - I hardly know, sir, just at present - at least I know who I was when I got up this morning, but I think I must have been changed several times since then."

From Alice's Adventure in Wonderland

- by Lewis Carroll

## ACKNOWLEDGEMENTS

I express my sincere appreciation of the assistance and cooperation of my advisor, Professor Jim Belford and the members of the Thesis Committee, Dr. John Seymour, Dr. Winston Rampaul and Professor Bill Drozda, whose advice and aid in the preparation of this thesis were encouraging.

I wish to express thanks and appreciation for the assistance and cooperation extended by Dr. Eric MacPherson, Dr. Heather Sharman, Mrs. Eveline Baran, Mrs. Julia Estaban, and Dr. Koenraad Lindner. I can never thank them enough.

I also express my appreciation to the physical education staff at St. John's High School and to the students who were the subjects of this investigation, for their assistance and cooperation.

Finally, I must give a lot of credit to my parents who gave me continued cooperation, patience and support which made this thesis possible. I thank them for never giving up on me and my education.

## ABSTRACT

The purpose of this study was to examine and compare attitudes of "recently arrived" and "established" female students, as it pertains to the physical education and related activities. The study population consisted of thirty-nine secondary Filipino females born in the Philippines.

The study's instrument was a 42 item Likert scale survey. Unpaired t-tests were used to test the hypothesis. From the findings, the following conclusions were drawn:

"Recently Arrived" Filipino female students appear to:

- prefer non-aggressive sports.
- respond to exercise that improves poise.
- identify with their family unit as their preferred advisor.
- spend time on the academic subjects than on physical education.

"Established" Filipino female students appear to:

- prefer aggressive and non-aggressive sports.
- be willing to take part in physical activity
- have physical education as part of their school program.
- feel free to make their own decisions.

Implications for education are that educators should be aware of the various ethnic backgrounds and cultural influences with different expectations of physical involvement and achievement that exists among ethnic students.

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## CHAPTER ONE

### INTRODUCTION

#### 1.1 STATEMENT OF THE PROBLEM

While teaching female Filipino students at a Winnipeg high school, the researcher noted a variety of attitudes towards physical education activities among these 'New Canadians'. Upon closer examination these attitudes, ranging from wholehearted involvement to shyness and uneasiness in participation, appeared to have some relationship to the length of time these immigrant students have been resident in Canada.

Ho and Tashima (1981) ask the question, "What happens when an individual is taken out of context and placed in a different society?" Canadian schools place considerable emphasis upon the participation of girls and women in physical education and sports. The increasing number of women's teams in national and international competition in recent times attests to a cultural acceptance of women in sports. The question can then be asked, "Can the degree of attitudinal change towards physical education and sport be commensurate with the amount of time that these Filipino women have been in Canada?" Is there a measurable difference in attitude between those Filipino women who are recent arrivals and those who have been established in the community for a greater length of time?

One can categorize two different groups within the female population, those who have 'recently arrived' and have been in Canada for three years or less and those who have been resident in Canada for five years or more and are 'more established'.

The purpose of this study is to measure and compare the attitudes of recently-arrived and established immigrant Filipino women towards physical education and related activities.

Filipino immigrants, like others, bring their own cultural orientation to Canada. Much of that orientation is centred on the place of the family. Greendorfer (1985) points out that "child rearing practices make a big difference, especially when it comes to sex differences." Right from infancy, a process begins that has lifelong consequences for a child. The family plays a very important role in shaping a child's interest in sports by gender role stereotyping his/her behavior. "The result of this social learning or conditioning is that girls are channeled away from activity while boys are encouraged." (Greendorfer, 1985).

In this context it is significant that approximately 85% of the Filipino population is Roman Catholic. (The New Encyclopaedia Britannica, 1987). Family traditions are strongly influenced by religion and religious myths. Hollensteiner (1979), speaking of Filipino religious customs, observed that in the family, "children are seen as

gifts from God, evidence of the family being in his grace." A healthy newborn child means that the family has been in good standing with God. If a handicapped child is born that means there have been problems in the family and God is showing his displeasure.

What cultural conditions exist in the lives of Filipino females which may explain their attitude towards involvement in physical education and sports?

The Influence of the Church is evident within Filipino society. Roces, (1978) stated "one of the aims of the Spanish religious sector was to create a Catholic community consciousness in which the teaching and the spirit of the Church would penetrate into the daily lives of the converts." Miller (1968) noted that "under Spanish colonization religion and worship were emphasized; prayer books were about the only books to reach the hands of the natives. They gave meaning and substance to the Filipino's hopes and fears, their motivations and their strivings towards a better life." The Philippines is the only Roman Catholic country in Southeast Asia.

The Roman Catholic Church's influence was felt in nearly every aspect of the Filipino's way of life. The church had certain expectations as to the role of females within the Filipino community, including physical participation in physical education and related areas.

The Filipino family structure plays a significant role in the Filipino culture. A Filipino child is taught that, "society is full of dangers and that to be secure, it is

best to remain within the boundaries of the family." (Buduhan and Oandanson, 1981). Christian Filipinos have a "bilateral kinship system", in which relationships are traced from the mother's and father's families. (Lands and Peoples, 1980). The family structure is a close knit one and is considered the basic unit of society. The elders expect and demand subservience, devotion, loyalty and support from their children.

Traditional Filipino women, as Infante (1975) stated, "wish to be beautiful, ladylike, soft-spoken, polite and neatly dressed. Young girls must appear to have the quality of shyness because it is considered proper behaviour." Rosca (1986) observed that "there had been a time in the Philippines when to lead and to act was literally to be a man, and the few women who are recognized as leaders were considered 'honorary men'." Women are expected to be socially acceptable to everyone. In contemporary times Corazon Aquino has achieved a leadership position normally attributed to a man.

Sex stereotyping within the Philippines is evident. Aldabar-Lim (1975) suggested that the eventual social position of the adult female is molded early on in the "traditional and contemporary family", where the young girl is "entrusted with responsibilities as mother's helper." Filipino society has well established ideas about which activities are acceptable for women and which are not. The family unit shapes a girl's interest in games/sports and physical education by stereotyping her behaviour. Roces

(1978) in describing sexual roles, stated that, "fighting seems to be a man's sphere. Not that women do not care but their use of physical strength is limited. Filipino girls do not possess the fighting instinct." Girls may be interested spectators but active involvement in competitive and aggressive sports/activities, is contrary to their upbringing.

Parent and school influence upon the child's role in the family, Buduhan and Oandason (1981), observed, is one of encouraging subservience to the parents and the family unit. Over-assertiveness is unacceptable. In order to reinforce this role -

The elders chastise the quarrelsome child in the play group and praise the peaceful one. The active, assertive child is considered a trouble maker. The quiet submissive child is a well-behaved child. Even in play activities, individual leadership is discouraged and cooperative group leadership is rewarded. (Buduhan and Oandason, 1981).

They concluded that in the Filipino social system the highest priority is given to, "helpfulness, concern for others, friendship, humility and happy and close family ties." It may well be that this type of role conditioning would present problems for young people, particularly females, when they move to another country where family roles are more liberally interpreted.

In the Philippine Educational System, Vongthieres and Egan (1981) noted that, "parents place almost total value on the academic aspects of education. To them athletics means time away from academics. They may forbid their children to

waste time and energy on unimportant things." Filipino people look upon education as a stepping stone to individual success and social advancement. In a society where poverty is common, education is seen as the only means available for changing one's lifestyle. Education in an academic sense is for changing one's station in life and is therefore highly valued.

By comparison, in the Canadian educational system, the emphasis appears to be placed on achievement in both academics and athletics. In Canada there is an ever increasing emphasis on fitness and health through physical education and athletic activities.

It would appear that a Filipino female in a Canadian school attempts to deal with two different cultures at the same time. Buduhan and Oandason (1981) stated that within the Filipino culture, "It is considered extremely important for a child to be socialized by children and adults who come from a culturally homogenous community." It may well be that Philippine students in Canadian schools have little or no contact with Filipino educators which may affect the continuity of the social aspects of their culture. This may also be further affected by the presence and influence of other ethnic groups. The result is that the female Filipino child may be faced with cultural conflict between the family unit and Canadian society as represented by the educational system.

## 1.2 Nature and Purpose of Study

The purpose of this study was to compare attitudes between 'recently arrived' and 'established' female students, as they pertain to the physical education programs at a major Winnipeg high school.

## 1.3 Research Question

Is there a difference in attitude towards physical education and related activities between 'recently arrived' female Filipino students and 'established' female Filipino students.

## 1.4 General Hypothesis

Female Filipino students who have lived in Canada for five years or more will evidence a difference in attitude towards physical education classes and related activities than those students who have lived in Canada three years or less.

## 1.5 Educational Significance of the Study

Information obtained from this study may be of usefulness to those who teach Filipino students. The results may assist educators in understanding the influence of the Filipino culture upon young Filipinos' attitudes towards physical education and related activities in Canada.

## CHAPTER TWO

### Review of the Literature

The review of literature will show that the Filipino culture has an attitude system "that dictates behaviour directly or indirectly in that it sets norms and teaches that these norms are right." (Chilling, et al, 1986). These cultural attitudes are deeply rooted. Many Filipino immigrants may hold onto their entire 'old' culture (ethnic beliefs and values) as if nothing has changed in the move from one country to another.

It is the purpose of this chapter to identify and examine the effect that native cultural influences may have upon immigrants being absorbed into the culture of their adopted country. Specific reference will be made to this cultural transition as it relates to education and, in particular, physical education. The literature will focus on the socialization processes inherent in the Philippine culture which influence how young Filipino females regard physical education and physical activities.

To provide a background for the study it is necessary to examine the Philippines and its people, church and religion, the family structure, the traditional Filipino women, and the Philippines' educational system.

#### 2.1 The Philippines

A brief statement on the history of the Republic of the Philippines may provide a better understanding of the

country and its people.

The following discussion will identify those cultural attitudes including the sex stereotyping factors that exist in the Philippines society and which affect the Filipino female's involvement in physical activities and physical education. In addition, the dilemma which an immigrant Filipino female may be faced with when placed in an unfamiliar cultural environment will be examined.

It is important to understand that the Filipino culture has evolved from both Eastern and Western influences, which were adapted by the native Filipinos to their particular needs and circumstances. They acquired and adapted only that which could be applied to their traditional way of life. This subsequently affected the educational system and, in particular, their attitude toward women's physical education.

Though geographically the Philippines is situated in Southeast Asia it can be said to have a strong Western influence in its culture. The islands have been influenced principally by three countries; Spain, the United States of America and Japan. Each nation left it's 'mark' on the Philippines. (See Appendix A).

It's Oriental background still remains in the barrio with it's bamboo and nipa (palm thatch dwellings), it's close-knit family, and it's folklore. In most large towns and cities, however, the Oriental culture has been replaced by Spanish and American culture. The Spanish and English languages, in particular, have contributed to an appreciation of much in the West and have also, to some degree, included Western standards. (Encyclopaedia Britannica, 1978).

In recent times the Filipino people have been careful to adapt those aspects of other cultures which they felt contributed to but did not unduly change their own culture. Cailas (1966) observed that, "they selected culture traits which they modified to suit local needs and ways of doing things." These borrowed traits are found chiefly in language, religion, politics and the education system.

## 2.2 Influence of the Church

For three hundred and thirty-three years the Philippines were under Spanish rule, and it was during this period that the Roman Catholic religion was introduced to Filipino society.

"Catholics in the new world believed that women were definitely meant to be subordinate to men. Patriarchal laws were enacted assuming that the new world society would adhere to social standards and values which placed men in a dominant role." (Mawson, 1983).

One of the aims of the Spanish religion was to create a Catholic community consciousness in which the teaching and the spirit of the Church would penetrate into the daily lives of the converts. (Roces, 1978). Another aim of the Spaniards was to have Filipinos live near the Roman Catholic parishes. All the people were expected to live "under the bells", i.e., within the sound of church bells. (Lepthien, 1984). Spanish rule in the Philippines ended in 1898. Spain had declared war against the United States of America over the question of sovereignty of Cuba. Spain was forced to relinquish the islands to the United States as

part of the terms of surrender on December 10, 1898. For the next fifty years the Philippines continued under American rule and was thereby protected from seizures by other nations. In 1934, the Philippines were granted their independence from the United States.

"Neither 50 years as an American colony nor 26 years as an independent republic had been able to do much to counteract the 300 year tradition of male supremacy established in the 7,100 island archipelago, by Spanish colonial rule and the Roman Catholic Church. (Rosca, 1986)."

The Philippines is unique for being the only Roman Catholic country in Southeast Asia. Approximately 85% of the Filipino population is Catholic.

"Under Spanish colonization religion and worship were emphasized; prayer books were about the only books to reach the hands of the natives. They gave meaning and substance to the Filipinos' hopes and fears, their motivations and their strivings towards a better life." (Miller, 1968).

To convert the Filipinos to Christianity, the primary objective of the Spanish missionaries, schools were established in different parishes; the elements of the Christian doctrines constituted the only materials for instructions. (Deighton, 1971). The Roman Catholic Religion and the influence of the Church was further strengthened by accepting Filipinos into the Church hierarchy as cardinals, archbishops and bishops. Seminaries and cathedrals were built in every province and each town had a church. The church was increasingly involved in the social life of the country. A priest was always present at festival days,

community and family social events, as well as officiating at weddings and funerals.

The power and influence of the Roman Catholic Church in the Philippines is very strong, as evidenced in the recent 1986 elections. Before the recent elections Cardinal Jaime Sin sent a letter to all the Philippine parishes pointedly instructing the faithful to vote for those who showed "respect for human rights and life." (Moody, 1986). This pastoral letter was read at Sunday Mass for all Catholics to hear.

### 2.3 The Church and Politics

In the Philippines the Church has not hesitated to voice its opinion in the political arena. The Roman Catholic Bishops of the Philippines which number over a hundred have spoken out against the former government of Ferdinand Marcos. They accused the Marcos government of tampering with the 1986 presidential elections.

"A recent study showed that of the 24 pastoral letters issued since 1977, 15 took an openly political, though not necessarily anti-government stance. More recent pastoral letters have been judged political. The involvement of the Roman Catholic Church was crucial in un-seating President Ferdinand Marcos." (Winnipeg Free Press, April 2, 1988).

In the home, the religious upbringing of the family is the duty of the mother. Church attendances and other religious obligations are considered a family affair with the female members assuming these duties for the entire family. (Nelson, 1968). The Filipino children are baptized

and receive instruction in the religious philosophy and teachings of the Church. They must attend all church functions as part of their religious upbringing and, also, because this shows family solidarity.

At Church fiestas and on the Holy Days children may participate in candlelight processions, and join with others in the songs and dances of the culture. Theatrical performances and decorated floats are a part of the tradition of the fiesta.

The Philippines' constitution guarantees freedom of worship for all Filipinos. Roman Catholics make up 85% of the population; the other 15% is made up of Protestants, the Philippine Independent Church and Muslims.

#### 2.4 Filipino Family Structure

The family unit is central to the Filipino culture; it includes not only parents and their children but extends to maternal and paternal grandparent, relatives and friends. In addition, there are godparents who formalize the bonds between friends and provide for care of the family if the parents should die. (Howells and Sarabia, 1978). Parents may exercise authority over their children's welfare and upbringing, but it is always subject to approval by grandparents and other senior family members, even close friends may be consulted for their opinions. Family decisions, including those affecting the upbringing of the children, are most often arrived at only after a consensus

has been reached, after which the final decision will be adhered to by all. (Cote, 1986). The 'ideal' child has been described by Hollensteiner (1979) as;

considerate of his parents, which means, for the most part, being deferential to them, beyond this, he should be diligent in his studies and work. Sons should strive to avoid falling into bad ways while daughters should both do this and grow closer to God in faith and piety.

The Filipino culture holds the birth of a healthy child as a very special occasion. All children are seen as gifts from God, evidence of the family being in His grace. (Hollensteiner, 1979). Filipino parents view their children as extensions of themselves. Parents work very hard to provide for their children. Often many sacrifices are made by parents so that their children can have the best. The children are, in turn, expected to be eternally grateful for this unsolicited gift of love. (Hollensteiner, 1978).

"Children are born into a society where women do not have equal opportunities and girls and boys have different experiences and expectations of themselves which are formed by society's attitudes as to what is appropriate for girls and boys to do." (Weiner, 1985).

Girls and boys dress differently and play with toys appropriate to their gender. They are also given different household responsibilities.

With increasing age comes increasing responsibilities. Until the age of five young children are often indulged and lead a fairly carefree life. They develop normally as growing children, exhibiting traits of self-reliance and

understanding. An awareness of what is expected of them as individuals within the family is understood and accepted as a way of life. This is reinforced as more formal training begins after the age of five. After this age, they are expected to undertake some household tasks and their share of family responsibilities. Days of primary training are over and preparation for adulthood begins. A child learns that the welfare and support of the family and the community will always take precedence over an individual's desires, but that the family and community will be the source of support and security for the individual. The society honors the family which achieves; it approves the individual who works within the family context and for the good of the family as a whole. (Guthrie and Jacobs, 1966).

Early marriage is encouraged. Marriage brings together families and thus enlarges the family unit. Being Catholic, birth control is not allowed and large families are looked forward to and enjoyed. The Philippines' Family Planning Programs are hampered by strong Catholicism and by the Asian wish for the "insurance" of a large family in old age. (Peters, 1987). An average Filipino family raises five children who are viewed as potential workers and are expected to help either around the house, or when old enough, with work on the land or on the fishing boats. Fully aware of the security that the family can give, many Filipinos establish a family business and this provides jobs for their relatives. (Nelson, 1968). It is not uncommon

for several generations of the same family to live under the same roof.

By contrast, the Canadian family unit is generally considered to comprise only parents and their children. There is relatively less importance placed upon extended family unit membership, and grandparents, god-parents, relatives and friends do not generally contribute to the decision-making processes of the Canadian family. Although there may be occasions when opinions are sought, it is not in any way an obligation or accepted rule to follow this advice. The final decision will rest with the parents. Canadian children, therefore, do not normally turn to their relatives and friends for moral and material support to the extent that Filipinos do. Canadian parents assume full responsibility for the upbringing and support of their children. Filipino culture deems it appropriate and proper for the extended family unit to be involved in the nurturing of children.

### 2.5 The People and Physical Activities

Agoncillo (1977), Lawson (1984), and Lepthiem (1984) describe the Philippines as a very emotional, intensely patriotic, vibrant and artistically inclined society, fond of gaiety, music and social gatherings. (Appendix B). At such gatherings or fiestas they traditionally participate in singing, dancing and athletic events. Nelson (1968) observed that "Filipinos have a remarkable sense of

make-believe. Life is a constant source of fun and the urge to be merry is seen in the innumerable fiestas, where expense is of secondary importance, to eating, drinking, listening to brass bands, watching beauty contests and colourful religious processions with long lines of candle bearers and gaily decorated floats."

Such activities, although social in nature, also serve to preserve and enforce their way of life. The Filipino's love for music and dancing was carefully exploited by the Spanish missionaries, who used sacred music as an integral part of their church services. (Nelson, 1968).

At the sporting events a Filipino child can either be a participant or a spectator, and feel equally involved. These activities include team sports, baseball, soccer, basketball, volleyball, and the more individual sports of sipa, fencing, chess, tennis, golf, arnis, bowling and boxing. Jai-alia similar to handball is one of the most popular sports.

While under American rule, Filipinos were eager to adopt American traditions. One such tradition was the sport of basketball. The national sport for the Philippines is basketball and there has been a professional league since 1975. Following in popularity are baseball and soccer. Basketball is the national sport despite the Filipinos' small stature. Their preference for sport varies widely; the wealthy enjoy golf or polo, both sports involving some financial investment, while the less affluent play baseball

or ride bicycles for physical exercise and enjoyment.

The Philippines has competed in the Olympics since 1924 and has won medals in high jump, boxing and swimming. The medal winners have all been males. (Appendix C). No female has won a medal to date.

According to Roces (1978), as young children mature, sex differentiation becomes evident in games. The family unit will decree which games are suitable for girls to play. Such games as tinda-tindahan (store-keeping) reyna-reynaham (pretending to be beauty queens or queens) or bahay-bahayan (playing house) are considered to be ladylike and proper. The games help prepare them for adulthood. Young girls are also allowed to play piko (hopscotch), sintak, bao and taguan (hide and seek). These games help the girls to learn the importance of co-operative behaviour and the value of playing for the fun of it. The girls play these games among themselves, not with the boys because then situations, considered undesirable to a girl's upbringing, will not develop. Such games as babuybabuyan, kingking, tayaked and luksung-tinik are given up as the girls reach adolescence and are left to the boys to enjoy alone. These games are viewed as being too "strenuous or ungirlish" for them. (Roces, 1978). This is because the young girls are physically changing and they are also becoming shy about displaying acts of aggression or strength. Girls mature at an earlier age than boys in most cultures. Games that appear childish are given up as Filipino girls become more

conscious of their physical development and the need to adjust to approaching adult life.

"By nature, the boys possess the competitive instinct in sports, and the girls are content to leave such aggressive activities to them...e.g. fighting, boxing, babuybabuyan and pasuagan. Fighting seems to be a man's sphere. Not that women do not care, but their use of physical strength is limited. Filipino girls and women do not possess the 'fighting instinct.'" (Roces, 1978).

The girls may be interested as spectators but active involvement in such sports would be contrary to their upbringing.

#### 2.6 Traditional Filipino Woman

Filipino males have an "ideal" picture of how a female should appear and conduct herself. It is considered important for a Filipino man to marry an attractive Filipino woman because such a marriage will enrich the young man's career. Beauty queens are considered great assets as wives of politicians. (Lawson, 1984). For example, Ferdinand Marcos, the former exiled President of the Philippines married Imelda Romauldez in 1954. In the same year she had been named Miss Manila in a beauty pageant. Mrs. Marcos has claimed that Filipino women are "placed on a pedestal".

"And because she herself had been a beauty queen, beauty became the prime virtue, the source of all power for women. Parades and palace affairs were led by women chosen for their beauty, and Mrs. Marcos's own retinue, guard of honor, and playmates were all comely and extravagantly costumed." (Rosca, 1986).

Roces (1978), Rosca (1986), Budhunan and Oandanson (1981) stated that Filipino women are expected to marry men who have achieved a higher level of social standing than

themselves. By achieving this goal, the female has brought honour and respect to her family and friends. To be slovenly or unkempt is disgraceful for a Filipino. (Budhunan and Oandanson, 1981). The Filipino culture places great social value on physical appearance. It holds that physical exertion such as aggressiveness and shows of physical strength by a Filipino girl/woman would not be looked upon favorably by other females and males. Their manners are to be "soft and pleasing but mainly because they can never shine in conversation." (Rosca, 1986).

Roces (1978) Rosca (1986) and Budhunan (1988) stated that Filipino women were expected to act like ladies and any change in this 'role' was regarded as acting like a man. There had been a time in the Philippines when to lead and to act was literally to be a man, and the few women who were recognized as leaders were considered 'honorary men'. (Rosca, 1986). Trinidad Teconso, who at the turn of the century, fought Spanish and American colonizers with her machete, was known as a "man-woman". Former Senator Eva Estrada Kalaw was paid a compliment by a male colleague who said in 1971 that she was "the only person with balls" in the Senate. A university professor once said, in former times Corazon C. Aquino, as President, would have been unthinkable. (Rosca, 1986).

Filipino girls wish to be beautiful, lady-like, soft-spoken, polite and neatly dressed. Young girls must be socially acceptable to their fathers in particular and to

the family unit as a whole.

Young Filipino girls must act in a proper manner when in the presence of males. At all social events, young girls are accompanied by male chaperons, "who are mostly relatives or siblings." If a young boy wants to dance with a young girl, he must first ask the chaperone for permission. The young lady has no say; she looks up to her chaperone who gives her the sign whether to accept or reject the invitation. (Aldaba-Lim, 1979).

In accepting, the girl stands up without even looking at the boy, and follows him to the dance floor. The girl stiffens a little when she is held by the boy; to relax and enjoy the dance may be interpreted by spectators as unwomanly." (Aldaba-Lim, 1979).

Young girls must appear to have the quality of shyness because it is considered proper behaviour. (Infante, 1975). Mrs. Corazon C. Aquino, herself a Roman Catholic, "runs her own family along very traditional lines. Though her daughters are politically active, they can't be expected to do or say the unexpected." (Rosca, 1986).

A Philippine organization called GABRIELA (General Assembly Binding Women for Reforms, Integrity, Leadership and Action) has stated it considers "attitudinal and cultural sexism, particularly within the home..." a very important issue. (Rosca, 1986). Filipino women are taught that there are established male-female roles within the family unit. Gabriela is trying to change this image of Asian women as "docile, submissive females who make perfect wives." (Kumagai, 1978). Women are to be considered equal

in all aspects of life.

Hollensteiner (1978) states that the husband and wife relationships demands that the wife's earnings "do not exceed those of her husband's and that if the wife works there not be 'close contact with other men' (in the work place)." The women must remember the head of the family in all matters - economic, political and domestic - is the husband. Men are expected to project the dominant figure. (Hollensteiner, 1979).

Neila Sancho, a former beauty queen and now a strong advocate of the Women's Movement in the Philippines sums up the role of women in the male society when she noted "I was dined and stared at, but no one wanted to say anything of significance to me. It was as though all I had was a face and a body; no brains, no concerns." (Rosca, 1986).

### 2.7 Sex Stereotyping Within the Philippines

Young children are born into a society that has different expectations and experiences for females and males. The Filipino society has cultural attitudes as to what is appropriate for girls and boys to do. Because of their upbringing and their distinct role in the home, Filipino women are generally less inclined towards physical sports and indeed are not encouraged to be over-active physically.

Girls and boys are dressed differently from birth, the emphasis for girls being on the pretty little girl in pink.

Girls are often dressed more impractically than boys which not only inhibits their choice of activities but carries the implicit message that certain activities are not suitable for girls. (Weiner, 1985). They are expected to spend their leisure time in activities such as singing, dancing, attending social functions which center around the family unit.

Aldaba-Lim (1975) stated,

"an early differentiation of the respective roles of boys and girls in traditional and contemporary Filipino families helps shape the future role identity of the female in society. Very early in her growing up stage, she is entrusted with responsibilities as mother's helper."

Household duties are assigned according to sex - the girls are expected to do the household work while the boys are assigned to work outside in the fields or on the fishing boats. If there are no girls in the family then the boys are given household chores.

Under Spanish rule, according to Roces (1979) "the prevailing attitude among the wealthier families in the bigger towns and cities was that the 'woman's' place was in the home." Mothers trained their daughters to this end. Instilling total obedience to their fathers, to the priests, "to their husbands in marriage and their sons in old age." (Kumagai, 1978). Daughters were also taught not to question women's subrole in society.

These attitudes changed when America gained sovereignty of the Philippine Islands in 1898. American school teachers were brought over to teach and help establish the public

school system. Resultantly there was a change to some degree towards female involvement in physical activities.

With the arrival of the Americans the whole social scene in the Philippines seemed to change overnight. The Filipino female had gained a degree of equality with her male counterpart.

When the school opened to her, she proved to be a keen student. Within a quarter century of American tutelage she had entered for the historic first time the professional ranks of doctors, dentists, pharmacists, nurses and schoolteachers. In quick succession she was in sports playing in tennis and softball...:(Roces, 1978).

The Filipino society has strict ideas about which activities are acceptable for women and which are not.

Girls and boys are encouraged to play with different toys. By giving girls, and not boys, dolls to play with we reinforce the attitude that the caring role is the province of women, and at the same time we are, by implication, excluding men from this caring role. Approval is given to boy's games which involve physical activity, dominance and aggression, whereas similar behaviour in girls is unacceptable. (Weiner, 1985).

The family unit uses its influence in shaping a young child's interest in games/sports/physical education by gender role stereotyping her behaviour. At an early age, young girls learn to select and play such games as tinda-tindahan (storekeeping), bayay-hahayan (keeping house), or reyna-renahan (pretending to be beauty queens or Queens).

The parents prefer that children stay with the family and do things with the family. So children are not encouraged to play outside the family, rather they are encouraged to join family chores, while at play. Children wash clothes with mothers, or bathe their dolls at mother's side; or boys play near where their father works in the fields. (Roces, 1978).

Young girls stay at home with their mothers and do housekeeping duties. They "learn how to cook rice, clean the house, go to the market, mend clothes, take care of the younger siblings while the boys in the family are relatively free to stay out and play." (Infante, 1975).

## 2.8 The Philippines Educational System

### A. Historical Background

According to Kee (1973), the present day public school system of the Philippines is built on the social philosophy of the greatest good for the greatest number.

The History of education in the Philippines illustrates how the school can be used as an instrument of social change. (Deighton, 1971). This change is evident in the educational aims and activities pursued during the periods of colonization by Spain, the United States of America and Japan.

Kee (1973) stated that the Spaniards, though they introduced a system of formal education, saw the school "as the constant ally of the Church in the conversion of the natives." "Education was mainly religious with the basic three R's" being taught. (Kee, 1973).

During the American and Japanese occupations, each country wanted their language as the media of instruction: their teachers were recruited and their educational materials were used in the education of Filipinos. Filipino children "were forbidden to speak and use their native

language in the classrooms or on the school premises." (Deighton, 1971). By establishing this policy, each country wanted the Filipino children to share the same identity as their rulers. Each country wanted all interaction, socialization and communication to be the same.

With the creation in 1943 of the Republic of the Philippines a new educational constitution and school system was established. The general structure of the school system "is patterned after the American system, with schools classified into public (government) or private (non-government) and English and Pilipino as the media of instructions." (Cote, 1986).

The first six years of elementary education is compulsory and government supported. Children are enrolled in school after their seventh birthday. Although there is a law requiring that each child over the age of seven attend school until he completes his elementary education, the law is never enforced because school facilities are lacking. (Deighton, 1971).

After elementary there are four years of secondary education for which the government does not provide any funding. All funding for educational purposes at this level comes from the private sector. The school calendar for Philippines schools starts in June and ends in March.

#### B. What is taught? - Education content in the Philippines

"In the Philippines under the constitution all schools are required to develop students' moral character, personal

discipline, civic conscience, and vocational efficiency." (Deighton, 1971). At school parents stress that children should learn the three R's, acceptable conduct, good manners, moral democratic citizenship and health. A major emphasis of the school system is character or moral training.

Students are to be taught obedience and respect for their peers. Through the teaching of ethics and morals it is hoped that a student may become an ethical and moral person as well as an educated one. Schools help reinforce basic Filipino community values such as inter-personal relationships, respect for peers and authority, and acceptable behaviour.

Education is highly valued by Filipinos. Education is looked upon by the Filipino people as a stepping stone to individual success and social advancement. It is seen as the only means available for changing one's lifestyle. Parents and family members make great sacrifices to help their children obtain education. "Upon completion of their education, Filipino men and women in turn must assist others in the same way. This is a family obligation." (Postlethwaite, 1988).

Because the Philippines is an archipelago consisting of approximately 7,100 islands, each island/region is "encouraged to modify the content of the curriculum for the different learning areas to suit local situations." (Postlethwaite, 1988). For example, a rural school in a

farming region would offer an agricultural curriculum while a coastline school would design a curriculum to give technical training in fishing.

Philippine elementary schools teach character education, English, Pilipino, reading, mathematics, science, araling panlipunan (social studies) music, arts, physical education/scouting, work education (grades 1-4), home economics for girls (grades 5+6) and industrial arts for boys (grades 5+6). Table 1 shows a breakdown of subjects taught in an elementary school. Elementary schools stress work education and character development.

The secondary schools offer a curriculum that is designed to meet the needs of the Philippine's society as well as the needs of the individual. The Bureau of Public Schools has created a 2-2 plan which has the curriculum divided into two sections. The first two years are designed for general education and exploration of the interests and aptitudes of students; the last two years are intended for specialization. (Deighton, 1971). All students are required to take the same subjects in the first two years such as Pilipino, English, mathematics, science, social studies, health education, and work experience or home economics. These courses "aim to strengthen basic education and to serve as a unifying influence in the country." (Deighton, 1971). In the third or fourth year, students select either the vocational curriculum or the academic curriculum but only after extensive guidance.

TABLE 1  
Elementary Schools

| Subjects                            | No. of Min | MON | TUE | WED | THUR | FRI | MED OF Pilipino | INST English |
|-------------------------------------|------------|-----|-----|-----|------|-----|-----------------|--------------|
| Character Education                 | 10         | X   | X   | X   | X    | X   |                 | X            |
| Conversational English (Grades 1-2) | 40         | X   | X   | X   | X    | X   |                 | X            |
| English (Grades 3-6)                |            |     |     |     |      |     |                 | X            |
| Reading                             | 30         | X   | X   | X   | X    | X   |                 | X            |
| Mathematics                         | 40         | X   | X   | X   | X    | X   |                 | X            |
| Science                             | 40         | X   | X   | X   | X    | X   |                 | X            |
| Pilipino                            | 40         | X   | X   | X   | X    | X   | X               |              |
| Araling Panlipunan (Social Studies) | 40         | X   | X   | X   | X    | X   | X               |              |
| Work Education (Grades 1-4)         | 40         | X   | X   | X   | X    | X   | X               |              |
| Home Economics (Grades 5-6)         | 60         | X   | X   | X   | X    | X   | X               |              |
| Industrial Arts (Grades 5-6)        | 60         | X   | X   | X   | X    | X   | X               |              |
| Music                               | 30         | X   |     |     |      |     | X               |              |
| Arts                                | 20         |     | X   | X   |      |     | X               |              |
| P.E./Scouting                       | 30         |     |     |     | X    | X   | X               |              |

-Understanding the Filipinos: A Multicultural Education  
Writer: Flor Coté

The Philippines education system faces many challenges. The overall concern for improving education and making it available for everyone is of prime importance. Reaching the increasing large numbers of diverse people who populate the vast network of islands creates a need for more schools and classrooms. A problem particularly common in this part of the world is the damage to schools by typhoons. (Postlethwaite, 1988).

### C. Objectives and Aims of the Philippines' General Education

The aims of the educational system as stated in the 1973 Philippines Constitution are to:

- a) Provide a broad general education that will assist each individual to attain his or her potential as a human being; enhance the range and quality of individual and group participation in the basic functions of society; and acquire the essential education foundation of his or her development into a productive and versatile citizen.
- b) Train the nation's labour force in the middle level skills required for national development.
- c) Develop the professions that will provide leadership for the nation in the advancement of knowledge for improving the quality of human life.
- d) Respond effectively to changing national needs and conditions through a system of educational planning and education.  
(Postlethwaite, 1988).

