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THE UNIVERSITY OF ALBERTA

PARTICIPATION IN PHYSICAL ACTIVITY
BY DISABLED FEMALES IN CANADA

BY

KAREN ANNE CALZONETTI

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF SCIENCE

DEPARTMENT OF PHYSICAL EDUCATION AND SPORT STUDIES

EDMONTON, ALBERTA

FALL, 1988

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ISBN 0-315-45620-5

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IN CANADA

DEGREE: MASTER OF SCIENCE

YEAR THIS DEGREE GRANTED: 1988

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled PARTICIPATION IN PHYSICAL ACTIVITY BY DISABLED FEMALES IN CANADA submitted by KAREN ANNE CALZONETTI in partial fulfilment of the requirements for the degree of MASTER OF SCIENCE.

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Date:

DEDICATION

To MacDuff

ABSTRACT

There are 2.7 million disabled people in Canada, more than half of whom are female (Canadian Health and Disability Survey, 1985). Despite these statistics, very few studies on physical activity participation have specifically addressed the physically disabled female.

The purpose of this study was to examine the physical activity patterns and physical activity needs of physically disabled females in Canada. A survey was designed to tap the feelings of disabled women concerning their participation status with a view to improving the opportunities available to disabled females in Canada.

Results from this study reveal a number of factors which affect participation (or the lack of it) in physical activity by disabled females. Although the women surveyed had positive attitudes toward physical activity, their own degree of involvement in physical activity did not always reflect this attitude. Furthermore, the physical activity patterns which were demonstrated, and the activity needs which were expressed may be attributed to gender and disability.

The disabled women surveyed participate in many of the same physical activities as able-bodied women and for many of the same reasons. The barriers to participation are among the same constraints also expressed by able-bodied women in previous studies.

A lack of information on available programs was among the most constraining factor to participation in physical activity. Less than 5% of those surveyed found out about existing physical activity programs for the disabled through the school system. Over half of the inactive respondents said they would be more physically active if more programs were made available.

Results showed a preference for physical activities in an integrated setting. Well over half of physically disabled females said they felt encouraged to participate in physical activity when watching other disabled individuals participate. They felt discouraged by the notion of participation solely for rehabilitative reasons.

Overall this study revealed that the physical activity patterns and needs of disabled females are a reflection of many situational and socialization factors common to all women. These factors, such as age, socio-economic status and past experiences in physical activity affect and help explain the degree of involvement and participation.

In light of this point, and the descriptive data gathered from this study, there are many implications for application to physical activity programs for the physically disabled female participant.

ACKNOWLEDGEMENTS

I would like to express my greatest thanks to my advisor Dr. Jane Watkinson for her tremendous insight, guidance and encouragement during my time as a graduate student. Thank you for your friendship Jane.

I would also like to thank the other members of my committee for their valuable contribution of time and ideas. Dr. Brian Nielsen for his thought provoking questions and his spirit of optimism. And Val Blakely for her expertise in the field of barriers and constraints to participation in physical activity. A special note of interest to my entire committee... I have now successfully mastered the fine technique of cutlery balance and am presently seeking ways to parlay this skill into a valuable commodity.

Next, to the people I have met during my years at the University of Alberta, whose friendships I have shared and whose homes I have been welcomed in, I express a very special heartfelt thank you.

To members of the "Ladies Auxiliary Club" and the times shared in the company of good food and laughter, I say thank you. To Mireille and Francoise for their kindness, merci beaucoup.

To my family, Lisa, Erik, (and their children), Mark, Barb, Catharine, Adam, Kyla and Michael for their love and incredible spirit.

Lastly, and most importantly, to my parents Vince and Norma, who taught me to believe in myself. I love you all the flowers in the world.

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CHAPTER I

INTRODUCTION

Physical activity is known to be physiologically and/or psychologically beneficial for several well documented reasons (Astrand and Rodahl, 1970; Getchell, 1976; Snyder and Spreitzer, 1978). Researchers have shown that physically disabled individuals who choose to participate enjoy these same benefits (Cantu, 1980; Obstacles Report, 1982; Sullivan, 1984). Canadian statistics however, indicate the number of physically disabled individuals participating in physical activity is low. In comparison to the able-bodied population, the rate of participation amongst physically disabled females is particularly low (Licker, 1979; Canada Fitness Survey, 1986).

The factors influencing participation in physical activity are complex, even more so in the disabled population. Canada Fitness Survey results indicate that although disabled Canadians are somewhat less "active" than the overall Canadian population, they are similar in terms of attitudes and selected lifestyle behaviors concerning participation in physical activity (Canada Fitness Survey, 1986). Additional research indicate physical activity patterns which are unique to the physically disabled population (Kegel, Webster and Burgess, 1980; Sherrill, 1984; Dickinson and Perkins, 1985). The disabled participant is often faced with stereotypic notions surrounding involvement in physical activity. The questions of integration and segregation in physical activity (Lewko, 1981; Marshall, 1983; Brandmeyer and McBee, 1984) and participation solely for therapeutic or rehabilitative reasons (Orr,

1981; Beaver, 1982; Clarke, 1986), are examples of all too familiar issues encountered by many physically disabled individuals.

Other studies point to the glaring inequities existing in Canadian society which lead to barriers and constraints to participation and often inhibit or prevent involvement in physical activity by disabled individuals (Hutchison and Lord, 1979; Hutchison, 1980; Special Committee on the Disabled and the Handicapped, 1982; Grimes and French, 1987).

With respect to the physically disabled female these barriers and constraints are particularly severe because she is "doubly disadvantaged", one because she is female in a male dominated world, and two because she is disabled in an able-bodied world (Canadian Advisory Council on the Status of Women, 1980). The physically disabled female inherits patterns of physical activity characteristic of both the female and disabled population, patterns which encompass both positive and negative issues associated with participation in physical activity.

Despite the fact that an estimated 1.4 million females in Canada are disabled (Report on the Canadian Health and Disability Survey, 1983-1984) there is a tremendous lack of information available concerning physical activity and the disabled female. Rarely have disabled females been included in studies as a group to be researched in their own right. Instead, much of the knowledge obtained to date is based on assumptions inferred from the able-bodied population, both male and female, or the more often studied physically disabled male. In order to correctly assess the physical activity patterns and physical activity needs of physically disabled females, studies on this specific population must be

undertaken. It is hoped that the following study will provide useful insight into the future development of effective physical activity programs for physically disabled females, and perhaps make the reader more sensitive to aspects of physical activity as they pertain to disabled women.

STATEMENT OF THE PROBLEM

The purpose of this study was to identify the physical activity patterns and physical activity needs of physically disabled females in Canada. Specific problems were as follows:

1. To determine and describe present physical activity patterns of physically disabled females;
2. To determine and describe the needs and desires of physically disabled females for physical activity programming;
3. To determine and describe the barriers and constraints to participation in physical activity for physically disabled females; and
4. To determine and describe additional pertinent issues affecting the participation status of physically disabled females.

JUSTIFICATION OF THE STUDY

A recent Canada Fitness Survey reported that 47% of the disabled adult population indicated that nothing would increase their level of activity (Canada Fitness Survey, 1986, p. 23). As suggested by the Minister of Sport and Fitness, Otto Jelinek, in a news release communique of March 26, 1986, "We need a better understanding of the reasons why so many Canadians with a disability do not want to increase their levels of physical activity. We must develop new incentives to address the perceived needs of those who want to be more active."

Believing that the leisure and physical activity needs of the disabled are largely unmet (Patterson, 1981), this study may be further justified by one of the recommendations which grew out of the Research Priority Conference held in 1981. This recommendation stated the need for "assessment and development of strategies to overcome psychosocial barriers to participation by disabled populations" (Report of the Research Priority Development Conference, 1981, p. 8).

The need to be selectively concerned with physically disabled females stems from the fact that several sources deal with the general issues related to women and disability, but rarely deal specifically with physical activity-related issues (Resources for Feminist Research, 1985). Given that participation patterns amongst able-bodied individuals vary considerably by gender (Hall, 1976; 1978), it seems reasonable to assume that differences in participation patterns between disabled females and males may also exist.

In order to identify the many issues surrounding physical activity and disabled females in Canada, it was recognized that the collection of

data on factors affecting participation was necessary. Although it is impossible to determine causal relationships from descriptive studies, it was accepted that this descriptive information would contribute an understanding of the status of participation in physical activity by disabled females; and perhaps even provide some direction in terms of the promotion and development of participation in physical activity by physically disabled females.

As a result, Watkinson and Calzonetti, in 1987, directed a nationwide study sponsored by Fitness and Amateur Sport Women's Program and the Canadian Federation of Sport Organizations for the Disabled (C.F.S.O.D.). This study investigated the physical activity patterns and needs of physically disabled females, aged 10 and up, across Canada. Survey techniques were used to gather the data. The research presented in this thesis is part of this larger study.

DEFINITIONS

Physical Activity

For the purpose of this study, physical activity refers to those experiences derived through sporting or other physical recreation activities, pursued for pleasure and/or competitive purposes, which require an expenditure of physical energy and lead to the improvement of physical well being and a healthy lifestyle.

Physical Disability

For the purpose of this study, physical disability refers to any

persons who have permanent or long term sensory and/or motor impairment resulting in a loss or abnormality of physiological or anatomical structure or function. This includes individuals with spinal cord impairments, cerebral palsy, spina bifida, polio, amputations, auditory or visual impairments.

Within the context of this study, the concept of physical disability does not include individuals recovering from temporary medical conditions (e.g. fractures) or mental handicaps.

Disabled

For the purpose of this study the term disabled is synonymous with the above defined 'physical disability', unless otherwise indicated.

LIMITATIONS

The study was limited by the representativeness of the sample due to the fact that a disproportionate number in each group was tested. Particularly underrepresented were females who had auditory or visual impairments, as well as those females under twenty and over forty years of age.

The validity of the responses to the questionnaire was dependent upon the ability of respondents to remember past and present involvements in physical activity participation, and to provide information which may have been (or often) considered personal.

The assumption that subject responses were truthful and knowledgeable was also an accepted limitation of the present study.

DELIMITATIONS

This study was delimited to physically disabled females registered with either a disabled sport association or a 'generic' disability association.

The study was also delimited to those associations which responded to initial inquiries by agreeing to provide membership lists or to circulate the questionnaire on behalf of the researcher.

CHAPTER II

REVIEW OF LITERATURE

Why do some women make sport and physical activity a significant aspect of their lifestyle, while some do not? More specifically and pertaining to this thesis, why do some disabled women make sport and physical activity a significant aspect of the lifestyle, while some do not?

The preceding question is a simple one. The answer, however, is considerably more complex. The study of physical activity and disabled women is further complicated by the fact that very little specific documentation in this area exists. There is also very little known about the extent to which disability affects women differently than men, and how this disability relates to physical activity participation. It was necessary, therefore, to gather information from a variety of sources in order to gain insight into physical activity and the disabled female.

The literature reviewed for this study was divided into three areas. The first section begins with a framework for studying participation in physical activity. This model (in part) forms the basic structure for the entire review of literature. Section one also includes a number of studies related to physical activity participation. Subheadings include Activity Choices Among Disabled Canadians, The Importance of Physical Activity to Disabled Canadians, and Becoming Involved in Physical Activity. The second area of review deals with the barriers and constraints to participation for disabled women seen from

both a general perspective and a physical activity related perspective. The final area of review discusses a series of pertinent issues which are related to and may affect the degree of involvement in physical activity by disabled women.

A MODEL FOR STUDYING PARTICIPATION IN PHYSICAL ACTIVITY

In 1974 M. Hall developed a theoretical framework to help explain female participation (or the lack of it) in physical activity. In this model she posited four major determinants of primary involvement in sport and physical activity among females: 1) socialization determinants; 2) dispositional determinants, 3) attitudinal determinants and 4) situational determinants.

The concern with the thesis was not to test the efficacy of Hall's model, but to use it (in part) as a framework for examining physical activity participation (or the lack of it) by disabled women. For the purpose of this thesis, therefore, only the situational and socialization determinants were considered.

Research by Hall (1982) and later by Gilverson (1981) indicated that situational and socialization factors both played major roles in determining the degree of involvement in physical activity for women: situational, in that present surroundings and perhaps lifestyle influence the extent of participation; and socializational, in that attitudes and values predetermine an individual's desire to participate. "Given the right conditions, socialization and situational factors provide the initial impetus, the continued support, and the present opportunity to be involved to a greater extent than is otherwise

possible" (Hall, 1976, p. 187).

Included within the situational determinants category are factors such as age, educational background, socio-economic status, and present family involvement in recreation. The variables related to the category of socialization determinants include the activity involvement of previous significant others, the respondent's activity level when younger and the enjoyment of school physical education (Hall, 1976).

The results from Hall's study found that women in contrast to men participate less frequently and in fewer numbers in a smaller number of sport and physical activities. She also discovered a high degree of association between present and past involvement in physical activity.

Additional studies concerned with physical activity patterns appear to reinforce the significance of factors associated with the situational and socialization determinants identified by Hall

A study by Hall and Richardson (1976) demonstrated a tendency for sport and physical activity involvement amongst the able-bodied population to:

1. Decline with age;
2. Vary directly with income;
3. Increase with educational status;
4. Be more popular amongst single persons compared to married persons; and
5. Be more popular amongst males than females.

General findings from a study by Lupton, Ostrove and Bozzo (1984) discovered similar tendencies. Able-bodied individuals who exercised on a fairly regular basis were more likely to be:

1. Younger as opposed to older persons;
2. Men more than women;
3. Persons with higher levels of education and income; and
4. Single parents more frequently than other parents with children.

Based on the above findings it appears that the factors within situational and socialization determinants play major roles which affect the degree of involvement in physical activity. The actual extent to which these factors affect physical activity participation by disabled women is unknown due to a lack of available literature in the area. The following sections, however, do provide evidence which appears to support the contention that the factors within situational and socialization determinants are equally important in influencing participation in physical activity amongst disabled women as they are for the able-bodied population.

ACTIVITY CHOICES AMONGST DISABLED CANADIANS

Physical Activity Among Activity-Limited and Disabled Adults in Canada (Canada Fitness Survey, 1986) was the first Canadian analysis of activity patterns exhibited by disabled individuals. As in two previous Canada Fitness surveys, Fitness and Lifestyle in Canada (1983) and

Changing Times: Women and Physical Activity (1984), this survey identified the factors associated with physical activity.

Comparisons between these three surveys revealed many similarities, as well as some telling differences, with respect to physical activity patterns reflected by activity-limited adults and able-bodied females. The most popular activity choices of disabled Canadians aged 10 and older were walking, gardening, biking, swimming, and home exercise; exactly the same as those activities chosen by women in the 1984 Study 'Changing Times'. Gilverson (1981) indicated similar popular activity choices amongst the women she surveyed in a study which looked at physical recreation patterns.

In the disability survey, 'other team sports' appealed to just 4% of disabled women and 13% of disabled men. It is interesting to note that organized sport was absent as an activity choice for able-bodied women surveyed in 'Changing Times', and also for disabled women questioned in the 1986 survey of activity-limited adults.

Other studies have indicated similar tendencies amongst women to be under-represented in team and organized sports (Hall, 1976). Rosemary Deem, in a 1982 study concerned with the theory of women's leisure participation, discovered that women participated in a limited range of sports compared with men. She suggested that this finding reflects a difference in the meaning of sport between men and women, as well as a difference in the physical education experiences offered to boys and girls within the school system. Other researchers have also indicated more limited opportunities for females to participate in physical activity compared to males (Greendorfer 1977; Best, 1983).

The 1984 and 1986 Canada Fitness Surveys indicated that home exercise was a popular choice for both able-bodied and disabled females, but not as popular for able-bodied or disabled males. Considering the female's traditional role as wife and mother this preference for, and prevalence of, home based leisure activities is not surprising. Studies, such as Deem's (1982), reflect this same pattern.

In summary, it was found that physical activity choices for disabled women are quite similar to those of able-bodied women (Canada Fitness Survey, 1983; Canada Fitness Survey, 1984; Canada Fitness Survey, 1986). Research also showed there are existing differences in physical activity patterns between disabled men and disabled women which appear to be gender-based rather than disability-based (Canada Fitness Survey, 1986). Furthermore, the affiliation of disabled women with able-bodied women appears to be a reflection of many of the stereotyped gender-related roles reported in the literature (Hall, 1976; 1978; Greendorfer, 1977, 1981; Deem, 1982).

IMPORTANCE OF PHYSICAL ACTIVITY TO DISABLED CANADIANS

In terms of fitness levels, the 1986 survey on disabled Canadians reported that of 22,000 people sampled from aged 10-plus, 50% were active, 28% were moderately active, and 20% were sedentary. Although the number of disabled Canadians in the active category closely paralleled the activity levels of able-bodied Canadians in other Canada Fitness Surveys, a greater number of disabled females were discovered in the sedentary category.