Speaking of the constitution, Hall (1977) stated "That one of the functions of culture is to provide a highly selective screen between man and the outside world. In its many forms, culture therefore designates what we pay

attention to and what we ignore."

Husen (1985) stated that the key element of the educational system was to reflect the Filipino aims and hopes of their culture. Their education is based on general curriculum; curriculum material has to reflect their culture and be written by Filipinos. General education means a general curriculum, which is designed to meet the needs of students who plan to go to college as well as those students who will seek employment or become home-makers immediately after graduation.

#### D. Education and Religion

Filipino society has blended religious as well as personal growth goals into their education system. According to Miller (1968) it is apparent that the Filipinos "Have given their religion and their God prominence." He stated that the most distinctive feature of the education objectives is the emphasis placed on:

- a) Morality guided by the faith in God and love of fellow men.
- b) Family unity, a happy home life and efficient discharge of home responsibilities.
- c) Industry, manual labour, productive toil and the conservation of natural resources.

The 1973 Philippine Constitution commits all educational institutions to inculcating love of country, to teaching the duties of the citizenship and to developing moral character, personal discipline, and scientific, technological and

vocational efficiency. (Postlethwaite, 1988). (Appendix D and E).

#### E. Philippines's Physical Education Program

According to Calio, (1966) the aim of physical education at the elementary level in the Philippines is to develop physical health and fundamental social and moral attributes of upright citizenry in a democratic society, and to develop the rudiments of basic motor skills. The aim of the Philippines's secondary physical education is to "develop optimum physical fitness, social values, skills for participating in a variety of games, and recreation, and the preparation of culture through folk and foreign dances and songs." (Calio, 1966).

The Philippines school board has created programs to meet the aims:

The Elementary Program: includes movement education low organized games, lead-up games for sports such as basketball, volleyball, soccer, and baseball. Rythmical activities are a very important part of the elementary program. Children have the opportunity to learn folk dances, action and sing-song games. (Calio, 1966).

The Secondary Program: contains such activities such as gymnastics, rythym and dance, lead up and low-organized games. Students are provided the opportunity to specialize in individual dual athletics and team sports. The avenues for such development are found in the intramural program and interscholastic competition. (Calio, 1966).

In the first two years of Philippines' secondary education, physical education is integrated with health and in the third and fourth year the Citizenship Army Training. This course emphasizes military training, character development and the importance of the Philippines's judicial

system.

Augustin A. Calio (1966), former director of Physical Education, University of the Philippines stated,

It is rather difficult to make a general statement on the emphasis of physical education in the institutions of higher education in the country, because physical education is 'Institutionalized' according to the varying needs of each school.

Each institution is allowed to establish its own physical education program to meet its needs and interests. The Philippines has accepted the concept that -

Physical Education is education through the physical rather than of the physical is an accepted and recognized point of view among the leaders and students of physical education in the Public, the state schools, and the colleges. (Calio 1966).

The aim of physical education programs is to provide each individual with qualified teachers and adequate facilities. By having these two elements, an individual or group has the opportunity to act in situations which are physically sound, mentally stimulating and satisfying and socially sound." (Calio, 1966).

Throughout the Philippines every school places strong emphasis on folk singing and dancing in the physical education program. (Appendix F). These two activities are very much a part of the traditional Filipino way of life. Folk dancing has a place in the physical education curricula from the earliest grades,...and continues into the high school years. (Carson, 1978).

Annual athletic high school competitions are held in the Philippines. These competitions are an important part

of the physical education curriculum. In the public secondary system the inter-scholastic athletic meet is the major event of the year.

The public schools hold annual athletic meets. The competition involves "track and field, for boys and girls, boys' basketball, boys' baseball, and sipa, a native boys' game." (Vendien and Nixon, 1968). Swimming and tennis competitions are held for boys and girls when facilities are available.

In the Philippines the girls may be allowed to participate, but their level of exertion reflects their cultural tradition of preferred sports/activities, co-operative interaction, non-aggressive behaviour and non-contact, for example bowling and tennis meet all the above criteria.

#### Physical Education in the Philippines and Manitoba

A comparison of physical education programs in the Philippines and the Province of Manitoba reveals that there appears to be no difference between the two educational philosophies or in the program of activities.

The primary aim of the physical education program from kindergarten through the Senior High Schools in Manitoba is: To help students develop and participate in a purposeful, physical active lifestyle, which will enable them to experience a more enjoyable quality of life -- today

and tomorrow. (K-12 Physical Education Curriculum Guide, Province of Manitoba, 1981). This is achieved through:

1. Develop physical well-being.
2. Develop desired movement patterns through the neuromuscular system.
3. Express ideas, thoughts, and feelings with confidence through physical activity.
4. Develop safety and survival practices.
5. Develop an independence in pursuing physical activity throughout life.
6. Develop positive social interactions through a variety of physical activities.

The objectives of the Philippines physical education are as follows:

1. To develop and maintain optimum physical fitness.
2. To develop specific neuromuscular skills.
3. To develop proper ideals and desirable attitude toward physical activities.
4. To provide opportunities for wholesome recreation and harmonious association.
5. To impart knowledge and develop skills on varied physical activities that have carry-over values in life.
6. To develop desirable character traits through physical activities.
7. To revive, propagate and preserve Philippine culture. (Vendien and Nixon, 1968).

In 1937, physical education was granted the status as a curricular subject in the Philippines school system.

In both educational systems there appears to be

similar objectives and program activities. However, there are key differences. There are limited gymnasium facilities in the Philippines. The lack of gymnasium equipment limits the type of exercise/activity that may be taught. Many schools cannot afford to buy expensive athletic supplies, equipment and playground apparatus. (Vendien and Nixon, 1968). All physical education classes are held outside in the school yard weather permitting.

Discussions with immigrant Filipino females revealed that a great portion of the physical education program for girls is spent exercising and learning Philippine folk dances, songs and games. (Appendix F). Every year there "is a mammoth exhibition of freehand exercises, folk and creative dances, games, light and heavy apparatus exercises, stunts, tumbling and pyramid building, native sports, and other activities good for mass demonstrations." (Vendien and Nixon, 1968). Girls do run but not, it would appear, to the extent expected here in Manitoba; the concept of track and field is new to them. The Filipino girls are expected to run/work at an acceptable health-fitness level and build up their cardiovascular system. There is some time given to playing volleyball and softball.

In the Canadian educational system the emphasis appears to be placed on the individual achievement - both academic and athletic.

The Filipino child in Canada finds herself in a school system where the emphasis is placed on individual academic performance and competition. The degree to which group work is stressed in Manitoba is much less than it would be in the Philippines. Also the

the development skills and the attitudes for successful group work are not stressed as much as they would be in the Philippines. Even though children are working groups in Canada, the reward system favours the student who displays successful group work skills. (Buduham and Oandason, 1981).

The Canadian attitude places great value and importance on fitness and health and on athletics. Physical education is seen as an excellent avenue that allows students to develop positive relationships through a variety of physical activities. The Manitoba High School Association views athletics as an integral part of education.

Situations may arise that a Filipino girl, recently arrived in Canada may find it difficult to understand and accept. For example she is faced with a totally different gender related attitude and expectations towards female involvement and participation level in physical education.

"Acquiescence and obedience are values stressed in Asian families and when students encounter educational situations that emphasize individualism and gregariousness, they may develop internal doubts and frustrations. They are torn between values expressed in the school and in their own family traditions." (Vongthieres and Egan, 1981).

## 2.9 Family and School - Their Influence on Female

### Involvement in Physical Education

Education is highly valued as the only way to improve one's social standing in the community and advance the chances for success in business. This attitude is held by both Filipinos in their own country and by immigrant Filipino families in Canada. Parents of recently arrived

Filipino students, "place almost total value on the academic aspects of education. To them athletics means time away from academics." (Vongthieres and Egan, 1981).

In Canada a Filipino girl may wish to become involved in athletics in order to become more accepted by her contemporaries - but her parents may refuse their permission. (Vongthieres and Egan, 1981). A Filipino child is not encouraged to be independent. Independence is considered an anti-social attitude and the most offensive trait a Filipino could possess. (Buduhan and Oandason, 1981). Although Filipino parents train their children in self reliance their concept of self reliance for children does not include learning to decide for one's self or trusting one's judgment. Children in the Philippines are encouraged and expected to consult their elders and other people concerned. Their decisions must take into account the welfare of everyone in the family. (Roces, 1978).

At school the girls often sit separately from boys. At recess the boys are separated from the girls. Even the responsibilities of taking care of the school are assigned according to sex. The boys are given the duty of cleaning the school yard while the girls take care of the blackboards. The sex roles between the children become clear cut.

In such an environment Corbin (1985) has stated that many young girls develop what is called "learned helplessness". They believe they cannot achieve things that

they are really capable of doing. This attitude of 'learned helplessness' is instilled by the family unit by way of gender stereotyping and cultural attitudes.

This may not affect their attitude in sports, but may infiltrate other aspects of their life, and prove detrimental to their wellbeing. (Corbin, 1985). Corbin (1985) stated that activities society approves for women involve a separation of space, such as that created by a badminton or volleyball net, or a light implement such as a golf club, a tennis racquet or a baseball bat. In conversations with Cleto Buduhan and Linda Cantiveros, they expressed the view that if a Filipino female participates in athletics she is viewed as a tomboy. A tomboy is a girl who is aggressive, plays hard at sports, exerts physical strength and is usually outspoken by Filipino standards. Generally the men feel the athletic participation does not enhance the girl's personal beauty.

Cultural attitudes appear to play an important role at the participation level, they influence, and bear a relationship to the level of physical achievement reached, or permitted for the Filipino girl in a physical education program.

In the Philippines, physical education classes can be either co-ed or separated. It has been a tradition not to mix the sexes in physical education. "There is a very reserved attitude about the exposure of the human body or direct reference to any part of the body hidden under the

clothes. This type of upbringing will cause difficulties in gym and health classes." (Tebeau, 1977).

#### 2.10 Socialization of Filipino Female in Canadian Schools

Filipino females entering Canadian schools may find a big difference in how females are expected to participate and perform in physical education activities.

In Canadian Schools, where emphasis is placed on individual performance, young Filipinos may see the need to be assertive and competitive despite the fact that Filipino parents traditionally would stress cooperation and a certain reticence as more becoming behaviour. For the parents and the child in terms of their own culture, a successful leader is one who nurtures a cooperative attitude within his/her group.

An immigrant Filipino will experience a different method of interacting with the teachers and school administration. The relationship between Canadian teacher and student is very informal whereas in the Philippines she is expected to be more deferential. To show respect for an adult, a Filipino child might keep her head bowed, a gesture open to misinterpretation by Canadians who equate eye contact with openness and honesty. (A Culture in Transition, Filipinos in Canada, 1984).

A recently arrived Filipino female is placed in a situation where she must deal with two very different cultures at the same time. The Filipino child is familiar

with the Filipino culture, then must deal with one that is new and different.

The social and physical world of the Filipino child in Canada is characterized by a fragmented multilingual Filipino 'Family' multiethnic neighbourhoods, physical and cultural minority status and an educational system that has different priorities. Therefore, the Filipino child living in Canada undergoes a socialization process markedly different from that of a child in the Philippines. (Buduhan and Oandanson, 1981).

The result may be that a child is faced with a cultural conflict. The Filipino culture has specific expectations on how a young girl should behave and conduct herself.

The Canadian school system encourages Filipino children and indeed children of other cultures to socialize with children from other ethnic groups. Buduhan and Oandanson, (1981) pointed out that within the Filipino culture, "it is considered extremely important for a child to be socialized by children and adults who come from a culturally homogenous community." (Buduhan and Oandanson, 1981). Because there is not such a group within the school it is hard for the Filipino children to establish and maintain permanent friendships.

Filipino students are faced with many cultural differences when they emigrate. Ethnic diversity, different moral and social values, dissimilar physical appearance, all may affect the way they respond to their new surroundings. Within the new community, the Filipino student must deal with the aggression and verbal confrontations between the students and teachers. Whereas at home, they are constantly reminded by the family unit not to be aggressive and to respect their peers.

The result is they may be torn between the values expressed in the Canadian School systems and in their own family traditions.

#### 2.11 SUMMARY

To summarize the review of the related literature a philosophical foundation for understanding the environment of the Filipino culture was first established. It was important to focus on the external influences that Filipino females encounter during their child-rearing and adolescent years.

The major influence on the life and attitudes of a young Filipino girl is the family unit, a unit which provides support and guidance from early childhood until young adulthood. Young people are encouraged to marry at an early age, and thus perpetuate the ties and the strength inherent in their family life.

There are clearly defined attitudes on how young Filipino girls should be brought up. Their mothers teach them to share in family work around the home, and to respect the words of their parents and elder members within the extended family unit. Children learn to be considerate of others, to be polite, and to obey all the regulations of good behaviour. A neat attractive appearance is important.

The Filipino attitudes instilled during upbringing appear to differ from those of Canadian families. Filipino children may have difficulty in understanding a culture that

allows a child more individual freedom and active participation, and is not restricted by the gender-related attitudes that are an important part of the Filipino culture in the Philippines.

A Filipino girl's participation in physical education may be encouraged through emphasis on health and well-being. She is more likely to respond to exercise that improves her poise, her physical appearance and her health than to more demanding and energy-involved activities. Non-aggressive team sports, with less emphasis on a competitive attitude, are more likely to appeal to the Filipino girl. In this situation the qualities of sharing, consideration for others, and the important aspects of behaviour learnt in the home, will not be brought into conflict. There will be less reason to question her culture or feel different from other peer groups.

A well-structured program of physical education activities, which takes into consideration the needs of the Filipino girl, may gradually encourage participation at higher levels of physical education. Alternatively a Filipino girl may remain at the minimum involvement level. She may feel happy and content with her level of participation as well as her health fitness level.

Another major influence on the life and attitudes of a young Filipino girl is the church and religion. In the Philippines the Roman Catholic religion and the influence of the church is felt in every aspect of their social life and

the political arena of the country. Priests attend all festival days, community and family social events, as well as officiating at weddings and funerals. The Roman Catholic Church has not hesitated to voice its opinion on birth control and against the former government of Ferdinand Marcos.

Church attendances and other religious obligations are considered a family affair with the female members taking the responsibility for the whole family unit. The importance of church and religion is taught to young Filipino females at a very young age. A Filipino girl learns that "God" rewards the faithful with healthy newborn children as a sign of devotion to him and for living an acceptable life.

Physical education programs provide many extra-curricular benefits. There is the social contact with other students, making new friendships, the school spirit, the team spirit, the sharing in victory and defeat, the learning of skills for team sports and lifetime activities, and the developing of one's self. This in itself is a learning experience which supports academic achievement, makes for a well-developed personality, and encourage a wide acceptances of the world around us.

An understanding of the integration of the Filipino into the Canadian culture lies in their history. Traditionally the Filipinos have accepted from other cultures that which they feel at ease with. They took those

aspects which were best suited to their way of life, and all these traits, woven together, form their culture. It appears important to the Filipino students that they do not lose the association of their culture. Yet the Filipinos have much to contribute to the Canadian way of life, and from which Canadian students may learn.

## CHAPTER THREE

### METHODOLOGY

#### 3.1 Subjects

The population consisted of all Philippines- born Filipino female students registered at a major Winnipeg High School.

#### 3.2 Profile of the Population

Every student registered at the major high school was required to complete a home information sheet. On this form there was a section to record place of birth. The researcher went through all the school's home information forms for the total female population. The total number of females attending the high school who were born in the Philippines was sixty-seven (67). The sample population consisted of thirty-nine (39) students whose parents had given their permission to participate in the research project.

From the sample population, two sub-sample populations were established. One was called 'recently arrived'; the other was designated 'established'. The 'recently-arrived' group are immigrant Filipino females who have come from The Philippines and have been resident in Canada three (3) years or less. This group had nineteen (19) subjects.

The 'established' group are immigrant Filipino females who come from the Philippines and have been resident in Canada for five (5) years or more. Twenty (20) subjects

were in this group.

The information about place of birth was obtained from the school home information sheet. It is required that every student have a school home information sheet on file.

Sixty-seven (67) covering letters were mailed out to parents or guardians. (Appendix G). The covering letter explained the purpose of the survey and how the results would be used. The covering letter also assured parents/guardian and subjects of the confidentiality of responses. Accompanying the covering letter were sample questions from the student questionnaire and the permission form. (Appendix H and J).

The sample questions allowed parents/guardian to view some of the items in the student questionnaire.

From the total population the following responses were achieved from the mailing

|                                 |           |
|---------------------------------|-----------|
| Permission - yes                | 39        |
| Permission - no                 | 7         |
| Did not qualify                 | 5         |
| Already withdrawn from school   | 3         |
| No reply                        | 8         |
| Returned mail - address unknown | 5         |
| Total                           | <u>67</u> |

All students were enrolled in the 1988 to 1989 school year. The female Filipino students' age ranged from 12 years to 19 years, with the mean age being approximately 15 years old. (Appendix I).

The student demographics are shown in Table 2. There was no significant difference between Group A and Group B with respect to age.

TABLE 2

Means and Standard Deviations for Group A and Group B Ages

| Group A                   |     | Group B                   |     |
|---------------------------|-----|---------------------------|-----|
| No.                       | Age | No.                       | Age |
| 1.                        | 18  | 1.                        | 18  |
| 2.                        | 12  | 2.                        | 15  |
| 3.                        | 16  | 3.                        | 18  |
| 4.                        | 17  | 4.                        | 15  |
| 5.                        | 14  | 5.                        | 15  |
| 6.                        | 13  | 6.                        | 12  |
| 7.                        | 14  | 7.                        | 17  |
| 8.                        | 14  | 8.                        | 18  |
| 9.                        | 15  | 9.                        | 15  |
| 10.                       | 16  | 10.                       | 17  |
| 11.                       | 15  | 11.                       | 14  |
| 12.                       | 15  | 12.                       | 19  |
| 13.                       | 15  | 13.                       | 14  |
| 14.                       | 13  | 14.                       | 12  |
| 15.                       | 15  | 15.                       | 16  |
| 16.                       | 15  | 16.                       | 13  |
| 17.                       | 15  | 17.                       | 17  |
| 18.                       | 15  | 18.                       | 17  |
| 19.                       | 15  | 19.                       | 16  |
|                           |     | 20.                       | 13  |
| Total years 282 + 19      |     | Total years 311 + 20      |     |
| Average age = 14.84       |     | Average age = 15.55       |     |
| Standard Deviation = 1.38 |     | Standard Deviation = 2.09 |     |

### 3.3 Design and Procedure

The researcher compiled a list of all female Filipino students registered at the school and obtained permission from the School Principal to use the School's home information sheets; these sheets provided information regarding;

- Place of Birth
- Home Addresses
- Grade
- Parent's/Guardian's Name

Written parental permission was obtained from the parents/guardian of the students prior to commencement of the research project. (Appendix J). All parental consent forms were returned directly to the School Principal whereupon she provided the researcher with a list of all Filipino female students who had been given parental permission to participate in the study. A stamped, school-addressed envelope was provided in all sixty-seven mailings.

Participants were asked to fill out a demographic form (Appendix K) in order to identify those who were 'Recently-Arrived' and those who are 'Established' immigrants.

From this data, two sub-sample populations were identified:

Group A - were designated "Recently Arrived".

Group B - were designated "Established Residents".

The sample was to consist of 40 female Filipino students. Each group (A and B) was to have 20 subjects.

A covering letter accompanied the survey. (Appendix J). The letter explained the instructions on how to complete the questionnaire. The questionnaire (Appendix M) was given to the subjects in June of 1989.

The researcher briefly explained the nature of the study. (Appendix N). All members of the sample population filled out the questionnaire at the same time and location. One class period (approximately forty-five (45) minutes) was required to complete the questionnaire.

Each subject was assigned a group code letter A or B, on her questionnaire. The master list was kept by the researcher. The list included the names of all the individuals and their assigned group. Thus the researcher was not able to connect one survey with any one subject, thus guaranteeing anonymity.

As a basis for developing the questionnaire, the researcher established a list of all the 'ways' the two groups could be differentiated with regard to attitudes towards physical education and physical activities. From this list the researcher designed questions to show differences between the two Filipino female groups.

They were as follows:

- involvement in intramural program;
- involvement in interscholastic program;
- feelings about co-ed physical education classes;

- family opinion about physical education;
- physical education as a course subject;
- personal feelings about physical education and physical activities;
- comparison of the two countries (Philippines and Canada) physical education programs;
- personal preference of team sports;
- personal preference of individual sports;
- personal preference of sports/activities that sex stereotyped for the genders;
- personal preference of feminine versus non-feminine sports;
- determine the importance/status of physical education within the Filipino culture;
- importance of obtaining permission before trying out for a school team;
- personal preference for sports/activities that use a separation of space;
- personal preference for sports/activities that use an implement.

The researcher used this 'list' as a guide to create the forty-two (42) items Likert-Scale survey. (Appendix M). Various attitudinal tests dealing with physical education and physical activities were consulted. (Appendix O).

The questionnaire was in English. A Translation of the questions in Tagalog accompanied the survey. (Appendix P).

Ms. Julie Estaban, a Filipino teacher, was present during the assigned questionnaire completion time, in order to assist with translations.

### 3.4 Instrument

A Likert-scale questionnaire was used to measure the attitudes of individuals in each group towards the physical education program and toward individual activities within the course. The survey would also be used as a means for collecting information for administrative and curriculum implementation.

The researcher used a Likert-scale questionnaire (survey research) consisting of forty-two (42) items/statements.

The five responses to the questionnaire on the Likert-scale were as follows:

Strongly Agree

Agree

Undecided/No Opinion

Disagree

Strongly Disagree

### 3.5 Definition of Terms

For the purpose of this study the following terms were used:

Recently Arrived: Immigrants: Those who have come from the Philippines and have been resident in Canada three

(3) years or less.

Established: Immigrants: Those who have come from the Philippines and have been resident in Canada for five (5) years or more.

Only subjects who were within the boundaries set by the definition of terms with regard to time of residence in Canada were eligible for this study. One (1) year separation of time between the two groups was chosen in order to create an interval to allow for any divergences that could appear between the two groups.

### 3.6 Analysis of Data

The analysis of data collected is presented under three headings:

1. - organizing the data using the method of arranging the measures into frequency distribution.
2. the analysis of the data for hypothesis-testing purposes.
3. the analysis of the data for an assessment of:
  - A) the information obtained, and
  - B) the inferences which may be drawn from such information.

The information section is intended to familiarize the reader with the characteristics of the sample population and will outline the frequency distribution of the questionnaire items.

The latter sections address the hypotheses and

assessment of the data so that conclusions can be drawn and recommendations for further study formulated.

The responses of the students have been analysed in order to document any significant differences in attitudes towards physical education between the two groups.

In all headings, analyses were performed using the Statview SES + Graphics Package - The solution for Data Analysis and Presentation Graphics. A Macintosh SE computer system was used for this program package.

### 3.7 Limitations of The Study

Limitations of this study are as follows:

1. The study was descriptive in nature and used a brief, closed-response questionnaire instrument. By using a Likert-scale survey, respondents were not allowed to elaborate on responses. Because of this, the insight required for greater understanding was limited.
2. Two specific populations were sampled. The results are probably not generalizable to other groups to them in other schools.
3. The following experimental biases may have existed:
  - a) The subjects knowing that they were part of a project may have affected their responses.
  - b) The researcher was known to the subjects.
  - c) Subjects could have answered to please the researcher.

### 3.8 ETHICS

#### A. Permission

The parents/guardian were informed by means of a letter (Appendix G) that a research project was being conducted at the school. This letter will describe the nature of the research and requested permission from the parents/guardian to allow their respective daughters to participate in the study. A permission form and sample questions from the questionnaire accompanied the permission letter. (Appendix J and H).

Permission to carry out the project was requested in writing from the following:

1. Faculty of Education Ethics Committee.
2. The Research Ethics Committee, Winnipeg School Division No. 1.
3. The Superintendent's Department, Winnipeg School Division No. 1.
4. The Principal of a major high school.

All correspondence with the parents/guardian will be in English and Tagalog.

Prudent to its use the questionnaire was reviewed by the following:

a) four Filipinos

- Mrs. Julie Estaban - teacher
- Mrs. Linda Cantiveros - teacher and former President of the Manitoba Filipino Teachers Association.

- Ms. Marivel Taruc - Grade 12  
student

- Ms. Dolores Tagaca - Grade 12  
student

b) the Research Ethics Committee, Winnipeg School  
Division No. 1.

The Groups were asked to comment on three areas;

a) a suitable reflection of culture conditions and  
concerns in Phillipine society.

b) clarity of language.

c) the length of the questionnaire.

Each individual worked independently of the other.

The questionnaire was deemed acceptable to use as an  
instrument for the study.

## CHAPTER IV

### ANALYSIS OF DATA AND RESULTS

#### 4.1 INTRODUCTION

The purpose of this study was to compare attitudes between 'recently arrived' and 'established' Filipino female students, as they pertained to physical education and related activities. The participants in this study were all enrolled in the 1988-1989 school year at a major high school Winnipeg, Manitoba, Canada.

#### 4.2 STATISTICAL ANALYSIS

The information presented in this section was obtained from thirty-nine (39) grade 7 to 12 Filipino female students attending a major high school in the Winnipeg School Division No. 1. The thirty-nine subjects answered a forty-two item questionnaire.

The sample population contained thirty-nine Filipino females. All of the subjects were born in the Philippines and emigrated to Canada. From the sample population, two sub-sample groups were formed. Group A contained nineteen (19) 'recently arrived' immigrants who came from the Philippines and have been resident in Canada three (3) years or less. Group B contained twenty (20) 'established' immigrants who came from the Philippines and have been resident in Canada for five (5) years or more.

The reporting of this information was tabulated using four steps. In all steps, analyses were performed using the StatView SE+Graphics - The Solution for Data Analysis and Presentation Graphics computer program.

#### Step One

Group A and Group B demographics were summarized using information provided by the subjects on the cover page of the questionnaire.

#### Step Two

Data was collected for this study by using the Likert Scale Scoring System. This was used to rate the responses. A Likert scale five (5) point value rating system was chosen. (See Table 3).

#### Step Three

Group A and Group B responses were compared and placed in bar graph form for each of the forty-two (42) questions. Percentages were used to determine the mode - (number of responses in a distribution that occurred most frequently).

#### Step Four

Unpaired t-tests were used to examine differences between Group A and Group B. Each question's results, for both groups, were analyzed together to establish the probability factor. The accepted standard was .05 or better.

Positive statements were weighted so that a favorable response resulted in a higher score than an unfavorable one. Reverses value were used for negative statements.

Mean Scores were derived from the value scales for each statement. Calculations are shown in Tables 4 and 5.

TABLE 3  
Likert Scale Five Point Value Rating System

---

| RESPONSES            | POSITIVE<br>(+) | NEGATIVE<br>(-) |
|----------------------|-----------------|-----------------|
| Strongly Agree       | 4               | 0               |
| Agree                | 3               | 1               |
| No opinion/undecided | 2               | 2               |
| Disagree             | 1               | 3               |
| Strongly Disagree    | 0               | 4               |

---

TABLE 4

GROUP A - Recently Arrived

N=19

Mean Scores

| Question No. | Question No. | Question No. |
|--------------|--------------|--------------|
| 1. 3.42      | 15. 2.84     | 29. 2.16     |
| 2. 3.21      | 16. 2.95     | 30. 2.84     |
| 3. 2.58      | 17. 1.39     | 31. 2.74     |
| 4. 2.21      | 18. 2.53     | 32. 2.89     |
| 5. 2.95      | 19. 3.16     | 33. 2.63     |
| 6. 2.53      | 20. 2.68     | 34. 3.32     |
| 7. 3.37      | 21. 2.53     | 35. 2.79     |
| 8. 3.00      | 22. 2.89     | 36. 2.95     |
| 9. 1.95      | 23. 1.84     | 37. 3.37     |
| 10. 2.26     | 24. 2.37     | 38. 2.21     |
| 11. 2.37     | 25. 3.11     | 39. 3.05     |
| 12. 2.32     | 26. 2.47     | 40. 2.89     |
| 13. 2.89     | 27. 2.21     | 41. 1.95     |
| 14. 3.05     | 28. 2.21     | 42. 2.05     |

Total 111.13

Group Mean 2.65

TABLE 5

Group B - Established N=20

Mean Scores

| Question No. | Question No. | Question No. |
|--------------|--------------|--------------|
| 1. 3.00      | 15. 2.55     | 29. 2.4      |
| 2. 3.1       | 16. 2.9      | 30. 3.2      |
| 3. 2.3       | 17. 1.65     | 31. 1.64     |
| 4. 2.55      | 18. 2.35     | 32. 2.95     |
| 5. 2.6       | 19. 3.1      | 33. 3.0      |
| 6. 2.6       | 20. 2.25     | 34. 3.25     |
| 7. 3.4       | 21. 2.6      | 35. 2.9      |
| 8. 3.05      | 22. 2.7      | 36. 1.65     |
| 9. 3.2       | 23. 2.5      | 37. 3.55     |
| 10. 2.5      | 24. 1.6      | 38. 2.7      |
| 11. 3.0      | 25. 2.8      | 39. 3.45     |
| 12. 2.0      | 26. 2.9      | 40. 3.4      |
| 13. 2.45     | 27. 1.95     | 41. 3.25     |
| 14. 3.2      | 28. 2.65     | 42. 3.15     |

Total 113.5

Group Mean 5.695 - 2.70

The number of respondents remained the same for each group:

Group A - 'Recently Arrived' - 19

Group B - 'Established' - 20

All thirty-nine students answered every statement. The students used a check mark or an x to mark their answers. All statements were designed to be answered in a minimum amount of time.

#### 4.3 Information Derived from the Demography

Three statements of a demographic nature were included with the student questionnaire. (Appendix K). These statements were related specifically to physical education programs. All subjects responded to the statements. The demographics are shown in Table 6.

The three statements are as follows:

1. Are you involved in a physical education course?
2. Are you involved in the intramural program?
3. Are you involved on any school teams?

TABLE 6  
Demographic Information

| Statement   | Group A<br>'Recently Arrived' |       | Group B<br>'Established' |       |
|---|-------------------------------|-------|--------------------------|-------|
| #1 Are you involved<br>in a physical education<br>course? | Yes 18                        | No 1  | Yes 20                   | No 0  |
| #2 Are you involved<br>in the intramural<br>program?      | Yes 0                         | No 19 | Yes 8                    | No 12 |
| #3 Are you involved<br>on any school teams?               | Yes 0                         | No 19 | Yes 5                    | No 15 |

Statement # 1 - Are you involved in a physical education course?

Out of the sample population of thirty-nine (39) Filipino female students, only one grade 12 student was not involved in a physical education course. Physical education is a required course from grades 7 to 11. In grade 12 there is an option program called Leadership 305. This course has a full credit. (Appendix Q).

In the Group B - ('Established') two grade 12 Filipino female students were registered in the Leadership Program.

Statement #2 - Are you involved in the Intramural program?

None of the nineteen Filipino female students in Group A - ('Recently Arrived') were involved in the intramural program.

In Group B - ('Established') out of the twenty girls, eight were involved in the school's intramural program. Twelve girls were not involved in the intramural program. The number of participants in the intramural activities are shown in Table 7.

Statement #3 - Are you involved on any school teams?

None of the 19 Filipino female students in Group A - 'Recently-Arrived' were involved in the intramural program.

In Group B - ('Established') out of the twenty girls, six were involved on a school team(s). Fourteen girls were not involved in the school team program. The number of participants on school team(s) are shown in Table 8.

TABLE 7

## GROUP B - 'ESTABLISHED' FEMALE FILIPINO STUDENTS:

## Intramural Results

| ACTIVITIES     | JUNIOR HIGH | SENIOR HIGH |
|----------------|-------------|-------------|
| Volleyball     | 5           | 3           |
| Basketball     | 0           | 0           |
| Handball       | 3           | 3           |
| Indoor Soccer  | 0           | 0           |
| Badminton*     | -           | 4           |
| Floor Hockey** | 0           | -           |

NOTE:\* Not offered in Junior High

\*\* Not offered in Senior High

TABLE 8  
 GROUP B - 'ESTABLISHED' FEMALE FILIPINO STUDENTS:  
 School Team Results

| ACTIVITIES         | JUNIOR HIGH | SENIOR HIGH |
|--------------------|-------------|-------------|
| Cross Country      | 0           | 0           |
| Volleyball         | 3           | 3           |
| Basketball         | 0           | 0           |
| Handball*          | -           | 2           |
| Rugby*             | -           | 0           |
| Field Hockey*      | -           | 2           |
| Track & Field Team | 0           | 0           |
| Baseball**         | 0           | 1           |

NOTE: \* Handball, Rugby and Field Hockey are not offered as school teams in Junior High.

\*\* Baseball is not offered as a school team in Senior High.

#### 4.4 Statistical Analysis

The questionnaire asked statements that were designed to show differences between the two Filipino female groups. From the forty-two questions, nine items were at the accepted standard of .05 or better (See Table 9).

The nine statements that meet the accepted standard are as follows:

- #3. Filipino girls would rather take part in activities such as dance and aerobics than basketball.
- #9. If courses have to be dropped from the school program, physical education should be one of them.
- #11. Filipino girls would rather watch aggressive sports such as football and basketball than non-aggressive sports such as golf and bowling.
- #23. It is better to study other subjects than spend time allotted to physical education.
- #24. Filipino girls prefer to play individual games such as badminton more than team sports like soccer.
- #31. Filipino girls would rather do folk/social dance than play basketball.
- #36. Filipino girls should get permission from their parents or guardian before playing on a school team.
- #41. Soccer and basketball should be played by males only.
- #42. Figure skating and dancing are for girls only.

TABLE 9

The Nine Statements that meet the Accepted Standard  
(.05 or better)

| Question Number |    | Unpaired t-test<br>Probability (2-tail) score |
|-----------------|----|---|
| 1.              | 3  | .0553   |
| 2               | 9  | .0008   |
| 3.              | 11 | .0607   |
| 4.              | 23 | .043  |
| 5.              | 24 | .0405   |
| 6.              | 31 | .0123   |
| 7.              | 36 | .0067   |
| 8.              | 41 | .0039   |
| 9.              | 42 | .0128   |

These nine statements were the critical statements which best represented the intent of the study. The statistical analysis of each of the nine statements, along with discussions related to the hypothesis are as follows. Statements #3 and #31 will be analyzed together.