Licker (1979) found that the disabled as a group participated in

physical activity to a much smaller extent than the able-bodied. In fact, from a study involving over 900 respondents, participation in sports was ranked 22nd in a list of 27 leisure activities, and the median response in terms of frequency of participation in sports was never.

In a study which documented the recreational activities of amputees (Kegel, Webster and Burgess, 1980), gender did not play a significant role in determining whether or not individuals were active. Other studies have demonstrated that the number of able-bodied female participants in sport and recreational activities has actually increased in recent years (Stinson, 1984). This increase is still not equivalent to that of men however (Canada Fitness Survey, 1984).

Amongst sedentary disabled individuals who were surveyed, regular physical activity ranked last in a list of important health related factors. This result indicates an agreement in degree between behaviour and attitude for this group.

A significant gender-related fact regarding attitudes toward physical activity was noted in a Canada Fitness Survey Highlight Sheet (No. 57 - August, 1985). Physical Activity was ranked sixth amongst the factors contributing to well-being for girls, while it was ranked first for boys asked the same question.

A study by Dickinson and Perkins on disabled individuals (1985) found no significant sex differences concerning attitudes toward physical activity as reflected in its perceived importance as a part of life and as a contributor to health. They did, however, find that individuals surveyed in the active group rated physical activity as more

important than health, than did individuals surveyed in the inactive group.

The reasons for being active amongst disabled or activity-limited adults corresponded closely with the 1983 Lifestyle Fitness Survey and the 1984 Changing Times Survey. These reasons included 'to feel better', 'to improve flexibility', 'to control weight', 'to relax and reduce stress', and 'for pleasure and fun' (Canada Fitness Survey, 1986).

The only choice specifically related to therapy or rehabilitation was categorized as 'doctor's advice'. Amongst disabled and activity-limited females surveyed, this choice ranked fifth out of a possible ten responses; indicating that perhaps physical activity for therapeutic purposes was not a major concern.

In 1984, a study by Cooper surveyed 145 elite athletes with cerebral palsy to determine their reasons for participation in sports. Not one of the responses given was specifically related to therapy. The most frequently cited reasons in Cooper's study were similar to reasons echoed by able-bodied athletes (De Pauw, 1984), such as the 'challenge of competition', 'fun and enjoyment', 'love of sport', 'knowledge and skill about the sport', and 'fitness and health' (Cooper, 1984).

In summary, results indicated that disabled individuals, as a group, participate in physical activity to a smaller extent than the able-bodied (Licker, 1979; Canada Fitness Survey, 1983; Canada Fitness Survey, 1986). Disabled individuals who were physically active demonstrated positive attitudes towards activity, while disabled individuals who were physically inactive were considerably less enthused.

about physical activity (Kegel, Webster and Burgess, 1980; Dickinson and Perkins, 1985; Canada Fitness Survey, 1986). Similarities between able-bodied and disabled populations concerning the attitudes towards physical activity and the reasons for being active were also indicated (Cooper, 1984; De Pauw, 1986).

BECOMING INVOLVED IN PHYSICAL ACTIVITY

A study by Sherrill (1984) investigated the values a group of national level cerebral palsy and blind athletes believed they derived from participation in sport. Highly ranked for both disability groups were the benefits of 'fitness', 'socialization/friendships', 'self-concept/mental health', 'interesting/exciting use of leisure time', 'tension release/relaxation', and 'motor skills'.

A poll of athletes surveyed during the 1980 International Games for the Disabled by Ruckert showed that 75% of those questioned said sport had improved their social contact with non-handicapped people. No elaboration concerning the methods used and the interpretation given to this data was provided however (Ruckert, 1980).

Ruckert's study also reported findings which indicated the person(s) responsible for the athlete's involvement in sport. Twenty nine percent cited 'themselves', 27% cited both 'disabled and able-bodied friends', 9% cited their 'family', and 8% cited their 'physician'.

Amongst disabled Canadians surveyed in the 1986 Activity-Limited Survey there was a tendency for women to be active on their own. The main choices for companions in physical activity were 'no one' (41%),

followed by 'family/relatives' (29%) and 'friends' with 28% (Canada Fitness Survey, 1986).

While Sherrill's study (1984) and Ruckert's study (1980) indicated a strong affinity for social interaction amongst disabled athletes, this same affinity was not demonstrated by disabled individuals participating on a recreational basis. The fact that results showed a majority of disabled Canadians choose to exercise alone certainly reflects a need to examine the reasons for this 'preference' amongst recreational participants (Canada Fitness Survey, 1986).

Amongst disabled women surveyed in the 1986 report on activity-limited adults, the major changes to encourage greater participation in physical activity were 'more leisure time', 'people with whom to participate', 'better or closer facilities', 'less expensive facilities', and the 'common interest of the family'. Of these changes listed, the first three were identical to those reported in the 1984 Canada Fitness Survey: Changing Times.

By far the most alarming statistic from this question revealed that 47% of respondents said nothing would increase their level of activity (Physical Activity Among Activity-limited and Disabled Adults in Canada, 1986). Comparisons between disabled males and disabled females surveyed revealed no difference in this statistic. Why was the statistic reported so high amongst disabled Canadians? This statistic is even more worrisome when compared to previous surveys. Of the women surveyed in the 1984 Canada Fitness Survey, only 24% said 'nothing' would increase their level of activity.

A partial explanation for the prevailing feeling that nothing would

increase the level of activity amongst disabled Canadians may be understood by the definition used in the survey for 'disabled'. The Canada Fitness Survey on Activity-Limited and Disabled Adults identified functional disability according to activity-limitation. A disabled Canadian was defined as 'any individual who was limited in the type or amount of work or physical activity he or she could do because of a chronic or long-term illness or a permanent injury or handicap' (Report Preface, 1986). The definition used was quite broad and included individuals disabled in the traditional sense, as well as those limited by the effects of aging or other personal circumstances. By nature of the definition, therefore, some disabled individuals who did not feel personally limited by their handicap, in terms of their ability to engage in physical activity, may have been excluded from the survey.

The fact that a full 47% reported that nothing would increase their level of activity may not be so alarming when put into context with the definition, as well as other existing statistics from the study. The greatest percentage of activity-limited adults surveyed were 60 years of age or older and sedentary. Indeed, due to many chronic health related factors often associated with age, many of these individuals will always feel activity limited. Seen in this context the interpretation given to the expression 'nothing would increase their level of activity' is therefore less severe. Evidence notwithstanding, the fact remains that many disabled Canadians (particularly disabled females) are not as physically active as able-bodied Canadians.

The results of the studies which were reviewed in this chapter demonstrate the significance of situational and socialization factors

upon determining the degree of involvement in physical activity for disabled females. Disabled individuals are encouraged (or discouraged) to participate in physical activity by similar socialization processes as able-bodied individuals (Sherrill, 1984; Dickinson and Perkins, 1985).

Despite the fact that many women (able-bodied and disabled) have positive attitudes towards participation in sport and physical activity, results have demonstrated that their actual involvement is low (Hall, 1976; Thierfeld and Gibbons, 1986). Results of the studies reviewed suggest that this lack of involvement by disabled women in physical activity may not necessarily be a function of negative attitudes, but may be due to many of the factors alluded to by Hall (1976), such as socio-economic status and past involvements in physical activity.

BARRIERS AND CONSTRAINTS TO PARTICIPATION

I thought how unpleasant it is to be locked out; and

I thought how it is worse perhaps to be locked in.

Virginia Wolfe, *A Room of One's Own*, 1929

Disabled girls and women suffer under the double burden of barriers and constraints engendered through sex discrimination as well as those arising from disability. The theme of double jeopardy is a common one as evidenced by the literature (Fine and Asch, 1981; Thierfeld and Gibbons, 1986; Grimes and French, 1987). The following section deals with this theme in a general context and later examines its

applicability to participation in sport and physical activity.

* An article by Fine and Asch (1981) which examined the general status of disabled women in society today uncovered some rather grim realities: "disabled women are more likely to be unemployed than disabled men, somewhat less likely to be college educated, earn substantially less, and are less likely to find a job post-disability" (p. 234).

* Studies on the financial barriers encountered by disabled women in Canada report similar findings. Among groups of Canadians able to work, disabled persons have the highest unemployment rate. Results from the Report on the Canadian Health and Disability Survey in 1983-1984 indicated 54% of the disabled population earns less than \$10,000, including those with no income. Women tend to have lower incomes: Of the 216,000 disabled persons who reported no individual income, 80% were female. Additionally, 43% of disabled men compared to 62% of disabled women reported an income lower than \$10,000 (Profile of Disabled Persons in Canada, 1986, p. 20).

A study in Winnipeg entitled "The Social Needs Assessment of the Physically Disabled" (1984), revealed an unemployment rate of 74% for disabled women, compared to 60% for disabled men. Of the 178 surveyed living on annual incomes of under \$5,000., 117 were female. The study found that overall, the greatest economic difficulties are found with the young, single female (Toews, 1985).

Fine and Asch (1981) contend that disabled women are also disadvantaged socially and psychologically. Their study showed that the external restrictions imposed by negative attitudes concerning women's

roles (disabled and able-bodied) in our society are major barriers to social participation. Significantly fewer socially sanctioned roles are considered appropriate for disabled females. Fewer disabled women are married than both able-bodied women and disabled men (Fine and Asch, 1981; Weiss, 1985). Also, disabled women are often assumed to be inappropriate as mothers or sexual beings (International Rehabilitation Review, 1977).

In terms of psychological disadvantages, disabled women report more negative self-images than disabled men (Weinberg, 1976). "Disabled women are not only more likely to internalize society's rejection, but they are also more likely than disabled men to identify as "disabled" (Fine and Asch, 1981, p. 235).

These economic, social and psychological disadvantages result in what Fine and Asch call "rolelessness". Simply put, rolelessness refers to the "absence of sanctioned social roles and/or the institutional means to achieve these roles" (p. 239). The absence of not only sanctioned roles but role models introduce feelings of worthlessness for some disabled women, and complicate the issue of disability even more.

Insofar as the absence of socially prescribed roles can be a disadvantage for disabled women, the presence of roles ascribed to able-bodied women can be equally detrimental for disabled women. As demonstrated by Hall (1978) the roles adopted by women during different life cycle stages are much more of an inhibiting factor for women than they are for men. "These roles are more inhibiting for women because they must assume a more varied constellation of roles - wife, mother, worker which despite current trends to the contrary are not equally

comparable to the male roles of husband, father, and provider" (p. 230).

Other research has further indicated how society's traditional values and beliefs about women greatly impact on opportunities for education, employment, rights to services, benefits and full participation (Ambert, 1976; Duquin, 1982). A brief entitled "Women with Handicaps" (1980) stated that women's roles are limited, they receive fewer rewards, and their choices are assumed to be constrained by their female physical attributes.

As seen from an economic, social and psychological perspective disabled women are clearly oppressed. This oppression is nurtured, to a large extent, by society's attitudes toward the disabled, as well as the attitudes of the disabled towards themselves. This results in a process called stigmatization.

First conceptualized by Goffman in 1963, stigmatization is an 'undesired differentness, an attribute that is perceived as discrediting, a failing, a shortcoming, or a handicap' (Sherrill, 1984, p. 22). Because the stigma theory equates differentness with inferiority, the biggest constraint caused through stigmatization is one of non-acceptance by those who impose this label of differentness.

Related to the theory of stigmatization are the barriers encouraged through stereotypes. Past research has shown that stereotypes help perceivers order the world and prepare for predictable interactions, but they can be both narrow and inaccurate (Goffman, 1963). "Disabled people, like other minority groups, are differentiated from other people and often times treated as inferior by the nondisabled majority solely or largely on the basis of their disability, which overshadows and

qualifies all other qualities or abilities" (Nixon, 1982, p. 164).

Research has also demonstrated how stigmatization and stereotypes contribute to feelings of low self-esteem for many disabled individuals. True to the theory of learned helplessness and a perpetuation of the self-fulfilling prophecy, many disabled people become social misfits. Given the lack of opportunities, participants tend to behave in more passive and dependent fashions, thereby reinforcing society's image of the disabled as incompetent and dependent individuals (Charbonneau, 1980). Studies have shown that disabled women, in particular, are perceived in this fashion (Deem, 1982; Fine and Asch, 1982).

In summary, the research on the barriers and constraints faced by disabled women in society clearly demonstrates that they are victims of both gender and disability. The stigmatizations and stereotypes which result often lead to feelings of rolelessness and low self-esteem for many disabled women. The following section continues with this theme and discusses how these barriers and constraints affect the participation of disabled women in physical activity.

A. BARRIERS AND CONSTRAINTS TO PARTICIPATION IN PHYSICAL ACTIVITY

The major obstacles to increased activity according to women questioned in the 1986 Canada Fitness Survey on Activity-Limited Adults were 'ill health' (50%), 'injury or handicap' (39%) and 'lack of time due to school/work' (25%). This third ranked obstacle was identified as the major obstacle in participation for able-bodied women in the 1984 Canada Fitness Survey. Additionally, for activity-limited females, 'no facilities nearby' and 'costs too much' each had a response rate of 12%.

When categorized into active and sedentary groups, the response rate (male and female) for these obstacles changed somewhat for activity-limited adults. Amongst sedentary adults the major obstacle to increased activity was 'ill health' (78%); while the major obstacle cited by active adults was 'injury or handicap' (48%). 'Lack of time due to school/work' was also a significant obstacle for active adults with a 34% response rate reported (Canada Fitness Survey, 1986).

Dickinson and Perkins (1985) asked both active and inactive subjects to identify what they felt were the major limiting factors to participation. Amongst both of these groups 'time constraints' was ranked first as the major limiting factor to participation. Also ranked high, although in a slightly different order for both groups, were 'cost', 'availability of facilities' and 'availability of programs'. The least limiting factors amongst subjects in the active group was 'embarrassment'; while 'family pressure' was the factor least limiting participation for inactive subjects.

Dickinson's and Perkin's study indicated that disabled females experience greater limits to participation compared to disabled males, with respect to the availability of programs and family pressures. More females surveyed also felt greater limitations because of the attractiveness of alternative activities.

Constraints to participation were also studied by Sherrill in a paper presented at the 1984 Olympic Scientific Congress. Based on interviews with over 300 elite disabled athletes, Sherrill discovered that most of the athletes encountered problems of equal opportunity. These problems were especially evident with regard to the 'access of

equipment/facilities', 'knowledge and skills', 'friends to train/work out with'. and the 'availability of coaches' (Sherrill, 1984).

Additional studies by Grimes and French (1987) and Thierfeld and Gibbons (1986) have indicated existing differences between disabled women and disabled men concerning barriers to participation. Results (quoted by Grimes and French) of The Miller-Lite Report on Women and Sports indicate the major barriers to participation in sports by able-bodied women are: 'lack of involvement and training as children;' 'few programs outside schools', 'lack of interest', 'inadequate coaching/training;' 'lack of equipment and facilities,' and 'lack of prominent role models' (Miller Lite Report, 1985). Grimes and French suggest that 'the difficulties created by society's gender expectations are redoubled by assumptions of what disabled people can and cannot, should and should not, do" (p. 24). There is reason to believe, therefore, that disabled women are faced with the same gender-related barriers as able-bodied women.

This belief is further substantiated by Thierfeld and Gibbons (1986), who stated that "disabled girls, like able-bodied girls, generally do not have the same informal experience with sports that boys do, because they are not traditionally encouraged in sports the way boys are" (p. 22).

The underlying conclusion of both of these studies is that disabled girls and women, because of gender-related stereotypes, do not have the opportunity for exposure to sport and physical activities to the same extent as their male counterparts. This lack of exposure by females to the sport environment may limit their participation in physical activity

and results in low participation rates in comparison to men.

The perpetuation of this theory is evident in a number of studies dealing with able-bodied females as well. An article by Sage and Loudermilk (1979) found that the female athlete received little recognition (compared to the male athlete) for her athletic skills and accomplishments. According to the authors, this difference in recognition occurred because "society traditionally places less value on girls' participation in sports than they do on boys' participation" (p. 94).

Other researchers have stated that, in terms of the sex structure of Canadian society, women possess a lower social standing than men do and their roles in society are less highly valued (Hall, 1978, p. 232; Ambert, 1976; Duquin, 1982). "Sport as a societal microcosm cannot help but reflect the sex structure inherent in society itself" (Hall, 1978; p. 232).

Like the Miller Lite Report in 1985, the lack of role models has been identified by a number of studies as a major barrier to female participation in sport and physical activity. In a theory of achievement motivation, Kemper (1968) stated that the development of sports achievement in women is hampered because of a lack of available role models. Dickinson and Perkins (1985) indicated that within the disabled population, the small number of female role models for women may be a prime determinant of lack of participation amongst women. Results of their study showed that more males than females rated the role and example of others as a high source of encouragement to participate in physical activity.

The lack of role models for women is further promoted by the media. Studies have indicated the tendency by the media to emphasize male performance not only amongst the able-bodied population (Greendorfer, 1977), but amongst the disabled population also (Thierfeld and Gibbons, 1986).

With respect to participation in physical activity, the attitudinal barriers promoted through stigmatization and stereotypes are quite evident as demonstrated by the literature. Diane Rackiecki, a world record holder in wheelchair track was recently quoted as saying, "We (wheelchair athletes) haven't been looked at as legitimate athletes. I don't want to be a wheelchair athlete; I want to be an athlete first" (Montreal Gazette, September 5, 1987). Even the most accomplished athlete is relegated to the dim stigmatized life/world of the handicapped because of the fact of his or her physical limitation (Sherrill, 1984).

In an article concerned with leisure and recreation for the disabled, Lancaster-Gaye (1973) stated that many program developers presuppose that disabled people have a lot in common and are therefore interested in the same recreational activities. In fact, however, it does not necessarily follow that disabled people have anything in common apart from the difficulties of being disabled.

Stigmatization and stereotyping often leads to prejudices which result in discrimination (Sherrill, 1984). A number of studies have demonstrated the existence of unequal access to opportunities for disabled individuals to participate in physical activities. Disabled people encounter isolation through segregation (King, 1974; Dendy, 1978;

Sample, 1978; White, 1983; Price, 1986). The issue of segregation is particularly relevant to sport and physical activity and will be discussed later in the review of literature.

In addition to attitudinal barriers there are a number of physical and environmental barriers faced by disabled people in our society. Hutchison and Lord (1979) identify a lack of support services as one major barrier. These support services include a lack of available recreation programs in which to participate, a lack of accessible facilities and adequate transportation. "When few support services are available, many citizens are unable to utilize community resources" (Hutchison and Lord, 1979, p. 21). They also contend that inadequate leadership and inappropriate programs make participation unattractive and unrealistic for several consumers.

A later study by Hutchison (1980) revealed a lack of information on available services as the major barrier to participation amongst disabled individuals surveyed. Other barriers identified in this study were 'poor coordination and cooperation between various levels of service' and 'inadequate support services', eg. counselling, volunteer programs, advocacy.

Architectural barriers and [lack of] transportation and accessible facilities were also identified by other researchers (King, 1974; White, 1983; Price, 1986).

It is clear from the literature that the barriers and constraints to participation in physical activities for disabled females are closely linked to and parallel many of the economic, social and psychological realities existing in society today. At the root of many of the major

constraints and barriers to participation, once more, is the prevalence of stigmas and stereotypes which often result in a lack of self esteem among disabled women. This lack of self esteem in turn helps to promote a lack of interest in pursuing sports and other physical activities.

CONCLUSION

Research has shown that many of the myths surrounding participation in physical activity for disabled individuals are rooted in the stigmatizations and stereotypes perpetuated by existing situational and socialization processes. This issue for disabled women in society is particularly crucial.

Studies on the barriers and constraints to participation indicate disabled women are doubly disadvantaged because they belong to two minority groups whose members are already solitary victims of many societal barriers and constraints (Canadian Advisory Council on the Status of Women, 1980). Furthermore, the minority status created for disabled females implies that by virtue of being disabled and female, they have limited power, privilege and prestige in society (Nixon, 1982).

Additional research indicates that the traditional areas of sport and physical activity are not always open to disabled females. Evidence of this lies in studies dealing with inaccessible facilities, transportation problems and inappropriate activities (Hutchison and Lord, 1979).

Other studies point to the barriers and constraints to participation caused by society's attitudes towards the disabled. This

includes the misconceptions concerning participation by the disabled for therapeutic reasons, as well as the issues associated with the questions of integration and segregation (Marshall, 1983; Brandmeyer and McBee, 1984).

Regarding physical activity patterns, studies reveal several similarities between disabled and able-bodied females. Research also shows many differences in physical activity patterns between disabled men and disabled women (Dickinson and Perkins, 1985). Furthermore, the limited number of articles in existence heavily support the contention that differences between disabled men and women are more gender-based than disability-based. Disabled females appear to experience many of the same discriminations in sport and physical activity as able-bodied females (Deem, 1982; Thierfeld and Gibbons, 1986). Additionally, these discriminations are a result of well-documented stereotyped gender-based roles reported in the literature (Hall, 1976; 1978; Greendorfer, 1977, 1980; Gilverson, 1981; Hall and Richardson, 1982; Deem, 1982).

It is clear from the review of literature that there is a need to examine participation in physical activity by the disabled female from the perspective of gender and disability. It is on this basis that an accurate picture of participation and the physically disabled female and its relationship to various situational and socialization factors may best be described.

PHYSICAL DISABILITY AND RELATED PERTINENT ISSUES

The previous two sections in the review of literature dealt specifically with studies pertaining to physical activity patterns, and

the various barriers and constraints to participation. Both sections examined the literature associated with disabled and able-bodied individuals, male and female. The following section also examines literature dealing with physical activity, but with a major difference. The studies presented here in discussion form are concerned with pertinent issues related just to disabled persons. This section therefore contains few, if any, inferences or assumptions carried over from studies on the able-bodied population.

A major issue which faces the disabled participant in physical activity, at recreational levels through to competitive levels, is the question of integration and/or segregation. Support for programs on an either-or basis have surfaced in several studies (King, 1974; Dendy, 1978; Orr, 1981). It is clear through the literature however, that this is not an either-or issue. In fact, integration and segregation each have their useful place and purpose. If successful, the experiences gained by involvement in segregated physical activities can be as beneficial to one's development, as involvement in integrated physical activities. The key however is success (Stein, 1976).

"Integration through sport and physical recreation is a possibility, but it should not be taken for granted. The basic question which must be addressed is the extent to which modifications/adaptations of both structural-organizational factors as well as human factors (eg. attitudes, perceptions) can afford meaningful integration, and at what point, if any, should one decide that segregated experiences are the best form of service for the disabled participants" (Lewko, 1981, p. 25).

Other articles cite similar concerns (Sample, 1978, 1979; Marshall, 1983) related to the processes which allow disabled persons a variety of program choices. "The disabled should not be considered en masse because firstly, their interests are as diverse as those of the able-bodied population, and secondly, the range of disabilities and the different problems created by them affect each disabled person in a quite specific and individual way" (The Snowdon Working Party, 1977).

Available research indicates that integration of the disabled athlete into sports with the able-bodied population can be very beneficial to the disabled athlete. Wheelchair road racers, for instance, have demonstrated that this normalization process expands opportunities (Brandmeyer and McBee, 1984). The question which remains to be answered by researchers however, is whether or not the benefits accrued by the athletic elite affect the general disabled population, and, if so, to what extent.

Related to the segregation/integration issue is an issue concerned with the benefits of participation in physical activity experienced by disabled individuals. The fact is that the disabled and able-bodied populations have the same fitness needs; including cardiovascular endurance, muscular strength and endurance, flexibility, weight reduction, if necessary, and, in addition, functional posture correction (Sullivan, 1984).

It can safely be assumed then, that because the fitness needs are similar between these two populations, the psychosocial and physical benefits are probably also similar for disabled and able-bodied individuals. In point of fact, the evidence supporting the psychosocial

benefits which occur for the disabled participant is much more conclusive than the 'exercise hypothesis" (Jackson and Davis, 1983). This does not mean that disabled individuals do not benefit physiologically from exercise it just means they don't benefit identically when compared to able-bodied people.

Research has indicated the following psychosocial benefits are enjoyed by the disabled participant: improvements in self-concept and self-acceptance (Dendy, 1978); heightened self-confidence (Mirell and Barrett, 1980); and improved well-being (Thierfeld and Gibbons, 1986).

Further reinforcement of the positive benefits resulting from participation in physical activity is evident through the participants themselves. Said one wheelchair athlete, "Fitness is a big part of competing. But it goes beyond that. There is a tremendous carryover into everyday life: the improvements in self-image and confidence are most important" (Duda, 1985).

Indeed the importance of recreation and sports in the disabled person's total development must never be underestimated. According to the P.E.I. Recreation and Sports Association for the Disabled: "It has been clearly demonstrated that involvement in recreation and sport encourages a person to set certain goals and work towards such goals; and may result in real success and accomplishments while attaining the set goals. Improved self-image, increased confidence, and improved social skills are usual benefits derived from one's participation in sport and recreation activities" (Special Committee on the Disabled and the Handicapped, 1982, p. 101).

A major issue which needs to be addressed at this point concerns

the reasons behind participation in physical activity for disabled individuals. Participation in physical activities of a recreational or sport nature continues to be viewed as purely therapeutic and rehabilitative by many segments of both professional and lay communities despite the pleas by participants and results of research which indicate that disabled individuals take part in such activities for all the same reasons as able-bodied persons (Stein, 1983).

Historically the original reasons for participation in physical activities by disabled people were primarily therapeutic and rehabilitative (Guttman, 1976). However, sport and recreation for disabled individuals has undergone tremendous evolution. Disabled athletes are involved in a variety of sports competing nationally and internationally and gaining recognition as world class, elite competitors. Despite this evolution, still in its infancy stages, there are people who continue with the attitude that sport for the disabled athlete is solely a recreational or leisure pastime. The shortage of available coaches and the number of competitions has reinforced this belief (Gains, 1982).

The benefits, in terms of prestige, which do exist for disabled athletes exist primarily for disabled men. The fact is that there are fewer competitive events available for women (due, in part, to a smaller number of disabled females compared to disabled males). Research has indicated, however, that the women's competitions which do exist carry much less prestige than do men's competitions (Thierfeld and Gibbons, 1986).

Disability does not eliminate individual responsibility for meeting

physical activity needs, it merely complicates it (Avedon, 1977). The literature presented in this section has demonstrated a de-emphasis of participation in physical activity for therapeutic reasons amongst disabled individuals (Stein, 1983; Canada Fitness Survey, 1986). This section also briefly reviewed some of the arguments surrounding the integration and/or segregation issue.

CHAPTER III

METHODOLOGY

The present study was designed to investigate the physical activity patterns and the physical activity needs of disabled females in Canada via a nation-wide survey. This chapter examines the methods and procedures which were used to collect the data, including a description of the research instrument and the sampling techniques employed.

RESEARCH INSTRUMENT

The instrument used for this study was a self-administered questionnaire. It was decided that the questionnaire format would best fit the purpose of the investigation due to the nature of the population under study and the fact that the survey was Canada wide.

There are a number of advantages in conducting self-administered questionnaires. Questionnaires ensure that the same structure is used in observing all the subjects under study (Babbie, 1975). The respondent is guaranteed anonymity which may provide for more accurate information about his or her feelings; this may not occur if the researcher is present, or in the case of personal interviews. The respondents can fill out the questionnaire at their leisure which may provide a more comfortable and non-threatening environment for them.

The survey in this study consisted of close-ended questions. According to Babbie (1975) close-ended questions provide a greater uniformity of responses and are more easily processed than open-ended questions.

Questionnaires are not without their disadvantages however. Return rates can be poor as there is no opportunity for the investigator to clarify questions or provide motivation to the respondent to complete the survey. Research has indicated ways to minimize these disadvantages to assist the investigation's success. Dillman (1978) suggests the inclusion of a cover letter to stress the importance of the study, attractive questionnaire layout, official sponsorship of the survey, and follow-up cards mailed to the respondents. All of these methods were employed in the present study and will be described later in this chapter.

DEVELOPMENT OF THE RESEARCH INSTRUMENT

In order to understand the content of the questionnaire the process of its development must be explained. Overall the questionnaire construction was a multi-step process which spanned a six month period.

The first step in the questionnaire development was the identification of the project's basic objectives. This was accomplished through a 'brainstorming session' held in Ottawa with the directors of some of Canada's disabled sport associations. During this meeting a rather exhaustive list was compiled consisting of several issues and concerns related to physical activity and the disabled female. Major concerns were then highlighted and categorized and the scope of the study was realistically assessed. Out of the meeting four main objectives were decided upon, as were the project parameters of age and disability groups.

Information for the present study was based largely on these objectives:

- 1) To determine the frequency and degree or intensity of participation of physically disabled females;
- 2) To determine the entry process into involvement in physical activity;
- 3) To determine the needs and desires of physically disabled females for physical activity programming; and
- 4) To determine the barriers and constraints to participation.

The second step in the process involved conducting informal one-on-one interviews with a group of disabled women in Edmonton, Alberta. These interviews were taped in May, 1986 to gather anecdotal information concerning the project objectives. The interviews were loosely structured, consisting of a series of open-ended questions designed to probe and explore the many faceted issues surrounding participation in physical activity by the disabled female in Canada.

The females were selected for the interviews based on their level of involvement in physical activity. As well, the women chosen by the investigator represented as closely as possible the population under study ranging from the non-participant through to the elite performer.

The investigator was acquainted with six of the subjects interviewed through an affiliation with a fitness centre for disabled individuals. The remaining subjects were patients at a rehabilitation

centre in Edmonton. In total, the subjects interviewed ranged from fifteen years of age to sixty-three years and encompassed all of the physical disability groups included in the final study.

Based on impressions garnered from the interviews, the third step involved the development of actual questions for the questionnaire. A steering committee consisting of individuals familiar with the needs and issues surrounding the disabled female assisted in the development of these questions.

The next step in the questionnaire development involved the evaluation of the questionnaire by the steering committee members in Edmonton, as well as those individuals who attended the original brainstorming session in Ottawa. These individuals were encouraged to provide feedback on the following:

- 1) clarity of instructions;
- 2) clarity of questions;
- 3) questions which should be added;
- 4) questions which should be omitted; and
- 5) length of the questionnaire.

Revisions were made based on their suggestions and the questionnaire was disseminated once more to the steering committee members in Edmonton only. Additional faculty members at the University of Alberta were also included in this step of questionnaire dissemination. The purpose of the fifth step, similar to step four, was the provision of feedback on the questionnaire construction.

Step six consisted of a pilot study conducted in June 1986, involving a group of physically disabled females from Edmonton (a separate group from those women interviewed during the initial stages of questionnaire development). Once again, the pilot group chosen resembled as closely as possible the actual population targeted for the survey. The subjects chosen were asked to complete the questionnaire and provide feedback in the same fashion outlined in step four. The feedback obtained from these women was quite useful and further revisions were made.

After a total of ten major revisions the final copies of the questionnaires were printed in November, 1986. The following section describes in greater detail the research instrument.

DESCRIPTION OF THE RESEARCH INSTRUMENT

The final questionnaire (see Appendix A) consisted of twelve pages (English), containing thirty-five close-ended questions and one open-ended question designed to obtain descriptive data on the project's objectives. French translation of the questionnaire can be found in Appendix B.

In total twelve questions dealt with personal information such as the respondent's age, type of disability, educational background, economic standing and occupation. It was stated that all information was strictly confidential. Questions on background information were placed at the end of each questionnaire to help focus the respondent's attention on the major concerns of the survey.

The remaining close-ended questions were asked using two different scales. The Likert Scale was used on a series of attitude statements designed to tap the feelings of respondents on pertinent issues related to participation in physical activity. The items for this scale were developed through information gathered from preliminary meetings and interviews with disabled females, as well as a review of literature concerning physical activity and the disabled.

The second scale used was a 'single item indicator scale'. This scale was used for a number of questions to determine the patterns of physical activity including the frequency and degree of intensity of participation, reasons for participation, popular activity choices, limiting factors to participation and the entry process into involvement in physical activity. The items chosen for this scale were taken from previous Canada Fitness Surveys, and other physical activity pattern studies referenced in the review of literature. The validity of these items, therefore, lies in their repeated use in different studies.

Categories used for the question dealing with the physical activity participation level were adapted from the as yet unpublished Fitness and Amateur Sport Physical Participation Model (Smith, CAPHER Journal, September-October, 1987). Due to its relative newness however, its validity has to be determined. This model is useful because it serves as a continuum for physical activity participation based on the degree of structure or organization of particular activities. For example, 'unstructured participation' is the least structured physical activity category identified and is characterized by its lack of formal organization and its non-competitive nature. By following each

successive category from the left to the right, the increase in degree of structure or organization becomes readily apparent (see Figure 1).

The one and only open-ended question in the survey concerned future developments in physical activity programs for disabled women. Due to the wide range of possible responses it was decided to provide freedom of expression through the absence of structured replies. Given that the average length of time taken to complete the questionnaire was thirty minutes, the inclusion of this open-ended question was not unreasonable in the investigator's opinion.