Statement #3 - Filipino girls would rather take part in activities such as dance and aerobics than basketball.

Statement #31 - Filipino girls would rather do folk/social dance than play basketball.

While the two questions are broadly of the same intent they are distinguished between basketball as an activity which is highly physical in nature and those activities which, though physically active, require a poise and grace which is indigenous to their culture.

It should be noted that the two statements were spaced well apart from one another, one at the beginning; the other near the end of the questionnaire. This was done to see if there would be a difference in responses between the statements. (See Table 10).

The unpaired t-test probability (2 tail) score for statement 3 was .0553; for statement 31 the score was .0123. Both statements meet the accepted standard of .05 or better.

TABLE 10  
Statements #3 and 31

| <u>Categories</u>          | <u>Group A (N=19)</u> |            | <u>Group B (N=20)</u> |            |
|----------------------------|-----------------------|------------|-----------------------|------------|
|                            | <u>Statement #3</u>   | <u>#31</u> | <u>#3</u>             | <u>#31</u> |
| Agree/Strongly Agree       | 12                    | 13         | 5                     | 5          |
| Undecided/No Opinion       | 3                     | 3          | 8                     | 4          |
| Disagree/Strongly Disagree | 4                     | 3          | 7                     | 11         |

Group A - 'Recently Arrived'.

Group B - 'Established'.

Statement #3 - Filipino girls would rather take part in activities such as dance and aerobics than basketball.

This statement was used to compare activities and find out how Filipino females felt about these activities. Statement 3 was phrased as a positive question. The responses, mean score, and standard deviation for both groups (A and B) are shown in Table 11.

Group A - ('Recently Arrived') felt that they would prefer dance and aerobics over playing basketball. Out of the nineteen, three respondents had no opinion or were undecided about the question. Three respondents disagreed and one other strongly disagreed with the question. The remaining twelve respondents either agreed (8) or strongly agreed (4) that they would prefer to take part in dance and aerobics than basketball.

Group B - ('Established') evidenced a different opinion. Out of twenty, eight respondents had no opinion or were undecided about which activity they would prefer. Six respondents disagreed and one other strongly disagreed. This group of seven felt that they preferred basketball over dance and aerobics. The remaining five respondents either agreed (4) or strongly agreed (1) that they preferred dance and aerobics over basketball.

TABLE 11

Weighted Points Value Score for  
Statement #3 - Filipino girls would rather take part in  
activities such as dance and aerobics than basketball.

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| Responses | Strongly Agree | Agree | No opinion/<br>Undecided | Disagree | Strongly<br>Disagreed |
|-----------|----------------|-------|--------------------------|----------|-----------------------|
| Value     | 4              | 3     | 2                        | 1        | 0                     |
| Group A   | 4              | 8     | 3                        | 3        | 1                     |
| Group B   | 1              | 4     | 8                        | 6        | 1                     |

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STATEMENT #3: Overall Means and Standard  
Deviations for Group A and Group B

| <u>Group A</u> |        |        | <u>Group B</u> |     |       |
|----------------|--------|--------|----------------|-----|-------|
| N              | M      | S.D.   | N              | M   | S.D.  |
| 19             | 2.5789 | 1.1698 | 20             | 1.9 | .9679 |

Legend

N = number of subjects in group

M = mean score

S.D. = standard deviation

Statement #31 - Filipino girls would rather do folk/social dance than play basketball.

This statement was used to find out how Filipino girls felt about these activities which are very popular in the Philippines. Folk/social dancing is very popular in the Filipino's culture for both men and women. However, within the physical education program, the playing of basketball is exclusively a male sport. Basketball is considered to be the national sport of the Philippines.

Statement 31 was phrased as a positive question. The responses, mean score, and standard deviation for both groups (A and B) are shown in Table 12.

Group A - ('Recently Arrived') basically agreed with the statement. Out of the nineteen, thirteen respondents either strongly agreed (6) or agreed (7) with the statement. Three respondents had no opinion or were undecided about the statement. The remaining three either disagreed (1) or strongly disagreed (2).

Group B - ('Established') had varied opinions. Out of twenty, eleven either disagreed (9) or strongly disagreed (2) with the statement. They felt basketball would be preferred.

TABLE 12

Weighted Points Value Score for  
Statement #31 - Filipino girls would rather do folk/social  
dance than play basketball.

| Responses<br>Values | Strongly<br>Agree<br>(4) | Agree<br>(3) | No opinion/<br>Undecided<br>(2) | Disagree<br>(1) | Strongly<br>Disagree<br>(0) |
|---------------------|--------------------------|--------------|---------------------------------|-----------------|-----------------------------|
| Group A             | 6                        | 7            | 3                               | 1               | 2                           |
| Group B             | 2                        | 3            | 4                               | 9               | 2                           |

Statement #31: Overall Means and Standard Deviation  
for Group A and Group B

| Group A |        |        | Group B |     |        |
|---------|--------|--------|---------|-----|--------|
| N       | M      | S.D.   | N       | M   | S.D.   |
| 19      | 2.7368 | 1.2842 | 20      | 1.7 | 1.1743 |

Legend

N = number of subjects in group

M = mean score

S.D. = standard deviation.

Of the remaining nine, four were undecided or had no opinion and five either agreed (3) or strongly agreed (2) with the statement. This last group of five felt folk/social dance would be the preferred activity to take part in.

The mode for Group A was the Agree Response category at 37%. The mode for Group B was the Disagree Responses category at 45%.

In summary, the data for questions #3 and #31 supports the hypothesis that female Filipino students who have lived in Canada for five years or more will evidence different attitudes towards physical education classes and related activities than those students who have lived in Canada three years or less.

In Group A - ('Recently Arrived'), it can be presumed that the indigenous cultural influences affecting recently arrived Filipino females engagement and selection of certain physical activities may still be present at this time. This is borne out by the literature which says that because of the Filipino females' upbringing and their distinct role in the home, Filipino women are generally less inclined towards physical sports and indeed are not encouraged to be over-active physically. Filipino women are encouraged to take part in singing and dance (folk/social) which enhances their personal beauty and value as a wife. Aerobics and folk/social dance are activities that serve to preserve and

enforce their way of life. Group A appears to respond to exercise that improves poise, coordination and balance.

In Group B - ('Established'), it is possible that the Canadian attitude may have begun to influence those students established for longer periods in Canada, that the emphasis on physical participation and trying 'new' groups/sports in the Canadian school system is acceptable.

Statement #9: If courses have to be dropped from the school program, physical education should be one of them.

This statement was used to find out how Filipino females felt about the importance of physical education as a course. Statement 9 was phrased as a negative question. The responses, mean score, and standard deviation for both groups (A and B) are shown in Table 13. The unpaired t-test probability (2 tail) score for statement 9 was .0008. This statement met the accepted standard of .05 or better.

Group A - ('Recently Arrived'), had mixed feelings about the statement. Out of nineteen, five respondents had no opinion or were undecided about physical education in the school curriculum. The remaining fourteen respondents were evenly split, seven to drop the physical education course; seven to keep it.

TABLE 13

Weighted Points Value Score for  
Statement #9 - If courses have to be dropped from the school  
program, physical education should be one of them.

| Responses<br>Value | Strongly<br>Agree<br>(0) | Agree<br>(1) | No opinion/<br>Undecided<br>(2) | Disagree<br>(3) | Strongly<br>Disagree<br>(4) |
|--------------------|--------------------------|--------------|---------------------------------|-----------------|-----------------------------|
| Group A            | 3                        | 4            | 5                               | 5               | 2                           |
| Group A            | 0                        | 1            | 2                               | 9               | 8                           |

Statement #9: Overall Means and Standard  
Deviations for Group A and Group B

| <u>Group A</u> |        |        | <u>Group B</u> |      |       |
|----------------|--------|--------|----------------|------|-------|
| N              | M      | S.D.   | N              | M    | S.D.  |
| 19             | 1.9474 | 1.2681 | 20             | 3.20 | .8335 |

Legend

N + number of subjects in group

M = mean score

S.D. = standard deviation

Group B- ('Established') had a different opinion about the question. Out of twenty, seventeen respondents agreed that physical education should not be dropped from the school program. Two respondents were undecided or had no opinion about the statement; one respondent agreed that physical education should not be a part of the school program.

There is no mode for Group A but for Group B the mode was the Disagree Response category at 45%.

In summary the data for statement 9 supports the hypothesis that female Filipino students who have lived in Canada for five years or more will evidence different attitudes towards physical education classes and related activities than those students who have lived in Canada three years or less.

In Group A - (Recently Arrived), it appears to indicate the cultural influences place strong value on the academic aspect of education. This is borne out by the literature which says that Filipinos place almost total value on the academic aspects of education. Physical education and athletics is seen as time away from academics.

In Group B - ('Established'), it is possible that the Canadian attitude may have begun to influence those students established for longer periods in Canada, that which supports physical education credits and academic credits as equally as important.

Statement #11 - Filipino girls would rather watch aggressive sports such as football and basketball than non-aggressive sports such as golf and bowling.

This statement was used to find out how Filipino females felt about sports that display aggression and physical contact as opposed to sports that are non-aggressive and non-contact. Football and basketball are team sports; played with no separation of space between opponents. They are physical contact games involving emotions and aggression.

Golf and bowling are individual sports; the results being based upon individual performance. They are played with a separation of space and are non-contact games.

Statement 11 was phrased as a positive question. The responses, mean score, and standard deviation for both groups (A and B) are shown in Table 14. The unpaired t-test probability (2 tail) score for statement 22 was .0607. This statement met the accepted standard of .05 or better.

Group A - ('Recently Arrived') had mixed feelings about the statement. Out of nineteen, five respondents had no opinion or were undecided. Of the remaining fourteen respondents, five disagreed while nine either agreed (6) or strongly agreed (3).

Group B - ('Established') had a different opinion about the statement. Out of the twenty, fifteen respondents either agreed (8) or strongly agreed (7) with the statement that they would rather watch aggressive sports than

non-aggressive sports. Of the remaining five, three had no opinion or were undecided while two disagreed with the statement.

In summary the data for statement 11 supports the hypothesis that female Filipino students who have lived in Canada for five years or more will evidence different attitudes towards physical education classes and related attitudes than those students who have lived in Canada three years or less.

In Group A - ('Recently Arrived'), it may be presumed that the indigenous cultural influences affecting recently arrived Filipino females viewing selection of various sporting events may still be present at this time. This is borne out in the literature in that the boys possess the competitive instinct in sports, and the girls are content to leave such aggressive activities to them.

In Group B - ('Established'), it can be presumed that the Canadian attitude may have begun to influence those established students, where the emphasis on sport, strongly embodied in the Canadian school system, is acceptable.

TABLE 14

## Weighted Points Value Score for

Statement # 11 Filipino girls would rather watch aggressive sports such as football and basketball than non-aggressive sports such as golf and bowling.

| Responses | Strongly Agree | Agree | No opinion/<br>undecided | Disagree | Strongly Disagree |
|-----------|----------------|-------|--------------------------|----------|-------------------|
| Value     | (4)            | (3)   | (2)                      | (1)      | (0)               |
| Group A   | 3              | 6     | 5                        | 5        | 0                 |
| Group B   | 7              | 8     | 3                        | 2        | 0                 |

## Statement #11: Overall Means and Standard

## Deviations for Group A and Group B

| N  | Group A |        | N  | Group B |       |
|----|---------|--------|----|---------|-------|
|    | M       | S.D.   |    | M       | S.D.  |
| 19 | 2.3684  | 1.0651 | 20 | 3.00    | .9733 |

## Legend

N = number of subjects in group

M = mean score

S.D. = standard deviation

Statement #23 - It is better to study other subjects than spend time allotted to physical education.

The intent of this statement was to find out how Filipino females felt about time spent in physical education classes; was it beneficial or could the physical education time be better spent in other subject areas. Statement 23 was phrased as a negative question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 15. The unpaired t-test probability (2 tail) score for statement 23 was .043. This statement met the accepted standard of .05 or better.

Group A - ('Recently Arrived'), was varied in its opinion about the question. Out of nineteen, seven respondents either strongly agreed (2) or agreed (5); seven had no opinion or were undecided on how to spend the time. The remaining five either disagreed (4) or strongly disagreed (1) with the statement. This group of five felt time spent in physical education classes was beneficial.

Group B - ('Established'), had different opinions about the question. Out of the twenty, nine respondents had no opinion or were undecided about how they should spend the time, while nine others either disagreed (6) or strongly disagreed (3) with the statement. This last group of nine felt time spent in physical education was beneficial and would not want to lose the time for any other purpose.

TABLE 15

Weighted Points Value Score for  
Statement # 23 - It is better to study other subjects than  
spend time allotted to physical education.

| Responses | Strongly Agree | Agree | No opinion/<br>undecided | Disagree | Strongly<br>Disagree |
|-----------|----------------|-------|--------------------------|----------|----------------------|
| Value     | (0)            | (1)   | (2)                      | (3)      | (4)                  |
| Group A   | 2              | 5     | 7                        | 4        | 1                    |
| Group B   | 0              | 2     | 9                        | 6        | 3                    |

Statement #23: Overall Means and Standard  
Deviation for Group A and Group B

| Group A |        |        | Group B |     |       |
|---------|--------|--------|---------|-----|-------|
| N       | M      | S.D.   | N       | M   | S.D.  |
| 19      | 1.8421 | 1.0679 | 20      | 2.5 | .8885 |

Legend

N = number of subjects in group

M = mean score

S.D. = standard deviation

The mode for Group A and Group B is the No Opinion/Undecided Response category. Group A's mode was 37% while Group B's mode was 45%.

In summary, the data (Group A - 7 out of 19 approved; Group B - 9 out of 20 were opposed) provided support for the hypothesis that female Filipino students who have lived in Canada for five years or more will evidence different attitudes towards physical education classes and related activities than those students who have lived in Canada three years or less.

In Group A, it appears to indicate the cultural influences place strong value on the academic aspect of education. This is borne out by the literature which says that education is very important; it is seen as the only means for 'social mobility'.

In Group B, it can be presumed that the Canadian attitude may have begun to influence those students established for longer periods in Canada, where that supports academic achievement as well as physical participation in athletics as the norm.

Statement #24 - Filipino girls prefer to play individual games such as badminton more than team sports like soccer.

This statement was used to find out how Filipino girls felt about individual sports as opposed to team sports. Statement 24 was phrased as a positive question. The responses, mean score and standard deviation for both groups

(A and B) are shown in Table 16. The unpaired t-test probability (2 tail) score for Statement 24 was .0405. This statement met the accepted standard of .05 or better.

Group A - ('Recently Arrived') had different opinions in regards to the statement. Out of the nineteen, eleven either strongly agreed (4) or agreed (7) that their preference was individual games like badminton over team sports like soccer. One respondent was undecided or had no opinion. The remaining seven either disagreed (6) or strongly disagreed (1) with the question.

Group B - ('Established') had different opinions about the statement. Out of the twenty, nine respondents had no opinion or were undecided whether they preferred individual games over team sports. Three respondents agreed with the statement. The remaining either disagreed (5) or strongly disagreed (3) with the statement. Their preference was team sports.

The mode for Group A was the Agree Response category at 37%. The mode for Group B was No Opinion/Undecided category at 45%.

In summary the data (Group A - eleven out of nineteen approved; Group B - eight out of twenty were opposed while nine respondents had no opinion or undecided) provided support for the hypothesis that female Filipino students who have lived in Canada for five years or more will evidence different attitudes towards physical education classes and related activities than those students who have lived in Canada three years or less.

TABLE 16

Weighted Points Value Score for  
Statement #24 - Filipino girls prefer to play individual  
games such as badminton more than team sports like soccer.

| Responses | Strongly Agree | Agree | No opinion/<br>Undecided | Disagree | Strongly Disagree |
|-----------|----------------|-------|--------------------------|----------|-------------------|
| Value     | (4)            | (3)   | (2)                      | (1)      | (0)               |
| Group A   | 4              | 7     | 1                        | 6        | 1                 |
| Group B   | 0              | 3     | 9                        | 5        | 3                 |

Statement #24: Overall Means and Standard  
Deviation for Group A and Group B

| Group A |        |      | Group A |     |       |
|---------|--------|------|---------|-----|-------|
| N       | M      | S.D. | N       | M   | S.D.  |
| 19      | 2.3684 | 1.3  | 20      | 2.6 | .9403 |

Legend

N = number of subjects in group

M = mean score

S.D. = standard deviation

In Group A - ('Recently Arrived'), it appears to indicate the cultural influences especially the family unit play a very important role in shaping a child's interest in sports by gender stereotyping his/her behavior. This is borne out by the literature which says that the Filipino culture prefers games for females that have no body contact, space separation between opponents or sports that use an implement. The family unit appears to prefer non-aggressive sports that have less emphasis on a competitive attitude. Approval is given to boy's games which involve physical activity, domination, body contact and aggression but girls displaying similar behavior is totally unacceptable.

In Group B - ('Established'), it can be presumed that the Filipino females have accepted the Canadian attitude that a female is entitled to play any sport she so desires. It can also be presumed that the influence of the family unit has changed. The Filipino female in Group B may feel that individual and team sports have equal importance and benefits.

Statement #36 - Filipino girls should get permission from their parents or guardian before playing on a school team.

This question was used to find out how important it is for Filipino girls to inform and get permission from their parents/guardian before playing on a school team. The Filipino family structure plays a significant role in the Filipino culture. Filipino children are taught that

individual desires do not take precedence over family and community responsibilities.

Statement 36 was phrased as a positive question. The responses, mean score, and standard deviation for both groups (A and B) are shown in Table 17. The unpaired t-test probability (2 tail) score for Statement 36 was .0067. This statement met the accepted standard of .05 or better.

In both groups (A and B) no respondent was undecided or had no opinion. Each group's respondents could make a decision in regards to the statement.

Group A - ('Recently Arrived'), on the whole supported the question. Out of nineteen, sixteen respondents either agreed (9) or strongly agreed (7) that permission must be obtained from their family/guardian before playing on a school team. The remaining three respondents either disagreed (1) or strongly disagreed (2) with the statement.

Group B - ('Established'), had varied responses. Out of twenty, twelve either disagreed (6) or strongly disagreed (6) with the importance of obtaining permission from the family/guardian before playing on a school team. They felt it was not necessary to seek permission. The remaining eight either agreed (5) or strongly agreed (3) with the statement.

The mode for Group A was the Agree Response category at 47%. There was no mode for Group B. The disagree and strongly disagree response categories, each had the same number of respondents - six (6).

TABLE 17

Weighted Points Value Score for  
Statement 36 - Filipino girls should get permission from  
their parents or guardian before playing on a school team

| Responses | Strongly Agree | Agree | No opinion/<br>Undecided | Disagree | Strongly Disagree |
|-----------|----------------|-------|--------------------------|----------|-------------------|
| Value     | (4)            | (3)   | (2)                      | (1)      | (0)               |
| Group A   | 7              | 9     | 0                        | 1        | 2                 |
| Group B   | 3              | 5     | 0                        | 6        | 6                 |

Question #36: Overall Means and  
Standard Deviation for Group A and Group B

| Group A |        |        | Group B |      |        |
|---------|--------|--------|---------|------|--------|
| N       | M      | S.D.   | N       | M    | S.D.   |
| 19      | 2.9474 | 1.2681 | 20      | 1.65 | 1.5313 |

Legend

N = number of subjects in group

M = mean score

S.D. = standard deviation

In summary, the data (Group A - 16 out of 19 approved; Group B - 12 out of 20 were opposed) provided support for the hypothesis that female Filipino students who have lived in Canada for five years or more will evidence different attitudes towards physical education classes and related activities than those students who have lived in Canada three years or less.

In Group A, it appears to indicate that the Filipino family unit still influences the Filipino female's decisions. This is borne out by the literature which says that a Filipino female must seek permission from her family unit. The playing on a school team needs the consensus of the family unit. The final decision must be adhered to by the Filipino female.

In Group B, it can be presumed that the Filipino females have accepted the Canadian attitude that extra-curricular activities such as playing on a school team have important benefits - social contact with other students, team spirit and sharing in victory or defeat. It can also be presumed that the influence of the family structure has changed. The Filipino female in Group B may feel that the decision to play on a school team is a matter for individual choice rather than one which requires the family unit consent.

Statements #41 and #42 will be analyzed together.

Statement #41 - Soccer and basketball should be played by males only.

Statement #42 - Figure skating and dancing are for girls

only.

The two statements are of the same intent, to find out how gender stereotyping affects which physical activities are acceptable for Filipino females to participate in.

It should be noted that the two statements were the last two to be answered in the survey.

Statement #41 - Soccer and basketball should be played by males only.

This statement was used to find out how Filipino females felt about which activities were gender related for the females and males. Statement number 41 was phrased as a negative question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 18. The unpaired t-test probability (2 tail) score for statement 41 was .0039; for statement 42 the score was .0128. Both these statements met the accepted standard of .05 or better.

Group A - ('Recently arrived'), were nearly evenly split. Out of the nineteen, eight either agreed (4) or strongly agreed (4) with the statement. Nine respondents either disagreed (7) or strongly disagreed (2) that soccer and basketball should be played by males only. Only two respondents had no opinion or were undecided.

Group B - ('Established'), nearly all disagreed with the statement. Out of the twenty, seventeen respondents either disagreed (5) or strongly disagreed (12) that only boys should play soccer and basketball. Of the remaining three respondents, two strongly agreed with the statement and one had no opinion or was undecided.

TABLE 18

Weighted Points Value Score for  
Statement #41 Soccer and basketball should be played by  
males only.

| Responses | Strongly Agree | Agree | No opinion/<br>Undecided | Disagree | Strongly Disagree |
|-----------|----------------|-------|--------------------------|----------|-------------------|
| Value     | (0)            | (1)   | (2)                      | (3)      | (4)               |
| Group A   | 4              | 4     | 2                        | 7        | 2                 |
| Group B   | 2              | 0     | 1                        | 5        | 12                |

Statement #41: Overall Means and  
Standard Deviation of Group A and Group B

| Group A |        |        | Group B |      |        |
|---------|--------|--------|---------|------|--------|
| N       | M      | S.D.   | N       | M    | S.D.   |
| 19      | 1.9474 | 1.3934 | 20      | 3.25 | 1.2513 |

Legend

N = number of subjects in group

M = mean score

S.D. = standard deviation

The mode for Group A was the Disagree Response category at 37%. The mode for Group B was the Strongly Disagree Response category at 60%.

Statement #42 - Figure skating and dancing are for girls only.

This statement was used to find out how Filipino females felt about which activities were gender/sex stereotyped for the females and males. Statement 42 was phrased as a negative question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 19.

Group A - ('Recently arrived') had mixed feelings about the question. Out of the nineteen, nine either disagreed (7) or strongly disagreed (2) that only girls should be allowed to do figure skating and dancing. Seven respondents either agreed (3) or strongly agreed (4) that figure skating and dancing is only for females. The remaining two respondents had no opinion or were undecided.

Group B - ('Established') nearly all respondents disagreed with the statement. Out of the twenty, seventeen respondents either disagreed (7) or strongly disagreed (10) that figure skating and dancing are for girls only. Of the remaining three respondents, two strongly agreed with the statement while one had no opinion or was undecided.

The mode for Group A was the Disagree Response category at 42%. The mode for Group B was the Strongly Disagree Response category at 50%.

TABLE 19

Weighted Points Value Score for  
Statement #42 Figure skating and dancing are for girls  
only.

| Responses | Strongly Agree | No opinion/<br>Undecided | Disagree | Strongly<br>Disagree |     |
|-----------|----------------|--------------------------|----------|----------------------|-----|
| Value     | (0)            | (1)                      | (2)      | (3)                  | (4) |
| Group A   | 4              | 3                        | 2        | 8                    | 2   |
| Group B   | 2              | 0                        | 1        | 7                    | 10  |

Statement #42: Overall Means and Standard  
Deviation for Group A and Group B

| Group A |        |        | Group B |      |        |
|---------|--------|--------|---------|------|--------|
| N       | M      | S.D.   | N       | M    | S.D.   |
| 19      | 2.0526 | 1.3934 | 20      | 3.15 | 1.2258 |

Legend

N = number of subjects in group

M = mean score

S.D. standard deviation

In summary the data for statements #41 and #42 supports the hypothesis that female Filipino students who have lived in Canada for five years or more will evidence different attitudes towards physical education classes and related activities than those students who have lived in Canada three years or less.

In Group A - ('Recently Arrived'), it appears to indicate the cultural influences place strong value on what physical activities are acceptable for Filipino females to participate in. This is borne out by the literature which says that the family unit will decree which games are suitable for girls to play. The family unit may view games as being too "strenuous or ungirlish" for them.

In Group B - ('Established'), it can be presumed that the Canadian attitude may have begun to influence those students established for longer periods in Canada, where it supports that an individual can choose any activities/games he/she desires.

In concluding and with respect to the research hypothesis related to Statements #3, 9, 11, 23, 24, 31, 36, 41 and 42, the data supported the hypothesis. All unpaired t-test probability (2 tail) scores were statistically significant and indicated that Group B had different attitudes towards physical education classes and related activities than Group A.

In dealing with the remaining thirty-three (33) statements (#'s 1, 2, 4, 5, 6, 7, 8, 10, 12, 14, 15, 16, 17,

18, 19, 20, 21, 22, 25, 26, 27, 28, 29, 30, 32, 33, 34, 35, 37, 38, 39, 40) of the questionnaire with reference to the research hypothesis, the data did not support the hypothesis. All unpaired t-test probability (2-tail) scores were not statistically significant and indicated that Group A and Group B did not have significantly different attitudes towards physical education classes and related activities.

The statistical analysis of each of the thirty-three statements are as follows:

Statement #1 - Filipino girls should be physically fit.

This statement was used to find out how Filipino girls felt about the importance of being physically fit. Statement 1 was phrased as a positive question. The responses, mean score, and standard deviation for both groups (A and B) are shown in Table 20. The unpaired t-test probability ( 2 tail) score for statement 1 was .1299. This statement did not meet the accepted standard of .05 or better.

Both groups (A and B) agreed that Filipino girls should be physically fit. In Group A ('Recently Arrived'), eighteen out of nineteen respondents agreed (8) or strongly agreed (10) with the statement. The remaining respondent disagreed that Filipino girls should be physically fit. In Group B ('Established'), sixteen out of twenty respondents agreed (10) or strongly agreed (6) with the statement. Two out of twenty had no opinion or were undecided. The remaining two respondents disagreed that Filipino girls should be physically fit.

TABLE 20

Weighted Points Value Score for  
Statement #1 - Filipino girls should be physically fit.

| Responses | Strongly Agree | No Opinion/<br>Undecided | Disagree | Strongly<br>Disagreed |
|-----------|----------------|--------------------------|----------|-----------------------|
| Value     | 4              | 3                        | 2        | 1                     |
| Group A   | 10             | 8                        | 0        | 1                     |
| Group B   | 6              | 10                       | 2        | 2                     |

Statement #1 - Overall Means and Standard Deviations  
for Group A and Group B

| <u>Group A</u> |      |       | <u>Group A</u> |   |       |
|----------------|------|-------|----------------|---|-------|
| N              | M    | S.D.  | N              | M | S.D.  |
| 19             | 3.42 | .7685 | 20             | 3 | .9177 |

Legend

N = number of subjects in group

M = mean score

S.D. standard deviation

The mode for Group A was the Strongly Agree Response category at 53%. The mode for Group B was the Agree Response category at 50%.

Statement #2 - Physical education is not important to the overall education of Filipino girls.

This statement was asked to find out if Filipino girls felt that physical education was important to their overall education. Statement 2 was phrased as a negative question. The responses, mean score, and standard deviation for both groups (A and B) are shown in Table 21. The unpaired t-test probability (2 tail) score for statement 2 did not meet the accepted standard of .05 or better.

Both groups (A and B) disagreed that physical education is not important to the overall education of Filipino girls. In Group A ('Recently Arrived') seventeen out of nineteen respondents either disagreed (9) or strongly disagreed (8) with the statement. One out of nineteen had no opinion or were undecided. The remaining respondent strongly agreed with the statement.

In Group B - ('Established'), seventeen out of twenty respondents either disagreed (10) or strongly disagreed (7) that physical education is not important to the overall education of Filipino girls. One out of twenty had no opinion or were undecided. The remaining two respondents agreed with the statement.

For both groups (A and B) the mode was the Disagree Response category. The mode for Group A was at 47%, the mode for Group B was at 50%.

TABLE 21

Weighted Points Value Score for  
Statement #2 - Physical education is not important  
to the overall education of Filipino girls

| Responses | Strongly Agree | No Opinion/<br>Undecided | Disagree | Strongly<br>Disagreed |   |
|-----------|----------------|--------------------------|----------|-----------------------|---|
| Value     | 0              | 1                        | 2        | 3                     | 4 |
| Group A   | 1              | 0                        | 1        | 9                     | 8 |
| Group B   | 0              | 2                        | 1        | 10                    | 7 |

Statement #2 - Overall Means and Standard Deviations  
for Group A and Group B

|  | <u>Group A</u> |      | <u>Group B</u> |    |     |       |
|--|----------------|------|----------------|----|-----|-------|
|  | N              | M    | S.D.           | N  | M   | S.D.  |
|  | 19             | 3.21 | .9763          | 20 | 3.1 | .9119 |

Legend

N = Number of subjects in group

M = mean score

S.D. = standard deviation

Statement #4 - Filipino girls do not like to play physical contact sports such as touch football and basketball.

This statement was asked to find out how Filipino girls felt about sports that display aggression and physical contact such as touch football and basketball. Statement 4 was phrased as a negative question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 22. The unpaired t-test probability (2 tail) score for statement 4 was .4463. This statement did not meet the accepted standard of .05 or better.

Group A ('Recently Arrived') had mixed feelings about the statement. Out of nineteen, nine respondents either disagreed (5) or strongly disagreed (4) that Filipino girls do not like to play physical contact sports such as touch football and basketball. Three out of nineteen had no opinion or were undecided. The remaining five respondents either agreed (2) or strongly agreed (3) with the statement.

In Group B ('Established') fourteen out of twenty respondents either disagreed (9) or strongly disagreed (5) that Filipino girls do not like to play physical sports such as touch football and basketball. One out of twenty was undecided or had no opinion. The remaining five respondents either agreed (2) or strongly agreed (3) with the statement.

There was no mode for Group A. The mode for Group B was the Disagree Response category at 45%.

TABLE 22

Weighted Points Value Score for  
Statement #4 - Filipino girls do not like to play  
physical sports such as touch football and basketball

| Responses | Strongly Agree | No Opinion/<br>Undecided | Disagree | Strongly<br>Disagreed |   |
|-----------|----------------|--------------------------|----------|-----------------------|---|
| Value     | 0              | 1                        | 2        | 3                     | 4 |
| Group A   | 2              | 5                        | 3        | 5                     | 4 |
| Group B   | 3              | 2                        | 1        | 9                     | 5 |

Statement #4 - Overall Means and Standard  
Deviations for Group A and Group B

| N  | <u>Group A</u> |       | N  | <u>Group B</u> |       |
|----|----------------|-------|----|----------------|-------|
|    | M              | S.D.  |    | M              | S.D.  |
| 19 | 2.21           | 1.357 | 20 | 2.55           | 1.394 |

Legend

N = number of subjects in group

M = mean score

S.D. = standard deviation

Statement # 5 - Fathers are interested in sports.

This statement was used to find out if fathers of Filipino girls were interested in sports. Statement 5 was phrased as a positive question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 23. The unpaired t-test probability (2 tail) score for Statement 5 was .29. This statement did not meet the accepted standard of .05 or better.

In Group A ('Recently Arrived'), fourteen out of nineteen either agreed (7) or strongly agreed (7) that their fathers were interested in sports. Of the remaining five respondents, three had no opinion or were undecided while two either disagreed (1) or strongly disagreed (1) with the statement.

In Group B ('Established') twelve out of twenty either agreed (10) or strongly agreed (2) that their fathers were interested in sports. Of the remaining eight respondents, seven (7) had no opinion or were undecided while one strongly disagreed with the statement.

There was no mode for Group A. The mode for Group B was the Agree Response category at 50%.

TABLE 23

Weighted Points Value Score for  
Statement # 5 - Fathers are interested in sports

| Responses | Strongly Agree | No Opinion/<br>Undecided | Disagree | Strongly<br>Disagreed |   |
|-----------|----------------|--------------------------|----------|-----------------------|---|
| Value     | 4              | 3                        | 2        | 1                     | 4 |
| Group A   | 7              | 7                        | 3        | 1                     | 1 |
| Group B   | 2              | 10                       | 7        | 0                     | 1 |

Statement #5 - Overall Means and Standard  
Deviations for Group A and Group B

| <u>Group A</u> |      |       | <u>Group B</u> |     |       |
|----------------|------|-------|----------------|-----|-------|
| N              | M    | S.D.  | N              | M   | S.D.  |
| 19             | 2.94 | 1.129 | 20             | 2.6 | .8826 |

Legend

N = number of subjects in groups

M = mean score

S. D. = standard deviation

Statement # 6 - Physical education is emphasized more in Canada than in the Philippines.

This statement was used to find out if Filipino girls felt that there was a stronger emphasis placed on physical education in Canada than in the Philippines.

This statement was phrased as a positive question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 24. The unpaired t-test probability (2 tail) score for statement 6 was .8293. This statement did not meet the accepted standard of .05 or better.

In Group A - ('Recently Arrived'), eleven out of nineteen either agreed (8) or strongly agreed (3) that physical education is emphasized more in Canada than in the Philippines. Of the remaining respondents, five had no opinion or were undecided while two disagreed and one strongly disagreed with the statement.

In Group B - ('Established'), eleven out of the twenty either agreed (7) or strongly agreed (4) that physical education is emphasized more in Canada than in the Philippines. Seven respondents had no opinion or were undecided about the statement. The remaining two respondents disagreed (1) or strongly disagreed (1) that physical education is emphasized more in Canada than in the Philippines.

The mode for Group A was the Agree Response category at 42%. There was no mode for Group B.