SAMPLING PROCEDURES

The method of sampling was a major concern of this study due to the nature of the population. In assessing the physical activity patterns and particularly the activity needs of any population it is important to gather information from participants and non-participants alike. Bearing this in mind, the sample for this study was chosen from a large population of disabled Canadians divided under two headings:

- 1) those people affiliated with a disabled sport association; and
- 2) those people affiliated with a 'generic' disability association.

In order to get a more complete picture of the state of physical activity and the disabled female, it was decided to sample individuals from a wide age range; this included individuals from ages ten and

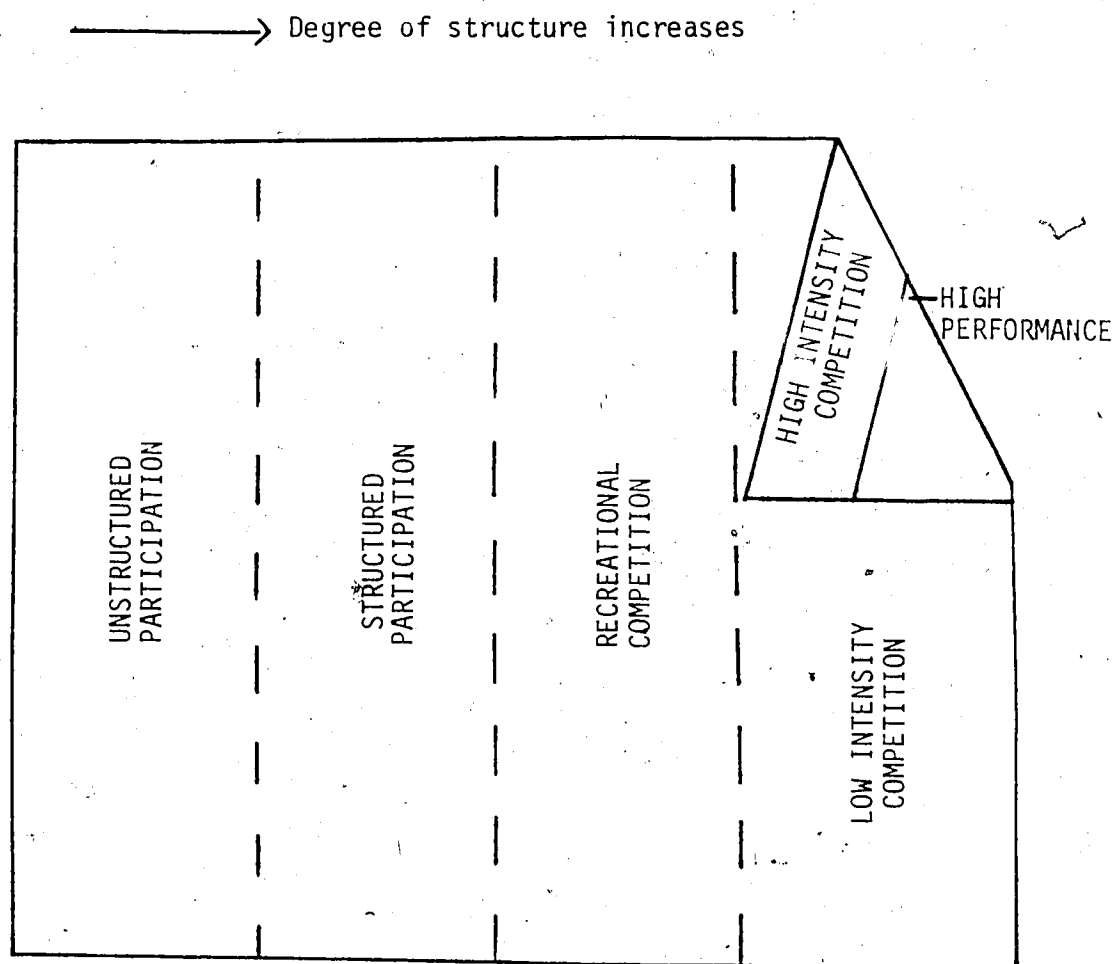


Figure 1. Physical activity participation model
(Developed by Fitness and Amateur Sport, 1987)

upwards. As mentioned in the introduction, however, the material presented in this thesis is part of a larger study. The main emphasis for this thesis will therefore be placed on individuals in their later teens and upwards.

The sampled population included individuals with the following disabilities:

- 1) Spinal Cord Impairments (Quadriplegia, Paraplegia, Polio and Spina Bifida);
- 2) Cerebral palsy;
- 3) Amputations;
- 4) Visual Impairments; and
- 5) Auditory Impairments.

Given the parameters of disability type and age, letters were sent to a list of disabled sport associations (members of C.F.S.O.D.), and 'generic' disability associations related to the disability groups targeted above. These letters briefly described the purpose of the study and explained that researchers were equally interested in the participants and the non-participants of physical activity. The letters sent to these associations also requested a membership list or, in cases where this was not possible, their assistance in distributing the questionnaire was sought (Appendix C).

Difficulty arose when most of the associations contacted agreed to distribute the survey from their offices rather than supplying membership lists. Leaving distribution responsibilities up to the

associations meant sacrificing a certain amount of control over achieving sample representativeness. However, given there was no alternative, it was decided to deal with the associations who agreed to participate in the study and leave the questionnaire distribution up to the various offices in question.

Regarding the survey mail-out, 100 questionnaires were sent to subjects affiliated with a sport disability association registered under C.F.S.O.D. and 264 questionnaires were sent to subjects affiliated with a 'generic' disability association (e.g., The Canadian Paraplegic Association, The Cerebral Palsy Association of Canada).

The degree to which this balance accurately reflected the population numbers was unknown. The main concern of the investigators was to get a reasonable number of replies from females who were involved in sport, and from those who were not.

Each questionnaire was numbered by the investigators and a record was kept of the numbers of surveys mailed to 'generic' disability associations and disabled sport associations.

RESEARCH METHODS AND PROCEDURES

A number of procedures were carried out in order to increase the response rate. In the initial mail-out, in addition to the questionnaire, two cover letters were enclosed supporting the project (see Appendix D). The first letter came from Fitness and Amateur Sport Women's Program; the second letter was a combined endorsement from C.F.S.O.D. and the Department of Physical Education and Sport Studies at the University of Alberta. French translations of the cover letters can

be found in Appendix E.

It should be noted that the implementation of this survey followed a design method recommended by Dillman (1977), both in terms of the project's endorsement and follow-up letters.

One week after the initial mail-out a follow-up letter was sent to subjects selected by the sampling procedure (English and French translations of the follow-up letter can be found in Appendix F). Distribution responsibilities of the follow-up letter were left up to the national offices in cases where the membership lists were unknown by the researchers. The purpose of the follow-up letter was threefold:

- 1) to thank those subjects who had already returned their questionnaires;
- 2) to remind those subjects who had not returned the questionnaire of the importance of their response to the study; and
- 3) to ask those subjects who had received a follow-up letter but no questionnaire package to return their follow-up letter so that the researchers could respond accordingly.

DATA RESULTS AND ANALYSIS

A running record of all questionnaire returns was kept by the investigator. This record included surveys which were returned unanswered due to an unknown or wrong address, as well as surveys which were returned completed. Final return rates, however, were based only

on those surveys completed and returned by individuals affiliated with 'generic' and sport disability associations.

Once the cutoff date for accepting survey returns passed all the results were coded on scan sheets and entered into a computer and descriptive statistics were generated. Frequencies and percentage response rates for all variables were obtained from the SAS computer package. Through examination of the frequencies, the raw data were checked for outliers, completeness and consistency.

With respect to the open-ended question each response (or non-response) was read by the researcher, grouped and eventually categorized under specific headings. Although this method may lack statistical sophistication, the results obtained from this question were judged by the experimenter to be particularly valuable and equally credible.

CHAPTER IV

RESULTS

It is important to note that in the text of this report all decimals have been rounded off to the nearest whole number and in the tables all percentages have been rounded off to the nearest tenth.

In certain questions respondents were asked to circle all appropriate answers. Therefore, in some tables where the percent is reported, it refers to the percentage of subjects that respond positively to that item. The frequency of responses in the table may therefore exceed the actual number of respondents. In other tables subjects were asked to choose the best answer so the frequency is equal to the total number of respondents.

RESPONSE RATES

In this study 500 questionnaires were printed with the intention of distribution to various associations across Canada. A total of 364 questionnaires were mailed out, 100 (27.5%) to individuals registered with a sport disability association and 264 (72.5%) to individuals who were members of a 'generic' disability association.

The total of questionnaire returns due to an unknown or wrong address was 7%. The final return rate calculated was 51%. Of this number 30% of the individuals were affiliated with a sport disability association, while 70% were affiliated with a 'generic' disability association.

DESCRIPTION OF THE SAMPLE

A total of 38% of the respondents were born with a physical disability while 62% reported an acquired disability. The following table is a breakdown of the nature of disability of the respondents.

TABLE 1 (N=174)

NATURE OF DISABILITY OF RESPONDENTS

1.	Spinal Cord Impairments	
	(a) Quadriplegic	6%
	(b) Paraplegic	33%
	(c) Polio	5%
	(d) Spina Bifida	1%
2.	Cerebral Palsy	19%
3.	Amputee	9%
4.	Visual Impairment	10%
5.	Auditory Impairment	3%
6.	Multiple	3%
7.	Other	11%

In terms of the severity of their disability, 12% of the respondents reported 'total disability', 27% reported 'some disability', 36% reported 'moderate disability', and 20% reported 'major disability'. The degree unknown was 4%, while 1% did not respond.

The age of the respondents is presented in Table 2. As mentioned previously, the major concern with this thesis is with disabled females in their late teens and older. The fact that the frequency of responses

amongst females below this age group is therefore not highly significant with respect to analysis. As well, the information given by women over the age of sixty, due to low response rates, will not be a major focus of the analysis.

TABLE 2
AGE OF RESPONDENTS (N=174)

	Frequency	Percent
1) 10 - 14	3	2
2) 15 - 19	18	10
3) 20 - 29	75	43
4) 30 - 39	40	23
5) 40 - 49	18	10
6) 50 - 59	14	8
7) 60 +	5	3

A total of 52% of the respondents reported an income of under \$10,000, in spite of the fact that only 12% of the females were under age twenty. Additionally, 28% of the respondents live alone. Even allowing for those individuals attending school after age twenty, and those supported by their parent's or husband's income, these statistics indicate that 40% of physically disabled females surveyed live below the poverty line.

FREQUENCY AND DEGREE OR INTENSITY OF PARTICIPATION IN PHYSICAL ACTIVITY

Information regarding frequency and degree or intensity of participation was sought from all respondents and based on a wide range of physical activities. The importance of physical activity was rated quite favorably by a majority of the respondents. A total of 66% said physical activity was 'very important', while 27% listed physical activity as 'somewhat important'. Only 2% said physical activity was 'not at all important'. The remaining 6% said physical activity was 'not very important'. Over half of the respondents (63%) felt they needed more physical activity.

In terms of activity level, the combined percent of 'inactive' and 'somewhat active' participants compared to 'quite active' and 'very active' participants was fairly even as reflected in Table 3.

TABLE 3
ACTIVITY LEVEL OF PHYSICALLY DISABLED FEMALES IN CANADA
(N = 174)

	Frequency	Percent
1) Inactive (average less than once a week for less than 9 months of the year)	44	25.3
2) Somewhat Active (average once a week for less than 9 months of the year)	38	21.8
3) Quite Active (average 2-3 times a week for less than 9 months of the year)	58	33.3
4) Very Active (average more than 3 times a week for 9 or more months of the year)	34	19.5

To determine the frequency of participation in physical activity subjects were asked to examine a comprehensive list of activities and record the time spent in each activity. They were also asked to check off those activities in which they did not participate.

Using the guidelines established in Table 3 this information was coded by the researcher into the categories of 'inactive', 'somewhat active', 'quite active', and 'very active', and is presented in Table 4. An additional element of time based on hours spent per week in each activity was also taken into account. For coding purposes an 'inactive' activity level was defined by less than one hour of participation less than once a week; 'somewhat active' was defined by up to one hour once a week; 'quite active' was defined by one hour 2 to 3 times a week, and 'very active' was defined by more than one hour for more than 3 times a week.

The highest rate of participation was reported in the following activities: walking/wheeling (76%), home exercise (68%), swimming (64%), dancing (49%) and weight training (48%) (see Table 4). The least popular activity was tennis with a participation rate of only 2%.

In the combined 'quite active-very active' category the top five activities were walking/wheeling (69%), home exercise (57%), weight training (39%), swimming (37%), and jogging/running/wheeling (31%).

Amongst the combined 'inactive-somewhat active' subjects the most popular activities were, in rank order, 'camping', 'dancing', 'swimming', 'gardening', and 'bowling'.

Following the question on frequency of participation respondents were asked to check off the appropriate level of participation they

TABLE 4
DEGREE OF PARTICIPATION (BASED ON FREQUENCY) OF PHYSICALLY
DISABLED FEMALES IN PHYSICAL ACTIVITY

53

NUMBER OF CASES	ACTIVITY	DOES NOT PARTICIPATE	INACTIVE	SOMEWHAT ACTIVE	QUITE ACTIVE	VERY ACTIVE
123	Tennis	88.6	5.7	4.9	-	-
132	Bowling	74.3	18.2	3.8	1.5	2.8
123	Ice Skating	82.1	11.4	6.5	-	-
128	Dancing	51.6	19.5	12.5	3.1	13.3
140	Swimming	36.4	15.0	11.4	10.0	27.2
118	Other Aquatics	85.6	4.3	4.3	1.7	4.3
131	Bicycling	64.9	4.6	9.9	10.7	9.9
122	Basketball	82.8	4.9	4.9	3.3	4.1
122	Volleyball	88.5	5.8	4.1	-	-
131	Jogging/ Running/ Wheeling (Track or Road	62.6	3.8	3.1	6.1	24.4
126	Downhill Skiing	75.4	8.7	10.3	5.6	-
131	Weight Training	51.9	6.1	3.1	6.1	32.8
129	Exercise Classes	65.9	3.9	7.8	4.7	17.8
124	Cross Country Skiing	82.3	6.5	4.9	6.5	-
137	Home Exercise	32.1	6.6	4.3	8.0	48.9
138	Walking/ Wheeling	23.9	5.8	1.5	10.9	58.0
125	Camping	53.6	28.8	12.0	4.8	-
119	Hiking	77.3	15.1	6.7	-	-
129	Gardening	66.7	10.1	14.0	7.0	2.3
95	Other Outdoor Activities	73.7	7.4	9.5	4.2	4.2
90	Other Team Sports	78.9	1.1	6.7	2.2	11.1
89	Other Individual Sports	82.0	2.3	6.8	5.6	3.3

engaged in for each activity.

Of all ~~the~~ activities listed, only swimming, jogging/running/wheeling, downhill skiing and weight training had respondents at every level of participation. Activities which had participation up to and including the 'noncompetitive, organized setting' level were ice skating, other aquatics, bicycling, and gardening. No activities had participation at the competitive levels only. (See Table 5).

Information regarding participation in activities with able-bodied individuals (integrated setting) versus participation in activities with non able-bodied individuals (segregated setting) was sought from all respondents.

Regardless of the level of participation, physical activity took place in an integrated setting 64% of the time. Participation in a segregated setting occurred 37% of the time. Hiking, camping, cross-country skiing, dancing, ice skating, and bowling all had a 75% or greater participation rate in an integrated setting. The activity with the highest participation rate in a segregated setting was home exercise (68%). Gardening followed with a rate of 53%. (See Table 6).

ENTRY PROCESS INTO INVOLVEMENT IN PHYSICAL ACTIVITY

Questions addressing the entry process into activity were asked in two parts. The first part required responses from all participants. In the second part questions were directed to the two groups ascertained earlier on in the survey; the inactive-somewhat active participants and the quite active-very active participants.

TABLE 5
PARTICIPATION LEVEL OF PHYSICALLY DISABLED
FEMALES IN PHYSICAL ACTIVITY

55

NUMBER OF CASES	ACTIVITY	DOES NOT PARTICIPATE	NONCOMPETITIVE NON ORGANIZED SETTING	NONCOMPETITIVE ORGANIZED SETTING	RECREATIONAL COMPETITION- ORGANIZED SETTING	LOW INTENSITY COMPETITION- ORGANIZED SETTING	HIGH INTENSITY COMPETITION	HIGH PERFORMANCE
168	Tennis	89.9	5.4	1.8	1.2	-	1.2	-
167	Bowling	68.3	24.8	1.8	4.8	-	-	-
168	Ice Skating	83.3	14.3	1.1	-	-	-	-
168	Dancing	54.2	36.3	4.8	2.4	1.2	1.2	-
167	Swimming	44.3	32.4	8.4	1.8	3.8	3.8	7.2
168	Other Aquatics	86.3	8.9	4.2	-	-	-	-
168	Bicycling	73.2	22.8	3.6	-	-	-	-
168	Basketball	85.7	4.8	2.4	3.6	1.8	-	1.2
168	Volleyball	83.9	5.4	5.4	3.6	1.2	-	-
168	Jogging/Running/ Wheeling (track or road)	66.1	14.3	3.6	3.8	4.2	3.8	6.8
168	Downhill Skiing	78.8	9.5	3.8	3.6	1.2	1.8	3.8
168	Weight Training	57.8	15.5	17.9	3.8	3.8	1.8	1.2
168	Exercise Classes	65.5	13.7	19.7	1.2	-	-	-
161	Cross Country Skiing	86.4	8.1	1.3	1.3	-	-	2.5
168	Home Exercise	34.5	57.8	4.8	-	-	1.8	-
168	Walking/Wheeling	23.2	66.7	3.6	3.8	1.8	-	1.8
168	Camping	54.2	38.1	4.2	3.8	-	-	-
167	Hiking	76.1	18.6	3.8	2.4	-	-	-
168	Gardening	69.7	26.2	3.6	-	-	-	-
157	Other Outdoor Activities	88.3	12.8	3.2	1.9	-	-	-
157	Other Team Sports	88.9	7.7	3.8	-	1.3	2.6	3.2
157	Other Individual Sports	89.2	2.6	1.9	1.9	1.9	-	1.9

TABLE 6
PHYSICAL ACTIVITY PARTICIPATION IN INTEGRATED
AND SEGREGATED SETTINGS AT ANY LEVEL

56

<u>NUMBER OF CASES</u>	<u>ACTIVITY</u>	<u>INTEGRATED SETTING</u>	<u>SEGREGATED SETTING</u>
17	Tennis	53.0	47.1
53	Bowling	83.0	17.0
28	Ice Skating	82.2	17.9
77	Dancing	87.0	13.0
93	Swimming	71.0	29.0
24	Other Aquatics	63.0	37.5
45	Bicycling	71.0	28.9
23	Basketball	74.0	26.1
28	Volleyball	64.3	35.7
57	Jogging/Running Wheeling (Track or Road)	52.6	47.4
37	Downhill Skiing	70.3	29.7
69	Weight Training	47.8	52.2
59	Exercise Classes	47.5	52.2
24	Cross Country Skiing	75.0	25.0
109	Home Exercise	32.1	67.9
129	Walking/Wheeling	59.7	40.3
79	Camping	83.6	16.5
43	Hiking	81.4	18.6
53	Gardening	<u>47.2</u>	<u>52.8</u>
1,047	Total	63.4	36.6

Results showed that close to half of all females surveyed (46%) are presently involved in a physical activity program offered by an agency. Of these, 55% were involved through a disabled sport club, such as the Canadian Association for Disabled Skiing or the Cerebral Palsy Sports Association. A total of 25% were involved through a centre for the disabled (not specifically sport oriented), such as the Lucie Bruneau Centre in Montreal or the Research and Training Centre for the Disabled in Edmonton. Eight percent were involved through a Community Centre such as the YWCA or YMCA and 6% were involved through a local sport club or team (not specifically designed for disabled individuals). A final 4% were involved through a society for the disabled, such as the Multiple Sclerosis Society or the Canadian Paraplegic Association.

Over 56% found out about the agency program through friends or relatives, while 13% found out via the media (primarily newspaper articles and information pamphlets).

Discovery through the medical professions and societies for the disabled were both equal with an 11% response rate. Only 4% of the respondents found out about programs offered while attending school and an additional 4% cited sports clubs as their information source.

Of major concern to the researcher was the identification of changes which would encourage greater participation amongst the inactive-somewhat active participants (47% of the surveyed population). Asked to respond to all changes which would encourage greater participation for themselves, results showed that seven of the fifteen changes listed had positive response rates of 40% or more (See Table 7).

The highest response rate was accorded to 'more facilities closer

to residence' (62%). 'Organized physical activities available' and 'people with whom to participate' were both cited by 50% of the respondents as an incentive to change. Amongst the inactive-somewhat active participants who were asked this question 9% said that none of the changes listed would encourage greater participation in physical activity (See Table 7).

The lack of response rates reported under 'available child care' is due largely to the fact that few of the women surveyed actually had children.

TABLE 7
CHANGES WHICH WOULD ENCOURAGE GREATER PARTICIPATION IN PHYSICAL
ACTIVITY**

	Frequency*	Percent*
1. More facilities closer to residence	51	62.2
2. Organized physical activities available	41	50.0
3. People with whom to participate	41	50.0
4. Accessible facilities	40	48.8
5. More available information on programs for physically disabled	36	43.9
6. Good community transport system	34	41.5
7. Knowledgeable instructors	33	40.3
8. Exposure to other physically disabled women involved in physical activity	31	37.8
9. Less expensive facility use	27	32.9
10. More leisure time	22	26.8
11. Support of family, relatives	18	22.0
12. Support of friends	15	18.3
13. Available child care	10	12.2
14. Support of doctor	10	12.2
15. None	7	8.6
Total	416	

* Individuals were asked to respond to all changes listed which would encourage greater participation in physical activity

** Respondents included only those individuals in the 'Inactive' or 'Somewhat Active' participation categories

A question asked of the 'quite active-very active' participants (53% of the surveyed population) dealt with identifying who was responsible for their initial involvement in physical activity. Half (50%) cited themselves as the individual responsible. 'Family/relatives' were cited by 14% of the respondents and 'friends' were cited by 13% in total. Other statistics were as follows: 'doctor' - 7%, 'physical therapist' - 7%, 'school/college/university' - 4% and 'other' - 4%.

Another question for the quite active-very active participants concerned their reasons for being active. In total 49% of all reasons listed were 'very important', 28% were 'somewhat important', 10% were 'not very important' and 10% were 'not at all important' (see Table 8).

Within the 'very important' category, six of a possible twelve reasons had a response rate of over 50%; these included 'to control weight/improve appearance' (53%), 'for pleasure and fun' (62%), 'to feel better' (77%), 'to challenge abilities' (68%), 'to improve flexibility' (63%) and 'to improve or maintain fitness' (85%).

'Advice of others' ranked highest in both the 'not at all important' category (45%) and the 'not very important' category (20%).

Participation for 'companionship' reasons was also not significantly important amongst quite and very active participants. Amongst the twelve listed reasons for being physically active, participation for 'rehabilitation or therapeutic purposes' was ranked third in both the 'not very important' and 'not at all' categories.

TABLE 8

REASONS FOR BEING PHYSICALLY ACTIVE*

	VERY IMPORTANT	SOMEWHAT IMPORTANT	NOT VERY IMPORTANT	NOT AT ALL IMPORTANT
a) To control weight/ improve appearance	53.3	37.0	7.7*	2.2
b) Medical advice	23.3	40.0	14.5	22.2
c) Advice of others	13.8	21.8	19.6	44.8
d) To relax, reduce stress	40.0	40.0	14.3	6.6
e) For pleasure and fun	61.7	22.7	6.4	3.2
f) To feel better	76.6	21.3	1.1	1.1
g) To learn new things	42.9	37.4	12.1	7.7
h) To challenge abilities	67.8	20.0	11.1	1.1
i) For companionship	35.2	33.0	19.8	12.1
j) To improve flexibility	62.8	28.7	6.4	2.1
k) To improve or maintain fitness	85.1	14.9	-	-
l) For rehabilitation or therapeutic purposes	37.4	25.3	15.4	22.0
TOTAL	49.3	28.1	10.2	10.3

* Individuals were asked to assess each reason for being physically active. Respondents included only those individuals in the 'quite active' or 'very active' participation categories.

NEEDS AND DESIRES OF PHYSICALLY DISABLED FEMALES FOR PHYSICAL ACTIVITY PROGRAMMING

The needs and desires of physically disabled females concerning physical activity programming was perhaps best reflected by the one open ended question in the survey. This question asked respondents to identify the kinds of programs they would like to see developed in the future for disabled females. A total of 44% chose not to respond to the open ended question, however, 56% did respond with various replies. Under the category of 'sport and recreational activities', 29% listed several different activities which they felt were needed. Answers included such things as: improved wheelchair basketball, women's volleyball, bowling, etc. A number of respondents took the opportunity in this question to express opinions about other needs regarding physical activity.

For purposes of interpretation, these responses were then coded by the researcher under the following broad categories:

1. Barriers, constraints and limitations;
2. Instruction classes;
3. Education;
4. Awareness and promotion; and
5. Philosophical Responses.

The category 'barriers, constraints and limitations' had a response rate of 9%, and included such things as improved accessibility to sport and recreation complexes and better transportation for the disabled.

More available time and money were also mentioned. Notable also was the need expressed by some women for more programs offered in rural communities.

Sixteen percent gave answers which fell under the category of 'classes and instruction'. A desire for fitness and aerobic instruction designed for physically disabled individuals was strongly expressed, the development of training clinics involving sport and recreation activities for the disabled and the need for knowledgeable instructors was also mentioned.

Closely related to the above mentioned category is the third category which was labelled 'education'. A total of 6% of the respondents felt the need for the promotion of integration within the school to actively involve disabled children in physical activities. Adaptation of sport and recreation activities for the disabled was mentioned to help promote this involvement. Rather than grouping all disabled individuals together in one class, a continuum for physical activity, based on the level and severity of disability, was suggested.

Concerning 'awareness and promotion', 8% of the surveyed population felt the need for publicity campaigns by sport and recreation associations to help increase involvement in physical activity by the disabled. This included the provision for appropriate role models for physically disabled females. The availability of information to help motivate individuals was also mentioned as a way to increase participation in physical activity.

Although the next category did not offer concrete needs and desires similar to the others mentioned, it did offer advice for disabled

individuals. Six percent of those surveyed felt it was important to maintain a positive attitude concerning physical activity. Being disabled was not necessarily thought to be a reason for lack of participation in physical activity, nor was it acceptable as an excuse.

A total of 11% responded under the category of 'don't know'. Largely because these individuals were not aware of what was available in terms of physical activity programming, they felt they could not respond to what types of programs were needed.

Other questions in the survey dealt with the identification of some specific needs and desires in physical activity programming. When asked with whom they would prefer to be physically active (within the context of a segregated versus integrated setting), 36% of the females surveyed stated that 'it did not matter', 4% preferred to be active with other physically disabled individuals only, and 5% preferred to be active with able-bodied individuals only (See Table 9).

TABLE 9

PREFERENCE OF COMPANION IN PHYSICAL ACTIVITY
FOR PHYSICALLY DISABLED FEMALES

	Frequency*	Percent*
1. Other physical disabled individuals	6	3.4
2. Able-bodied individuals	9	5.2
3. Both physically disabled and able-bodied	53	30.5
4. With physically disabled individuals in some activities and able-bodied individuals in other activities	39	22.4
5. Does not matter	62	35.6
6. Do not want to participate in physical activity	5	2.9

*Individuals were asked to choose the one statement that best described their preference of companion in physical activity.

When asked to specifically identify their companion preference, 48% of all respondents chose to participate in physical activity with their friends. A total of 27% had no preference, while 12% cited family or relatives as their main choice.

Related to the preceding questions dealing with preference for a companion, 24% of all those surveyed chose to participate with both men and women. If given the choice 16% would be physically active with other women, while less than 1% specifically chose men. A majority (57%) claimed 'it did not matter'.

The actual location of participation in physical activity when compared to the preferred location yielded interesting results. While 20% stated they participate in the 'park or outdoors', 40% preferred this location. Nineteen percent of the females surveyed participate in

the home while 11% mentioned the home as their preferred location. Response to an indoor recreation facility in both actual and preferred instances were close to equal (See Table 10).

TABLE 10
ACTUAL AND PREFERRED LOCATIONS FOR PARTICIPATION
IN PHYSICAL ACTIVITY

	<u>PREFERRED LOCATION</u>		<u>ACTUAL LOCATION</u>	
	Frequency*	Percent*	Frequency*	Percent*
1. Park/Outdoors	70	40.2	35	20.1
2. Home	19	10.9	33	19.0
3. Indoor Recreational Facility	51	29.3	52	29.9
4. Commercial Facility or Private Club	11	6.3	52	29.9
5. Work	-	-	1	-
6. School/College/University	5	2.9	14	8.0
7. Other	10	5.7	6	3.4
8. Do not participate	5	2.9	20	11.5

*Individuals were asked to choose one statement that best described their preferred location and their actual location for participation in physical activity.

BARRIERS AND CONSTRAINTS TO PARTICIPATION

All respondents were asked to assess a list of limiting factors to participation in physical activity to help identify some of the barriers and constraints to participation in activity for physically disabled

females. Most often cited in the very important category were 'inaccessible facilities' with a 35% response rate, 'lack of information on available services' with a response rate of 34%, 'transportation problems' with a response rate of 30% and 'inappropriate activities' with a 29% response rate. The highest rated factor under the somewhat important category was 'high expense of activity' which was reported by 37% of respondents. 'Embarrassment, lack of self-confidence' was not very important for 27% of the survey population; while 57% cited 'time constraints due to school' not at all important. (See Table 11).

TABLE 11
LIMITING FACTORS TO PARTICIPATION IN PHYSICAL ACTIVITY
BY PHYSICALLY DISABLED FEMALES

	<u>VERY IMPORTANT</u>	<u>SOMEWHAT IMPORTANT</u>	<u>NOT VERY IMPORTANT</u>	<u>NOT AT ALL IMPORTANT</u>
a) Embarrassment, Lack of self-confidence	8.3	27.2	26.6	37.9
b) Physical discomfort	14.2	28.0	14.2	33.9
c) Lack of interest	17.0	29.1	24.3	29.7
d) Inaccessible facilities	34.6	26.1	16.4	23.0
e) Transportation problems	30.3	19.1	17.9	33.3
f) High expense of activity	19.2	37.1	18.6	25.2
g) Inappropriate activities	28.4	34.2	13.6	23.9
h) Lack of information on available services	33.5	30.0	15.0	21.6
i) Medical advice	21.7	20.5	22.3	35.6
j) Time constraints due to work	21.1	33.7	9.6	35.6
k) Lack of appropriate equipment	20.4	19.2	15.0	45.5
l) Time constraints due to family	10.2	25.8	17.4	46.7
m) Time constraints due to school	14.4	15.0	13.8	56.9
n) Medical problems	17.4	24.0	16.2	42.5
o) Encounter negative attitudes	8.4	19.2	25.8	46.8
p) Lack of encouragement by family, friends or other	12.0	15.0	18.6	54.5
q) Lack of companion	18.7	26.5	18.7	36.2

Included in the survey was a question consisting of thirteen independent statements which attempted to tap some of the attitudes of physically disabled females towards participation in physical activity. Using a Likert scale, respondents were asked to indicate whether they 'strongly agreed', 'agreed', 'disagreed' or 'strongly disagreed' with each listed statement.

Overall the largest single statistic reported showed 60% of the surveyed population agreed that 'society in general is becoming more aware of the physical activity needs of physically disabled women'. The lowest response was reported in two cases: Only 4% strongly agreed that 'it is more acceptable for a physically disabled man to participate in physical activity than it is for a physically disabled woman to participate in physical activity', and just 4% strongly agreed that they felt 'more comfortable around physical disabled individuals than able-bodied individuals'.

It is interesting to note that almost 70% of the females questioned disagreed or strongly disagreed with the statement 'the main reason I participate in physical activity is for rehabilitation purposes'.

A combined total of 26% felt discriminated against because they were female, while 22% agreed or strongly agreed they were discriminated against because they were disabled.

A majority of females surveyed (66%) agreed or strongly agreed that they were not intimidated by able-bodied individuals when participating in physical activity. Another majority (75%) disagreed or ~~strongly~~ disagreed that they needed special treatment when participating in physical activity because of their disability (See Table 12).