TABLE 24

Weighted Points Value Score for  
Statement #6 - Physical education is emphasized more  
in Canada than in the Philippines.

| Responses | Strongly Agree | Agree | No Opinion/<br>Undecided | Disagree | Strongly Disagreed |
|-----------|----------------|-------|--------------------------|----------|--------------------|
| Value     | 4              | 3     | 2                        | 1        | 0                  |
| Group A   | 3              | 8     | 5                        | 2        | 1                  |
| Group B   | 4              | 7     | 7                        | 1        | 1                  |

Statement #6 - Overall Means and Standard  
Deviations for Group A and Group B

| <u>Group A</u> |       |       | <u>Group B</u> |     |      |
|----------------|-------|-------|----------------|-----|------|
| N              | M     | S.D.  | N              | M   | S.D. |
| 19             | 2.526 | 1.073 | 20             | 2.6 | 1.04 |

Legend

N = number of subjects in group

M = mean score

S. D. = standard deviation.

Statement # 7 - Girls and boys should not take physical education classes together.

This statement was asked to find out if Filipino girls prefer co-ed physical education classes or not. Statement 7 was phrased as a negative question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 25. The unpaired t-test probability (2 tail) score for Statement 7 was .9091. This statement did not meet the accepted standard of .05 or better.

In Group A - ('Recently Arrived'), sixteen out of nineteen respondents either disagreed (6) or strongly disagreed (10) that girls and boys should not take physical education classes together. The remaining three respondents had no opinion or were undecided about the statement.

In Group B - ('Established'), nineteen out of twenty respondents either disagreed (8) or strongly disagreed (11) that girls and boys should not take physical education classes together. The remaining respondent strongly agreed with the statement.

The mode for both groups (A and B) was the Strongly Disagree Response category. The mode for Group A was at 53%, the mode for Group B was at 55%.

TABLE 25

Weighted Points Value Score for  
Statement #7 - Girls and boys should not take  
physical education together

| Responses | Strongly Agree | No Opinion/<br>Undecided | Disagree | Strongly<br>Disagreed |    |
|-----------|----------------|--------------------------|----------|-----------------------|----|
| Value     | 0              | 1                        | 2        | 3                     | 4  |
| Group A   | 0              | 0                        | 3        | 6                     | 10 |
| Group B   | 1              | 0                        | 0        | 8                     | 11 |

Statement #7 - Overall Means and Standard  
Deviations for Group A and Group B

| <u>Group A</u> |       |       | <u>Group B</u> |     |       |
|----------------|-------|-------|----------------|-----|-------|
| N              | M     | S.D.  | N              | M   | S.D.  |
| 19             | 3.368 | .7609 | 20             | 3.4 | .9403 |

Legend

N = number of subjects in group

M = mean score

S. D. standard deviation

Statement #8 - Physical education helps one feel and look better.

The intent of this statement was to find out if Filipino girls understand that physical education helps one feel and look better by being physically active. Statement 8 was phrased as a positive question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 26. The unpaired t-test probability (2 tail) score for statement 8 was .8928. This statement did not meet the accepted standard of .05 or better.

In both groups (A and B) no respondent was undecided or had no opinion. Each group's respondents could make a decision in regards to the statement.

In Group A - ('Recently Arrived'), sixteen out of nineteen respondents agreed (9) or strongly agreed (7) that physical education helps one feel and look better. The remaining three either disagreed (2) or strongly disagreed (1) with the statement.

In Group B - ('Established'), seventeen out of twenty respondents agreed (9) or strongly agreed (8) that physical education helps one feel and look better. The remaining three either disagreed (2) or strongly disagreed (1) with the statement.

The mode for both groups (A and B) was the Agree Response category. The mode for Group A was 47%, the mode for Group B was at 47%.

TABLE 26

Weighted Points Value Score for  
Statement #8 - Physical education helps one feel and  
look better.

| Responses | Strongly Agree | Agree | No Opinion/<br>Undecided | Disagree | Strongly Disagree |
|-----------|----------------|-------|--------------------------|----------|-------------------|
| Value     | 4              | 3     | 2                        | 1        | 0                 |
| Group A   | 7              | 9     | 0                        | 2        | 1                 |
| Group B   | 8              | 9     | 0                        | 2        | 1                 |

Statement #8 - Overall Means and Standard  
Deviations for Group A and Group B

| N  | <u>Group A</u> |       | N  | <u>Group B</u> |       |
|----|----------------|-------|----|----------------|-------|
|    | M              | S.D.  |    | M              | S.D.  |
| 19 | 3              | 1.154 | 20 | 3.05           | 1.145 |

Legend

N = number of subjects in group

M = mean score

S. D. = standard deviation

Statement #10 - Filipino girls would rather play active games like volleyball and tennis than be involved in fitness testing activities.

This statement was used to find out how Filipino girls felt about playing sports/games like volleyball and tennis versus being involved in fitness testing activities. Statement 10 was phrased as a positive question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 27. The unpaired t-test probability (2 tail) score for statement 10 was .5315. This statement did not meet the accepted standard of .05 or better.

In Group A - ('Recently Arrived'), eleven out of nineteen respondents either agreed (9) or strongly agreed (2) that they would prefer being in sports/games more than being involved in fitness testing activities. Three respondents had no opinion or were undecided about the statement. The remaining five either disagreed (2) or strongly disagreed (3) with the statement.

In Group B - ('Established'), eleven out of the twenty respondents either agreed (8) or strongly agreed (3) that they would prefer being in sports/games more than being involved in fitness testing activities. Six respondents had no opinion or were undecided. The remaining three either disagreed (2) or strongly disagreed (1) with the statement.

The mode for both groups (A and B) was the Agree Response category. The mode for Group A was at 47%, the mode for Group B was at 40%.

TABLE 27

Weighted Points Value Score for  
Statement #10 - Filipino girls would rather play  
active games like volleyball and tennis than be  
involved in fitness testing activities.

| Responses | Strongly Agree | Agree | No Opinion/<br>Undecided | Disagree | Strongly Disagree |
|-----------|----------------|-------|--------------------------|----------|-------------------|
| Value     | 4              | 3     | 2                        | 1        | 0                 |
| Group A   | 2              | 9     | 3                        | 2        | 3                 |
| Group B   | 3              | 8     | 6                        | 2        | 1                 |

Statement #10 - Overall Means and  
Standard Deviations for Group A and Group B

| <u>Group A</u> |       |       | <u>Group B</u> |     |       |
|----------------|-------|-------|----------------|-----|-------|
| N              | M     | S.D   | N              | M   | S.D.  |
| 19             | 2.263 | 1.285 | 20             | 2.5 | 1.051 |

Legend

N = number of subjects in group

M = mean score

S. D. = standard deviation

Statement #12 - Mothers are interested in sports.

The intent of this statement was to find out if mothers of Filipino girls are interested in sports. Statement 12 was phrased as a positive question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 28. The unpaired t-test probability (2 tail) score for statement 12 was .3248. This statement did not meet the accepted standard of .05 or better.

In both groups (A and B) the highest number of respondents answered in the No Opinion/Undecided Response category - six out of nineteen in Group A and ten out of twenty in Group B. The mode for both groups (A and B) was the No Opinion/Undecided Response category. The mode for Group A was at 32%, the mode for Group B was at 50%.

In Group A - ('Recently Arrived'), eight out of nineteen respondents either agreed (5) or strongly agreed (3) that their mothers are interested in sports. The remaining five disagreed with the statement.

In Group B - ('Established'), the remaining ten out of twenty respondents were evenly split. Five respondents either agreed (4) or strongly agreed (1) that their mothers are interested in sports. The other five either disagreed (4) or strongly disagreed (1) with the statement.

TABLE 28

Weighted Points Value for  
Statement #12 - Mothers are interested in sports

| Response | Strongly Agree | Agree | No Opinion/<br>Undecided | Disagree | Strongly Disagree |
|----------|----------------|-------|--------------------------|----------|-------------------|
| Value    | 4              | 3     | 2                        | 1        | 0                 |
| Group A  | 3              | 5     | 6                        | 5        | 0                 |
| Group B  | 1              | 3     | 10                       | 4        | 1                 |

Statement #12 - Overall Means and Standard  
Deviations for Group A and Group B

| <u>Group A</u> |       |       | <u>Group B</u> |   |       |
|----------------|-------|-------|----------------|---|-------|
| N              | M     | S.D.  | N              | M | S.D.  |
| 19             | 2.315 | 1.056 | 20             | 2 | .9177 |

Legend

N = number of subjects in group

M = mean score

S. D. = standard deviation

Statement #13 - Folk/social dance is more popular in the Philippines than in Canada.

This statement was used to find out if folk/social dance is more popular in the Philippines than in Canada. The review of literature stated that dance is an important part of Philippines' educational system. A great portion of the physical education program for girls is spent exercising and learning Philippine folk dances, songs and games. At the major high school folk dance is only offered in grades 7 and 8, social dance is offered in grades 10 and 11. Each dance activity runs no longer than twelve (12) classes.

Statement 13 was phrased as a positive question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 29. The unpaired t-test probability (2 tail) score for statement 13 was .194. This statement did not meet the accepted standard of .05 or better.

In Group A ('Recently Arrived'), fourteen out of nineteen respondents either agreed (8) or strongly agreed (6) that folk/social dance is more popular in the Philippines than in Canada. Three out of nineteen had no opinion or were undecided. Of the remaining two respondents, one disagreed and the other strongly disagreed that folk/social dance is more popular in the Philippines than in Canada.

TABLE 29

Weighted Points Value for  
Statement #13 - Folk/social dance is more popular in  
the Philippines than in Canada.

| Response | Strongly Agree | Agree | No Opinion/<br>Undecided | Disagree | Strongly Disagree |
|----------|----------------|-------|--------------------------|----------|-------------------|
| Value    | 4              | 3     | 2                        | 1        | 0                 |
| Group A  | 6              | 8     | 3                        | 1        | 1                 |
| Group B  | 3              | 6     | 9                        | 1        | 1                 |

Statement #13 - Overall Means and Standard  
Deviation for Group A and Group B

| <u>Group A</u> |       |       | <u>Group B</u> |      |       |
|----------------|-------|-------|----------------|------|-------|
| N              | M     | S.D.  | N              | M    | S.D.  |
| 19             | 2.894 | 1.100 | 20             | 2.45 | .9987 |

Legend

N = number of subjects in group

M = mean score

S.D. = standard deviation

In Group B ('Established'), nine out of the twenty respondents either agreed (6) or strongly agreed (3) that folk/social dance is more popular in the Philippines than in Canada. Nine out of the twenty had no opinion or were undecided. Of the remaining two respondents, one disagreed and the other strongly disagreed that folk/social dance is more popular in the Philippines than in Canada.

The mode for Group A is the Agree Response category at 42%. The mode for Group B is the No Opinion/Undecided Response category at 45%.

Statement #14 - Filipino girls do not like attending physical education classes.

The intent of this statement was to find out how Filipino females felt about attending physical education classes.

Statement 14 was phrased as a negative question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 30. The unpaired t-test probability (2 tail) score for statement 14 was .6133. This statement did not meet the accepted standard of .05 or better.

In Group A ('Recently Arrived'), sixteen out of nineteen respondents either disagreed (10) or strongly disagreed (6) that Filipino girls do not like attending physical education classes. Two out of the nineteen had no opinion or were undecided. The remaining respondent strongly agreed that Filipino girls do not like attending physical education classes.

TABLE 30

Weighted Points Value for  
Statement #14 - Filipino girls do not like attending  
physical education classes.

| Responses | Strongly Agree | Agree | No Opinion/<br>Undecided | Disagree | Strongly Disagree |
|-----------|----------------|-------|--------------------------|----------|-------------------|
| Value     | 0              | 1     | 2                        | 3        | 4                 |
| Group A   | 1              | 0     | 2                        | 10       | 6                 |
| Group B   | 0              | 0     | 5                        | 6        | 9                 |

Statement #14 - Overall Means and Standard  
Deviation for Group A and Group B

|  | <u>Group A</u> |       |       | <u>Group B</u> |     |       |
|--|----------------|-------|-------|----------------|-----|-------|
|  | N              | M     | S.D.  | N              | M   | S.D.  |
|  | 19             | 3.052 | .9703 | 20             | 3.2 | .8335 |

Legend

N = number of subjects in group

M = mean score

S. D. = standard deviation

In Group B ('Established'), fifteen out of the twenty respondents either disagreed (6) or strongly disagreed (9) that Filipino girls do not like attending physical education classes. The remaining five respondents had no opinion or were undecided about the statement.

The mode for Group A was the Disagree Response category at 53%. The mode for Group B was the Strongly Disagree Response category at 45%

Statement #15 - Filipino girls like games that have lots of vigorous activity in them.

This statement was used to find out how Filipino girls felt about games that involve lots of vigorous activity. Statement 15 was phrased as a positive question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 31. The unpaired t-test probability (2 tail) score for statement 15 was .6552. This statement did not meet the accepted standard of .05 or better.

In both groups (A and B) the highest number of respondents answered in the No Opinion/Undecided Response category - eight out of nineteen in Group A and ten out of twenty in Group B. The mode for both groups (A and B) was the No Opinion/Undecided Response category. The mode for Group A was 42%, the mode for Group B was at 50%.

TABLE 31

Weighted Points Value for  
Statement #15 - Filipino girls like games that have  
lots of vigorous activity in them.

| Responses | Strongly Agree | Agree | No Opinion/<br>Undecided | Disagree | Strongly Disagree |
|-----------|----------------|-------|--------------------------|----------|-------------------|
| Value     | 4              | 3     | 2                        | 1        | 0                 |
| Group A   | 2              | 7     | 8                        | 1        | 1                 |
| Group B   | 3              | 6     | 10                       | 1        | 0                 |

Statement #15 - Overall Means and  
Standard Deviations for Group A and Group B

| <u>Group A</u> |       |       | <u>Group B</u> |      |       |
|----------------|-------|-------|----------------|------|-------|
| N              | M     | S.D.  | N              | M    | S.D.  |
| 19             | 2.421 | .9612 | 20             | 2.55 | .8256 |

Legend

N = number of subjects in group

M = mean score

S. D.= standard deviation

In Group A - ('Recently Arrived'), nine of the nineteen respondents either agreed (7) or strongly agreed (2). Filipino girls like games that have lots of vigorous activity in them. The remaining two respondents either disagreed (1) or strongly disagreed (1) with the statement.

In Group B - ('Established'), nine out of twenty either agreed (6) or strongly agreed (3) that Filipino girls like games that have lots of vigorous activity in them. The remaining respondent disagreed with the statement.

Statement #16 - Physical education should be a required course in school.

The intent of this statement was to find out how Filipino girls felt about physical education as a required course. Statement 16 was phrased as a positive question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 32. The unpaired t-test probability (2 tail) score for statement 16 was .8796. This statement did not meet the accepted standard of .05 or better.

In Group A - ('Recently Arrived'), fifteen out of nineteen respondents either agreed (10) or strongly agreed (5) that physical education should be a required course in school. Three out of nineteen had no opinion or were undecided. The remaining respondent strongly disagreed with the statement.

TABLE 32

Weighted Points Value for  
Statement #16 - Physical education should be a  
required course in school.

| Responses | Strongly Agree | No Opinion/<br>Undecided | Disagree | Strongly<br>Disagree |
|-----------|----------------|--------------------------|----------|----------------------|
| Value     | 4              | 3                        | 2        | 1                    |
| Group A   | 5              | 10                       | 3        | 0                    |
| Group B   | 6              | 8                        | 4        | 2                    |

Statement #16 - Overall Means and Standard  
Deviations for Group A and Group B

| <u>Group A</u> |       |       | <u>Group B</u> |     |       |
|----------------|-------|-------|----------------|-----|-------|
| N              | M     | S.D.  | N              | M   | S.D.  |
| 19             | 2.947 | .9703 | 19             | 2.9 | .9679 |

Legend

N = number of subjects in group

M = mean score

S.D. = standard deviation

In Group B - ('Established'), fourteen out of twenty respondents either agreed (8) or strongly agreed (6) that physical education should be a required course in school. Four out of twenty had no opinion or were undecided. The remaining two respondents disagreed with the statement.

The mode for both groups (A and B) was the Agree Response category. The mode for Group A was at 53%, the mode for Group B was at 40%.

Statement #17 - Filipino girls prefer to play basketball more than volleyball.

This statement was used to find out if Filipino girls prefer a physical contact sport with no space separation such as basketball all over a non-physical contact sport with a space separation, such as volleyball. Statement 17 was phrased as a positive question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 33. The unpaired t-test probability (2 tail) score for statement 17 was .4089. This statement did not meet the accepted standard of .05 or better.

In Group A - ('Recently Arrived'), twelve out of nineteen respondents either disagreed (8) or strongly disagreed (4) that Filipino girls prefer to play basketball more than volleyball. Four out of nineteen had no opinion or were undecided. The remaining three respondents either agreed (2) or strongly agreed (1) that Filipino girls prefer basketball over volleyball.

TABLE 33

Weighted Points Value for  
Statement #17 - Filipino girls prefer to play  
basketball more than volleyball

| Responses | Strongly Agree | Agree | No opinion/<br>Undecided | Disagree | Strongly Disagree |
|-----------|----------------|-------|--------------------------|----------|-------------------|
| Value     | 4              | 3     | 2                        | 1        | 0                 |
| Group A   | 1              | 2     | 4                        | 8        |                   |
| Group B   | 1              | 3     | 5                        | 10       | 1                 |

Statement #17 - Overall Means and Standard  
Deviations for Group A and Group B

| <u>Group A</u> |       |       | <u>Group B</u> |      |       |
|----------------|-------|-------|----------------|------|-------|
| N              | M     | S.D.  | N              | M    | S.D.  |
| 19             | 1.368 | 1.116 | 20             | 1.65 | .9881 |

Legend

N = number of subjects in group

M = mean score

S. D. = standard deviation

In Group B - ('Established'), eleven out of the twenty respondents either disagreed (1) or strongly disagreed (1) that Filipino girls prefer to play basketball more than volleyball. Five out of twenty had no opinion or were undecided. The remaining four respondents either agreed (3) or strongly agreed (1) with the statement.

The mode for both groups (A and B) was the Disagree Response category. The mode for Group A was at 42%, the mode for Group B was at 50%.

Statement #18 - Filipino girls prefer to play racquet sports like tennis and badminton more than running track.

The intent of this statement was to find out if Filipino girls prefer racquet sports that allow for a separation of space (tennis and badminton use a net) over a physically demanding sport such as running track. Statement 18 was phrased as a positive question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 34. The unpaired t-test probability (2 tail) score for statement 23 was .6608. This statement did not meet the accepted standard of .05 or better.

Both groups (A and B) agreed that Filipino girls preferred to play racquet sports like tennis and badminton more than running track. In Group A ('Recently Arrived') eleven out of nineteen respondents either agreed (6) or strongly agreed (5). In Group B ('Established') eleven out of twenty respondents either agreed (9) or strongly agreed (2) that Filipino girls prefer to play racquet sports like tennis and badminton more than running track.

TABLE 34

Weighted Point Value for  
Statement #18 - Filipino girls prefer to play racquet  
sports like tennis and badminton more than running  
track

| Response | Strongly Agree | Agree | No opinion/<br>Undecided | Disagree | Strongly Disagree |
|----------|----------------|-------|--------------------------|----------|-------------------|
| Value    | 4              | 3     | 2                        | 1        | 0                 |
| Group A  | 5              | 6     | 5                        | 0        | 3                 |
| Group B  | 2              | 9     | 5                        | 2        | 2                 |

Statement #18 - Overall Means and Standard  
Deviations for Group A and Group B

| <u>Group A</u> |       |       | <u>Group B</u> |      |       |
|----------------|-------|-------|----------------|------|-------|
| N              | M     | S.D.  | N              | M    | S.D.  |
| 19             | 2.526 | 1.348 | 20             | 2.36 | 1.136 |

Legend

N = number of subjects in group

M = mean score

S. D. = standard deviation

Five respondents from both groups (A - 5 out of 19; B - 5 out of 20) had no opinion or were undecided. In Group A three out of nineteen strongly disagreed while in Group B four out of twenty either disagreed (2) or strongly disagreed (2) that Filipino girls prefer to play racquet sports like tennis and badminton more than running track.

The mode for both groups (A and B) was the Agree Response category. The mode for Group A was at 32%, the mode for Group B was at 45%.

Statement #19 - Parents should encourage their family's involvement in physical activity.

This statement was used to find out if Filipino girls felt if it was important for their parents to encourage their family's involvement in physical activity. Statement 19 was phrased as a positive question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 35. The unpaired t-test probability (2 tail) score for statement 29 was .8315. This statement did not meet the accepted standard of .05 or better.

Both groups (A and B) agreed that Filipino parents should encourage their family's involvement in physical activity. In Group A ('Recently Arrived') eighteen out of nineteen respondents either agreed (13) or strongly agreed (5) with the statement. In Group B ('Established') fourteen out of twenty either agreed (5) or strongly agreed (9) that Filipino parents should encourage their family's involvement in physical activity.

TABLE 35

Weighted Points Value for  
Statement #19 - Parents should encourage their  
family's involvement in physical activity

| Responses | Strongly Agree | Agree | No Opinion/<br>Undecided | Disagree | Strongly Disagree |
|-----------|----------------|-------|--------------------------|----------|-------------------|
| Value     | 4              | 3     | 2                        | 1        | 0                 |
| Group A   | 5              | 13    | 0                        | 1        | 0                 |
| Group B   | 9              | 5     | 5                        | 1        | 0                 |

Statement #19: Overall Means and Standard  
Deviation for Group A and Group B

| N  | Group A |       | Group B |     | S.D.  |
|----|---------|-------|---------|-----|-------|
|    | M       | S.D.  | N       | M   |       |
| 19 | 3.1579  | .6882 | 20      | 3.1 | .9679 |

Legend

N = number of subjects in group

M = mean score

S.D. = standard deviation

In Group A the nineteen respondents were able to make a decision about the statement. No one used the No Opinion/Undecided Response category. Yet in Group B, five out of twenty had no opinion or were undecided about the statement. The remaining respondent in both groups (A and B) disagreed that Filipino parents should encourage their family's involvement in physical activity.

The mode for Group A was the Agree Response category at 68%. The mode for Group B was the Strongly Agree Response category at 45%.

Statement #20 - Running/jogging is emphasized more in Canada than in the Philippines.

The intent of this statement was to find out if in Canada running/jogging has a stronger emphasis within physical education programs than in the Philippines. Statement 20 was phrased as a positive question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 36. The unpaired t-test probability (2 tail) score for statement 20 was .2854. This statement did not meet the accepted standard of .05 or better.

In Group A - ('Recently Arrived'), twelve out of the nineteen respondents either agreed (1) or strongly agreed (6) that running/jogging is emphasized more in Canada than in the Philippines. Four out of the nineteen had no opinion or were undecided. The remaining three respondents either disagreed (1) or strongly disagreed (2) with the statement.

TABLE 36

Weighted Points Value for  
Statement #20 - Running/jogging is emphasized  
more in Canada than in the Philippines

| Responses | Strongly Agree | Agree | No Opinion/<br>Undecided | Disagree | Strongly Disagree |
|-----------|----------------|-------|--------------------------|----------|-------------------|
| Value     | 4              | 3     | 2                        | 1        | 0                 |
| Group A   | 6              | 6     | 4                        | 1        | 2                 |
| Group B   | 3              | 6     | 6                        | 3        | 2                 |

Statement #20 - Overall Means and  
Standard Deviations for Group A and Group B

| Group A |       |       | Group B |      |       |
|---------|-------|-------|---------|------|-------|
| N       | M     | S.D.  | N       | M    | S.D.  |
| 19      | 2.684 | 1.293 | 20      | 2.25 | 1.208 |

Legend

N = number of subjects in group

M = mean score

S.D. = standard deviation

In Group A - ('Recently Arrived'), twelve out of the nineteen respondents either agreed (1) or strongly agreed (6) that running/jogging is emphasized more in Canada than in the Philippines. Four out of the nineteen had no opinion or were undecided. The remaining three respondents either disagreed (1) or strongly disagreed (2) with the statement.

In Group B - ('Established'), nine out of twenty respondents either agreed (6) or strongly agreed (3) that running/jogging is emphasized more in Canada than in the Philippines. Six out of twenty had no opinion or were undecided. The remaining five respondents either disagreed (3) or strongly disagreed (2) with the statement.

Both groups (A and B) had no mode.

Statement #21 - Physical education is too competitive.

This statement was asked to find out if Filipino girls felt that physical education was too competitive for them. Statement 21 was phrased as a negative question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 37. The unpaired t-test probability (2 tail) score for statement 21 was .8157. This statement did not meet the accepted standard of .05 or better.

In Group A ('Recently Arrived'), eleven out of nineteen respondents either disagreed (8) or strongly disagreed (3) that physical education is too competitive. Seven out of nineteen had no opinion or were undecided. The remaining two respondents agreed with the statement.

TABLE 37

Weight Points Value for  
Statement #21 - Physical education is to  
competitive.

| Responses | Strongly Agree |   | No Opinion/<br>Undecided | Disagree | Strongly<br>Disagree |
|-----------|----------------|---|--------------------------|----------|----------------------|
| Value     | 0              | 1 | 2                        | 3        | 4                    |
| Group A   | 0              | 2 | 7                        | 8        | 2                    |
| Group B   | 1              | 2 | 5                        | 8        | 4                    |

Statement #21 - Overall Means and Standard  
Deviations for Group A and Group B

| <u>Group A</u> |       |       | <u>Group B</u> |     |       |
|----------------|-------|-------|----------------|-----|-------|
| N              | M     | S.D.  | N              | M   | S.D.  |
| 19             | 2.526 | .8412 | 20             | 2.6 | 1.095 |

Legend

N = number of subjects in group

M = mean score

S.D. = standard deviation

In Group B - ('Established'), twelve out of twenty respondents either disagreed (8) or strongly disagreed (4) that physical education is too competitive.

Five out of twenty had no opinion or were undecided. The remaining three respondents either agreed (2) or strongly agreed (1) with the statement.

Statement #22 - Physical education does improve social behaviour.

This statement was used to find out if Filipino girls thought that taking part in physical education classes results in improved social behaviour. Statement 22 was phrased as a positive question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 38. The unpaired t-test probability (2 tail) score for statement 22 was .5298. This statement did not meet the accepted standard of .05 or better.

In Group A - ('Recently Arrived'), sixteen out of nineteen respondents either agreed (11) or strongly agreed (5) that physical education does improve social behaviour. None of the nineteen respondents used the No Opinion/Undecided Response category. They could make a decision regarding the statement. Three out of the nineteen either disagreed (2) or strongly disagreed (1) with the statement.

TABLE 38

Weighted Points Value for  
Statement #22 - Physical education does improve  
social behaviour

| Responses | Strongly Agree |    | No Opinion/<br>Undecided | Disagree | Strongly<br>Disagree |
|-----------|----------------|----|--------------------------|----------|----------------------|
| Value     | 4              | 3  | 2                        | 1        | 0                    |
| Group A   | 5              | 11 | 0                        | 2        | 1                    |
| Group B   | 2              | 12 | 4                        | 2        | 0                    |

Statement #22 - Overall Means and  
Standard Deviation for Group A and Group B

| <u>Group A</u> |       |       | <u>Group B</u> |     |       |
|----------------|-------|-------|----------------|-----|-------|
| N              | M     | S.D.  | N              | M   | S.D.  |
| 19             | 2.894 | 1.100 | 20             | 2.7 | .8013 |

Legend

N = number of subjects in group

M = mean score

S.D. = standard deviation

In Group B - ('Established'), thirteen out of twenty respondents either agreed (7) or strongly agreed (6) that physical education does improve social behaviour. Four out of twenty had no opinion or were undecided. The remaining three respondents either disagreed (1) or strongly disagreed (2) with the statement.

For both groups (A and B) the mode was the Agree Response category. The mode for Group A was at 53%, the mode for Group B was at 35%.

Statement #25 - Filipino girls prefer to play volleyball more than field hockey.

The intent of this statement was to find out if Filipino girls showed a preference for one sport, volleyball, over another, field hockey. Volleyball uses a net for a separation of space and a limited amount of running. On the other hand, field hockey has no separation of space and involves a lot of running. Statement 25 was phrased as a positive question. The responses, mean score, and standard deviation for both groups (A and B) are shown in Table 39. The unpaired t-test probability (2 tail) score for statement 25 was .3195. This statement did not meet the accepted standard of .05 or better.

In Group A - ('Recently Arrived'), sixteen out of nineteen respondents either agreed (10) or strongly agreed (6) that Filipino girls prefer to play volleyball more than field hockey. Two out of nineteen had no opinion or were undecided. The remaining respondent disagreed with the statement.

TABLE 39

Weighted Points Value for  
Statement #25 - Filipino girls prefer to play  
volleyball more than field hockey

| Response | Strongly Agree | Agree | No Opinion/<br>Undecided | Disagree | Strongly Disagree |
|----------|----------------|-------|--------------------------|----------|-------------------|
| Value    | 4              | 3     | 2                        | 1        | 0                 |
| Group A  | 6              | 10    | 2                        | 1        | 0                 |
| Group B  | 6              | 7     | 4                        | 3        | 0                 |

Statement #25 - Overall Means and Standard  
Deviations for Group A and Group B

|  | <u>Group A</u> |       |       | <u>Group B</u> |     |       |
|--|----------------|-------|-------|----------------|-----|-------|
|  | N              | M     | S.D.  | N              | M   | S.D.  |
|  | 19             | 3.105 | .8093 | 20             | 2.8 | 1.056 |

Legend

N = number of subjects in group

M = mean score

S.D. = standard deviation

In Group B ('Established'), thirteen out of twenty respondents either agreed (7) or strongly agreed (6) that Filipino girls prefer to play volleyball more than field hockey. Four out of twenty had no opinion or were undecided. The remaining three respondents disagreed with the statement.

The mode for both groups (A and B) was the Agree Response category. The mode for Group A was at 53%, the mode for Group B was at 35%.

Statement #26 - In Filipino families, sons are encouraged more than daughters to participate in physical education.

This statement was used to find out if Filipino girls felt that their brothers are encouraged more than themselves to participate in physical education. Statement 26 was phrased as a positive question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 40. The unpaired t-test probability (2 tail) score for statement 26 was .2887. This statement did not meet the accepted standard of .05 or better.

In Group A ('Recently Arrived') twelve out of nineteen respondents either agreed (9) or strongly agreed (3) that in Filipino families, sons are encouraged more than daughters to participate in physical education. Three out of nineteen had no opinion or were undecided. The remaining four respondents either disagreed (2) or strongly disagreed (2) with the statement.

TABLE 40

Weighted Points Value for  
Statement #26 - In Filipino families, sons are  
encouraged more than daughters to participate in  
physical education.

| Responses | Strongly Agree |   | No Opinion/<br>Undecided | Disagree | Strongly<br>Disagree |
|-----------|----------------|---|--------------------------|----------|----------------------|
| Value     | 4              | 3 | 2                        | 1        | 0                    |
| Group A   | 3              | 9 | 3                        | 2        | 2                    |
| Group B   | 8              | 6 | 4                        | 0        | 2                    |

Statement #26 - Overall Means and Standard  
Deviations for Group A and Group B

| N  | <u>Group A</u> |       | N  | <u>Group B</u> |       |
|----|----------------|-------|----|----------------|-------|
|    | M              | S.D.  |    | M              | S.D.  |
| 19 | 2.473          | 1.218 | 20 | 2.9            | 1.252 |

Legend

N = number of subjects in group

M = mean score

S.D. = standard deviation

In Group B - ('Established'), fourteen out of the twenty respondents either agreed (6) or strongly agreed (8) that in Filipino families, sons are encouraged more than daughters to participate in physical education. Four out of twenty had no opinion or were undecided. The remaining two respondents strongly disagreed with the statement.

The mode for Group A was the Agree Response category at 47%. The mode for Group B was the Strongly Agree Response category at 40%.

Statement #27 - Canadian girls are fitter than Filipino girls.

This statement was asked to find out if Filipino girls felt that they were not as fit as Canadian girls. Statement 27 was phrased as a positive question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 41. The unpaired t-test probability (2 tail) score for statement 27 was .4802. This statement did not meet the accepted standard of .05 or better.

In Group A - ('Recently Arrived'), twelve out of nineteen respondents either agreed (9) or strongly agreed (3) that Canadian girls are fitter than Filipino. Four out of nineteen had no opinion or were undecided. The remaining four respondents either disagreed (2) or strongly disagreed with the statement.

TABLE 41

Weighted Points Value for  
Statement #27 - Canadian girls are fitter than  
Filipino girls

| Responses | Strongly Agree | Agree | No Opinion/<br>Undecided | Disagree | Strongly Disagree |
|-----------|----------------|-------|--------------------------|----------|-------------------|
| Value     | 4              | 3     | 2                        | 1        | 0                 |

|         |   |   |    |   |   |
|---------|---|---|----|---|---|
| Group A | 3 | 9 | 4  | 2 | 2 |
| Group B | 2 | 3 | 10 | 2 | 3 |

Statement #27 - Overall Mean and Standard  
Deviations for Group A and Group B

| N  | <u>Group A</u> |       | N  | <u>Group B</u> |       |
|----|----------------|-------|----|----------------|-------|
|    | M              | S.D.  |    | M              | S.D.  |
| 19 | 2.210          | 1.134 | 20 | 1.95           | 1.145 |

Legend

N = number of subjects in group

M = mean score

S.D. = standard deviation

In Group B - ('Established'), ten out of twenty respondents had no opinion or were undecided that Canadian girls are fitter than Filipino girls. This group could not make a decision about the statement. Five out of twenty either agreed (3) or strongly agreed (2) while the remaining five either disagreed (2) or strongly disagreed (3) with the statement.

The mode for Group A was the Agree Response category at 47%. The mode for Group B was the No Opinion/Undecided Response category at 50%.

Statement #28 - Young girls who participate in and enjoy physical activities are considered to be less feminine or less ladylike than those who do not participate.

The intent of this statement was to find out if Filipino girls felt that participating and enjoying physical activities make them feel less feminine or less ladylike than those who do not participate. Statement 28 was phrased as a negative question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 42. The unpaired t-test probability (2 tail) score for statement 28 was .2533. This statement did not meet the accepted standard of .05 or better.

In Group A - ('Recently Arrived'), seven out of nineteen respondents had no opinion or were undecided if young girls who participate in and enjoy physical activities are considered to be less feminine or less ladylike than those who do not participate. Seven out of nineteen either disagreed (3) or strongly disagreed (4). The remaining five respondents either agreed (3) or strongly agreed (2) with the statement.