TABLE 12
ATTITUDES OF PHYSICALLY DISABLED FEMALES TOWARD
PARTICIPATION IN PHYSICAL ACTIVITY

	<u>STRONGLY AGREE</u>	<u>AGREE</u>	<u>DISAGREE</u>	<u>STRONGLY DISAGREE</u>
a) I feel self conscious about my body, because of my disability, when participating in physical activity.	13.4	30.2	32.0	24.4
b) I do not feel discriminated against because I am female.	35.1	39.2	18.1	7.6
c) I am not intimidated by able-bodied individuals when participating in physical activity.	32.4	43.0	14.7	10.0
d) I do not participate in physical activity because I am afraid I will hurt myself.	4.1	13.0	27.7	55.3
e) I feel discriminated against because I am physically disabled.	5.3	16.6	44.4	33.7
f) Watching other physically disabled individuals participating in physical activities encourages me to participate also.	27.1	45.9	20.0	7.1
g) I need special treatment when participating in physical activity because I am physically disabled.	5.9	23.5	34.1	36.5
h) People feel sorry for me because I am physically disabled.	4.1	28.4	57.9	9.6
i) It is more acceptable for a physically disabled man to participate in physical activity than it is for a physically disabled woman to participate in physical activity.	3.5	10.0	41.2	45.3
j) The main reason I participate in physical activity is for rehabilitation purposes.	10.0	20.1	45.3	24.1
k) Society in general is becoming more aware of the physical activity needs of physically disabled women.	13.1	60.1	20.8	6.0
l) I feel self-conscious about my body when participating in physical activity because I am overweight.	7.7	20.4	32.6	39.5
m) I am more comfortable around other physically disabled individuals than able-bodied individuals.	3.5	10.5	45.6	40.4

CHAPTER V

DISCUSSION

In the past, it has been suggested that physically disabled individuals are not interested in physical activity and that inactivity is largely attributed to the individual's physical disability. The results of this study indicate a large majority of physically disabled females recognize the importance of physical activity and have a desire to participate. Physical activity was very or somewhat important for 92% of the surveyed population and 87% felt, in terms of their lifestyle, that physical activity was also very or somewhat important. Why then do 63% of the disabled females surveyed feel they do not get sufficient physical activity?

In an assessment of their physical activity level 33% of the females surveyed were quite active, 10% were very active, 22% were somewhat active and 25% were inactive. However, of the combined somewhat active and inactive participants, 62% said they would be more physically active if programs were made available. This statistic certainly seems to indicate a strong desire by those women not active to become more active.

Concerning the extent to which physical disability prevents participation in physical activity 30% felt their disability seriously prevents their participation. Forty-three percent believed their disability only somewhat prevented their participation, and 27% were not at all prevented from physical activity because of their disability. In the assessment of the severity of their disability 12% described their

disability as total, 21% as major, 25% had some disability, and those with a moderate disability comprised 36%. The degree unknown was 4%. It appears from these results that the causal relationship between physical disability and inactivity is not conclusive. In fact, it is possible to infer from this study that one's disability has little to do with one's relative inactivity in recreational and sport participation.

These statistics indicate there are likely other factors which affect participation in physical activity amongst physically disabled females which may not be related to the severity of one's physical disability. In order to best examine these factors it is necessary to return once more to the project objectives and discuss its application to the physical activity participation model alluded to in the review of literature.

FREQUENCY AND DEGREE OR INTENSITY OF PARTICIPATION

It would appear from the results that the majority of disabled females prefer physical activities which can be done alone or with a partner. Of the five most popular activity choices (walking/wheeling, home exercise, swimming, dancing and weight training) the greatest inclination is towards those activities which require little or no equipment or facilities. (The inclusion of weight training as a popular activity choice may be due to a large number of respondents sampled from a weight training centre.)

The tendency for physically disabled females to be active on their own, with little or no equipment or facilities, may not necessarily be due to preference however. It has already been mentioned that

relatively inactive participants would participate more in physical activities if information about the programs were available. Additional barriers faced by physically disabled females (at all activity levels) include 'inaccessible facilities', 'transportation problems', 'inappropriate activities,' and 'lack of companion'. Thus, participation in those activities may be attributed more to ease and necessity rather than a desired preference.

Team and group oriented activities organized at competitive levels are much more popular amongst quite and very active participants, than amongst somewhat active and inactive participants. This may be due to the fact that the active participants are more motivated, as reflected by their level of activity, to participate in a greater range of activities. It could also be that these women were and are affected by different situational and socialization factors compared to less physically active females.

Although not specifically tested in this survey, the research into available literature demonstrates the effect of various situational and socialization determinants upon female participation in physical activity (Hall, 1976; Hall and Richardson, 1982; Greendorfer, 1977; Gilverson, 1981; Deem, 1982; Dickinson and Perkins, 1985; Stinson, 1986). It is possible that the quite and very active women surveyed in this study had more positive experiences with sport and physical activity at various stages in their lives than the inactive and somewhat active females studied. It is reasonable to assume that the women who reported more activity may have received more support from "significant others", such as family members and friends; they may also have been

exposed to more role models than the less active females surveyed. Simply put, the reasons for greater reported frequencies in both the level and the type of physical activities for some of the disabled females surveyed is probably due to the fact that these women had more real or perceived opportunities to participate in physical activities than did the less active females surveyed.

Given this scenario, the results reported that the number of females involved in group and team oriented activities is quite small. The reasons for this come from two essentially non-related components: the barriers resulting from disability and the barriers resulting from gender. The traditional and conservative attitudes which persist within organized sport regarding appropriate roles or activities for females (able-bodied and disabled) tend to contribute to the limiting or restricting of equal opportunities for female participation in sport (Kemper, 1968; Zoble, 1972; Hall, 1976; Hall and Richardson, 1982; Thierfeld and Gibbons, 1986; Grimes and French, 1987). The women surveyed in this case may feel constrained by many of the stereotypic notions concerning not only the female's role in sport and recreational activities but the role for disabled individuals as well. Unfortunately many physical activity programs are still designed according to stereotypic notions of what is suitable and unsuitable for disabled women (Hall, 1976). The result of these attitudes, very often, is participation by females in less competitive and more passive physical activities and in more sheltered environments (compared to males).

There are definitely fewer opportunities for physically disabled females to participate in organized physical activities compared to

disabled males. One reason is because there are fewer physically disabled females with whom to participate (De Pauw, 1986; Thierfeld and Gibbons, 1986). However, disabled females are restricted as well by negative attitudes and a lack of programs (Nixon, 1977, 1982; Dickinson and Perkins, 1985; Thierfeld and Gibbons, 1986; Grimes and French, 1987). Both of these factors are related to gender and disability and result in the much referred to double disadvantage for disabled females.

ENTRY PROCESS INTO INVOLVEMENT IN PHYSICAL ACTIVITY

Of the physically active females surveyed, 46% were involved in physical activity offered by an agency. Most often the agency was a disability-affiliated agency, either sport or non-sport related. Discovery of the agency was usually made through friends and relatives.

Only 4% of the respondents found out about these programs through the education system and 12% were prompted by newspaper articles or information pamphlets.

A major barrier to participation is a lack of available information concerning physical activity programs for disabled females. This lack of information is particularly evident within the school system. As an important source of awareness, the education system must be actively involved in the promotion of physical activities for disabled individuals to help increase their potential for participation.

It is also important that the education system provide positive experiences associated with physical activity participation for disabled females. With respect to the situational and socialization determinants identified by Hall (1976) both educational background and the enjoyment

of school physical education were significant factors related to involvement (or the lack of it) in physical activity. Research also indicates that a woman who is not encouraged to be physically active as a girl will also be unlikely to participate in physical activity as an adult (Hall and Richardson, 1982; Deem, 1982; Thierfeld and Gibbons, 1986). The existence of negative physical education experiences related to limited opportunities to participate and various negatively stereotyped attitudes toward female involvement in physical activity are equally prevalent in the literature (Zoble, 1972; Hall, 1976; Hall and Richardson, 1982; Duquin, 1982).

Because it has been shown that disabled females are often victimized by many of the same gender related stereotypes as able-bodied females (Grimes and French, 1987), it is essential that the education system be aware of the harmful carryover effects such attitudes have with respect to later involvement in physical activity for females.

It is also vital that the disabled female participate in as wide a range of physical activities available while attending school. The limitations placed on a disabled girl imposed, not because of physical disability, but because of ill-prepared educators, can indeed be harmful to the future development of disabled females physically and psychologically.

A high degree of motivation amongst active participants is further indicated by the fact that 50% of active respondents identified themselves as the individual most responsible for initial participation into physical activity. These results are in agreement with previous studies which cited similar tendencies amongst disabled adults active in

physical activity (Ruckert, 1980; Sherrill, 1984).

Because this questionnaire did not specifically or sufficiently refer to role models as important sources of encouragement in physical activity, it is difficult to provide an assessment on this as an influence on participation. Given the assumption that role models are an important source of encouragement for involvement in physical activities however, one may say that a lack of role models can be a deterrent to involvement. The research available on able-bodied and disabled females does in fact show that a positive relationship exists between females and female role models in terms of their sociological development and participation in physical activity (Hall, 1976; Greendorfer, 1978; Fine and Asch, 1981; Dickinson and Perkins, 1985; Grimes and French, 1987).

It is interesting to note the reasons for being active amongst quite and very active respondents. Contrary to popular opinion, the main reason for participation in physical activity is not for rehabilitative or therapeutic purposes. The six major reasons for participation amongst the surveyed population are quite similar to those reported by the able-bodied women (Changing Times: Women and Physical Activity, 1984). These include such things as 'to improve or maintain fitness', 'to feel better', 'for pleasure and fun', 'to control weight and improve appearance', 'to challenge abilities', and 'to improve flexibility'.

Barring obvious contact with associations which deal specifically with disabled persons, physically disabled females become involved and stay involved in physical activities for the same reasons as able-bodied

participants. Equally apparent is the fact that their low involvement (or, in certain cases, non-involvement) in some activities, is due to many of the same reasons which exist for able-bodied women such as lack of time and money.

It would seem from the survey results that the rehabilitative benefits connected to physical activity, although important, are not as important for the disabled female as is presently believed by many people in our society. In fact, it appears that any appeals to disabled Canadians (particularly female) would be more successful if made from a more gender-related basis than a disability-related basis. This and other needs are particularly evident in the following analysis of results.

NEEDS AND DESIRES OF PHYSICALLY DISABLED FEMALES FOR PHYSICAL ACTIVITY PROGRAMMING

Results indicate a majority of physically disabled females participate in activities with able-bodied individuals. Their preference for companion also demonstrates an inclination towards an integrated, rather than segregated, environment. Other results echo these sentiments.

In a question which examines attitudes of physically disabled females toward participation in physical activity, 76% agree or strongly agree they do not feel intimidated by able-bodied individuals when participating in physical activity. Eight-six percent disagree that they are more comfortable around other physically disabled individuals than able-bodied individuals.

The literature on integration and/or segregation is substantial (King, 1974; Charbonneau, 1977; Nixon, 1982; White, 1983; Stein, 1983; Marshall, 1983; Brandmeyer and McBee, 1984; Sherrill, Rainbolt and Ervin, 1984). Advocates of segregation believe disabled individuals have unique physical activity needs compared to able-bodied persons and need additional 'protection' because of physical limitations.

Results from this study indicate the inaccuracy of some of these beliefs. An overwhelming percentage (83%) disagree or strongly disagree with the statement, "I do not participate in physical activity because I am afraid I will hurt myself". Only 24% agree with the statement, "I need special treatment when participating in physical activity because I am physically disabled".

A majority of the respondents (57%) also disagree or strongly disagree that their disability makes them feel self-conscious about their bodies when participating in physical activity.

Some of the rationale behind the existence of segregation, it seems is therefore not applicable based on the results of this survey. In fact, it appears there is an expressed desire by many disabled individuals to de-emphasize the ghetto mentality which segregated environments often promote through stigmatization, stereotyping and prejudice (Nixon, 1982; Sherrill, 1984).

Another dimension to the integration/segregation issue evidenced by the survey is the need, identified in the open-ended question regarding future programs, for active participation by females involved in integrated physical activity programs.

The mere provision of programs in integrated settings for disabled

females is not sufficient. In order for integration to be successful, participants must feel personally satisfied. With respect to physical activity, personal satisfaction may be measured in several ways, many of which depend on the individual's own reasons and motivations for participating.

As noted previously, the reasons for being physically active amongst disabled women in this survey are similar to reasons expressed by able-bodied women in other studies. Some of these reasons include 'to control weight/improve appearance', 'for pleasure and fun', 'to feel better', 'to challenge abilities', 'to improve flexibility' and 'to improve or maintain fitness'.

In the development of integrated physical activities, programmers and practitioners need to be aware of these reasons, and design appropriate activities based on these reasons. Any program (integrated or segregated) which ignores this point will probably be unsuccessful and gain little support from disabled individuals.

It appears from the survey results that there is a need for integrated physical activity programs which accommodate physically disabled females. Although the preference for these programs is strong; there is still a need for physical activities in segregated settings as well. The fact that 30% of the females surveyed feel self-conscious about their physical disability when participating in physical activity indicates a necessity to maintain segregated programs in some instances.

It cannot be conclusively determined that segregated programs do (or would) decrease the feelings of self-consciousness which exist for some disabled females. However, the inherent value of segregation in

terms of group cohesion may be a facilitator of the positive feelings associated with self-worth and self-esteem. The fact that segregation by nature fosters feelings of 'differentness' can both negatively and positively affect an individual's development, and this must also be considered. The need for the development of more physical activity programs is also expressed by disabled women in the survey. This is not surprising given the limited programs which are presently available for these women. The fact is, as pointed out in the literature, the disabled population is diverse and consists of people with many different needs and interests. They are no different in this respect than the able-bodied population (Lancaster-Gaye, 1973; Charbonneau, 1977; Hutchison, 1980).

Increasing the number and variety of program offerings for disabled women is not enough however. Provisions must be made for women who have varying skill levels and different types of disabilities.

Some of the needs identified by respondents in this survey include fitness classes designed for disabled females and instruction in various sports and recreational activities. The desire for more available information is again expressed in the open-ended question, the fact that 11% feel they cannot comment on the kinds of physical activity programs needed by disabled females, because they are unaware of the programs presently offered further reflects a need for increased promotion.

Involvement in physical activity is influenced by a variety of situational and socialization factors. Studies dealing with the sources of encouragement in physical activity demonstrate that initial involvement by disabled and able-bodied individuals into sport and

recreation depends largely on external sources. The motivation to continue, however, comes from the many pleasures inherent in the activity and intrinsic sources rather than from outside the individual (Dickinson and Perkins, 1985).

It is reasonable to assume, therefore, that because motivation is vital to participation in any physical activity, and interest can best be maintained through successfully run programs, that the needs expressed by the females surveyed be reflected in future physical activity programs for the disabled female.

BARRIERS AND CONSTRAINTS TO PARTICIPATION

Survey results indicate the major barriers and constraints to participation relate quite highly to the environmental and physical elements present in society. The highest ranked limiting factors to participation are 'inaccessible facilities', 'lack of information on available services', 'transportation' problems', 'time constraints due to work', and 'inappropriate activities'. The main factor ranked under the 'somewhat important' category is 'the high expense of activity'.

The limiting role played by the cost factor is not at all surprising given the economic background of respondents in this survey. Results indicate over 49% of the surveyed population earns less than \$10,000; an amount far below the poverty level in Canada. In terms of priorities, therefore, participation in physical activities is understandably low. This study did not address the relative importance of physical activity compared to other specific lifestyle components, so the degree to which economic difficulties limits participation can only

be inferred. However, of the many variables which affect participation in physical activity, past studies show that socio-economic status is of major significance (Hall, 1976; Gilverson, 1981).

The availability of time is also a major indicator of physical activity participation. The degree to which time constraints limit physical activity is relative to the perceived importance placed upon physical activity by each individual. Past studies indicate more women, compared to men, feel time is a limiting factor to participation (Hall, 1976; Deem, 1982; Changing Times: Women and Physical Activity, 1984; Lupton, Ostrove and Bozzo, 1984). This appears to be a gender-related issue related largely to the traditional roles for women of wife, mother and worker. The fact that more women today, either by choice or necessity, are involved in an outside working environment, as well as the home and family environment definitely affects, and perhaps limits, the time available for physical activity pursuits.

The remaining barriers encountered by disabled women in this survey are among the typical, albeit unacceptable, barriers which most disabled persons face at one time or another. These barriers, such as inaccessible facilities and transportation problems, have been addressed by several previous studies (Hutchison and Lord, 1979; Hutchison, 1980; White, 1983). Based on the results of this survey, these architectural barriers still remain major constraints to participation in physical activity.

Perhaps more difficult to overcome, yet equally limiting, are the more personal barriers and constraints to physical activity encountered specifically by disabled females. Of particular interest are the survey

results which deal with issues of discrimination. A total of 22% of the women surveyed feel discriminated against because they are disabled, while 26% feel discriminated against because they are female. The slightly higher response rate of gender-related discrimination over disability-related discrimination is consistent with other survey results which show more significant parallels between able-bodied and disabled women, than between disabled men and disabled women (Hall, 1976; Deem, 1981; Thierfeld and Gibbons, 1986; Grimes and French, 1987).

The fact that the percentage difference between disability and gender is insignificant also supports the double disadvantage issue and the related problems associated with discriminations on the basis of gender and disability.

Only 14% of the females in the study feel it is more acceptable for a physically disabled man to participate in physical activity than it is for a physically disabled woman to participate in physical activity. Judging from this result, disabled women feel quite strongly about participation in physical activity from a gender-based equality viewpoint (just as able-bodied women feel about their participation compared to men).