TABLE 42

Weighted Points Value for  
Statement #28 - Young girls who participate in and  
enjoy physical activities are considered to be less  
feminine or less ladylike than those who do not  
participate.

| Responses | Strongly Agree | Agree | No Opinion/<br>Undecided | Disagree | Strongly Disagree |
|-----------|----------------|-------|--------------------------|----------|-------------------|
| Value     | 0              | 1     | 2                        | 3        | 4                 |
| Group A   | 2              | 3     | 7                        | 3        | 4                 |
| Group B   | 1              | 1     | 7                        | 6        | 5                 |

Statement #28 = Overall Means and Standard  
Deviations for Group A and Group B

| N  | <u>Group A</u> |       | N  | <u>Group B</u> |       |
|----|----------------|-------|----|----------------|-------|
|    | M              | S.D.  |    | M              | S.D.  |
| 19 | 2.210          | 1.272 | 20 | 2.65           | 1.089 |

Legend

N = number of subjects in group

M = mean score

S.D. = standard deviation

In Group B - ('Established'), seven out of twenty respondents had no opinion or were undecided if young girls who participate in and enjoy physical activities are considered to be less feminine or less ladylike than those who do not participate. Eleven out of twenty either disagreed (6) or strongly disagreed (5). The remaining two respondents either agreed (1) or strongly agreed (1) with the statement.

For both groups (A and B) the mode was the No Opinion/Undecided Response category. The mode for Group A was at 37%, the mode for Group B was at 35%.

Statement #29 - Filipino girls prefer to watch sports more than taking part in them.

The intent of this statement was to find out if Filipino girls prefer to watch sports more than taking part in them. Statement 29 was phrased as a positive question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 43. The unpaired t-test probability (2 tail) score for statement 29 was .5403. This statement did not meet the accepted standard of .05 or better.

In Group A - ('Recently Arrived'), nine out of nineteen respondents either agreed (6) or strongly agreed (3) that Filipino girls prefer to watch sports more than taking part in them. Four out of nineteen had no opinion or were undecided. The remaining six respondents either disagreed (3) or strongly disagreed (3) with the statement.

TABLE 43

Weighted Points Value for  
Statement #29 - Filipino girls prefer to  
watch sports more than taking part in them.

| Responses | Strongly Agree |   | No Opinion/<br>Undecided | Disagree | Strongly<br>Disagree |
|-----------|----------------|---|--------------------------|----------|----------------------|
| Value     | 4              | 3 | 2                        | 1        | 0                    |
| Group A   | 3              | 6 | 4                        | 3        | 3                    |
| Group B   | 4              | 4 | 9                        | 2        | 1                    |

Statement #29 - Overall Means and Standard  
Deviations for Group A and Group B

|  | <u>Group A</u> |       |       | <u>Group B</u> |     |       |
|--|----------------|-------|-------|----------------|-----|-------|
|  | N              | M     | S.D.  | N              | M   | S.D.  |
|  | 19             | 2.157 | 1.344 | 20             | 2.4 | 1.095 |

Legend

N = number of subjects in group

M = mean score

S. D. = standard deviation

In Group B - ('Established'), eight out of twenty either agreed (4) or disagreed (4) that Filipino girls prefer to watch sports more than taking part in them. Nine out of twenty had no opinion or were undecided. The remaining three respondents either disagreed (2) or strongly disagreed (1) with the statement.

The mode for Group A was the Agree Response category at 32%. The mode for Group B was the No Opinion/Undecided Response category at 45%.

Statement #30 - Playing games in a group is more fun than playing alone.

The intent of this statement was to find out if Filipino girls had a preference about playing games in a group or individually. Statement 30 was phrased as a positive question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 44. The unpaired t-test probability (2 tail) score for statement 30 was .4398. This statement did not meet the accepted standard of .05 or better.

In Group A - ('Recently Arrived'), fifteen out of nineteen respondents either agreed (6) or strongly agreed (9) that playing games in a group is more fun than playing alone. None of the nineteen respondents had a problem in making a decision about the statement. The remaining four strongly disagreed (4) with the statement.

TABLE 44

Weighted Points Value for  
Statement #30 - Playing games in a group is more fun  
than playing alone.

| Responses | Strongly Agree | Agree | No Opinion/<br>Undecided | Disagree | Strongly Disagree |
|-----------|----------------|-------|--------------------------|----------|-------------------|
| Value     | 4              | 3     | 2                        | 1        | 0                 |
| Group A   | 9              | 6     | 0                        | 0        | 4                 |
| Group B   | 12             | 4     | 2                        | 0        | 2                 |

Statement #30 - Overall Means and Standard  
Deviations for Group A and Group B

| <u>Group A</u> |       |       | <u>Group B</u> |     |       |
|----------------|-------|-------|----------------|-----|-------|
| N              | M     | S.D.  | N              | M   | S.D.  |
| 19             | 2.842 | 1.572 | 20             | 3.2 | 1.281 |

Legend

N = number of subjects in group

M = mean score

S. D. = standard deviation

In Group B - ('Established'), sixteen out of twenty respondents either agreed (4) or strongly agreed (12) that playing games in a group is more fun than playing alone. Two out of twenty had no opinion or were undecided. The remaining two respondents strongly disagreed with the statement.

For both groups (A and B) the mode was the Strongly Agreed Response category. The mode for Group A was at 47%, the mode for Group B was at 60%.

Statement #32 - In Filipino families, daughters are expected to be a helper in the home rather than play on school teams.

This statement was used to find out if Filipino girls are expected by their families to be helpers in the home rather than playing on school teams. Statement 32 was phrased as a positive question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 45. The unpaired t-test probability (2 tail) score for statement 32 was .8936. This statement did not meet the accepted standard of .05 or better.

In Group A - ('Recently Arrived'), twelve out of nineteen either agreed (3) or strongly agreed (9) that in Filipino families, daughters are expected to be a helper in the home rather than play on school teams. Four out of nineteen had no opinion or were undecided. The remaining three respondents either disagreed (2) or strongly disagreed (1) with the statement.

TABLE 45

Statement #32 - In Filipino families, daughters are expected to be a helper in the home rather than play on school teams.

| Responses | Strongly Agree | Agree | No Opinion/<br>Undecided | Disagree | Strongly Disagree |
|-----------|----------------|-------|--------------------------|----------|-------------------|
| Value     | 4              | 3     | 2                        | 1        | 0                 |
| Group A   | 9              | 3     | 4                        | 2        | 1                 |
| Group B   | 9              | 5     | 4                        | 0        | 2                 |

Statement #32 - Overall Means and Standard Deviations for Group A and Group B

|    | <u>Group A</u> |       | N  | <u>Group B</u> |       |
|----|----------------|-------|----|----------------|-------|
|    | M              | S.D.  |    | M              | S.D.  |
| N  |                |       |    |                |       |
| 19 | 2.894          | 1.286 | 20 | 2.95           | 1.276 |

Legend

- N = number of subjects in group
- M = mean score
- S.= standard deviation

In Group B - ('Established'), fourteen out of twenty respondents either agreed (5) or strongly agreed (9) that in Filipino families, daughters are expected to be a helper in the home rather than play on school teams. Four out of twenty had no opinion or were undecided, The remaining two respondents strongly disagreed with the statement.

For both groups (A and B) the mode was Strongly Agree Response category. The mode for Group A was at 47%, the mode for Group B was at 45%.

Statement #33 - There is more time scheduled for physical education classes in Canada than in the Philippines.

This statement was used to find out if both countries allotted equal time to physical education classes. Statement 33 was phrased as a positive question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 46. The unpaired t-test probability (2 tail) score for statement 33 was .342. This statement did not meet the accepted standard of .05 or better.

In Group A - ('Recently Arrived'), thirteen out of nineteen either agreed (7) or strongly agreed (6) that there is more time scheduled for physical education classes in Canada than in the Philippines. Only one respondent had no opinion or was undecided. Five out of nineteen either disagreed (3) or strongly disagreed (2) with the statement.

TABLE 46

Weighted Points Value for  
Statement #33 - There is more time scheduled for  
physical education classes in Canada than in the  
Philippines.

| Responses | Strongly Agree | Agree | No Opinion/<br>Undecided | Disagree | Strongly Disagree |
|-----------|----------------|-------|--------------------------|----------|-------------------|
| Value     | 4              | 3     | 2                        | 1        | 0                 |
| Group A   | 6              | 7     | 1                        | 2        | 2                 |
| Group B   | 6              | 8     | 6                        | 0        | 0                 |

Statement #33 - Overall Means and Standard  
Deviations for Group A and Group B

|    | <u>Group A</u> |       | N  | <u>Group B</u> |       |
|----|----------------|-------|----|----------------|-------|
|    | M              | S.D.  |    | M              | S.D.  |
| N  |                |       |    |                |       |
| 19 | 2.631          | 1.382 | 20 | 3              | .7947 |

Legend

N = number of subjects in group

M = mean score

S.D. = standard deviation

In Group B - ('Established'), fourteen out of twenty respondents either agreed (7) or strongly agreed (6) that there is more time scheduled for physical education classes in Canada than in the Philippines. Six out of twenty had no opinion or were undecided. No one in Group B disagreed with the statement.

For both groups (A and B) the mode was Agree Response category. The mode for Group A was at 37%; the mode for Group B was at 40%.

Statement #34 - Physical education is not a pleasant experience.

The intent of this statement was to find out if Filipino girls found physical education as an unpleasant experience or not. Statement 34 was phrased as a negative question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 47. The unpaired t-test probability (2 tail) score for statement 34 was .7692. This statement did not meet the accepted standard of .05 or better.

In both groups (A and B) no one agreed with the statement (Group A - 0 of 19, Group B - 0 of 20) that physical education is not a pleasant experience. Groups A and B both had the same number of respondents (Group A - 17 of 19; Group B - 17 of 20) that either disagreed (9) or strongly disagreed (8) with the statement.

TABLE 47

Weighted Points Value for  
Statement #34 - Physical education is  
not a pleasant experience.

| Responses | Strongly Agree |   | No Opinion/<br>Undecided | Disagree | Strongly<br>Disagree |
|-----------|----------------|---|--------------------------|----------|----------------------|
| Value     | 0              | 1 | 2                        | 3        | 4                    |
| Group A   | 0              | 0 | 2                        | 9        | 8                    |
| Group B   | 0              | 0 | 3                        | 9        | 8                    |

Statement #34 - Overall Means and Standard  
Deviations for Group A and Group B

|    | <u>Group A</u> |      |    | <u>Group B</u> |       |
|----|----------------|------|----|----------------|-------|
| N  | M              | S.D. | N  | M              | S.D.  |
| 19 | 3.315          | .671 | 20 | 3.25           | .7164 |

Legend

N = number of subjects in group

M = mean score

S.D. = standard deviation

In Group A, two out of nineteen respondents had no opinion or were undecided about the statement. In Group B, three out of twenty respondents had no opinion or were undecided if physical education is an unpleasant experience or not.

For both groups (A and B) the mode was the Disagree Response category. The mode for Group A was at 47%, the mode for Group B was at 45%.

Statement #35 - Filipino girls who participate in active games and sports are not popular with boys.

This statement was used to find out if Filipino girls felt that participating in active games and sports made them unpopular with boys. Statement 35 was phrased as a negative question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 48. The unpaired t-test probability (2 tail) score for statement 35 was .756. This statement did not meet the accepted standard of .05 or better.

In Group A ('Recently Arrived') thirteen out of nineteen respondents either disagreed (8) or strongly disagreed (5) that Filipino girls who participate in active games and sports are not popular with boys. Four out of nineteen had no opinion or were undecided. The remaining two respondents either agreed (1) or strongly agreed (1) with the statement.

TABLE 48

Weighted Points Value for  
Statement #35 - Filipino girls who participate in  
active games and sports are not popular with boys.

| Responses | Strongly Agree |   | No Opinion/<br>Undecided | Disagree | Strongly<br>Disagree |
|-----------|----------------|---|--------------------------|----------|----------------------|
| Value     | 0              | 1 | 2                        | 3        | 4                    |
| Group A   | 1              | 1 | 4                        | 8        | 5                    |
| Group B   | 1              | 1 | 3                        | 7        | 7                    |

Statement #35 - Overall Means and Standard  
Deviations for Group A and Group B

|    | <u>Group A</u> |       | N  | <u>Group B</u> |       |
|----|----------------|-------|----|----------------|-------|
|    | M              | S.D.  |    | M              | S.D.  |
| N  |                |       |    |                |       |
| 19 | 2.789          | 1.084 | 20 | 2.9            | 1.119 |

Legend

N = number of subjects in group

M = mean score

S.D. = standard deviation

In Group B - ('Established'), fourteen out of twenty respondents either disagreed (7) or strongly disagreed (7) that Filipino girls who participate in active games and sports are not popular with boys. Four out of twenty had no opinion or were undecided. The remaining two respondents either agreed (1) or strongly agreed (1) with the statement.

The mode for Group A was the Disagree Response category at 42%. There was no mode for Group B.

Statement #37 - Filipino girls should not participate in physical education programs.

The intent of this statement was to find out if Filipino girls felt that they should be involved in physical education programs. Statement 37 was phrased as a negative question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 49. The unpaired t-test probability (2 tail) score for statement 37 was .3132. This statement did not meet the accepted standard of .05 or better.

In Group A - ('Recently Arrived'), eighteen out of nineteen respondents either disagreed (10) or strongly disagreed (8) that Filipino girls should not participate in physical education programs. The remaining respondent had no opinion or was undecided about the statement. No respondents agreed or strongly disagreed.

TABLE 49

Weighted Points Value for  
Statement #37 - Filipino girls should not  
participate in physical education programs

| Responses | Strongly Agree | Agree | No Opinion<br>Undecided | Disagree | Strongly Disagree |
|-----------|----------------|-------|-------------------------|----------|-------------------|
| Value     | 0              | 1     | 2                       | 3        | 4                 |
| Group A   | 0              | 0     | 1                       | 10       | 8                 |
| Group B   | 0              | 0     | 0                       | 9        | 11                |

Statement #37 - Overall Means and Standard  
Deviations for Group A and Group B

| <u>Group A</u> |       |       | <u>Group B</u> |      |       |
|----------------|-------|-------|----------------|------|-------|
| N              | M     | S.D.  | N              | M    | S.D.  |
| 19             | 3.368 | .5973 | 20             | 3.55 | .5104 |

Legend

N = number of subjects in group

M = mean score

S.D. = standard deviation

In Group B - ('Established'), all twenty respondents either disagreed (9) or strongly disagreed (11) that Filipino girls should not participate in physical education programs. The Group B felt strongly that Filipino girls should be a part of physical education programs.

The mode for Group A was the Disagree Response category at 53%. The mode for Group B was the Strongly Disagree Response category at 55%.

Statement #38 - People get all the exercise they need in just doing their daily work.

The intent of this statement was to find out if Filipino girls felt they get enough exercise just doing their daily work. Statement 38 was phrased as a negative question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 50. The unpaired t-test probability (2 tail) score for statement 38 was .2027. This statement did not meet the accepted standard of .05 or better.

In Group A - ('Recently Arrived'), ten out of nineteen respondents either disagreed (7) or strongly disagreed (3) that people get all the exercise they need in just doing their daily work. Two out of nineteen had no opinion or were undecided. The remaining seven respondents either agreed (5) or strongly agreed (2) with the statement.

TABLE 50

Weighted Points Value for  
Statement #38 - People get all the exercise they  
need in just doing their daily work

| Responses | Strongly Agree |   | No Opinion/<br>Undecided | Disagree | Strongly<br>Disagree |
|-----------|----------------|---|--------------------------|----------|----------------------|
| Value     | 0              | 1 | 2                        | 3        | 4                    |
| Group A   | 2              | 5 | 2                        | 7        | 3                    |
| Group B   | 1              | 1 | 5                        | 7        | 4                    |

Statement #38 - Overall Means and Standard  
Deviations for Group A and Group B

|    | <u>Group A</u> |       | N  | <u>Group B</u> |       |
|----|----------------|-------|----|----------------|-------|
|    | M              | S.D.  |    | M              | S.D.  |
| N  |                |       |    |                |       |
| 19 | 2.210          | 1.315 | 20 | 2.7            | 1.031 |

Legend

N = number of subjects in group

M = mean score

S. D. = standard deviation

In Group B - ('Established'), thirteen out of twenty respondents either disagreed (9) or strongly disagreed (4) that people get all the exercise they need in just doing their daily work. Five out of twenty had no opinion or were undecided. The remaining two respondents either agreed (1) or strongly agreed (1) with the statement.

For both groups (A and B) the mode was Disagree Response category. The mode for Group A was at 37%, the mode for Group B was at 45%.

Statement #39 - After high school graduation people should continue to be involved in sports and games.

This statement was used to find out if Filipino girls upon school graduation should continue to be involved in sports and games. Statement 39 was phrased as a positive question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 51. The unpaired t-test probability (2 tail) score for statement 39 was .1312. This statement did not meet the accepted standard of .05 or better.

In Group A ('Recently Arrived') fifteen out of nineteen respondents either agreed (9) or strongly agreed (3) that after high school graduation people should continue to be involved in sports and games. Three out of nineteen had no opinion or were undecided. The remaining respondent disagreed with the statement.

TABLE 51

Weighted Points Value for  
Statement #39 - After high school graduation  
people should continue to be involved in sports  
and games.

| Responses | Strongly Agree | Agree | No Opinion/<br>Undecided | Disagree | Strongly Disagree |
|-----------|----------------|-------|--------------------------|----------|-------------------|
| Value     | 4              | 3     | 2                        | 1        | 0                 |
| Group A   | 6              | 9     | 3                        | 1        | 0                 |
| Group B   | 9              | 6     | 4                        | 0        | 1                 |

Statement #39 - Overall Means and Standard  
Deviations for Group A and Group B

| <u>Group A</u> |       |       | <u>Group B</u> |      |       |
|----------------|-------|-------|----------------|------|-------|
| N              | M     | S.D.  | N              | M    | S.D.  |
| 19             | 3.052 | .8481 | 20             | 3.45 | .7592 |

Legend

N = number of subjects in group

M = mean score

S. D. = standard deviation

In Group B - ('Established'), fifteen out of twenty respondents either agreed (6) or strongly agreed (9) that after high school graduation people should continue to be involved in sports and games. Four out of twenty had no opinion or were undecided. The remaining respondent strongly disagreed with the statement.

The mode for Group A was the Agree Response category at 47%. The mode for Group B was the Strongly Agree Response category at 60%.

Statement #40 - Physical education skills are of no benefit to a person.

The intent of this statement was to find out if Filipino girls felt that physical education skills were of a benefit or not to individuals. Statement 40 was phrased as a negative question. The responses, mean score and standard deviation for both groups (A and B) are shown in Table 52. The unpaired t-test probability (2 tail) score for statement 40 was .4782. This statement did not meet the accepted standard of .05 or better.

In Group A - ('Recently Arrived'), fourteen out of nineteen respondents either disagreed (11) or strongly disagreed (3) that physical education skills are of no benefit to a person. Five out of nineteen had no opinion or were undecided. No one agreed or strongly agreed with the statement.

TABLE 52

Weighted Points Value for  
Statement #40 - Physical education skills are of  
no benefit to a person.

| Responses | Strongly Agree | Agree | No Opinion/<br>Undecided | Disagree | Strongly Disagree |
|-----------|----------------|-------|--------------------------|----------|-------------------|
| Value     | 0              | 1     | 2                        | 3        | 4                 |
| Group A   | 0              | 0     | 5                        | 11       | 3                 |
| Group B   | 1              | 0     | 4                        | 6        | 9                 |

Statement #40 - Overall Means and Standard  
Deviations for Group A and Group B

| N  | <u>Group A</u> |       | N  | <u>Group B</u> |       |
|----|----------------|-------|----|----------------|-------|
|    | M              | S.D.  |    | M              | S.D.  |
| 19 | 2.894          | .6578 | 20 | 3.1            | 1.071 |

Legend

N = number of subjects in group

M = mean score

S. D. = standard deviation

In Group B - ('Established'), fifteen out of twenty respondents either disagreed (6) or strongly disagreed (9) that physical education skills are of no benefit to a person. Four out of twenty had no opinion or were undecided. The remaining respondent strongly agreed with the statement.

The mode for Group A was the Disagree Response category at 58%. The mode for Group B was the Strongly Disagree Response category at 45%.

These thirty-three statements did not meet the accepted standard of .05 or better. Therefore the data provided no support for the hypothesis that female Filipino students who have lived in Canada for five years or more will evidence different attitudes towards physical education classes and related activities than those students who have lived in Canada three years or less.

## CHAPTER V

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 SUMMARY OF FINDINGS

The purpose of this study was to examine and compare attitudes between 'recently arrived' and 'established' Filipino female students, as they pertain to the physical education programs at a major Winnipeg high school.

The study population consisted of thirty-nine Filipino females born in the Philippines. All students were enrolled in the 1988 to 1989 school year at a major high school.

The thirty-nine students were placed into two sub-sample populations - 'recently arrived' and 'established'. Group A - 'recently arrived' had nineteen subjects while Group B - 'established' had twenty subjects.

The instrument used in this investigation was a forty-two item Likert-scale questionnaire. The Likert-scale survey was used to measure the attitudes towards the physical education program as well as toward individual attitudes within the physical education course.

Unpaired t-tests were used to test the hypothesis that female Filipino students who have lived in Canada for five years or more will evidence different attitudes towards physical education classes and related activities than those students who have lived in Canada three years or less. To test the hypothesis, unpaired t-tests (2 tail) were computed

on the two group's mean scores. The accepted standard of .05 or better was chosen as the criterion for the rejection of or the failure to reject the null hypothesis.

## 5.2 CONCLUSIONS

Several conclusions may be drawn from the results of the analysis of the data. The study is limited to a specific population attending a major high school, Winnipeg, Manitoba, and the findings can only be applied to that population.

Within the limitations of the study, the following conclusions can be drawn from this investigation:

1. Group A ('Recently Arrived') Filipino female students appear to respond to exercise that improves their poise, physical appearance, health and wellbeing rather than those exercises which are designed to increase power, strength and endurance.

2. Group A ('Recently Arrived') Filipino female students appear to prefer non-aggressive sports that have no physical contact and/or a separation of space.

3. Group A ('Recently Arrived') Filipino female students appear to identify with their family unit as the most preferred advisor for personal matters such as seeking permission to play on school teams.

4. Group A ('Recently Arrived') Filipino female students appear to prefer to spend time on the academic subjects than on physical education classes.

5. Group B ('Established') Filipino female

students appear to have a more accepting attitude towards aggressive and non-aggressive sports.

Group B ('Established') Filipino female students appear to be more willing to take part in physical activity and in trying 'new' sports.

7. Group B ('Established') Filipino female students appear to prefer to have physical education classes as part of their school program.

8. Group B ('Established') Filipino female students appear to feel free to make their own decisions concerning participation in physical activities and the decision to play on school teams.

### 5.3 RECOMMENDATIONS

The following recommendations are made based on the findings/results of the study.

1. Further research may be made into the differences that may exist between immigrant female Filipinos from rural and urban environments in the Philippines.

2. Further research data can be obtained through personal interview follow-ups with the willing respondents from this study.

3. This study might be repeated in three years' time using as many of the original 'recently arrived' Filipino female students and 'established' Filipino female students as possible in order to compare results with the original study.

4. A similar study could be undertaken using students from different cultures, e.g. Vietnamese, Laotian, and Portuguese.

5. A research based upon observation of physical education programs in Filipino schools within the Philippines.

6. A more comprehensive study including all major schools in Winnipeg.

#### 5.4 SUMMARY

The purpose of this study was to examine the attitudes of two distant groups of Filipino female students towards physical education and related activities in order to measure differences which may exist between the two. Group A ('Recently Arrived') and Group B ('Established') responses were compared using a questionnaire. There were forty-two items in the questionnaire. Thirty-nine subjects comprised the population. All subjects were students at a major high school.

There were four steps to the data analysis. Step One involved the summarization of Group A and Group B demographics. Step Two involved collecting the data by using the Likert-scale scoring system. Step Three involved comparing and placing Group A and Group B responses in graph form for each of the forty-two statements. Step Four involved conducting unpaired t-tests (2 tail) in order to examine and identify differences between Group A and Group B (Appendix R).

The study revealed that there were attitudinal differences between 'recently arrived' Filipino female students and 'established' Filipino female students. The attitudinal differences appear to be evident in the following areas:

1) decision-making with reference to involvement in school physical activities.

2) the importance of physical education within the school curriculum.

3) non-aggressive sports vs. aggressive sports.

4) sex stereotyping of females towards sports/physical activity.

The following interprets the results of the unpaired t-test (2 tail) for statements 3, 9, 11, 23, 24, 31, 36, 41 and 42 . These statements proved to be statistically significant to the hypothesis.

Statement 9 - If courses have to be dropped from the school program, physical education should be one of them.

Statement 23 - It is better to study other subjects than spend time allotted to physical education.

The intent of each statement was to find out the importance of physical education as a course subject in the total curriculum. Both statements proved to be statistically significant in that the probability score for statement 9 was .0008 and for statement 23, 043.

The review of literature supports these findings.

Education is very important to Filipinos. It is looked upon as a stepping stone to individual success. Vongthieres and Egan (1981) stated that Filipino parents "place almost total value on the academic aspects of education and athletics means time away from academics." Education is seen as the only means for social advancement and of changing one's lifestyle.

'Recently Arrived' Filipino female students appear to place emphasis on the academic subjects rather than on physical education. They also appear to feel that physical education was not important as a course within the curriculum and the time allotted to physical education could be better spent studying other subjects.

On the other hand, 'established' Filipino female students appear to consider physical education as an important and equal part of their curriculum.

In summary, the data for statements 9 and 23 supports the hypothesis that female Filipino students who have lived in Canada for five years or more will evidence different attitudes towards physical education classes and related activities than those students who have lived in Canada three years or less.

Statement 3 - Filipino girls would rather take part in activities such as dance and aerobics than basketball.

Statement 11 - Filipino girls would rather watch aggressive sports such as football and basketball than

non-aggressive sports such as golf and bowling.

Statement 24 - Filipino girls prefer to play individual games such as badminton more than team sports like soccer.

Statement 31 - Filipino girls would rather do folk/social dance than play basketball.

Statement 41 - Soccer and basketball should be played by males only.

Statement 42 - Figure skating and dancing are for girls only.

All these statements will be discussed as a group. They are concerned with physical activity. Each one of these statements were proven to be statistically significant. The unpaired t-test probability (2 tail) score for each statement is as follows:

| STATEMENT | PROBABILITY SCORE |
|-----------|-------------------|
| 3         | .0553             |
| 11        | .0607             |
| 24        | .0405             |
| 31        | .0123             |
| 41        | .0039             |
| 42        | .0128             |

The review of literature supports that Filipino females are born into a society that has different expectations and experiences for females and males. The Filipino society has strict ideas about which activities are acceptable for females and which are not. Aldaba-Lim (1979), Roces (1978), Weiner (1985), and Rosca (1986) stated that the Filipino society has cultural attitudes as to what

is appropriate for girls.

'Recently Arrived' Filipino female students appear to prefer non-aggressive, no physical contact sports, and activities that require an element of poise and grace. They also appear to prefer sports/activities that require a separation of space. The activities that this group seem to prefer are dance, figure skating, aerobics, badminton, golf and bowling. They seem to imply that soccer and basketball are for males only.

Buduhan and Oandason (1981) stated that Filipino students are not to be independent and competitive. Recently arrived Filipino female students appear to prefer activities that allow for cooperation and harmonious relationships.

Cultural influences appear to play a more important role influencing the attitudes of 'recently arrived' Filipino females. This is brought out by the kinds of physical activities in the school curriculum in the Philippines.

'Established' Filipino female students appear to show no preference for one activity over another. This group appears to be more accepting of the attitude of being competitive. They also appear to be more willing to take part in physical activities with the school program. Cultural influences appear to be less a factor in their attitude to competitive sport.

In summary, the data (statements 3, 11, 24, 31,

41, 42) supports the hypothesis that female Filipino students who have been in Canada for five years or more will evidence different attitudes towards physical education classes and related activities than those students who have lived in Canada three years or less.

Statement 36 - Filipino girls should get permission from their parents or guardian before playing on a school team.

Statement 36 proved to be statistically significant in that the probability score was .0067. The literature, Cote (1986), Guthrie and Jacobs (1966), Hollensteiner (1979), Howells and Sarabia (1978), and Watkins and Astilla (1980) stated that Filipino children learn to be dependent on the family unit. The family unit is central to the Filipino culture; it includes not only parents and their children but extends to maternal and paternal grandparents, godparents, relatives and friends. Family sufficiency, not self sufficiency is the Filipino ideal.

'Recently Arrived' Filipino female students appear to identify with their family unit as the most preferred advisor for personal matters such as seeking permission to play on a school team. This dependence on the family unit is in keeping with the Filipino ideal of family sufficiency.

'Established' Filipino female students appear to prefer to make the decision to try out/play for a school team as a personal matter. They appear to feel this

decision does not require the family unit consent. 'Established' Filipino female students appear to prefer self sufficiency over family sufficiency.

The data (statement 36) supports the hypothesis that female Filipino students who have lived in Canada for five years or more will evidence different attitudes towards physical education classes and related activities than those students who have lived in Canada three years or less.

#### SUMMARY

It appears that the Filipino students who have been in Canada the longest appear to have accepted physical education and related activities, as an important part of their schooling. They appear to have accepted the philosophy that the participation of girls and women in physical education and related activities is acceptable in Canadian society.

Thirty-three out of forty-two statements did not have sufficient statistical significance for the study. Many of the statements did provide information and support to the review of literature.

Statement 1 - Filipino girls should be physically fit.

Statement 2 - Physical education is not important to the overall education of Filipino girls.

Statement 8 - Physical education helps one feel and look better.

Statement 14 - Filipino girls do not like

attending physical education classes.

Statement 15 - Filipino girls like games that have lots of vigorous activity in them.

Statement 19 - Parents should encourage their family's involvement in physical activity.

Statement 21 - Physical education is too competitive.

Statement 22 - Physical education does improve social behaviour.

Statement 29 - Filipino girls prefer to watch sports more than taking part in them.

Statement 30 - Playing games in a group is more fun than playing alone.

Statement 34 - Physical education is not a pleasant experience.

Statement 37 - Filipino girls should not participate in physical education programs.

Statement 38 - People get all the exercise they need in just doing their daily work.

Statement 39 - After high school graduation people should continue to be involved in sports and games.

Statement 40 - Physical education skills are of no benefit to a person.

In both groups ('recently arrived') and 'established'), the data from these statements seems to imply that Filipino female students appear to understand the important concepts of physical education and physical

fitness. These concepts are as follows:

- it is important to be physically fit.
- physical education helps one feel and look better.
- physical education improves social behaviour.
- just doing your daily work is not enough, one must do extra physical activity to stay physically fit.
- physical education teaches physical skills that are important to each individual's development.

Statement 6 - Physical education is emphasized more in Canada than in the Philippines.

Statement 13 - Folk/Social dance is more popular in the Philippines than in Canada.

Statement 20 - Running/jogging is emphasized more in Canada than in the Philippines.

Statement 27 - Canadian girls are fitter than Filipino girls.

Statement 33 - There is more time scheduled for physical education classes in Canada than in the Philippines.

In discussions with Filipino female students, they expressed that there are differences between Philippines' and Canadian physical education programs. These students stated that there were differences in program content, amount of time scheduled for physical education classes and emphasis placed on physical education.

In both groups ('Recently Arrived' and 'Established') the data from these statements seems to imply that there appears to be more emphasis and more time scheduled for physical education in Canada than in the Philippines. Also running/jogging is emphasized more in Canada than in the Philippines. From the literature it was stated that folk/social dance is an important part of the Philippines' physical education program. Group A ('Recently Arrived') agreed with the above statement yet Group ('Established') could not make a clear decision whether folk/social dance is or is not an important part of the Philippines physical education program. The author believes that the reason could be the length of time these 'Established' Filipino female students have been away from the Philippines.

'Recently Arrived' Filipino female students seemed to imply that their group felt that Canadian girls were fitter than Filipino girls. On the other hand the 'established' Filipino female students appeared to have mixed feelings about this statement, ranging from undecided, disagreeing to agreeing.

Statement 28 - Young girls who participate in and enjoy physical activities are considered to be less feminine or less ladylike than those who do not participate.

Statement 35 - Filipino girls who participate in active games and sports are not popular with boys.

The intent of these two statements were asked to

find out if Filipino females who participate in and enjoy physical activities are considered less feminine or less ladylike or unpopular with boys. The review of literature has stated that for young Filipino females, it is extremely important to be considered attractive by knowing how to conduct herself and how to appear. Roces (1978), Rosca (1986), Buduhan (1988) stated that Filipino girls wish to be beautiful, lady-like, soft-spoken, polite and neatly dressed.

The data appear to imply that both groups ('recently arrived' and 'established') of Filipino female students consider participation in physical activities to be acceptable. They appear to suggest that Filipino female students who participate in and enjoy physical activities are not considered less feminine or less ladylike or unpopular with boys. This data is contrary to what has been stated in the review of literature.

Participation in physical education programs is a requirement for grades 7 to 11. Participation in intramurals and interscholastic teams is totally voluntary. From the demographic information (Chapter IV), none of the nineteen 'recently arrived' Filipino females took part in intramurals or were on any school teams. Of the 'established' Filipino females, only eight out of twenty took part in the intramural program while five out of twenty were involved on any school teams.

Statement 7 - Girls and boys should not take

physical education classes together.

This statement was asked to find out if Filipino female students preferred co-ed physical education classes. From the data, both groups ('recently arrived' and 'established') appear to prefer co-ed gym classes.

The review of literature stated, however, that traditionally the sexes do not mix in physical education. Tebeau (1977) stated "there is a very reserved attitude about the exposure of the human body...", which could cause difficulties in physical education classes.

The literature (Aldaba-Lim (1975), Weiner (1985) and Roces (1978)) supports the fact that sex stereotyping exists within the Filipino culture.

Statement 26 - In Filipino families, sons are encouraged more than daughters to participate in physical education.

Both groups ('recently arrived' and 'established') seem to imply that Filipino males in their family are encouraged more than them to participate in physical education and related activities. It seems more acceptable for males to be involved in physical activities.