This study did not specifically ask how disabled women feel discriminated against; nor did it ask why they feel this way. The results from a question asking respondents to assess a list of limiting factors to participation, however, may provide some suggestions in this area.

Not including the environment-related barriers already alluded to, a significant limiting factor to participation in physical activity for

the disabled women in this survey is 'inappropriate activities'.

Previous studies demonstrate existing differences in physical activity patterns between males and females (Fitness and Lifestyle in Canada, 1983; Physical Activity Among Activity-Limited and Disabled Adults, 1986). The reasons for these differences, however, are not relevant for this argument.

Studies also show that disabled men are more involved in physical activity than disabled women and that this is apparent in all levels of activity (De Pauw, 1986; Physical Activity Among Activity-Limited and Disabled Adults, 1986). The fact that disabled men have more opportunities to participate in physical activities (Thierfeld and Gibbons, 1986) is also significant.

If one accepts that there are male-female differences (able-bodied or not) in physical activity patterns, and that a greater number of disabled men participate in physical activities at various levels of participation, it is not surprising that the women in this survey feel that inappropriate activities is a limiting factor to participation.

To a large extent the activities which exist for disabled individuals today are designed primarily with men in mind (Thierfeld & Gibbons, 1986). From this perspective therefore, accepting that disabled females have unique needs and interests based on their gender, this result is to be expected. In order to overcome this barrier to participation it is vital that the specific and, at times, unique needs of disabled women in physical activity be recognized and met.

Of significance to the success for future programs is the already mentioned issue of role models for disabled females. Certainly a lack

of female role models may be considered a barrier and constraint to participation in physical activity. A total of 73% of women in this study indicate that watching other physically disabled individuals encourages them to participate also. In the interest of promoting physical activity amongst disabled females, the potential for increased participation via exposure to role models is quite realistic.

It is significant that 73% of the women surveyed agree that society, in general, is becoming more aware of the physical activity needs of disabled females. On the positive side, this is no doubt due (at least in part) to the increased visibility of disabled persons in our society today. Yet, if one examines the situation more critically the picture is not so bright. The fact is the literature, and the results of this study demonstrate economical, psychological and social disadvantages which still exist for disabled women in Canadian society today. Furthermore, many of these disadvantages seen from gender-based and disability-based perspectives, directly and indirectly affect the degree of perceived involvement in physical activity for disabled women.

CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS

SUMMARY

The purpose of the survey was to identify the physical activity patterns and physical activity needs of physically disabled females in Canada.

Individuals were sampled from as wide an age range and activity base as possible. Subjects were sought from national and provincial disability associations, both sport and non-sport related. A total of 174 females of various physical disabilities were involved in this study.

The research instrument used for this investigation was a self-administered close-ended questionnaire. Descriptive information on physical activity patterns, barriers and constraints to participation in physical activity and the needs and issues dealing with physical activity programs were all addressed.

Frequencies and percentage response rates for each question were calculated and reported based on the project objectives. These objectives included:

- 1) To determine the frequency and degree of intensity of participation of physically disabled females;
- 2) To determine the entry process into involvement in physical activity;

- 3) To determine the needs and desires of physically disabled females for physical activity programming; and
- 4) To determine the barriers and constraints to participation.

Through available research in the area, the results were analyzed and compared and contrasted with previous related studies pertaining specifically to physically disabled females. When this was not possible, largely because of a lack of research-specific data, inferences were drawn from studies on other populations. These included information obtained on disabled males as well as able-bodied males and females.

CONCLUSIONS

The results of this study indicate that there are a number of complex socialization and situational factors which affect participation in physical activity. These factors are both gender-related and disability-related.

The study revealed evidence to support the 'double-disadvantage' issue in the sense that disabled females are members of two minority groups. However, results demonstrated that disabled females are greater victims of gender-based disadvantages rather than disability-based disadvantages.

Additional survey results show the number of physically disabled females participating in physical activity is not consistent with the number of females who express a desire to participate. A majority of those surveyed are not satisfied or only somewhat satisfied with the

physical activity programs presently offered for physically disabled females. Furthermore, the reasons for this dissatisfaction are not rooted intrinsically, but exist due to many external factors present in society.

These include many attitudinal predispositions based on gender and disability. The resulting stigmatizations, stereotypes and prejudices affect society's perceptions of, and actions towards, disabled women. Although not necessarily related to participation in physical activity these perceptions and actions have a tremendous carryover effect for disabled females into many aspects of their lives.

Society may be becoming more aware of the physical activity needs of disabled females, but the programs and activities offered do not always reflect this awareness. While it must be realized and accepted that some disabled females will never be involved in physical activities, due to choice or severe disablement, the opportunity to participate in physical activities must be made available to physically disabled females. Furthermore, this opportunity must be available in as wide a range of physical activities as possible, not as a privilege, but as an equal right.

CHANGES TO THE STUDY

The following suggested changes would be beneficial to further research into physical activity and the physically disabled female.

1) Modifications in Sampling Technique

In order to gain more conclusive results, and determine any existing differences between various disability groups,

improved methods for sample selection are recommended. This would include considerations for disabled women registered with associations which are sport and non-sport related. An increase in sample size on the basis of age, activity level and type of disability would also be beneficial.

2) Modifications in Research Design

Data gathered through interviews consisting of open-ended and close-ended questions would be beneficial and lend greater credibility to the results found in the study through the survey method.


3) Modifications in the Type of Questions Asked

Additional questions based on gender-specific and disability-specific issues would be useful from a comparative viewpoint. More questions addressing the importance of role models and previous experiences in physical activity by the disabled females would also be useful. Emphasis should also be placed on questions which address the subjects level of skill and competency in various physical activities. Survey questions related to barriers to participation were only on external factors. Further developments concerning those barriers under internal control need to be addressed.

RECOMMENDATIONS

Based on the descriptive data gathered from the report there are many implications for application to physical activity programs for the physically disabled female participant. There is a need for:

- 1) the development of a promotional campaign within the school system to provide the initial and/or increased awareness concerning physical activity and the physically disabled participant, as well as the impetus necessary to initiate involvement into physical activity by disabled children;
- 2) the school system to provide an opportunity for disabled individuals to participate in physical activities which may be continued outside of the school environment;
- 3) leadership training and leisure counselling to provide knowledgeable instructors familiar with the physical activity needs of physically disabled females;
- 4) the improved dissemination of information by the schools and the community at large concerning physical activity and the disabled participant;
- 5) the provision for prominent role models, particularly with respect to greater exposure of physically disabled females successfully participating in all levels of physical activity to help encourage participation by other disabled females;
- 6) increased opportunities for physically disabled females to participate in physical activities within an integrated environment;
- 7) the provision of appropriate and preferred physical activities which are gender specific and equity based; and
- 8) messages promoting physical activity for the physically disabled female should reinforce the positive images associated

with fitness, personal satisfaction, and overall well-being, rather than concentrating on the rehabilitative value of physical activity participation by disabled individuals. 

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APPENDIX A

SURVEY QUESTIONNAIRE (ENGLISH)

PHYSICAL ACTIVITY PATTERNS AND THE PHYSICALLY DISABLED

FEMALE IN CANADA

QUESTIONNAIRE

Study Sponsored Jointly

by

Fitness and Amateur Sport Women's Program

and

Canadian Federation of Sport Organizations for the Disabled

(CFSOD)

in conjunction with

Department of Physical Education and Sport Studies

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Physical Activity means those experiences derived through sporting or other physical recreational activities pursued for pleasure and/or competitive purposes, which require an expenditure of physical energy and lead to improvement of physical well being and healthy lifestyle.

1. How important is physical activity to you? (Circle the number of your answer.)

1. VERY IMPORTANT
2. SOMEWHAT IMPORTANT
3. NOT VERY IMPORTANT
4. NOT AT ALL IMPORTANT

2. Do you think that you get sufficient physical activity or do you feel that you should be more active? (Circle the number of your answer.)

1. GET SUFFICIENT ACTIVITY
2. SHOULD GET MORE PHYSICAL ACTIVITY
3. DON'T KNOW

3. To what extent does the fact that you are physically disabled prevent you from participating in physical activity? (Circle the number of your answer.)

1. A LOT
2. SOMEWHAT
3. NOT AT ALL

4. In terms of your lifestyle how important is your own participation in physical activity? (Circle the number of your answer.)

1. VERY IMPORTANT
2. SOMEWHAT IMPORTANT
3. NOT VERY IMPORTANT
4. NOT AT ALL IMPORTANT

5. Are you presently involved as an active participant in a program of physical activity organized by an agency? (Circle the number of your answer.)

1. YES
2. NO
3. DON'T KNOW

If yes, what is the agency? _____

How did you find out about this program? _____

6. a) Were you born with a physical disability or did you acquire your disability later in life? (Circle the number of your answer.)

1. BORN WITH A PHYSICAL DISABILITY
2. ACQUIRED DISABILITY LATER IN LIFE

- b) If acquired, how would you describe your present level of participation in physical activity compared to that before onset of disability. (Circle the number of your answer.)

1. MORE PHYSICALLY ACTIVE
2. LESS PHYSICALLY ACTIVE
3. ABOUT THE SAME
4. DON'T KNOW

- c) Following onset of your disability how long was it before you became involved in physical activity (excluding physical activity which occurred during medical rehabilitation)? (Circle the number of your answer.)

1. THREE MONTHS
2. SIX MONTHS
3. NINE MONTHS
4. A YEAR OR LATER
5. DID NOT BECOME INVOLVED

7. How would you describe your participation in physical activity at present? (Circle the number of your answer.)

1. INACTIVE (average less than once a week for less than 9 months of the year)
2. SOMEWHAT ACTIVE (average once a week for less than 9 months of the year)
3. QUITE ACTIVE (average 2-3 times a week for less than 9 months of the year)
4. VERY ACTIVE (average more than 3 times a week for 9 or more months of the year)

If you circled Number 1. or Number 2. as your answer go to question 8.

If you circled Number 3. or Number 4. as your answer go to question 10.

8. If activity programs for physically disabled women were made available in your community would you become more physically active? (Circle the number of your answer.)

1. YES
2. NO
3. DON'T KNOW

9. What changes listed below would encourage greater participation in physical activity for you? (Circle ALL appropriate numbers.)

1. MORE FACILITIES CLOSER TO RESIDENCE
2. PEOPLE WITH WHOM TO PARTICIPATE
3. KNOWLEDGEABLE INSTRUCTORS
4. SUPPORT OF DOCTOR
5. SUPPORT OF FAMILY, RELATIVES
6. ORGANIZED PHYSICAL ACTIVITIES AVAILABLE
7. ACCESSIBLE FACILITIES
8. MORE AVAILABLE INFORMATION ON PROGRAMS FOR PHYSICALLY DISABLED
9. SUPPORT OF FRIENDS
10. LESS EXPENSIVE FACILITY USE
11. MORE LEISURE TIME
12. AVAILABLE CHILD CARE
13. EXPOSURE TO OTHER PHYSICALLY DISABLED WOMEN INVOLVED IN PHYSICAL ACTIVITY
14. GOOD COMMUNITY TRANSPORT SYSTEM
15. NONE
16. OTHER (PLEASE SPECIFY) _____

Proceed to Question 12.

10. Please assess each of the following statements and indicate by circling one of the numbers whether the listed reason for being active is: 1 - very important, 2 - somewhat important, 3 - not very important, 4 - not at all important.

<u>REASON FOR BEING ACTIVE</u>	<u>VERY IMPORTANT</u>	<u>SOMEWHAT IMPORTANT</u>	<u>NOT VERY IMPORTANT</u>	<u>NOT AT ALL IMPORTANT</u>
TO CONTROL WEIGHT/ IMPROVE APPEARANCE	1	2	3	4
MEDICAL ADVICE	1	2	3	4
ADVICE OF OTHERS (SPECIFY OTHERS)	1	2	3	4
<hr/>				
TO RELAX, REDUCE STRESS	1	2	3	4
FOR PLEASURE AND FUN	1	2	3	4
TO FEEL BETTER	1	2	3	4
TO LEARN NEW THINGS	1	2	3	4
TO CHALLENGE ABILITIES	1	2	3	4
FOR COMPANIONSHIP	1	2	3	4
TO IMPROVE FLEXIBILITY	1	2	3	4
TO IMPROVE OR MAINTAIN FITNESS	1	2	3	4
FOR REHABILITATION OR THERAPEUTIC PURPOSES	1	2	3	4
OTHER	1	2	3	4

11. Who was responsible for your initial participation in physical activity? (Circle the number of your answer.)

1. SELF
2. FAMILY/RELATIVES
3. DOCTOR
4. PHYSICAL THERAPIST
5. OTHER REHABILITATION PERSONNEL
6. SCHOOL/COLLEGE/UNIVERSITY
7. FRIENDS
8. CO-WORKERS
9. OTHER AGENCY (PLEASE SPECIFY) _____
10. OTHER (PLEASE SPECIFY) _____

12. Please circle the number of the category that best reflects your level of participation (alone or in a group) in the following physical activities. Please give an answer for each activity.

ACTIVITY	ACTIVITY LEVEL						
	NON-COMPETITIVE/ NON-ORGANIZED E.g. Jogging with a friend	NON-COMPETITIVE/ ORGANIZED SETTING E.g. Scheduled Fitness class	RECREATIONAL COMPETITION/ ORGANIZED SETTING E.g. Playing Tennis at a Club	LOW INTENSITY COMPETITION/ ORGANIZED SETTING E.g. Wheeling in 10K Roadrace	HIGH INTENSITY COMPETITION E.g. Regional or National Championships	HIGH PERFORMANCE E.g. International Championship	DO NOT PARTICIPATE
TENNIS	1	2	3	4	5	6	7
BOWLING	1	2	3	4	5	6	7
ICE SKATING	1	2	3	4	5	6	7
DANCING	1	2	3	4	5	6	7
SWIMMING	1	2	3	4	5	6	7
OTHER AQUATICS	1	2	3	4	5	6	7
BICYCLING	1	2	3	4	5	6	7
BASKETBALL	1	2	3	4	5	6	7
VOLLEYBALL	1	2	3	4	5	6	7
JOGGING/RUNNING/ WHEELING (TRACK OR ROAD)	1	2	3	4	5	6	7
DOWNHILL SKIING	1	2	3	4	5	6	7
WEIGHT TRAINING	1	2	3	4	5	6	7
EXERCISE CLASSES	1	2	3	4	5	6	7
CROSS COUNTRY SKIING	1	2	3	4	5	6	7
HOME EXERCISE	1	2	3	4	5	6	7
WALKING/WHEELING	1	2	3	4	5	6	7
CAMPING	1	2	3	4	5	6	7
HIKING	1	2	3	4	5	6	7
GARDENING	1	2	3	4	5	6	7
OTHER OUTDOOR ACTIVITIES (PLEASE SPECIFY)	1	2	3	4	5	6	7
OTHER INDIVIDUAL SPORTS (PLEASE SPECIFY)	1	2	3	4	5	6	7
OTHER TEAM SPORTS (PLEASE SPECIFY)	1	2	3	4	5	6	7

13. Return to Question 12 and put an "X" through the circled activities that you participated in with able-bodied individuals. For example, if you circled a 2 as your activity level for Dancing in Question 12, and you participate in this activity with able bodied individuals put an X through your circle.

Example:

ACTIVITY	ACTIVITY LEVEL						
DANCING	1	2	3	4	5	6	7

[illegible]

15. The following is a list of statements dealing with attitudes related to physical activity. Please indicate by circling the appropriate response whether you:
1 - Strongly Agree, 2 - Agree, 3 - Disagree, 4 - Strongly Disagree

	<u>STRONGLY AGREE</u>	<u>AGREE</u>	<u>DISAGREE</u>	<u>STRONGLY DISAGREE</u>
1. I feel self conscious about my body, because of my disability, when participating in physical activity.	1	2	3	4
2. I do not feel discriminated against because I am female.	1	2	3	4
3. I am not intimidated by able-bodied individuals when participating in physical activity.	1	2	3	4
4. I do not participate in physical activity because I am afraid I will hurt myself.	1	2	3	4
5. I feel discriminated against because I am physically disabled.	1	2	3	4
6. Watching other physically disabled individuals participating in physical activities encourages me to participate also.	1	2	3	4
7. I need special treatment when participating in physical activity because I am physically disabled.	1	2	3	4
8. People feel sorry for me because I am physically disabled.	1	2	3	4
9. It is more acceptable for a physically disabled man to participate in physical activity than it is for a physically disabled woman to participate in physical activity.	1	2	3	4
10. The main reason I participate in physical activity is for rehabilitation purposes.	1	2	3	4
11. Society in general is becoming more aware of the physical activity needs of physically disabled women.	1	2	3	4
12. I feel self conscious about my body when participating in physical activity because I am overweight.	1	2	3	4
13. I am more comfortable around other physically disabled individuals than able-bodied individuals.	1	2	3	4

16. Given the choice who would you most prefer as a companion for physical activity? (Circle the number of your answer.)

1. CLASSMATES
2. NO ONE
3. FRIENDS
4. CO-WORKERS
5. FAMILY/RELATIVES
6. OTHERS (PLEASE SPECIFY) _____
7. NO PREFERENCE
8. DO NOT WANT TO PARTICIPATE IN PHYSICAL ACTIVITY

17. With whom would you prefer to be physically active? (Circle the number of your answer.)

1. OTHER PHYSICALLY DISABLED INDIVIDUALS
2. ABLE-BODIED INDIVIDUALS
3. BOTH PHYSICALLY DISABLED AND ABLE-BODIED INDIVIDUALS IN THE SAME SETTING
4. WITH PHYSICALLY DISABLED INDIVIDUALS IN SOME ACTIVITIES, AND ABLE-BODIED INDIVIDUALS IN OTHER ACTIVITIES
5. DOES NOT MATTER
6. DO NOT WANT TO PARTICIPATE IN PHYSICAL ACTIVITY

18. Who would you feel most comfortable with, while participating in physical activity? (Circle the number of your answer.)