Statement 32 - In Filipino families, daughters are expected to be a helper in the home rather than play on school teams.

As stated in the literature, there are clearly defined attitudes on how young Filipino females should be brought up. Aldaba-Lim (1975) stated that Filipino females

are entrusted with responsibilities as mother's helper.

The data seems to imply that young Filipino females are expected to be a helper in the home by doing chores and assisting with younger siblings. Both groups ('recently arrived' and 'established') appear to agree with the statement.

#### 5.5 CONCLUDING SUMMARY

The purpose of this study was to examine the attitudes of 'Recently Arrived' and 'Established' Filipino students towards physical education and related activities in order to measure differences which may exist between the two groups. The instrument used to compare their responses was a Likert-scale questionnaire comprising 42 items. Thirty-nine subjects comprised the population. All subjects were students at a major high school.

There were four steps to the data analysis. Step One involved the summarization of Group A and Group B demographics. Step Two involved collecting the data by using the Likert-scale scoring system. Step Three involved comparing and placing Group A and Group B responses in graph form for each of the 42 statements. Step Four involved conducting unpaired t-test (2 tail) in order to examine and identify differences between Group A - 'Recently Arrived' and Group B - 'Established'.

On the basis of the findings and the limitations stated in the study, the following conclusions were drawn:

'Recently Arrived' Filipino female students appear

to:

1. - prefer non-aggressive sports that have no physical contact and a 'separation of space'.

2. - appear to identify with their family unit as the most preferred advisor for personal matters such as seeking permission to play on school teams.

3. - appear to prefer to spend time on the academic subjects than on physical education classes.

4. - appear to respond to exercise that improves their poise, physical appearance and grace rather than those exercises which are designed to increase power, strength and endurance.

'Established' Filipino female students appear to:

1 - have a more accepting attitude towards aggressive and non-aggressive sports.

2. - appear to be more willing to take part in physical activity and in trying 'new' sports.

3. - appear to prefer to have physical education classes as part of their school program.

4. - appear to feel free to make their own decisions concerning participation in physical activities and the decision to play on school teams.

Implications for education are that educators should be constantly updating their knowledge of multicultural education, by studying current research and attending professional development in-services. Educators should be aware of the various ethnic backgrounds and

cultural influences with different expectations of physical involvement and achievement that exists among ethnic students.

REFERENCES

- A Culture in Transition: Filipines in Canada. (1984).  
Department of Religion, Winnipeg. University of  
Manitoba.
- Agoncillo, T.M. and Alfonso, O.M. (1960). A Short  
History of the Filipino People. Quezon City:  
University of the Philippines.
- Agoncillo, Teodoro and Guevrero, Milagros C. (1977).  
History of the Filipino People (5th ed.). Quezon  
City, Philippines: Garcia Publishing Company.
- Aldo-Lim, Estefania (1975, June). The Social Rule of  
Women. Unitas: A Quarterly for the Arts and  
Sciences, 48(21).
- Arasas, Marcial, Q. (1983). The Dynamics of Filipino  
Immigrants in Canada. Canada: Coles Printing Co.  
(1975) Ltd.
- Asian Christians Walk a Difficult Line. (1988,  
April 2). Winnipeg Free Press
- Asian Pacific Perspectives (1975). Filipino Americans:  
A Portrait. Los Angeles, California: Los Angeles  
Unified School District.
- Bocco, Geoffrey (1974). The Philippines America's  
Forgotten Friends. New York: Parents Magazine  
Press.
- Brown, Ina Corinne (1963). Understanding Other  
Cultures. Englewood Cliffs, N.J.: Prentice-Hall.
- Buduham, Aeto and Oandason, Lolita (1981). Filipino  
Students in Manitoba Schools. Winnipeg: Curriculum  
Services Manitoba
- Cailao, Augustine A. (1966, July 28 - August 2)  
Physical Education in the Philippines. Report at  
the International Congress of the International  
Council of Health, Physical Education and Recreation  
9th. Seoul, Korea.
- Carson, Arthur L. (1978). The Story of Philippines.  
Quezon City, Phillippines: New Day Publishers.
- Cook, James (1972). History of the Olympics In  
Pictures. London, England: Tom Stacey Ltd.

- Corbin, Charles B. (1985, October). The Female Mind. Shape Magazine p.p. 34-36
- Cote, Flor (1986). Understanding the Filipinos: A Multicultural Education. Canada: Project of the Philippine - Canadian Cultural and Community Services Society.
- Deighton, Lee C. (editor) (1971). The Encyclopedia of Education, 7. New York, N.Y.
- Crowell - Collier Education Corporation, The MacMillan Company and the Free Press.
- Encyclopedia Americana, 21. (1976). New York, N.Y.: Americana Corporation.
- Flores, Pedro V. (1981). Educational Innovation in the Philippines: A Case Study of Project Impact. Ottawa, Canada: International Development Research Centre.
- Foley, Douglas E. (1976). Philippine Rural Education: An Anthropological Perspective. Detroit, Michigan: The Cellar Book.
- Gander, M.J. (1974). Feminine and Masculine Role Stereotyping in Physical Education and Competitive Sports. Wisconsin: University of Wisconsin.
- Greendorfer, Susan L. Ph.D (1983, March). A Challenge for Sociocultural Sport Studies. Journal of Physical Education, Recreation and Dance, 54(3), 18-20
- Greendorfer, Susan L. Ph.D (1985, October). Growing Up. Shape Magazine pp. 30-31.
- Guthrie, G.M. (1961). The Filipino Child and Philippine Society. Manila, Philippines: Philippine. University Press.
- Gunthrie, G. and Jacobs, P. (1966). Child Rearing and Personality Development in the Philippines. Pennsylvania: Pennsylvania State University Press.
- Hart, Donn H. (1979, May). Filipino Americano: An Emerging Minority. Amerasia Journal, 6 (1), 173-182.
- Hoferek, Mary J. (1982). Sex Role and Physical Activities; Evolving Trends. Quest, 34 (1), 72-81.

- Hollensteiner, Mary R. (Editor) (1979). Society, Culture and the Filipino: A Textbook of Readings in Anthropology and Sociology. Quezon City, Philippines: The Institute of Philippine Culture, Ateneo de Manila University.
- Howells, Gary N. and Sarabia, Isabelita (1978, March - April). Education and the Filipino Child. Intergrated Education, 16(1), 17-20.
- Husen, Torsten and Postlethwaite, T. Neville (Editors). (1985) The International Encyclopedia of Education Research and Studies, 7. Great Britain: Pergamon Press.
- Infante, Teresita R. (1975). The Women in Early Philippines and Among The Cultural Minorities. Manila, Philippines : Unitas Publications, University of Santo Thomas.
- Ito, Karen L. and Tashima, Eugene (1981, April 23). Asian American Self Concept. Paper presented at the Annual Conference of the National Association for Interdisciplinary Ethnic Group Studies 9th. Las Cruces, New Mexico.
- Jamais, Maria F., Pablo, Renato Y. and Taylor, Donald M. (1971, April). Ethnic Awareness in Filipino Children. Journal of Social Psychology, 83, 157-164.
- Jacanco, F. Lande (1969). Growing Up in a Philippine Barrio. New York: Holt, Rinehart, and Winston.
- Johnston, Bernard (Editor) (1987). Collier's Encyclopedia, 18. MacMillan Educational Company.
- K-12 Physical Education Curriculum Guide. (1981). Winnipeg, Manitoba: Department of Education.
- Kan, Bettie Sing Luke (1981). The Asian American Experience. California: Project R.E.A.C.H. Ethnic Perspectives Series.
- Kee, Francis Wong Hoy (1973). Comparative Studies in Southeast Asian Education. Malaysia: Heineman Educational Books (Asia) Ltd.
- Kroeber, A.L. (1978). Peoples of the Philippines. Westport, CT: Greenwood Press.

- Kumagai, Gloria L. (1978, April 19-22). The Asian Women in America. Paper presented at the Annual Conference on Ethnic and Minority Studies 6th, La Crosse, Wisconsin.
- Lands and Peoples, 2. (1980) Duabury, CT: Grohphier Incorporated.
- Lawson, Don (1984). Marcos and the Philippines. New York, N.Y.: Franklin Watts.
- Lawson, Don (1986). The New Philippines (2nd ed.). New York, N.Y.: Franklin Watts
- Lepthiem, Emile V. (1984). Enchantment of the World: The Philippines. Chicago: Children's Press.
- Manuel, Juan L. (1972) Source Book in Philippine Education. Quezon City, Philippines: Alemar - Pheonix Publishing House Inc.
- Mawson, Marlene L. (1983, October 29). Sex Role Socialization in Sport. Paper presented at the Annual Society for the Sociology of Sport, Denver, CO.
- Melendy, M.B. (1977). Asians in America: Filipinos, Koreans and West Indians. Boston, MA: Twayne Publishers.
- Mendez-Paz, Policarpio and Jocano, F. Landa (1979). The Filipino in its Rural and Urban Orientation: Two Case Studies in Culture and Education. Mendiola, Manila: Centro Escolar University Research and Development Center.
- Miller T.W.G. (1968). Education in South-East Asia. Sydney, Australia: Ian Novak Publishing Company.
- Moody, John (1986, February 14). God and Manila. Time
- Nelson, Raymond (1968). The Philippines. New York, N.Y.: Walker and Company.
- People of the Philippines: Building Bridges of Understanding. (1977). Provo, Utah: Brigham Young University.
- Perlman, Daniel H. (1978, January). High Education in the Philippines: an Overview and Current Problems. Peabody Journal of Education, 55 (2), 119-26.

- Peter, Jens (1987). Philippines: A Travel Survival Kit (3rd. ed.). Victoria, Australia: Lonely Planet Publications.
- Postlethwaite, T. Neville (Editor) (1988). The Encyclopedia of Comparative Education and National Systems of Education. Oxford, Great Britain: Pergamon Press.
- Report of the Magsaysay Committee on General Education: Towards General Education in the Philippines. (1960) Manila, Philippines.
- Richardson, Dorothy A. and Hall, M. Ann (1982). Fair Ball, Towards Sex Equality in Canadian Sport. Ottawa, Canada: Canadian Advisory Council on the Status of Women.
- Riley, Marie et al (1980, November). Children and Youth in Action: Physical Activities and Sports. (Eric Document ED 206610).
- Roces, Alfredo (Editor) (1978). Filipino Heritage: The Making of a Nation Series, 1-10. Philippines: Lahing Filipino Publishing Inc.
- Rosca, Ninotchka (1986, October). Between the Guns and the Crucifix: Cory Aquino and the Woman of the Philippines. MS.
- Saito, S. (1972). Philippine Ethnography. Honolulu: University Press of Hawaii.
- Stitt, Beverly A. (1988). Building Gender Fairness in Schools. Illinois: Southern Illinois University Press.
- Sundarlin, Sylvia (1971). Migrant Children: Their Education. Washington, D.C.: Association for Children Education International.
- Tebeau, Sue (1977) Culture Factors: A Guide to Understanding Asian E.S.L. Students. Bilingual Education Resource Series (Eric Document ED 201716).
- The Education of Asian American and Pacific American Children and Youth, 76 (1981, September). ERIC/CLIE Urban Diversity Series. New York, N.Y.: ERIC Clearinghouse on Urban Education.
- The New Encyclopedia Britannica, 14 (1988). Chicago. Encyclopedia Britannica Inc.

- The 1990 Information Please Almanac (43rd Ed.).  
Boston, MA: Houston Mifflin Company
- Vendien, C, Lynn and Nixon, John E. (1968). The World Today in Health, Physical Education and Recreation.  
Eglewood Cliffs, N.Y.: Prentice-Hall Inc.
- Vongthieres, Siri and Egan, Lawrence A. (1981, August).  
Asian and Pacific Americans: An Educational Challenge. Paper presented at the meeting of the  
Commission of the States on Education, Denver, CO.
- Watkins, David and Astilla, Estelo (1980, January-  
June). Self-Esteem and Family Relationships: A  
Filipino Study. International Journal of Sociology,  
10.
- Weiner, Gaby (Edition) (1985). Just a Bunch of Girls:  
Feminist Approaches to Schooling. Philadelphia:  
Open University Press.

APPENDICES

**APPENDIX A**  
**DEMOGRAPHICS: THE PHILIPPINES**

### DEMOGRAPHICS

The purpose of this section is to present a general overview of The Philippines.

The Philippines is an archipelago consisting of some 7,100 islands, lying about 880 kilometers (550 miles) off the southeast coast of Asia. The total land area is over 300,000 square kilometers (115,830 square miles) and is bounded by some 1,294,000 square kilometers (500,000 square miles) of oceanic waters, on the East by the Pacific Ocean, on the South by the Celebes Sea, and on the West and North coasts by the South China Sea. The capital of the Philippines is Manila, situated on the island of Luzon, and the people of the Philippines are called Filipinos.

Of the 7,100 islands, only 1,200 are inhabited during certain seasons of the year, but the remaining 2,500 are not suitable for habitation. The largest islands are Luzon and Mindanao which when combined together comprise two-thirds of the total area of the Philippines. Although the Philippines is only half the size of Manitoba, it has approximately 50 times the population. In 1984 the Philippines population was estimated to be over fifty-four million people.

The Philippines has two official languages, Pilipino and

English. Pilipino is based on the Tagalog language. These three languages are spoken by the majority of Filipinos. But there is also a number of Filipino who speak Spanish or Chinese. It has been estimated that there are over seventy-five (75) different languages and dialects spoken in the Philippines. (Encyclopaedia Britannica, 1978).

APPENDIX B  
A LIST OF FESTIVALS HELD  
IN THE PHILIPPINES

A LIST OF FESTIVALS HELD IN THE PHILIPPINES  
JANUARY 1 TO DECEMBER 31

| Month     | Name of Festival   |
|-----------|--|
| January 1 | New Years Day<br>Feast of Three kings<br>Feast of the Black Nazarene<br>Fiesta de Santo Nino<br>Pipigan<br>Appey<br>Mannerway<br>Axti-Atihan<br>Constitution Day                         |
| February  | Mari Raya Madji<br>Chinese New Year<br>Feast of Our Lady of<br>Candelaria Iinagba<br>Feast of our Lady of Lourdes<br>Valentine's Day<br>Bale Samgoanga Festival                          |
| March     | Saranggolahan<br>Baguio Festival<br>Iloilo Regatta<br>Araw Ng Dabaw<br>Singulog<br>Lenten Week - Palm Sunday<br>Moriones Festival<br>Hold Week<br>(Good Friday)                          |
| April     | Bataan Day<br>Magellan's Landing<br>Mandugan<br>Feast of Virgen de Turumba   |
| May 1     | Labor Day<br>Santacruzán<br>Flores de Mayo<br>Feast of Our Lady of Peace<br>and Voyage<br>Fall of Corregidor<br>International Sea Fair<br>Carabao Festival<br>Harvest Festival "Pahiyas" |

|                      | Fertility Rites   |
|----------------------|---|
| June                 | Pista Ng Krus<br>Philippine Independence Day<br>Malaran Festival<br>Feast of St. John the Baptist<br>Lechon Parade<br>Our Lady of Perpetual Help<br>Saint Peter and Paul<br>Feast of San Pedro                            |
| July<br>4            | Harvest Festival<br>Filipino-American Friendship<br>Day<br>Bocaue River Festival<br>St. Martha River Festival   |
| August               | Dance of the Aetas<br>Cry of Balintawak<br>Cagayan de Oro City Festival   |
| September            | Sunduan<br>Penafrancia Festival<br>National Day   |
| October              | Davao Tribal Festival<br>La Naval de Manila<br>Our Lady of Solitude<br>Feast of Our Lady of the<br>Pillar<br>Landing of the Liberation<br>Allied Forces<br>Great Sibidan Race<br>Pista Ng Aba<br>Feast of Christ the King |
| November 1<br><br>30 | All Saints Day<br>All Souls Day<br>Mari Raya Poasa<br>Feast of San Clemente<br>Yakan Harvest Festival<br>Kaamulan<br>National Heroes' Day   |
| December             | Feasts of Our Lade of the<br>Immaculate Conception<br>Malabon Fluvial Parada<br>Taal Fluvial Festival<br>Pagsanjan Town Fiesta<br>Simgang Gabi  |

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Panunuluyan  
Lantern Festival  
Christmas Day  
Bota de Flores  
Holy Innocent's Day  
Rizal Day

APPENDIX C  
OLYMPIC MEDAL WINNERS

## Olympic Medal Winners for the Philippines

| Year | Sport/Event              | Name                |
|------|--------------------------|---------------------|
| 1928 | 200M Breastroke- Bronze  | Teofilo Yldefonson  |
| 1932 | 200M Breastroke - Bronze | Teofilio Yldefonson |
| 1932 | Boxing - Bronze          | Jose Villaneuva     |
| 1932 | High Jump - Bronze       | Simeon Toribio      |
| 1964 | Boxing - Silver          | Antony Villaneuve   |
| 1988 | Boxing - Bronze          |                     |

## History of The Olympics in Pictures

James Coote  
Tom Stacey Ltd.  
London, England. 1972

APPENDIX D  
1973 CONSTITUTION OF THE REPUBLIC  
OF THE PHILIPPINES: NEW TRENDS IN  
EDUCATION

## 1973 CONSTITUTION OF THE REPUBLIC OF THE PHILIPPINES

## NEW TRENDS IN EDUCATION

ARTICLE II

## DECLARATION OF PRINCIPLES AND STATE POLICIES

Sec. 7 The State shall establish, maintain, and ensure adequate social services in the field of education, health, housing, employment, welfare, and social security to guarantee the enjoyment by the people of a decent standard of living.

ARTICLE XV

## GENERAL PROVISIONS

## Sec. 3

- (1) This Constitution shall be officially promulgated in English and in Pilipino and translated into each dialect spoken by over fifty thousand people, and into Spanish and Arabic. In case of conflict the English text shall prevail.
- (2) The National Assembly shall take steps towards the development and formal adoption of a common national language to be known as Pilipino.
- (3) Until otherwise provided by law, English and Pilipino shall be the official languages.

## Sec. 8

- (1) All educational institutions shall be under the supervision of, and subject to regulation, by the State. The State shall establish and maintain a complete, adequate and integrated system of education relevant to the goals of national development.
- (2) All institutions of higher learning shall enjoy academic freedom.
- (3) The study of the Constitution shall be part of the curricula in all schools.
- (4) All educational institutions shall aim to inculcate love of country, teach the duties of citizenship, and develop oral character, personal discipline, and

scientific, technological, and vocational efficiency.

- (5) The State shall maintain a system of free public elementary education and, in areas where finances permit, establish and maintain a system of free public education at least up to the secondary level.
- (6) The State shall provide citizenship and vocational training to adult citizens and out-of-school youth, and create and maintain scholarships for poor and deserving students.
- (7) Educational institutions, other than those established by religious orders, mission boards, and charitable organizations, shall be owned solely by citizens of the Philippines, or corporations or associations sixty per centum of the capital of which is owned by such citizens. The control and administration of educational institutions shall be vested in citizens of the Philippines. No educational institution shall be established exclusively for aliens, and no group of aliens shall comprise more than one-third of the enrolment in any school. The provisions of this sub-section shall not apply to schools established for foreign diplomatic personnel and their dependents and, unless otherwise provided by law, for other foreign temporary residents.
- (8) At the option expressed in writing by the parents or guardians, and without cost to them, and the government, religion shall be taught to their children or wards in public elementary and high schools as may be provided by law.

Sec. 9

- (1) The State shall promote scientific research and invention. The advancement of science and technology shall have priority in the national development.
- (2) Filipino culture shall be preserved and developed for national identity. Arts and letters shall be under the patronage of the State.

APPENDIX E  
REPORT OF THE MAGSAYSAY COMMITTEE  
ON GENERAL EDUCATION, TOWARDS  
GENERAL EDUCATION IN THE PHILIPPINES, 1960

REPORT OF THE MAGSAYSAY COMMITTEE ON GENERAL  
EDUCATION, TOWARDS GENERAL EDUCATION IN THE  
PHILIPPINES

The fundamental objective of General Education as stated by the Philippines Board of National Education in 1956 are as follows;

- I To inculcate moral and spiritual values inspired by an abiding faith in God.
- II To develop an enlightened, patriotic, useful and upright citizenery in a democratic society.
- III To instill habits of industry and thrift, and to prepare individuals to contribute to the economic development and wise conservation of the Nation's natural resources.
- IV To maintain family solidarity, to improve community life, to perpetuate all that is desirable in our national heritage, and to serve the cause of world peace.
- V To promote the sciences, arts and letters for the enrichment of life and the recognition of the dignity of the human race.

The basic aims of General Education as stated in Concurrent Resolution NO. 8 are as follows:

1. To live a moral life guided by faith in God and love for his fellow man.
2. To love and serve the Republic of the Philippines as citizens, willingly performing duties, intelligently exercising rights and faithfully practicing the ideals of democracy.
3. To be able to read and listen understandingly, talk and write intelligently, and think and act wisely in solving the problems of daily life.
4. To be efficient in earning an honest living and to contribute to the economic well-being of the Philippines through productive labor and the wise use and conservation of the Nation's resources.
5. To maintain family unity, live a happy home life, and discharge efficiently responsibilities for worthy home membership.

6. To carry on healthful living in a wholesome environment so as to become physically strong and mentally fit.
7. To spend leisure wisely in order to attain self-realization and contributor to the welfare of the community.
8. To appreciate the arts and letters and to attain self-fulfillment by enriching them with their own contribution; to apply science and add to the universal fund of knowledge so that life may be made richer and fuller.
8. To appreciate the arts and letters and to attain self-fulfillment by enriching them with their own contribution; to apply science and add to the universal fund of knowledge so that life may be made richer and fuller.
9. To carry on the Filipino way of life, retaining the priceless heritage of our basic Malayan culture, especially the ethical virtues, while using to advantage the valuable experiences of the human race.
10. To understand other countries, develop good will toward their people, and promote the cause of world peace and the ideal of world brotherhood.

Report of the Magsaysay Committee on  
General Education, Towards General  
Education in the Philippines, 1960

APPENDIX F

TYPE OF ACTIVITIES TAUGHT IN THE PHILIPPINES

Type of Activities Taught in the Philippines

Primary Grades

1. Singing
2. Low Organized Games
3. Rhythms and dances
4. Self-testing activities  
(stunts and tumbling)
5. Mimetics
6. Simple freehand rhythmic
7. Swimming \*

Intermediate Grades

1. Lead-up games
2. Simple track and field
3. Rhythms and dances
4. Self-testing activities
5. Gymnastics

Secondary Grades

1. Gymnastics
2. Rhythm and dances
3. Individual Sports, i.e. cycling
4. Team Sports - volleyball, basketball,  
softball, soccer.
5. Track and field events.
6. stunts, tumbling, and pyramid building
7. Native games
8. Swimming

\* Swimming and life-saving skills are taught where facilities are available. (Vendien and Nixon, 1968).

APPENDIX G

LETTER TO PARENTS/GUARDIAN

APPENDIX G  
LETTER TO PARENTS/GUARDIAN

-206-

Dear Parents/Guardian,

The purpose of this letter is to inform you that I will be conducting a research project at St. John's High School and to request your permission to allow your daughter to participate in the program. The study is to compare attitudes which may exist among female Filipino students as it pertains to Physical Education. The research project is for a thesis program - Masters of Education Degree at the University of Manitoba.

The project involves forty (40) female students. They will be asked to answer a survey which has forty-two questions. The questionnaire will take one class period (approximately 40 minutes) to answer. Please be assured that all information will be kept confidential. It will only be used for the intended purpose of the study. No names will be on the questionnaires.

Please see the attached page which cites several examples of the questions to be asked in the questionnaire. If you have any further questions about the study or you wish to see the questionnaire, please feel free to contact me at the school at 589-4374 between 9:00 a.m. and 3:30 p.m.

This study has been approved by the Superintendent's Department, the Research Ethics Committee, Winnipeg School Division No. 1, the School Principal and the Faculty of Education, University of Manitoba.

Please indicate on the permission form whether or not you wish your daughter to participate in this study.

Please mail this form back to the School Principal, Dr. H. Sharman, in the stamped addressed envelope that is provided for you.

Thank you for your consideration in this matter.

Yours truly,

Miss Jennifer Campbell

APPENDIX H  
SAMPLE QUESTIONS FROM THE QUESTIONNAIRE

APPENDIX H

Sample Questions from the Questionnaire

Statements:

1. Canadian girls are fitter than Filipino girls.
2. Playing games in a group is more fun than playing alone.
3. Filipino girls should be physically fit.
4. Fathers are interested in sports.

**APPENDIX I**

**GROUP A - Ages and Grades**

**GROUP B - Ages and Grades**

GROUP A

"RECENTLY ARRIVED" FEMALE FILIPINO STUDENTS

Total No. surveyed - 19

| Grade     | No. of students<br>each Grade | Age | No. of students in each<br>Age Group |
|-----------|-------------------------------|-----|--------------------------------------|
| 7         | 4                             | 12  | 1                                    |
| 8         | 4                             | 13  | 2                                    |
| 9         | 9                             | 14  | 3                                    |
| 10        | 1                             | 15  | 9                                    |
| 11        | 0                             | 16  | 2                                    |
| 12        | 1                             | 17  | 1                                    |
|           |                               | 18  | <u>1</u>                             |
| Total No. | <u>19</u>                     |     | 19                                   |

GROUP B

"ESTABLISHED" FEMALE FILIPINO STUDENTS

Total No. surveyed - 20

| Grade     | No. of students<br>each Grade | Age | No. of students in each<br>Age Group |
|-----------|-------------------------------|-----|--------------------------------------|
| 7         | 4                             | 12  | 2                                    |
| 8         | 2                             | 13  | 2                                    |
| 9         | 3                             | 14  | 2                                    |
| 10        | 3                             | 15  | 4                                    |
| 11        | 6                             | 16  | 2                                    |
| 12        | 2                             | 17  | 4                                    |
|           |                               | 18  | 3                                    |
|           |                               | 19  | <u>1</u>                             |
| Total No. | <u>20</u>                     |     | <u>20</u>                            |

APPENDIX J  
PERMISSION FORM

Permission Form

Name of Student: \_\_\_\_\_

Please check one:

\_\_\_\_\_

I do give permission for my daughter to be involved in the research project to be conducted by Miss J. Campbell.

\_\_\_\_\_

I do not give permission for my daughter to be involved in the research project to be conducted by Miss J. Campbell.

Parent/Guardian

Signature \_\_\_\_\_

Date \_\_\_\_\_ 1989.

Please return this form to the school by \_\_\_\_\_ 1989.

APPENDIX K  
DEMOGRAPHICS OF SAMPLE POPULATION  
AND  
DEMOGRAPHY INFORMATION

Demographics of Sample Populations

File No. \_\_\_\_\_

Name (Please print full name) \_\_\_\_\_

Grade \_\_\_\_\_ Home Room No. \_\_\_\_\_

Birthday  
 Year of Birth \_\_\_\_\_ Age \_\_\_\_\_

Month \_\_\_\_\_

Place of Birth \_\_\_\_\_ Country \_\_\_\_\_

Were you born in the Philippines? \_\_\_\_\_ Yes \_\_\_\_\_ No

If born in the Philippines, how long have you resided in Canada?

Years \_\_\_\_\_ Months \_\_\_\_\_

How long have you been a student at St. John's High School?

Please check ( )

0-2 years \_\_\_\_\_ 3-4 years \_\_\_\_\_ 5-6 years \_\_\_\_\_

Are you involved in Physical Education?

Yes \_\_\_\_\_ No \_\_\_\_\_

When did you come to Canada? \_\_\_\_\_ Year

\_\_\_\_\_ Month

Have you resided in Canada since that date?

Yes \_\_\_\_\_ No \_\_\_\_\_

Check one:

\_\_\_\_\_ I do consent to participating in this study.\_\_\_\_\_ I do not consent to participating in this study.

Student's Signature \_\_\_\_\_

Date \_\_\_\_\_ 1989

APPENDIX K

DEMOGRAPHY INFORMATION

Please answer the following questions:

1. Are you involved in a physical education course?

yes \_\_\_\_\_ no \_\_\_\_\_

2. Are you involved in the intramural program?

yes \_\_\_\_\_ no \_\_\_\_\_

If yes, please list what intramural programs you take part in.

|       |       |       |
|-------|-------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

3. Are you involved on any school teams?

yes \_\_\_\_\_ no \_\_\_\_\_

If yes, please list what school teams you take part in.

|       |       |       |
|-------|-------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

Thank you.

APPENDIX L

COVERING LETTER FOR STUDENT QUESTIONNAIRE

APPENDIX L  
Student Questionnaire

Dear Student:

Group Letter \_\_\_\_\_

Grade \_\_\_\_\_

Welcome and thank you for being part of my research project. I ask that you answer this survey. I need your opinion on 42 questions. Please give me your honest opinion.

Accompanying this questionnaire is a sheet that has all the questions translated into Tagalog. If there is a question you do not understand in English please check the Tagalog translation.

We will go through sample questions on how the questions should be answered.

Examples

Winnipeg winters are very cold

Playing games in the snow is fun

I like going to the dentist

**APPENDIX M**  
**STUDENT QUESTIONNAIRE**









- 40. Physical education skills are of no benefit to a person.
- 41. Soccer and basketball should be played by males only.
- 42. Figure skating and dancing are for girls only.

| STRONGLY DISAGREE | DISAGREE | NO OPINION/UNDECIDED | AGREE | STRONGLY AGREE |
|-------------------|----------|----------------------|-------|----------------|
|                   |          |                      |       |                |
|                   |          |                      |       |                |
|                   |          |                      |       |                |

APPENDIX N  
VERBAL INSTRUCTION SHEET

APPENDIX N

Verbal Instructions for both Groups

Welcome and thank you for being part of my research project.

I ask that you answer this survey. I need your opinion on 42 questions.

Accompanying this questionnaire is a sheet that has all the questions translated into Tagalog. If there is a question you do not understand in English check the Tagalog translation.

On the first page of the questionnaire is a sample question on how the questions should be answered. (Go through sample question).

When you finish the questionnaire, please place it in the box by the exit doors. (Show them the container).

Please remember, DO NOT sign your name.

Once again, thank you for your time and effort.

APPENDIX O  
ATTITUDINAL TESTS

APPENDIX O

ATTITUDINAL TEST REFERENCES

- Adams, R.S. (1963). Two Scales for Measuring Attitude Towards Physical Education. Research Quarterly, 34, 91-94
- Baker, Mary C. (1940). Factors Which May Influence the Participation in Physical Education of Girls and Women. Research Quarterly, 11, 126-131.
- Campbell, Donald E. (1968) Students' Attitudes Toward Physical Education. Research Quarterly, 39, 456-462.
- Carr, Martha (1945). The Relationship Between Success in Physical Education and Selected Attitudes Expressed by High School Freshmen Girls. Research Quarterly, 16, 176-191.
- Johnson, Barry L. and Nelson, Jack K. (1979). Practical Measurements for Evaluation in Physical Education (3rd ed). Minneapolis, Minnesota: Burgers Publishing Company.
- Kenyon, Gerald S. (1962, May). Analysis of General Attitudes Toward Physical Education. Research Quarterly, 33, 239-248.
- Kenyon, Gerald S. (1968). A Conceptual Model for Characterizing Physical Activity. Research Quarterly, 39, 96-105.
- Richardson, Charles E. (1960, December). Thurstone Scale of Measuring Attitudes of College Students Towards Physical Fitness and Exercise. Research Quarterly, 31, 638-643.
- Wear, C. L. (1951, March). The Evaluation of Attitudes Toward Physical Education as an Activity Course. Research Quarterly, 22, 114-126.
- Wear, C. L. (1955, March). Construction of Equivalent Forms of an Attitude Scale. Research Quarterly, 26, 113-119.

APPENDIX P  
TRANSLATION OF THE STUDENT QUESTIONNAIRE  
IN TAGALOG

Halimbawa ng mga katanungan

1. Ang mga kababaihang Pilipina ay dapat na maging malusog at masigla.
2. Ang pag-aaral ng Physical Education ay hindi nagdudulot ng kawili-wiling eksperyensa o karanasan.
3. Mas kasiya-siya ang paglalaro na kasama sa grupo kaysa paglalaro ng mag-isa.
4. Nakukuha ng mga tao ang lahat ng kinakailangang ehersisyo sa pamamagitan ng paggawa ng kanilang pangaraw-araw na trabaho.
5. Gusto ng mga kababaihang Pilipina ang mga palarong nangangailangan ng puspulang paggalaw at sigla.
6. Ang mga tatay ay mahilig sa mga palarong palakasan o sports.

Group Letter \_\_\_\_\_  
Baitang \_\_\_\_\_ Edad \_\_\_\_\_

Sagutin ang lahat ng mga tanong.  
Lagyan ng " X " ang kahon na  
katumbas ng inyong sagot.  
Mahalaga ang inyong opinyon o  
saloobin sa pananaliksik na ito.  
Salamat sa inyong kooperasyon.

|   |   |   |   |    |
|---|---|---|---|----|
| t | s | w | h | t  |
| a | u | a | i | a  |
| l | m | l | n | l  |
| a | a | a | d | a  |
| g | s | n | i | g  |
| a | a | n | n | a  |
| n | n | g | g | n  |
| g | g | o | s | g  |
|   |   | m | u |    |
| s | a | p | a | di |
| u | y | i | s | s  |
| m | o | n | a | u  |
| a | n | y | n | m  |
| s |   | o | g | a  |
| a |   | n | a | s  |
| n |   |   | y | a  |
| g |   |   | a | n  |
| a |   |   | y | g  |
| y |   |   | o | a  |
| o |   |   | n | y  |
| n |   |   |   | o  |

Halimbawa

Ang winter sa Winnipeg ay masyadong malamig.

Mga katanungan:

1. Ang mga kababaihang Pilipina ay dapat na maging malusog at masigla.
2. Ang Physical Education ay hindi mahalaga sa kabuuang pag-aaral ng mga Pilipina.
3. Mas pipiliin ng mga kababaihang Pilipina ang sumali sa aerobics at pagsasayaw kaysa basketball.
4. Ayaw ng mga kababaihang Pilipina ang paglalaro ng mga palakasang may contact o banggaan ng katawan na tulad ng football at basketball.
5. Mahilig ang mga tatay sa sports(palakasan)
6. Mas pinahahalagahan ang Physical Education sa Canada kaysa sa Pilipinas.
7. Ang mga babae at lalake ay hindi dapat magkasama sa mga klase sa Physical Education.
8. Nakakatulong ang Physical Education sa pagpapaganda at pagpapasigla ng katawan.

9. Kung kinakailangang magbawas ng mga programa sa pag-aaral, ang Physical Education ay isa sa dapat bawasin.
10. Mas pipiliin ng mga kababaihang Pilipina ang paglalaro ng tennis at volleyball kaysa sumali sa mga gawaing kaugnay ng fitness testing o pagsusulit ng lakas.
11. Mas pipiliin ng mga kababaihang Pilipina ang manood ng mga agresibong palaro na tulad ng football at basketball kaysa manuod ng di-agresibong palaro na tulad ng golf at bowling.
12. Mahilig ang mga nanay sa sports (palakasan).
13. Mas popular ang pagsasayaw ng mga "folk" at social dances sa Pilipinas kaysa sa Canada.
14. Ayaw ng mga kababaihang Pilipina ang pumasok sa Physical Education classes.
15. Gusto ng mga kababaihang Pilipina ang mga palarong nangangailangan ng puspusang paggalaw at sigla.
16. Ang Physical Education ay dapat maging kinakailangang (required) kurso sa paaralan.
17. Mas gusto ng mga kababaihang Pilipina ang maglaro ng basketball kaysa volleyball.
18. Mas gusto ng mga Kababaihang Pilipina ang maglaro ng racquet sports tulad ng tennis at badminton kaysa tumakbo o sumali sa "track".
19. Dapat himukin o isulong ng mga magulang na sumali ang kanilang pamilya sa mga gawaing pampalakasan.
20. Ang pagtakbo ay higit ginagawa sa Canada kaysa sa Pilipinas.
21. Masyado ang kumpetisyon sa Physical Education.
22. Nakakatulong ang Physical Education sa pagpapabuti ng pag-uugaling kaugnay sa pakikihalu-bilo at pakikisama.
23. Mas mabuti pang magbuhos ng oras sa pag-aaral ng ibang leksiyon kaysa gamitin ito sa Physical Education.

24. Mas gusto ng mga kababaihang Pilipina ang maglaro ng pang-isahang palakasan tulad ng badminton kaysa sumali sa palarong nanga-ngailangan ng "team" tulad ng soccer.
25. Mas gusto ng mga kababaihang Pilipina ang maglaro ng volleyball kaysa sa field hockey.
26. Sa mga pamilyang Pilipino, ang mga anak na lalake ay higit na inu-udyukan at pinapayagan na sumali sa gawaing pampalakasan kaysa mga anak na babae.
27. Ang mga kababaihang Canadian ay higit na malakas at masigla kaysa mga kababaihang Pilipina.
28. Ang mga dalagitang sumasali at nag-eejoy sa mga gawaing pampalakasan ay ipinapalagay na hindi gaanong mahinhin kung itutulad doon sa mga hindi sumasali sa ganitong gawain.
29. Mas pipiliin ng mga kababaihang Pilipina ang manood ng mga palarong pampalakasan kaysa sa sumali o maglaro ng mga ito.
30. Ang paglalaro na kasama sa grupo ay mas kasiya-siya kaysa paglalaro ng mag-isa.
31. Mas gagawin ng mga kababaihang Pilipina ang magsayaw ng mga "folk" at social dances kaysa maglaro ng basketball.
32. Sa mga pamilyang Pilipino, ang mga anak na babae ay inaasahang tumulong sa bahay kaysa maglaro sa mga "team" sa eskuwelahan.
33. Mas mahaba ang oras na inu-ukol para sa Physical Education classes sa Canada kaysa sa Pilipinas.
34. Ang Physical Education ay hindi kawili-wiling karanasan o eksperiyensiya.
35. Ang mga kababaihang Pilipina na sumasali sa mga aktibong palaro at palakasan ay hindi popular sa mga kalalakihan.
36. Ang mga kakabaihang Pilipina ay dapat na humingi ng permiso sa kanilang mga magulang bago sumali sa school team.
37. Hindi dapat sumali ang mga kababaihang Pilipina sa mga programa sa Physical Education.

38. Nakukuha ng mga tao ang kanilang kinakailangang ehersisyo sa pamamagitan ng paggawa ng kanilang pangaraw-araw na trabaho.
39. Pagkatapos ng graduation sa high school, dapat ituloy ninuman ang pagsali sa mga palaro at gawaing pampalakasan.
40. Ang mga kagalingang kaugnay sa Physical Education ay walang hatid na kapakinabangan sa isang tao.
41. Ang soccer at baskefball ang dapat maglaro ay manga lalaki lamang.
42. Ang figure skating ay para sa manga babai lamang.

APPENDIX Q  
DATA TABLES

DATA TABLES

Group A

X<sub>1</sub>: 1

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 0      | 0%       |
| 2    | 1         | 2       | 1      | 5%       |
| 3    | 2         | 3       | 0      | 0%       |
| 4    | 3         | 4       | 8      | 42%      |
| 5    | 4         | 5       | 10     | 53%      |

-Mode

Group B

X<sub>1</sub>: 1

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 0      | 0%       |
| 2    | 1         | 2       | 2      | 10%      |
| 3    | 2         | 3       | 2      | 10%      |
| 4    | 3         | 4       | 10     | 50%      |
| 5    | 4         | 5       | 6      | 30%      |

-Mode

X<sub>2</sub>: 2

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 1      | 5%       |
| 2    | 1         | 2       | 0      | 0%       |
| 3    | 2         | 3       | 1      | 5%       |
| 4    | 3         | 4       | 9      | 47%      |
| 5    | 4         | 5       | 8      | 42%      |

-Mode

X<sub>2</sub>: 2

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 0      | 0%       |
| 2    | 1         | 2       | 2      | 10%      |
| 3    | 2         | 3       | 1      | 5%       |
| 4    | 3         | 4       | 10     | 50%      |
| 5    | 4         | 5       | 7      | 35%      |

-Mode

X<sub>3</sub>: 3

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 1      | 5%       |
| 2    | 1         | 2       | 3      | 16%      |
| 3    | 2         | 3       | 3      | 16%      |
| 4    | 3         | 4       | 8      | 42%      |
| 5    | 4         | 5       | 4      | 21%      |

-Mode

X<sub>3</sub>: 3

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 1      | 5%       |
| 2    | 1         | 2       | 6      | 30%      |
| 3    | 2         | 3       | 8      | 40%      |
| 4    | 3         | 4       | 4      | 20%      |
| 5    | 4         | 5       | 1      | 5%       |

-Mode

X<sub>4</sub>: 4

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 2      | 11%      |
| 2    | 1         | 2       | 5      | 26%      |
| 3    | 2         | 3       | 3      | 16%      |
| 4    | 3         | 4       | 5      | 26%      |
| 5    | 4         | 5       | 4      | 21%      |

X<sub>4</sub>: 4

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 3      | 15%      |
| 2    | 1         | 2       | 2      | 10%      |
| 3    | 2         | 3       | 1      | 5%       |
| 4    | 3         | 4       | 9      | 45%      |
| 5    | 4         | 5       | 5      | 25%      |

-Mode

Group A

X5:5

| Bar: | From: (2) | To: (1) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 1      | 5%       |
| 2    | 1         | 2       | 1      | 5%       |
| 3    | 2         | 3       | 3      | 16%      |
| 4    | 3         | 4       | 7      | 37%      |
| 5    | 4         | 5       | 7      | 37%      |

Group B

X5:5

| Bar: | From: (2) | To: (1) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 1      | 5%       |
| 2    | 1         | 2       | 0      | 0%       |
| 3    | 2         | 3       | 7      | 35%      |
| 4    | 3         | 4       | 10     | 50%      |
| 5    | 4         | 5       | 2      | 10%      |

X6:6

| Bar: | From: (2) | To: (1) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 1      | 5%       |
| 2    | 1         | 2       | 2      | 11%      |
| 3    | 2         | 3       | 5      | 26%      |
| 4    | 3         | 4       | 8      | 42%      |
| 5    | 4         | 5       | 3      | 16%      |

X6:6

| Bar: | From: (2) | To: (1) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 1      | 5%       |
| 2    | 1         | 2       | 1      | 5%       |
| 3    | 2         | 3       | 7      | 35%      |
| 4    | 3         | 4       | 7      | 35%      |
| 5    | 4         | 5       | 4      | 20%      |

X7:7

| Bar: | From: (2) | To: (1) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 0      | 0%       |
| 2    | 1         | 2       | 0      | 0%       |
| 3    | 2         | 3       | 3      | 16%      |
| 4    | 3         | 4       | 6      | 32%      |
| 5    | 4         | 5       | 10     | 53%      |

X7:7

| Bar: | From: (2) | To: (1) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 1      | 5%       |
| 2    | 1         | 2       | 0      | 0%       |
| 3    | 2         | 3       | 0      | 0%       |
| 4    | 3         | 4       | 8      | 40%      |
| 5    | 4         | 5       | 11     | 55%      |

X8:8

| Bar: | From: (2) | To: (1) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 1      | 5%       |
| 2    | 1         | 2       | 2      | 11%      |
| 3    | 2         | 3       | 0      | 0%       |
| 4    | 3         | 4       | 9      | 47%      |
| 5    | 4         | 5       | 7      | 37%      |

X8:8

| Bar: | From: (2) | To: (1) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 1      | 5%       |
| 2    | 1         | 2       | 2      | 10%      |
| 3    | 2         | 3       | 0      | 0%       |
| 4    | 3         | 4       | 9      | 45%      |
| 5    | 4         | 5       | 8      | 40%      |

Group A

X9:9

| Bar | From: (z) | To: (c) | Count | Percent |
|-----|-----------|---------|-------|---------|
| 1   | 0         | 1       | 3     | 16%     |
| 2   | 1         | 2       | 4     | 21%     |
| 3   | 2         | 3       | 5     | 26%     |
| 4   | 3         | 4       | 5     | 26%     |
| 5   | 4         | 5       | 2     | 11%     |

X10:10

| Bar | From: (z) | To: (c) | Count | Percent |
|-----|-----------|---------|-------|---------|
| 1   | 0         | 1       | 3     | 16%     |
| 2   | 1         | 2       | 2     | 11%     |
| 3   | 2         | 3       | 3     | 16%     |
| 4   | 3         | 4       | 9     | 47%     |
| 5   | 4         | 5       | 2     | 11%     |

X11:11

| Bar | From: (z) | To: (c) | Count | Percent |
|-----|-----------|---------|-------|---------|
| 1   | 0         | 1       | 0     | 0%      |
| 2   | 1         | 2       | 5     | 26%     |
| 3   | 2         | 3       | 5     | 26%     |
| 4   | 3         | 4       | 6     | 32%     |
| 5   | 4         | 5       | 3     | 16%     |

X12:12

| Bar | From: (z) | To: (c) | Count | Percent |
|-----|-----------|---------|-------|---------|
| 1   | 0         | 1       | 0     | 0%      |
| 2   | 1         | 2       | 5     | 26%     |
| 3   | 2         | 3       | 6     | 32%     |
| 4   | 3         | 4       | 5     | 26%     |
| 5   | 4         | 5       | 3     | 16%     |

Group B

X9:9

| Bar | From: (z) | To: (c) | Count | Percent |
|-----|-----------|---------|-------|---------|
| 1   | 0         | 1       | 0     | 0%      |
| 2   | 1         | 2       | 1     | 5%      |
| 3   | 2         | 3       | 2     | 10%     |
| 4   | 3         | 4       | 9     | 45%     |
| 5   | 4         | 5       | 8     | 40%     |

X10:10

| Bar | From: (z) | To: (c) | Count | Percent |
|-----|-----------|---------|-------|---------|
| 1   | 0         | 1       | 1     | 5%      |
| 2   | 1         | 2       | 2     | 10%     |
| 3   | 2         | 3       | 6     | 30%     |
| 4   | 3         | 4       | 8     | 40%     |
| 5   | 4         | 5       | 3     | 15%     |

X11:11

| Bar | From: (z) | To: (c) | Count | Percent |
|-----|-----------|---------|-------|---------|
| 1   | 0         | 1       | 0     | 0%      |
| 2   | 1         | 2       | 2     | 10%     |
| 3   | 2         | 3       | 3     | 15%     |
| 4   | 3         | 4       | 8     | 40%     |
| 5   | 4         | 5       | 7     | 35%     |

X12:12

| Bar | From: (z) | To: (c) | Count | Percent |
|-----|-----------|---------|-------|---------|
| 1   | 0         | 1       | 1     | 5%      |
| 2   | 1         | 2       | 4     | 20%     |
| 3   | 2         | 3       | 10    | 50%     |
| 4   | 3         | 4       | 4     | 20%     |
| 5   | 4         | 5       | 1     | 5%      |

Group A

X13:13

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 1      | 5%       |
| 2    | 1         | 2       | 1      | 5%       |
| 3    | 2         | 3       | 3      | 16%      |
| 4    | 3         | 4       | 8      | 42%      |
| 5    | 4         | 5       | 6      | 32%      |

-Mode

Group B

X13:13

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 1      | 5%       |
| 2    | 1         | 2       | 1      | 5%       |
| 3    | 2         | 3       | 9      | 45%      |
| 4    | 3         | 4       | 6      | 30%      |
| 5    | 4         | 5       | 3      | 15%      |

-Mc

X14:14

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 1      | 5%       |
| 2    | 1         | 2       | 0      | 0%       |
| 3    | 2         | 3       | 2      | 11%      |
| 4    | 3         | 4       | 10     | 53%      |
| 5    | 4         | 5       | 6      | 32%      |

-Mode

X14:14

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 0      | 0%       |
| 2    | 1         | 2       | 0      | 0%       |
| 3    | 2         | 3       | 5      | 25%      |
| 4    | 3         | 4       | 6      | 30%      |
| 5    | 4         | 5       | 9      | 45%      |

-Mc

X15:15

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 1      | 5%       |
| 2    | 1         | 2       | 1      | 5%       |
| 3    | 2         | 3       | 8      | 42%      |
| 4    | 3         | 4       | 7      | 37%      |
| 5    | 4         | 5       | 2      | 11%      |

-Mode

X15:15

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 0      | 0%       |
| 2    | 1         | 2       | 1      | 5%       |
| 3    | 2         | 3       | 10     | 50%      |
| 4    | 3         | 4       | 6      | 30%      |
| 5    | 4         | 5       | 3      | 15%      |

-Mc

X16:16

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 1      | 5%       |
| 2    | 1         | 2       | 0      | 0%       |
| 3    | 2         | 3       | 3      | 16%      |
| 4    | 3         | 4       | 10     | 53%      |
| 5    | 4         | 5       | 5      | 26%      |

-Mode

X16:16

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 0      | 0%       |
| 2    | 1         | 2       | 2      | 10%      |
| 3    | 2         | 3       | 4      | 20%      |
| 4    | 3         | 4       | 8      | 40%      |
| 5    | 4         | 5       | 6      | 30%      |

-Mc

Group A

X17:17

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 4      | 21%      |
| 2    | 1         | 2       | 8      | 42%      |
| 3    | 2         | 3       | 4      | 21%      |
| 4    | 3         | 4       | 2      | 11%      |
| 5    | 4         | 5       | 1      | 5%       |

-Mode

X18:18

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 3      | 16%      |
| 2    | 1         | 2       | 0      | 0%       |
| 3    | 2         | 3       | 5      | 26%      |
| 4    | 3         | 4       | 6      | 32%      |
| 5    | 4         | 5       | 5      | 26%      |

-Mode

X19:19

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 0      | 0%       |
| 2    | 1         | 2       | 1      | 5%       |
| 3    | 2         | 3       | 0      | 0%       |
| 4    | 3         | 4       | 13     | 68%      |
| 5    | 4         | 5       | 5      | 26%      |

-Mode

X20:20

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 2      | 11%      |
| 2    | 1         | 2       | 1      | 5%       |
| 3    | 2         | 3       | 4      | 21%      |
| 4    | 3         | 4       | 6      | 32%      |
| 5    | 4         | 5       | 6      | 32%      |

Group B

X17:17

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 1      | 5%       |
| 2    | 1         | 2       | 10     | 50%      |
| 3    | 2         | 3       | 5      | 25%      |
| 4    | 3         | 4       | 3      | 15%      |
| 5    | 4         | 5       | 1      | 5%       |

X18:18

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 2      | 10%      |
| 2    | 1         | 2       | 2      | 10%      |
| 3    | 2         | 3       | 5      | 25%      |
| 4    | 3         | 4       | 9      | 45%      |
| 5    | 4         | 5       | 2      | 10%      |

X19:19

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 0      | 0%       |
| 2    | 1         | 2       | 1      | 5%       |
| 3    | 2         | 3       | 5      | 25%      |
| 4    | 3         | 4       | 5      | 25%      |
| 5    | 4         | 5       | 9      | 45%      |

X20:20

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 2      | 10%      |
| 2    | 1         | 2       | 3      | 15%      |
| 3    | 2         | 3       | 6      | 30%      |
| 4    | 3         | 4       | 6      | 30%      |
| 5    | 4         | 5       | 3      | 15%      |

Group A

X21:21

| Bar | From: (≥) | To: (<) | Count | Percent |       |
|-----|-----------|---------|-------|---------|-------|
| 1   | 0         | 1       | 0     | 0%      |       |
| 2   | 1         | 2       | 2     | 11%     |       |
| 3   | 2         | 3       | 7     | 37%     |       |
| 4   | 3         | 4       | 8     | 42%     | -Mode |
| 5   | 4         | 5       | 2     | 11%     |       |

Group B

X21:21

| Bar | From: (≥) | To: (<) | Count | Percent |       |
|-----|-----------|---------|-------|---------|-------|
| 1   | 0         | 1       | 1     | 5%      |       |
| 2   | 1         | 2       | 2     | 10%     |       |
| 3   | 2         | 3       | 5     | 25%     |       |
| 4   | 3         | 4       | 8     | 40%     | -Mode |
| 5   | 4         | 5       | 4     | 20%     |       |

X22:22

| Bar | From: (≥) | To: (<) | Count | Percent |       |
|-----|-----------|---------|-------|---------|-------|
| 1   | 0         | 1       | 1     | 5%      |       |
| 2   | 1         | 2       | 2     | 11%     |       |
| 3   | 2         | 3       | 0     | 0%      |       |
| 4   | 3         | 4       | 11    | 58%     | -Mode |
| 5   | 4         | 5       | 5     | 26%     |       |

X22:22

| Bar | From: (≥) | To: (<) | Count | Percent |       |
|-----|-----------|---------|-------|---------|-------|
| 1   | 0         | 1       | 0     | 0%      |       |
| 2   | 1         | 2       | 2     | 10%     |       |
| 3   | 2         | 3       | 4     | 20%     |       |
| 4   | 3         | 4       | 12    | 60%     | -Mode |
| 5   | 4         | 5       | 2     | 10%     |       |

X23:23

| Bar | From: (≥) | To: (<) | Count | Percent |       |
|-----|-----------|---------|-------|---------|-------|
| 1   | 0         | 1       | 2     | 11%     |       |
| 2   | 1         | 2       | 5     | 26%     |       |
| 3   | 2         | 3       | 7     | 37%     | -Mode |
| 4   | 3         | 4       | 4     | 21%     |       |
| 5   | 4         | 5       | 1     | 5%      |       |

X23:23

| Bar | From: (≥) | To: (<) | Count | Percent |       |
|-----|-----------|---------|-------|---------|-------|
| 1   | 0         | 1       | 0     | 0%      |       |
| 2   | 1         | 2       | 2     | 10%     |       |
| 3   | 2         | 3       | 9     | 45%     | -Mode |
| 4   | 3         | 4       | 6     | 30%     |       |
| 5   | 4         | 5       | 3     | 15%     |       |

X24:24

| Bar | From: (≥) | To: (<) | Count | Percent |       |
|-----|-----------|---------|-------|---------|-------|
| 1   | 0         | 1       | 1     | 5%      |       |
| 2   | 1         | 2       | 6     | 32%     |       |
| 3   | 2         | 3       | 1     | 5%      |       |
| 4   | 3         | 4       | 7     | 37%     | -Mode |
| 5   | 4         | 5       | 4     | 21%     |       |

X24:24

| Bar | From: (≥) | To: (<) | Count | Percent |       |
|-----|-----------|---------|-------|---------|-------|
| 1   | 0         | 1       | 3     | 15%     |       |
| 2   | 1         | 2       | 5     | 25%     |       |
| 3   | 2         | 3       | 9     | 45%     | -Mode |
| 4   | 3         | 4       | 3     | 15%     |       |
| 5   | 4         | 5       | 0     | 0%      |       |

Group A

X25:25

| Bar: | From: (2) | To: (1) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 0      | 0%       |
| 2    | 1         | 2       | 1      | 5%       |
| 3    | 2         | 3       | 2      | 11%      |
| 4    | 3         | 4       | 10     | 53%      |
| 5    | 4         | 5       | 6      | 32%      |

-Mode

Group B

X25:25

| Bar: | From: (2) | To: (1) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 0      | 0%       |
| 2    | 1         | 2       | 3      | 15%      |
| 3    | 2         | 3       | 4      | 20%      |
| 4    | 3         | 4       | 7      | 35%      |
| 5    | 4         | 5       | 6      | 30%      |

-Mode

X26:26

| Bar: | From: (2) | To: (1) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 2      | 11%      |
| 2    | 1         | 2       | 2      | 11%      |
| 3    | 2         | 3       | 3      | 16%      |
| 4    | 3         | 4       | 9      | 47%      |
| 5    | 4         | 5       | 3      | 16%      |

-Mode

X26:26

| Bar: | From: (2) | To: (1) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 2      | 10%      |
| 2    | 1         | 2       | 0      | 0%       |
| 3    | 2         | 3       | 4      | 20%      |
| 4    | 3         | 4       | 6      | 30%      |
| 5    | 4         | 5       | 8      | 40%      |

-Mode

X27:27

| Bar: | From: (2) | To: (1) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 1      | 5%       |
| 2    | 1         | 2       | 5      | 26%      |
| 3    | 2         | 3       | 4      | 21%      |
| 4    | 3         | 4       | 7      | 37%      |
| 5    | 4         | 5       | 2      | 11%      |

-Mode

X27:27

| Bar: | From: (2) | To: (1) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 3      | 15%      |
| 2    | 1         | 2       | 2      | 10%      |
| 3    | 2         | 3       | 10     | 50%      |
| 4    | 3         | 4       | 3      | 15%      |
| 5    | 4         | 5       | 2      | 10%      |

-Mode

X28:28

| Bar: | From: (2) | To: (1) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 2      | 11%      |
| 2    | 1         | 2       | 3      | 16%      |
| 3    | 2         | 3       | 7      | 37%      |
| 4    | 3         | 4       | 3      | 16%      |
| 5    | 4         | 5       | 4      | 21%      |

-Mode

X28:28

| Bar: | From: (2) | To: (1) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 1      | 5%       |
| 2    | 1         | 2       | 1      | 5%       |
| 3    | 2         | 3       | 7      | 35%      |
| 4    | 3         | 4       | 6      | 30%      |
| 5    | 4         | 5       | 5      | 25%      |

-Mode

Group A

X29:29

| Bar: | From: (2) | To: (1) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 3      | 16%      |
| 2    | 1         | 2       | 3      | 16%      |
| 3    | 2         | 3       | 4      | 21%      |
| 4    | 3         | 4       | 6      | 32%      |
| 5    | 4         | 5       | 3      | 16%      |

-Mode

X30:30

| Bar: | From: (2) | To: (1) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 4      | 21%      |
| 2    | 1         | 2       | 0      | 0%       |
| 3    | 2         | 3       | 0      | 0%       |
| 4    | 3         | 4       | 6      | 32%      |
| 5    | 4         | 5       | 9      | 47%      |

-Mode

X31:31

| Bar: | From: (2) | To: (1) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 2      | 11%      |
| 2    | 1         | 2       | 1      | 5%       |
| 3    | 2         | 3       | 3      | 16%      |
| 4    | 3         | 4       | 7      | 37%      |
| 5    | 4         | 5       | 6      | 32%      |

-Mode

X32:32

| Bar: | From: (2) | To: (1) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 1      | 5%       |
| 2    | 1         | 2       | 2      | 11%      |
| 3    | 2         | 3       | 4      | 21%      |
| 4    | 3         | 4       | 3      | 16%      |
| 5    | 4         | 5       | 9      | 47%      |

-Mode

Group B

X29:29

| Bar: | From: (2) | To: (1) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 1      | 5%       |
| 2    | 1         | 2       | 2      | 10%      |
| 3    | 2         | 3       | 9      | 45%      |
| 4    | 3         | 4       | 4      | 20%      |
| 5    | 4         | 5       | 4      | 20%      |

-Mode

X30:30

| Bar: | From: (2) | To: (1) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 2      | 10%      |
| 2    | 1         | 2       | 0      | 0%       |
| 3    | 2         | 3       | 2      | 10%      |
| 4    | 3         | 4       | 4      | 20%      |
| 5    | 4         | 5       | 12     | 60%      |

-Mode

X31:31

| Bar: | From: (2) | To: (1) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 2      | 10%      |
| 2    | 1         | 2       | 9      | 45%      |
| 3    | 2         | 3       | 4      | 20%      |
| 4    | 3         | 4       | 3      | 15%      |
| 5    | 4         | 5       | 2      | 10%      |

-Mode

X32:32

| Bar: | From: (2) | To: (1) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 2      | 10%      |
| 2    | 1         | 2       | 0      | 0%       |
| 3    | 2         | 3       | 4      | 20%      |
| 4    | 3         | 4       | 5      | 25%      |
| 5    | 4         | 5       | 9      | 45%      |

-Mode

Group A

X33:33

| Bar: | From: (2) | To: (1) | Count | Percent |
|------|-----------|---------|-------|---------|
| 1    | 0         | 1       | 2     | 11%     |
| 2    | 1         | 2       | 3     | 16%     |
| 3    | 2         | 3       | 1     | 5%      |
| 4    | 3         | 4       | 7     | 37%     |
| 5    | 4         | 5       | 6     | 32%     |

-Mode

Group B

X33:33

| Bar: | From: (2) | To: (1) | Count | Percent |
|------|-----------|---------|-------|---------|
| 1    | 0         | 1       | 0     | 0%      |
| 2    | 1         | 2       | 0     | 0%      |
| 3    | 2         | 3       | 6     | 30%     |
| 4    | 3         | 4       | 8     | 40%     |
| 5    | 4         | 5       | 6     | 30%     |

-Mode

X34:34

| Bar: | From: (2) | To: (1) | Count | Percent |
|------|-----------|---------|-------|---------|
| 1    | 0         | 1       | 0     | 0%      |
| 2    | 1         | 2       | 0     | 0%      |
| 3    | 2         | 3       | 2     | 11%     |
| 4    | 3         | 4       | 9     | 47%     |
| 5    | 4         | 5       | 8     | 42%     |

-Mode

X34:34

| Bar: | From: (2) | To: (1) | Count | Percent |
|------|-----------|---------|-------|---------|
| 1    | 0         | 1       | 0     | 0%      |
| 2    | 1         | 2       | 0     | 0%      |
| 3    | 2         | 3       | 3     | 15%     |
| 4    | 3         | 4       | 9     | 45%     |
| 5    | 4         | 5       | 8     | 40%     |

-Mode

X35:35

| Bar: | From: (2) | To: (1) | Count | Percent |
|------|-----------|---------|-------|---------|
| 1    | 0         | 1       | 1     | 5%      |
| 2    | 1         | 2       | 1     | 5%      |
| 3    | 2         | 3       | 4     | 21%     |
| 4    | 3         | 4       | 8     | 42%     |
| 5    | 4         | 5       | 5     | 26%     |

-Mode

X35:35

| Bar: | From: (2) | To: (1) | Count | Percent |
|------|-----------|---------|-------|---------|
| 1    | 0         | 1       | 1     | 5%      |
| 2    | 1         | 2       | 1     | 5%      |
| 3    | 2         | 3       | 4     | 20%     |
| 4    | 3         | 4       | 7     | 35%     |
| 5    | 4         | 5       | 7     | 35%     |

X36:36

| Bar: | From: (2) | To: (1) | Count | Percent |
|------|-----------|---------|-------|---------|
| 1    | 0         | 1       | 2     | 11%     |
| 2    | 1         | 2       | 1     | 5%      |
| 3    | 2         | 3       | 0     | 0%      |
| 4    | 3         | 4       | 9     | 47%     |
| 5    | 4         | 5       | 7     | 37%     |

-Mode

X36:36

| Bar: | From: (2) | To: (1) | Count | Percent |
|------|-----------|---------|-------|---------|
| 1    | 0         | 1       | 6     | 30%     |
| 2    | 1         | 2       | 6     | 30%     |
| 3    | 2         | 3       | 0     | 0%      |
| 4    | 3         | 4       | 5     | 25%     |
| 5    | 4         | 5       | 3     | 15%     |

Group A

X37:37

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 0      | 0%       |
| 2    | 1         | 2       | 0      | 0%       |
| 3    | 2         | 3       | 1      | 5%       |
| 4    | 3         | 4       | 10     | 53%      |
| 5    | 4         | 5       | 8      | 42%      |

-Mode

X38:38

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 2      | 11%      |
| 2    | 1         | 2       | 5      | 26%      |
| 3    | 2         | 3       | 2      | 11%      |
| 4    | 3         | 4       | 7      | 37%      |
| 5    | 4         | 5       | 3      | 16%      |

-Mode

X39:39

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 0      | 0%       |
| 2    | 1         | 2       | 1      | 5%       |
| 3    | 2         | 3       | 3      | 16%      |
| 4    | 3         | 4       | 9      | 47%      |
| 5    | 4         | 5       | 6      | 32%      |

-Mode

X40:40

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 0      | 0%       |
| 2    | 1         | 2       | 0      | 0%       |
| 3    | 2         | 3       | 5      | 26%      |
| 4    | 3         | 4       | 11     | 58%      |
| 5    | 4         | 5       | 3      | 16%      |

-Mode

Group B

X37:37

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 0      | 0%       |
| 2    | 1         | 2       | 0      | 0%       |
| 3    | 2         | 3       | 0      | 0%       |
| 4    | 3         | 4       | 9      | 45%      |
| 5    | 4         | 5       | 11     | 55%      |

-Mode

X38:38

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 1      | 5%       |
| 2    | 1         | 2       | 1      | 5%       |
| 3    | 2         | 3       | 5      | 25%      |
| 4    | 3         | 4       | 9      | 45%      |
| 5    | 4         | 5       | 4      | 20%      |

-Mode

X39:39

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 0      | 0%       |
| 2    | 1         | 2       | 0      | 0%       |
| 3    | 2         | 3       | 3      | 15%      |
| 4    | 3         | 4       | 5      | 25%      |
| 5    | 4         | 5       | 12     | 60%      |

-Mode

X40:40

| Bar: | From: (≥) | To: (<) | Count: | Percent: |
|------|-----------|---------|--------|----------|
| 1    | 0         | 1       | 1      | 5%       |
| 2    | 1         | 2       | 0      | 0%       |
| 3    | 2         | 3       | 4      | 20%      |
| 4    | 3         | 4       | 6      | 30%      |
| 5    | 4         | 5       | 9      | 45%      |

-Mode

Group A

X 41 : 41

| Bar | From: (≥) | To: (<) | Count | Percent |
|-----|-----------|---------|-------|---------|
| 1   | 0         | 1       | 4     | 21%     |
| 2   | 1         | 2       | 4     | 21%     |
| 3   | 2         | 3       | 2     | 11%     |
| 4   | 3         | 4       | 7     | 37%     |
| 5   | 4         | 5       | 2     | 11%     |

-Mode

Group B

X 41 : 41

| Bar | From: (≥) | To: (<) | Count | Percent |
|-----|-----------|---------|-------|---------|
| 1   | 0         | 1       | 2     | 10%     |
| 2   | 1         | 2       | 0     | 0%      |
| 3   | 2         | 3       | 1     | 5%      |
| 4   | 3         | 4       | 5     | 25%     |
| 5   | 4         | 5       | 12    | 60%     |

-Mode

X 42 : 42

| Bar | From: (≥) | To: (<) | Count | Percent |
|-----|-----------|---------|-------|---------|
| 1   | 0         | 1       | 4     | 21%     |
| 2   | 1         | 2       | 3     | 16%     |
| 3   | 2         | 3       | 2     | 11%     |
| 4   | 3         | 4       | 8     | 42%     |
| 5   | 4         | 5       | 2     | 11%     |

-Mode

X 42 : 42

| Bar | From: (≥) | To: (<) | Count | Percent |
|-----|-----------|---------|-------|---------|
| 1   | 0         | 1       | 2     | 10%     |
| 2   | 1         | 2       | 0     | 0%      |
| 3   | 2         | 3       | 1     | 5%      |
| 4   | 3         | 4       | 7     | 35%     |
| 5   | 4         | 5       | 10    | 50%     |

-Mode

Unpaired t-Test X<sub>1</sub> : GROUP Y<sub>1</sub> : 1

DF: Unpaired t Value: Prob. (2-tail):

|    |        |       |
|----|--------|-------|
| 37 | 1.5492 | .1299 |
|----|--------|-------|

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 3.4211 | .7685      | .1763       |
| B      | 20     | 3      | .9177      | .2052       |

Unpaired t-Test X<sub>1</sub> : GROUP Y<sub>2</sub> : 2

DF: Unpaired t Value: Prob. (2-tail):

|    |       |       |
|----|-------|-------|
| 37 | .3655 | .7168 |
|----|-------|-------|

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 3.2105 | .9763      | .224        |
| B      | 20     | 3.1    | .9119      | .2039       |

Unpaired t-Test X<sub>1</sub> : GROUP Y<sub>3</sub> : 3

DF: Unpaired t Value: Prob. (2-tail):

|    |       |       |
|----|-------|-------|
| 37 | 1.979 | .0553 |
|----|-------|-------|

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.5789 | 1.1698     | .2684       |
| B      | 20     | 1.9    | .9679      | .2164       |

Unpaired t-Test X<sub>1</sub> : GROUP Y<sub>4</sub> : 4

DF: Unpaired t Value: Prob. (2-tail):

|    |        |       |
|----|--------|-------|
| 37 | -.7698 | .4463 |
|----|--------|-------|

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.2105 | 1.3572     | .3114       |
| B      | 20     | 2.55   | 1.3945     | .3118       |

Unpaired t-Test X<sub>1</sub> : GROUP Y<sub>5</sub> : 5

DF: Unpaired t Value: Prob. (2-tail):

|    |        |     |
|----|--------|-----|
| 37 | 1.0735 | .29 |
|----|--------|-----|

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.9474 | 1.1291     | .259        |
| B      | 20     | 2.6    | .8826      | .1974       |

Unpaired t-Test X<sub>1</sub> : GROUP Y<sub>6</sub> : 6

DF: Unpaired t Value: Prob. (2-tail):

|    |        |       |
|----|--------|-------|
| 37 | -.2171 | .8293 |
|----|--------|-------|

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.5263 | 1.0733     | .2462       |
| B      | 20     | 2.6    | 1.0463     | .234        |

Unpaired t-Test X<sub>1</sub> : GROUP Y<sub>7</sub> : 7

DF: Unpaired t Value: Prob. (2-tail):

|    |        |       |
|----|--------|-------|
| 37 | -.1149 | .9091 |
|----|--------|-------|

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 3.3684 | .7609      | .1746       |
| B      | 20     | 3.4    | .9403      | .2103       |

Unpaired t-Test X<sub>1</sub> : GROUP Y<sub>8</sub> : 8

DF: Unpaired t Value: Prob. (2-tail):

|    |        |       |
|----|--------|-------|
| 37 | -.1357 | .8928 |
|----|--------|-------|

| Group: | Count: | Mean: | Std. Dev.: | Std. Error: |
|--------|--------|-------|------------|-------------|
| A      | 19     | 3     | 1.1547     | .2649       |
| B      | 20     | 3.05  | 1.1459     | .2562       |

T-TEST

**Unpaired t-Test X<sub>1</sub> : GROUP Y<sub>9</sub> : 9**

|     |                   |                 |
|-----|-------------------|-----------------|
| DF: | Unpaired t Value: | Prob. (2-tail): |
| 37  | -3.6635           | .0008           |

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 1.9474 | 1.2681     | .2909       |
| B      | 20     | 3.2    | .8335      | .1864       |

**Unpaired t-Test X<sub>1</sub> : GROUP Y<sub>10</sub> : 10**

|     |                   |                 |
|-----|-------------------|-----------------|
| DF: | Unpaired t Value: | Prob. (2-tail): |
| 37  | -.6317            | .5315           |

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.2632 | 1.2842     | .2946       |
| B      | 20     | 2.5    | 1.0513     | .2351       |

**Unpaired t-Test X<sub>1</sub> : GROUP Y<sub>11</sub> : 11**

|     |                   |                 |
|-----|-------------------|-----------------|
| DF: | Unpaired t Value: | Prob. (2-tail): |
| 37  | -1.9347           | .0607           |

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.3684 | 1.0651     | .2444       |
| B      | 20     | 3      | .9733      | .2176       |

**Unpaired t-Test X<sub>1</sub> : GROUP Y<sub>12</sub> : 12**

|     |                   |                 |
|-----|-------------------|-----------------|
| DF: | Unpaired t Value: | Prob. (2-tail): |
| 37  | .9979             | .3248           |

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.3158 | 1.0569     | .2425       |
| B      | 20     | 2      | .9177      | .2052       |

Unpaired t-Test X<sub>1</sub> : GROUP Y 13 : 13

DF: Unpaired t Value: Prob. (2-tail):

|    |       |      |
|----|-------|------|
| 37 | 1.323 | .194 |
|----|-------|------|

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.8947 | 1.1002     | .2524       |
| B      | 20     | 2.45   | .9987      | .2233       |

Unpaired t-Test X<sub>1</sub> : GROUP Y 14 : 14

DF: Unpaired t Value: Prob. (2-tail):

|    |        |       |
|----|--------|-------|
| 37 | -.5096 | .6133 |
|----|--------|-------|

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 3.0526 | .9703      | .2226       |
| B      | 20     | 3.2    | .8335      | .1864       |

Unpaired t-Test X<sub>1</sub> : GROUP Y 15 : 15

DF: Unpaired t Value: Prob. (2-tail):

|    |        |       |
|----|--------|-------|
| 37 | -.4502 | .6552 |
|----|--------|-------|

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.4211 | .9612      | .2205       |
| B      | 20     | 2.55   | .8256      | .1846       |

Unpaired t-Test X<sub>1</sub> : GROUP Y 16 : 16

DF: Unpaired t Value: Prob. (2-tail):

|    |       |       |
|----|-------|-------|
| 37 | .1526 | .8796 |
|----|-------|-------|

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.9474 | .9703      | .2226       |
| B      | 20     | 2.9    | .9679      | .2164       |

Unpaired t-Test X<sub>1</sub> : GROUP Y 17 : 17

DF: Unpaired t Value: Prob. (2-tail):

|    |        |       |
|----|--------|-------|
| 37 | -.8353 | .4089 |
|----|--------|-------|

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 1.3684 | 1.1161     | .256        |
| B      | 20     | 1.65   | .9881      | .2209       |

Unpaired t-Test X<sub>1</sub> : GROUP Y 18 : 18

DF: Unpaired t Value: Prob. (2-tail):

|    |       |       |
|----|-------|-------|
| 37 | .4423 | .6608 |
|----|-------|-------|

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.5263 | 1.3486     | .3094       |
| B      | 20     | 2.35   | 1.1367     | .2542       |

Unpaired t-Test X<sub>1</sub> : GROUP Y 19 : 19

DF: Unpaired t Value: Prob. (2-tail):

|    |       |       |
|----|-------|-------|
| 37 | .2142 | .8315 |
|----|-------|-------|

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 3.1579 | .6882      | .1579       |
| B      | 20     | 3.1    | .9679      | .2164       |

Unpaired t-Test X<sub>1</sub> : GROUP Y 20 : 20

DF: Unpaired t Value: Prob. (2-tail):

|    |        |       |
|----|--------|-------|
| 37 | 1.0839 | .2854 |
|----|--------|-------|

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.6842 | 1.2933     | .2967       |
| B      | 20     | 2.25   | 1.2085     | .2702       |

T-TEST

Unpaired t-Test X<sub>1</sub> : GROUP Y 21 : 21

|     |                   |                 |
|-----|-------------------|-----------------|
| DF: | Unpaired t Value: | Prob. (2-tail): |
| 37  | -.2347            | .8157           |

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.5263 | .8412      | .193        |
| B      | 20     | 2.6    | 1.0954     | .2449       |

Unpaired t-Test X<sub>1</sub> : GROUP Y 22 : 22

|     |                   |                 |
|-----|-------------------|-----------------|
| DF: | Unpaired t Value: | Prob. (2-tail): |
| 37  | .6342             | .5298           |

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.8947 | 1.1002     | .2524       |
| B      | 20     | 2.7    | .8013      | .1792       |

Unpaired t-Test X<sub>1</sub> : GROUP Y 23 : 23

|     |                   |                 |
|-----|-------------------|-----------------|
| DF: | Unpaired t Value: | Prob. (2-tail): |
| 37  | -2.0958           | .043            |

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 1.8421 | 1.0679     | .245        |
| B      | 20     | 2.5    | .8885      | .1987       |

Unpaired t-Test X<sub>1</sub> : GROUP Y 24 : 24

|     |                   |                 |
|-----|-------------------|-----------------|
| DF: | Unpaired t Value: | Prob. (2-tail): |
| 37  | 2.1232            | .0405           |

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.3684 | 1.3        | .2982       |
| B      | 20     | 1.6    | .9403      | .2103       |

T-TEST

Unpaired t-Test X<sub>1</sub> : GROUP Y 25 : 25

|     |                   |                 |
|-----|-------------------|-----------------|
| DF: | Unpaired t Value: | Prob. (2-tail): |
| 37  | 1.0091            | .3195           |

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 3.1053 | .8093      | .1857       |
| B      | 20     | 2.8    | 1.0563     | .2362       |

Unpaired t-Test X<sub>1</sub> : GROUP Y 26 : 26

|     |                   |                 |
|-----|-------------------|-----------------|
| DF: | Unpaired t Value: | Prob. (2-tail): |
| 37  | -1.0765           | .2887           |

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.4737 | 1.2188     | .2796       |
| B      | 20     | 2.9    | 1.2524     | .28         |

Unpaired t-Test X<sub>1</sub> : GROUP Y 27 : 27

|     |                   |                 |
|-----|-------------------|-----------------|
| DF: | Unpaired t Value: | Prob. (2-tail): |
| 37  | .7132             | .4802           |

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.2105 | 1.1343     | .2602       |
| B      | 20     | 1.95   | 1.1459     | .2562       |

Unpaired t-Test X<sub>1</sub> : GROUP Y 28 : 28

|     |                   |                 |
|-----|-------------------|-----------------|
| DF: | Unpaired t Value: | Prob. (2-tail): |
| 37  | -1.1604           | .2533           |

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.2105 | 1.2727     | .292        |
| B      | 20     | 2.65   | 1.0894     | .2436       |

Unpaired t-Test X 1 : GROUP Y 29 : 29

|     |                   |                 |
|-----|-------------------|-----------------|
| DF: | Unpaired t Value: | Prob. (2-tail): |
| 37  | -.618             | .5404           |

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.1579 | 1.3443     | .3084       |
| B      | 20     | 2.4    | 1.0954     | .2449       |

Unpaired t-Test X 1 : GROUP Y 30 : 30

|     |                   |                 |
|-----|-------------------|-----------------|
| DF: | Unpaired t Value: | Prob. (2-tail): |
| 37  | -.7809            | .4398           |

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.8421 | 1.5728     | .3608       |
| B      | 20     | 3.2    | 1.2814     | .2865       |

Unpaired t-Test X 1 : GROUP Y 31 : 31

|     |                   |                 |
|-----|-------------------|-----------------|
| DF: | Unpaired t Value: | Prob. (2-tail): |
| 37  | 2.6335            | .0123           |

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.7368 | 1.2842     | .2946       |
| B      | 20     | 1.7    | 1.1743     | .2626       |

Unpaired t-Test X 1 : GROUP Y 32 : 32

|     |                   |                 |
|-----|-------------------|-----------------|
| DF: | Unpaired t Value: | Prob. (2-tail): |
| 37  | -.1346            | .8936           |

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.8947 | 1.2865     | .2951       |
| B      | 20     | 2.95   | 1.2763     | .2854       |

Unpaired t-Test X<sub>1</sub> : GROUP Y 33 : 33

DF: Unpaired t Value: Prob. (2-tail):

|    |         |       |
|----|---------|-------|
| 37 | -1.0267 | .3112 |
|----|---------|-------|

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.6316 | 1.3829     | .3172       |
| B      | 20     | 3      | .7947      | .1777       |

Unpaired t-Test X<sub>1</sub> : GROUP Y 34 : 34

DF: Unpaired t Value: Prob. (2-tail):

|    |       |       |
|----|-------|-------|
| 37 | .2956 | .7692 |
|----|-------|-------|

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 3.3158 | .671       | .1539       |
| B      | 20     | 3.25   | .7164      | .1602       |

Unpaired t-Test X<sub>1</sub> : GROUP Y 35 : 35

DF: Unpaired t Value: Prob. (2-tail):

|    |       |      |
|----|-------|------|
| 37 | -.313 | .756 |
|----|-------|------|

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.7895 | 1.0842     | .2487       |
| B      | 20     | 2.9    | 1.1192     | .2503       |

Unpaired t-Test X<sub>1</sub> : GROUP Y 36 : 36

DF: Unpaired t Value: Prob. (2-tail):

|    |        |       |
|----|--------|-------|
| 37 | 2.8733 | .0067 |
|----|--------|-------|

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.9474 | 1.2681     | .2909       |
| B      | 20     | 1.65   | 1.5313     | .3424       |

**Unpaired t-Test X<sub>1</sub> : GROUP Y 37 : 37**

|     |                   |                 |
|-----|-------------------|-----------------|
| DF: | Unpaired t Value: | Prob. (2-tail): |
| 37  | -1.0224           | .3132           |

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 3.3684 | .5973      | .137        |
| B      | 20     | 3.55   | .5104      | .1141       |

**Unpaired t-Test X<sub>1</sub> : GROUP Y 38 : 38**

|     |                   |                 |
|-----|-------------------|-----------------|
| DF: | Unpaired t Value: | Prob. (2-tail): |
| 37  | -1.2968           | .2027           |

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.2105 | 1.3157     | .3018       |
| B      | 20     | 2.7    | 1.0311     | .2306       |

**Unpaired t-Test X<sub>1</sub> : GROUP Y 39 : 39**

|     |                   |                 |
|-----|-------------------|-----------------|
| DF: | Unpaired t Value: | Prob. (2-tail): |
| 37  | -1.5434           | .1312           |

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 3.0526 | .8481      | .1946       |
| B      | 20     | 3.45   | .7592      | .1698       |

**Unpaired t-Test X<sub>1</sub> : GROUP Y 40 : 40**

|     |                   |                 |
|-----|-------------------|-----------------|
| DF: | Unpaired t Value: | Prob. (2-tail): |
| 37  | -.7165            | .4782           |

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.8947 | .6578      | .1509       |
| B      | 20     | 3.1    | 1.0712     | .2395       |

Unpaired t-Test X 1 : GROUP Y 41 : 41

|     |                   |                 |
|-----|-------------------|-----------------|
| DF: | Unpaired t Value: | Prob. (2-tail): |
| 37  | -3.075            | .0039           |

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 1.9474 | 1.3934     | .3197       |
| B      | 20     | 3.25   | 1.2513     | .2798       |

Unpaired t-Test X 1 : GROUP Y 42 : 42

|     |                   |                 |
|-----|-------------------|-----------------|
| DF: | Unpaired t Value: | Prob. (2-tail): |
| 37  | -2.6148           | .0128           |

| Group: | Count: | Mean:  | Std. Dev.: | Std. Error: |
|--------|--------|--------|------------|-------------|
| A      | 19     | 2.0526 | 1.3934     | .3197       |
| B      | 20     | 3.15   | 1.2258     | .2741       |

## X1: 1

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 3.4211   | .7685      | .1763       | .5906     | 22.4648      | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | * Missing: |
| 1        | 4          | 3           | 65        | 233          | 0          |

## X2: 2

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 3.2105   | .9763      | .224        | .9532     | 30.4102      | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | * Missing: |
| 0        | 4          | 4           | 61        | 213          | 0          |

## X3: 3

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 2.5789   | 1.1698     | .2684       | 1.3684    | 45.3594      | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | * Missing: |
| 0        | 4          | 4           | 49        | 151          | 0          |

## X4: 4

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 2.2105   | 1.3572     | .3114       | 1.8421    | 61.399       | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | * Missing: |
| 0        | 4          | 4           | 42        | 126          | 0          |

## X5: 5

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 2.9474   | 1.1291     | .259        | 1.2749    | 38.3086      | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | * Missing: |
| 0        | 4          | 4           | 56        | 188          | 0          |

X6: 6

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:     | Count:     |
|----------|------------|-------------|-----------|-----------------|------------|
| 2.5263   | 1.0733     | .2462       | 1.152     | 42.4862         | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squares: | * Missing: |
| 0        | 4          | 4           | 48        | 142             | 0          |

X7: 7

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:     | Count:     |
|----------|------------|-------------|-----------|-----------------|------------|
| 3.3684   | .7609      | .1746       | .5789     | 22.5888         | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squares: | * Missing: |
| 2        | 4          | 2           | 64        | 226             | 0          |

X8: 8

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:     | Count:     |
|----------|------------|-------------|-----------|-----------------|------------|
| 3        | 1.1547     | .2649       | 1.3333    | 38.49           | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squares: | * Missing: |
| 0        | 4          | 4           | 57        | 195             | 0          |

X9: 9

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:     | Count:     |
|----------|------------|-------------|-----------|-----------------|------------|
| 1.9474   | 1.2681     | .2909       | 1.6082    | 65.1209         | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squares: | * Missing: |
| 0        | 4          | 4           | 37        | 101             | 0          |

X10: 10

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:     | Count:     |
|----------|------------|-------------|-----------|-----------------|------------|
| 2.2632   | 1.2842     | .2946       | 1.6491    | 56.7429         | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squares: | * Missing: |
| 0        | 4          | 4           | 43        | 127             | 0          |

X<sub>11</sub>: 11

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 2.3684   | 1.0651     | .2444       | 1.1345    | 44.9722      | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | * Missing: |
| 1        | 4          | 3           | 45        | 127          | 0          |

X<sub>12</sub>: 12

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 2.3158   | 1.0569     | .2425       | 1.117     | 45.6373      | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | * Missing: |
| 1        | 4          | 3           | 44        | 122          | 0          |

X<sub>13</sub>: 13

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 2.8947   | 1.1002     | .2524       | 1.2105    | 38.0083      | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | * Missing: |
| 0        | 4          | 4           | 55        | 181          | 0          |

X<sub>14</sub>: 14

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 3.0526   | .9703      | .2226       | .9415     | 31.7863      | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | * Missing: |
| 0        | 4          | 4           | 58        | 194          | 0          |

X<sub>15</sub>: 15

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 2.4211   | .9612      | .2205       | .924      | 39.7033      | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | * Missing: |
| 0        | 4          | 4           | 46        | 128          | 0          |

## X16: 16

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 2.9474   | .9703      | .2226       | .9415     | 32.9216      | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | * Missing: |
| 0        | 4          | 4           | 56        | 182          | 0          |

## X17: 17

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 1.3684   | 1.1161     | .256        | 1.2456    | 81.559       | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | * Missing: |
| 0        | 4          | 4           | 26        | 58           | 0          |

## X18: 18

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 2.5263   | 1.3486     | .3094       | 1.8187    | 53.382       | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | * Missing: |
| 0        | 4          | 4           | 48        | 154          | 0          |

## X19: 19

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 3.1579   | .6882      | .1579       | .4737     | 21.7945      | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | * Missing: |
| 1        | 4          | 3           | 60        | 198          | 0          |

## X20: 20

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 2.6842   | 1.2933     | .2967       | 1.6725    | 48.1802      | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | * Missing: |
| 0        | 4          | 4           | 51        | 167          | 0          |

## X21 : 21

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:    | Count:     |
|----------|------------|-------------|-----------|----------------|------------|
| 2.5263   | .8412      | .193        | .7076     | 33.2971        | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squar.: | * Missing: |
| 1        | 4          | 3           | 48        | 134            | 0          |

## X22 : 22

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:    | Count:     |
|----------|------------|-------------|-----------|----------------|------------|
| 2.8947   | 1.1002     | .2524       | 1.2105    | 38.0083        | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squar.: | * Missing: |
| 0        | 4          | 4           | 55        | 181            | 0          |

## X23 : 23

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:    | Count:     |
|----------|------------|-------------|-----------|----------------|------------|
| 1.8421   | 1.0679     | .245        | 1.1404    | 57.9702        | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squar.: | * Missing: |
| 0        | 4          | 4           | 35        | 85             | 0          |

## X24 : 24

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:    | Count:     |
|----------|------------|-------------|-----------|----------------|------------|
| 2.3684   | 1.3        | .2982       | 1.6901    | 54.8898        | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squar.: | * Missing: |
| 0        | 4          | 4           | 45        | 137            | 0          |

## X25 : 25

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:    | Count:     |
|----------|------------|-------------|-----------|----------------|------------|
| 3.1053   | .8093      | .1857       | .655      | 26.0623        | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squar.: | * Missing: |
| 1        | 4          | 3           | 59        | 195            | 0          |

## X26 : 26

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 2.4737   | 1.2188     | .2796       | 1.4854    | 49.2691      | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | # Missing: |
| 0        | 4          | 4           | 47        | 143          | 0          |

## X27 : 27

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 2.2105   | 1.1343     | .2602       | 1.2865    | 51.3118      | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | # Missing: |
| 0        | 4          | 4           | 42        | 116          | 0          |

## X28 : 28

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 2.2105   | 1.2727     | .292        | 1.6199    | 57.5766      | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | # Missing: |
| 0        | 4          | 4           | 42        | 122          | 0          |

## X29 : 29

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 2.1579   | 1.3443     | .3084       | 1.807     | 62.2947      | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | # Missing: |
| 0        | 4          | 4           | 41        | 121          | 0          |

## X30 : 30

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 2.8421   | 1.5728     | .3608       | 2.4737    | 55.3391      | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | # Missing: |
| 0        | 4          | 4           | 54        | 198          | 0          |

## X31 : 31

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:    | Count:     |
|----------|------------|-------------|-----------|----------------|------------|
| 2.7368   | 1.2842     | .2946       | 1.6491    | 46.922         | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squar.: | * Missing: |
| 0        | 4          | 4           | 52        | 172            | 0          |

## X32 : 32

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:    | Count:     |
|----------|------------|-------------|-----------|----------------|------------|
| 2.8947   | 1.2865     | .2951       | 1.655     | 44.4412        | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squar.: | * Missing: |
| 0        | 4          | 4           | 55        | 189            | 0          |

## X33 : 33

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:    | Count:     |
|----------|------------|-------------|-----------|----------------|------------|
| 2.6316   | 1.3829     | .3172       | 1.9123    | 52.5484        | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squar.: | * Missing: |
| 0        | 4          | 4           | 50        | 166            | 0          |

## X34 : 34

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:    | Count:     |
|----------|------------|-------------|-----------|----------------|------------|
| 3.3158   | .671       | .1539       | .4503     | 20.2377        | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squar.: | * Missing: |
| 2        | 4          | 2           | 63        | 217            | 0          |

## X35 : 35

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:    | Count:     |
|----------|------------|-------------|-----------|----------------|------------|
| 2.7895   | 1.0842     | .2487       | 1.1754    | 38.8667        | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squar.: | * Missing: |
| 0        | 4          | 4           | 53        | 169            | 0          |

## X36 : 36

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 2.9474   | 1.2681     | .2909       | 1.6082    | 43.0263      | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | # Missing: |
| 0        | 4          | 4           | 56        | 194          | 0          |

## X37 : 37

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 3.3684   | .5973      | .137        | .3567     | 17.7313      | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | # Missing: |
| 2        | 4          | 2           | 64        | 222          | 0          |

## X38 : 38

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 2.2105   | 1.3157     | .3018       | 1.731     | 59.5185      | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | # Missing: |
| 0        | 4          | 4           | 42        | 124          | 0          |

## X39 : 39

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 3.0526   | .8481      | .1946       | .7193     | 27.7831      | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | # Missing: |
| 1        | 4          | 3           | 58        | 190          | 0          |

## X40 : 40

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 2.8947   | .6578      | .1509       | .4327     | 22.7253      | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | # Missing: |
| 2        | 4          | 2           | 55        | 167          | 0          |

## X 41 : 41

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 1.9474   | 1.3934     | .3197       | 1.9415    | 71.5522      | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | * Missing: |
| 0        | 4          | 4           | 37        | 107          | 0          |

## X 42 : 42

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 2.0526   | 1.3934     | .3197       | 1.9415    | 67.8828      | 19         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | * Missing: |
| 0        | 4          | 4           | 39        | 115          | 0          |

X<sub>1</sub>: 1

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:     | Count:     |
|----------|------------|-------------|-----------|-----------------|------------|
| 3        | .9177      | .2052       | .8421     | 30.5888         | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squares: | * Missing: |
| 1        | 4          | 3           | 60        | 196             | 0          |

X<sub>2</sub>: 2

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:     | Count:     |
|----------|------------|-------------|-----------|-----------------|------------|
| 3.1      | .9119      | .2039       | .8316     | 29.4164         | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squares: | * Missing: |
| 1        | 4          | 3           | 62        | 208             | 0          |

X<sub>3</sub>: 3

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:     | Count:     |
|----------|------------|-------------|-----------|-----------------|------------|
| 1.9      | .9679      | .2164       | .9368     | 50.9424         | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squares: | * Missing: |
| 0        | 4          | 4           | 38        | 90              | 0          |

X<sub>4</sub>: 4

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:     | Count:     |
|----------|------------|-------------|-----------|-----------------|------------|
| 2.55     | 1.3945     | .3118       | 1.9447    | 54.6878         | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squares: | * Missing: |
| 0        | 4          | 4           | 51        | 167             | 0          |

X<sub>5</sub>: 5

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:     | Count:     |
|----------|------------|-------------|-----------|-----------------|------------|
| 2.6      | .8826      | .1974       | .7789     | 33.9454         | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squares: | * Missing: |
| 0        | 4          | 4           | 52        | 150             | 0          |

X<sub>6</sub>: 6

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:     | Count:     |
|----------|------------|-------------|-----------|-----------------|------------|
| 2.6      | 1.0463     | .234        | 1.0947    | 40.2422         | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squares: | # Missing: |
| 0        | 4          | 4           | 52        | 156             | 0          |

X<sub>7</sub>: 7

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:     | Count:     |
|----------|------------|-------------|-----------|-----------------|------------|
| 3.4      | .9403      | .2103       | .8842     | 27.6566         | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squares: | # Missing: |
| 0        | 4          | 4           | 68        | 248             | 0          |

X<sub>8</sub>: 8

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:     | Count:     |
|----------|------------|-------------|-----------|-----------------|------------|
| 3.05     | 1.1459     | .2562       | 1.3132    | 37.5715         | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squares: | # Missing: |
| 0        | 4          | 4           | 61        | 211             | 0          |

X<sub>9</sub>: 9

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:     | Count:     |
|----------|------------|-------------|-----------|-----------------|------------|
| 3.2      | .8335      | .1864       | .6947     | 26.0471         | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squares: | # Missing: |
| 1        | 4          | 3           | 64        | 218             | 0          |

X<sub>10</sub>: 10

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:     | Count:     |
|----------|------------|-------------|-----------|-----------------|------------|
| 2.5      | 1.0513     | .2351       | 1.1053    | 42.0526         | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squares: | # Missing: |
| 0        | 4          | 4           | 50        | 146             | 0          |

X<sub>11</sub>: 11

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:     | Count:     |
|----------|------------|-------------|-----------|-----------------|------------|
| 3        | .9733      | .2176       | .9474     | 32.4443         | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squares: | # Missing: |
| 1        | 4          | 3           | 60        | 198             | 0          |

X<sub>12</sub>: 12

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:     | Count:     |
|----------|------------|-------------|-----------|-----------------|------------|
| 2        | .9177      | .2052       | .8421     | 45.8831         | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squares: | # Missing: |
| 0        | 4          | 4           | 40        | 96              | 0          |

X<sub>13</sub>: 13

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:     | Count:     |
|----------|------------|-------------|-----------|-----------------|------------|
| 2.45     | .9987      | .2233       | .9974     | 40.7626         | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squares: | # Missing: |
| 0        | 4          | 4           | 49        | 139             | 0          |

X<sub>14</sub>: 14

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:     | Count:     |
|----------|------------|-------------|-----------|-----------------|------------|
| 3.2      | .8335      | .1864       | .6947     | 26.0471         | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squares: | # Missing: |
| 2        | 4          | 2           | 64        | 218             | 0          |

X<sub>15</sub>: 15

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:     | Count:     |
|----------|------------|-------------|-----------|-----------------|------------|
| 2.55     | .8256      | .1846       | .6816     | 32.3756         | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squares: | # Missing: |
| 1        | 4          | 3           | 51        | 143             | 0          |

## GROUP B

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## X16:16

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:     | Count:     |
|----------|------------|-------------|-----------|-----------------|------------|
| 2.9      | .9679      | .2164       | .9368     | 33.3761         | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squares: | # Missing: |
| 1        | 4          | 3           | 58        | 186             | 0          |

## X17:17

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:     | Count:     |
|----------|------------|-------------|-----------|-----------------|------------|
| 1.65     | .9881      | .2209       | .9763     | 59.8841         | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squares: | # Missing: |
| 0        | 4          | 4           | 33        | 73              | 0          |

## X18:18

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:     | Count:     |
|----------|------------|-------------|-----------|-----------------|------------|
| 2.35     | 1.1367     | .2542       | 1.2921    | 48.3706         | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squares: | # Missing: |
| 0        | 4          | 4           | 47        | 135             | 0          |

## X19:19

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:     | Count:     |
|----------|------------|-------------|-----------|-----------------|------------|
| 3.1      | .9679      | .2164       | .9368     | 31.2228         | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squares: | # Missing: |
| 1        | 4          | 3           | 62        | 210             | 0          |

## X20:20

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:     | Count:     |
|----------|------------|-------------|-----------|-----------------|------------|
| 2.25     | 1.2085     | .2702       | 1.4605    | 53.7121         | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squares: | # Missing: |
| 0        | 4          | 4           | 45        | 129             | 0          |

## GROUP B

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## X21 : 21

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:    | Count:     |
|----------|------------|-------------|-----------|----------------|------------|
| 2.6      | 1.0954     | .2449       | 1.2       | 42.1325        | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squar.: | * Missing: |
| 0        | 4          | 4           | 52        | 158            | 0          |

## X22 : 22

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:    | Count:     |
|----------|------------|-------------|-----------|----------------|------------|
| 2.7      | .8013      | .1792       | .6421     | 29.6783        | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squar.: | * Missing: |
| 1        | 4          | 3           | 54        | 158            | 0          |

## X23 : 23

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:    | Count:     |
|----------|------------|-------------|-----------|----------------|------------|
| 2.5      | .8885      | .1987       | .7895     | 35.5409        | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squar.: | * Missing: |
| 1        | 4          | 3           | 50        | 140            | 0          |

## X24 : 24

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:    | Count:     |
|----------|------------|-------------|-----------|----------------|------------|
| 1.6      | .9403      | .2103       | .8842     | 58.7703        | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squar.: | * Missing: |
| 0        | 3          | 3           | 32        | 68             | 0          |

## X25 : 25

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:    | Count:     |
|----------|------------|-------------|-----------|----------------|------------|
| 2.8      | 1.0563     | .2362       | 1.1158    | 37.7253        | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squar.: | * Missing: |
| 1        | 4          | 3           | 56        | 178            | 0          |

## X26 : 26

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 2.9      | 1.2524     | .28         | 1.5684    | 43.185       | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | # Missing: |
| 0        | 4          | 4           | 58        | 198          | 0          |

## X27 : 27

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 1.95     | 1.1459     | .2562       | 1.3132    | 58.7657      | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | # Missing: |
| 0        | 4          | 4           | 39        | 101          | 0          |

## X28 : 28

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 2.65     | 1.0894     | .2436       | 1.1868    | 41.1103      | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | # Missing: |
| 0        | 4          | 4           | 53        | 163          | 0          |

## X29 : 29

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 2.4      | 1.0954     | .2449       | 1.2       | 45.6435      | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | # Missing: |
| 0        | 4          | 4           | 48        | 138          | 0          |

## X30 : 30

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 3.2      | 1.2814     | .2865       | 1.6421    | 40.0452      | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | # Missing: |
| 0        | 4          | 4           | 64        | 236          | 0          |

## X31 : 31

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.: | Count:     |
|----------|------------|-------------|-----------|-------------|------------|
| 12.7     | 49.2781    | 11.0189     | 2428.3263 | 388.0162    | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squ. | # Missing: |
| 0        | 222        | 222         | 254       | 49364       | 0          |

## X32 : 32

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.: | Count:     |
|----------|------------|-------------|-----------|-------------|------------|
| 2.95     | 1.2763     | .2854       | 1.6289    | 43.2645     | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squ. | # Missing: |
| 0        | 4          | 4           | 59        | 205         | 0          |

## X33 : 33

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.: | Count:     |
|----------|------------|-------------|-----------|-------------|------------|
| 3        | .7947      | .1777       | .6316     | 26.4906     | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squ. | # Missing: |
| 2        | 4          | 2           | 60        | 192         | 0          |

## X34 : 34

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.: | Count:     |
|----------|------------|-------------|-----------|-------------|------------|
| 3.25     | .7164      | .1602       | .5132     | 22.0416     | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squ. | # Missing: |
| 2        | 4          | 2           | 65        | 221         | 0          |

## X35 : 35

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.: | Count:     |
|----------|------------|-------------|-----------|-------------|------------|
| 2.9      | 1.1192     | .2503       | 1.2526    | 38.5935     | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Squ. | # Missing: |
| 0        | 4          | 4           | 58        | 192         | 0          |

## X36 : 36

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 1.65     | 1.5313     | .3424       | 2.3447    | 92.8032      | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | * Missing: |
| 0        | 4          | 4           | 33        | 99           | 0          |

## X37 : 37

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 3.55     | .5104      | .1141       | .2605     | 14.378       | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | * Missing: |
| 3        | 4          | 1           | 71        | 257          | 0          |

## X38 : 38

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 2.7      | 1.0311     | .2306       | 1.0632    | 38.1887      | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | * Missing: |
| 0        | 4          | 4           | 54        | 166          | 0          |

## X39 : 39

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 3.45     | .7592      | .1698       | .5763     | 22.0045      | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | * Missing: |
| 2        | 4          | 2           | 69        | 249          | 0          |

## X40 : 40

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 3.1      | 1.0712     | .2395       | 1.1474    | 34.5533      | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | * Missing: |
| 0        | 4          | 4           | 62        | 214          | 0          |

X 41 : 41

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 3.25     | 1.2513     | .2798       | 1.5658    | 38.502       | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | * Missing: |
| 0        | 4          | 4           | 65        | 241          | 0          |

X 42 : 42

| Mean:    | Std. Dev.: | Std. Error: | Variance: | Coef. Var.:  | Count:     |
|----------|------------|-------------|-----------|--------------|------------|
| 3.15     | 1.2258     | .2741       | 1.5026    | 38.9149      | 20         |
| Minimum: | Maximum:   | Range:      | Sum:      | Sum of Sqr.: | * Missing: |
| 0        | 4          | 4           | 63        | 227          | 0          |

APPENDIX R  
PHYSICAL EDUCATION SCHOOL TIME STRUCTURE

Physical Education School Time Structure.

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| Grade                    | No. of times in a<br>6 day cycle | Length of time per<br>class |
|--------------------------|----------------------------------|-----------------------------|
| 7                        | 3                                | 42 minute periods           |
| 8                        | 3                                | "                           |
| 9                        | 4                                | "                           |
| 105 - full credit (10)   | 5                                | "                           |
| 101 - half credit (10)   | 3                                | "                           |
| 205 - full credit (11)   | 5                                | "                           |
| 201 - half credit (11)   | 3                                | "                           |
| Leadership Program - 305 | 5                                | "                           |

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Note:

- A) Every student in grades 7 to 11 must take physical education.
- B) St. John's High School is not a semester school; therefore students take physical education from September to June.
- C) Leadership Program - 305 is an option course.