1. WOMEN
2. MEN
3. WOMEN AND MEN
4. DOES NOT MATTER
5. DO NOT WANT TO PARTICIPATE IN PHYSICAL ACTIVITY

19. Given the choice, in what location would you prefer to be physically active? (Circle the number of your answer.)

1. PARK/OUTDOORS
2. HOME
3. INDOOR RECREATIONAL FACILITY
4. COMMERCIAL FACILITY OR PRIVATE CLUB
5. WORK
6. SCHOOL/COLLEGE/UNIVERSITY
7. OTHER (PLEASE SPECIFY) _____
8. DO NOT PARTICIPATE

20. In what location do you participate at the present time? (Circle the number of your answer.)

1. PARK/OUTDOORS
2. HOME
3. INDOOR RECREATIONAL FACILITY
4. COMMERCIAL FACILITY OR PRIVATE CLUB
5. WORK
6. SCHOOL/COLLEGE/UNIVERSITY
7. OTHER (PLEASE SPECIFY) _____
8. DO NOT PARTICIPATE

21. Below is a list of limiting factors to participation in physical activity. Assess each statement and indicate by circling one of the numbers how important each factor is to limiting your personal participation. 1 - very important, 2 - somewhat important, 3 - not very important, 4 - not at all important.

<u>LIMITING FACTORS</u>	<u>VERY</u> <u>IMPORTANT</u>	<u>SOMEWHAT</u> <u>IMPORTANT</u>	<u>NOT VERY</u> <u>IMPORTANT</u>	<u>NOT AT ALL</u> <u>IMPORTANT</u>
EMBARRASSMENT, LACK OF SELF-CONFIDENCE	1	2	3	4
PHYSICAL DISCOMFORT	1	2	3	4
LACK OF INTEREST	1	2	3	4
INACCESSIBLE FACILITIES	1	2	3	4
TRANSPORTATION PROBLEMS	1	2	3	4
HIGH EXPENSE OF ACTIVITY	1	2	3	4
INAPPROPRIATE ACTIVITIES	1	2	3	4
LACK OF INFORMATION ON AVAILABLE SERVICES	1	2	3	4
MEDICAL ADVICE	1	2	3	4
TIME CONSTRAINTS DUE TO WORK	1	2	3	4
LACK OF APPROPRIATE EQUIPMENT (no wheelchair/no guiderunner, etc.)	1	2	3	4
TIME CONSTRAINTS DUE TO FAMILY	1	2	3	4
TIME CONSTRAINTS DUE TO SCHOOL	1	2	3	4
MEDICAL PROBLEMS	1	2	3	4
ENCOUNTER NEGATIVE ATTITUDES	1	2	3	4
LACK OF ENCOURAGEMENT BY FAMILY, FRIENDS OR OTHER	1	2	3	4
LACK OF COMPANION	1	2	3	4
OTHERS (PLEASE SPECIFY)	1	2	3	4

22. If you were not physically disabled do you feel you would be more or less involved in physical activity than you are now? (Circle the number of your answer.)

1. MORE INVOLVED
2. LESS INVOLVED
3. THE SAME
4. DON'T KNOW

23. Are you satisfied with the type of physical activities and programs offered for physically disabled women today? (Circle the number of your answer.)

1. FULLY SATISFIED
2. QUITE SATISFIED
3. SOMEWHAT SATISFIED
4. NOT SATISFIED
5. NO OPINION

24. What kinds of programs for physically disabled women would you like to see developed in the future?

Background Information

Please Note: The information below will help us in planning activities for the future. You can be assured of complete anonymity and confidentiality.

25. What is your age? (Circle the number of your answer.)

1. 10-14
2. 15-19
3. 20-29
4. 30-39
5. 40-49
6. 50-59
7. 60 +

26. What is your educational background? (Circle the number of your answer.)

1. ELEMENTARY SCHOOL
2. HIGH SCHOOL
3. SOME POST-SECONDARY EDUCATION
4. POST-SECONDARY CERTIFICATE/DIPLOMA
5. UNIVERSITY DEGREE

27. What is your Occupation? (Circle the number of your answer.)

1. PROFESSIONAL/EXECUTIVE
2. SALES/CLERICAL
3. LABOURER
4. STUDENT
5. OTHER

28. In what income bracket do you fall? (Circle the number of your answer.)

1. UNDER \$10,000
2. \$10,000-\$14,999
3. \$15,000-\$19,999
4. \$20,000-\$24,999
5. \$25,000-\$29,999
6. \$30,000 AND UP

29. With whom do you live at present?

1. WITH RELATIVES OTHER THAN SPOUSE
2. WITH NON-RELATIVES
3. WITH SPOUSE
4. ALONE

30. Where do you live?

1. IN AN APARTMENT
2. IN A HOUSE
3. IN A DUPLEX
4. IN A COLLECTIVE DWELLING (Example: A group home)
5. IN A HOSPITAL
6. OTHER (PLEASE SPECIFY) _____

31. Do you have any children? (Circle the number of your answer.)

1. YES
2. NO

If YES, how many? _____

32. What is the size of the community in which you presently live? (Circle the number of your answer.)

1. UNDER 10,000
2. 10,000-50,000
3. 50,000-100,000
4. OVER 100,000

33. What is the nature of your disability? (Circle the number of your answer.)

1. SPINAL CORD IMPAIRMENT
(PLEASE SPECIFY WHICH ONE BY CHECKING✓)

QUADRIPLEGIA ☐

PARAPLEGIA ☐

POLIO ☐

SPINA BIFIDA ☐

2. CEREBRAL PALSY
3. AMPUTEE
4. VISUAL IMPAIRMENT
5. AUDITORY IMPAIRMENT
6. MULTIPLE (PLEASE SPECIFY) _____
7. OTHER (PLEASE SPECIFY) _____

34. Under which category would you classify the severity of your disability? (Circle the number of your answer.)

1. TOTAL
2. SOME DISABILITY
3. MODERATE DISABILITY
4. MAJOR DISABILITY
- DEGREE UNKNOWN

35. When participating in physical activity, do you use any aids?
(Circle the number of your answer.)

1. YES
2. NO

36. If yes, what aid is used? (Circle the number of your answer.)

1. ELECTRIC WHEELCHAIR
2. MANUAL WHEELCHAIR
3. PROSTHESIS (SPECIFY)
4. CANE
5. CRUTCHES
6. WALKER
7. ORTHOPEDIC FOOTWEAR
8. OTHER AIDS (SPECIFY)

THANK YOU FOR YOUR TIME AND COOPERATION

APPENDIX B

SURVEY QUESTIONNAIRE (FRENCH)

TENDANCES DE LA PARTICIPATION À L'ACTIVITÉ PHYSIQUE
ET LES FEMMES PHYSIQUEMENT HANDICAPÉES AU CANADA

QUESTIONNAIRE

Une étude paraissant conjointement

par

Le programme pour les femmes de
Condition physique et Sport amateur

et

La Fédération Canadienne des Organisations de Sport pour Handicapés

conjointement avec le

Département d'Éducation physique et d'Études sportives

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Le terme activité physique fait référence aux expériences dérivées d'activités sportives ou autres activités physiques récréationnelles pour le plaisir et/ou la compétition. L'activité physique requiert une dépense d'énergie physique et mène à l'amélioration de la condition physique et du mode de vie.

1. Pour vous, quelle est l'importance de l'activité physique? (Encerclez le numéro de votre réponse)

1. TRÈS IMPORTANT
2. QUELQUE PEU IMPORTANT
3. PAS TRÈS IMPORTANT
4. PAS DU TOUT IMPORTANT

2. Est-ce que vous croyez faire suffisamment d'activité physique ou croyez-vous que vous pourriez être plus active? (Encerclez le numéro de votre réponse)

1. JE FAIT SUFFISAMMENT D'ACTIVITÉ PHYSIQUE
2. JE DEVRAIT FAIRE PLUS D'ACTIVITÉ PHYSIQUE
3. JE NE SAIS PAS

3. À quel degré est-ce que le fait que vous êtes handicapée physique vous empêche de participer à l'activité physique? (Encerclez le numéro de votre réponse)

1. BEAUCOUP
2. QUELQUE PEU
3. PAS DU TOUT

4. En terme de votre mode de vie, comment évalueriez-vous l'importance de votre participation à l'activité physique? (Encerclez le numéro de votre réponse)

1. TRÈS IMPORTANT
2. QUELQUE PEU IMPORTANT
3. PAS TRÈS IMPORTANT
4. PAS DU TOUT IMPORTANT

5. Êtes-vous présentement impliquée comme participante active dans un programme d'activité physique organisé par une agence? (Encerclez le numéro de votre réponse)

1. OUI
2. NON
3. JE NE SAIS PAS

Si oui, quelle est l'agence? _____

Comment avez-vous été informé de ce programme? _____

- 6.a) Êtes-vous née avec un handicap physique ou l'avez-vous obtenu plus tard dans la vie?

1. NÉE AVEC UN HANDICAP PHYSIQUE
2. OBTENU UN HANDICAP PHYSIQUE PLUS TARD DANS LA VIE

- b) Si vous avez obtenu l'handicap physique plus tard dans la vie, comment est-ce que vous décririez votre niveau de participation à l'activité physique par rapport à ce qu'il était avant votre handicap physique? (Encerclez le numéro de votre réponse)

1. JE SUIS PLUS PHYSIQUEMENT ACTIVE
2. JE SUIS MOINS PHYSIQUEMENT ACTIVE
3. JE SUIS À PEU PRÈS AU MÊME NIVEAU
4. JE NE SAIS PAS

- c) Après l'abord de votre handicap physique, combien de temps avez-vous pris avant d'être impliquée dans l'activité physique (En excluant l'activité physique durant la phase de réadaptation/thérapie)? (Encerclez le numéro de votre réponse)

1. 3 MOIS
2. 6 MOIS
3. 9 MOIS
4. 1 ANS OU PLUS
5. JE NE SUIS PAS DEVENUE IMPLIQUÉE

7. Comment est-ce que vous décriveriez votre participation actuelle dans l'activité physique ? (Encerclez le numéro de votre réponse)

1. INACTIVE (EN MOYENNE MOINS D'UNE FOIS PAR SEMAINE POUR MOINS DE 9 MOIS PAR ANNÉE)
2. QUELQUE PEU ACTIVE (EN MOYENNE 1 FOIS PAR SEMAINE POUR MOINS DE 9 MOIS PAR ANNÉE)
3. ASSEZ ACTIVE (EN MOYENNE 2-3 FOIS PAR SEMAINE POUR MOINS DE 9 MOIS PAR ANNÉE)
4. TRÈS ACTIVE (EN MOYENNE 3 FOIS PAR SEMAINE POUR 9 MOIS OU PLUS PAR ANNÉE)

Si vous avez encerclé le numéro 1 ou 2 comme réponse, allez à la question # 8

8. S'il y avait des programmes pour les femmes physiquement handicapées disponible dans votre communauté, est-ce que vous seriez plus active? (Encerclez le numéro de votre réponse)

1. OUI
2. NON
3. JE NE SAIS PAS

9. De la liste suivante, quels changements vous encourageraient à participer plus activement à l'activité physique? (Encerclez le numéro de votre réponse)

1. PLUS D'INSTALLATIONS PRÈS DE MA RÉSIDENCE
2. AUTRES PERSONNES POUR PARTICIPER AVEC
3. MONITEURS POSSÉDANT LES CONNAISSANCES À FOND
4. SOUTIEN DU DOCTEUR
5. SOUTIEN DE LA FAMILLE/PARENTÉ
6. DES ACTIVITÉS PHYSIQUES ORGANISÉES DISPONIBLES
7. INSTALLATIONS ACCESSIBLES
8. PLUS D'INFORMATION DISPONIBLES SUR LES PROGRAMMES POUR LES HANDICAPÉS PHYSIQUES
9. SOUTIEN D'AMIS (ES)
10. COÛT MOINS DISPENDIEUX POUR L'USAGE D'INSTALLATION
11. PLUS DE TEMPS LIBRE
12. GARDE D'ENFANTS DISPONIBLES
13. D'ÊTRE EXPOSÉ À D'AUTRES FEMMES HANDICAPÉES PHYSIQUES IMPLIQUÉES DANS L'ACTIVITÉ PHYSIQUE
14. BON SYSTÈME DE TRANSPORT COMMUNAUTAIRE
15. RIEN
16. AUTRES (SVP SPÉCIFIEZ) _____

Procédez à la question #12

10. S.V.P. Évaluez chacun des énoncés suivants et indiquez en encerclant un des numéros si la raison énoncée pour être active est:

1 - très importante 2 - quelque peu importante
3 - très peu importante 3 - pas du tout importante

<u>RAISON POUR ÊTRE ACTIVE</u>	<u>TRÈS IMPORTANTE</u>	<u>QUELQUE PEU IMPORTANTE</u>	<u>TRÈS PEU IMPORTANTE</u>	<u>PAS DU TOUT IMPORTANTE</u>
POUR CONTRÔLER LE POIDS/AMÉLIORER L'APPARENCE	1	2	3	4
CONSEIL MÉDICAL	1	2	3	4
CONSEIL DE D'AUTRES (SPÉCIFIEZ)	1	2	3	4
POUR RELAXER/ DIMINUER LE STRESS	1	2	3	4
POUR LE PLAISIR	1	2	3	4
POUR SE SENTIR MIEUX	1	2	3	4
POUR AMÉLIORER LES HABILETÉS	1	2	3	4
POUR AMITIÉ	1	2	3	4
POUR AMÉLIORER LA FLEXIBILITÉ	1	2	3	4
POUR AMÉLIORER OU MAINTENIR LA CONDITION PHYSIQUE	1	2	3	4
POUR BUT DE RÉADAPTATION	1	2	3	4
AUTRE	1	2	3	4

11. Qui a été initialement responsable pour votre participation à l'activité physique?
(Encercler le numéro de votre réponse)

1. MOI-MÊME
2. FAMILLE/PARENTÉ
3. DOCTEUR
4. THÉRAPEUTE (PHYSIOTHÉRAPEUTE OU ERGOTHÉRAPEUTE)
5. AUTRE PERSONNEL DE RÉADAPTATION
6. ÉCOLE/ COLLÈGE/ UNIVERSITÉ
7. AMIS (ES)
8. COLLÈGUE DE TRAVAIL
9. AUTRE AGENCE (S.V.P. SPÉCIFIEZ) _____
10. AUTRE (S.V.P. SPÉCIFIEZ) _____

S.V.P. Entrez le numéro de la catégorie qui correspond le mieux à votre niveau de participation (seul ou en groupe) dans les activités physiques suivantes. S.V.P. inscrivez une réponse pour chaque activité.

ACTIVITÉ	NIVEAU D'ACTIVITÉ						
	NON COMPÉTITIF/HILIEU NON-ORGANISÉ ex: Jogging avec am(s)(es)	NON-COMPÉTITIF/HILIEU ORGANISÉ ex: classe de conditionnement physique cédulée	COMPÉTITION RÉCREATIONNELLE/HILIEU ORGANISÉ ex: jouer au tennis dans un club	LÉGÈRE INTENSITÉ/COMPÉTITION/HILIEU ORGANISÉ ex: rouler ("wheeling") dans une course de 10 km	FORTE INTENSITÉ COMPÉTITION ex: championnats régionaux ou nationaux	HAUTE PERFORMANCE ex: championnats internat- nationaux	NE PARTICIPE PAS
TENNIS	1	2	3	4	5	6	7
QUILLES	1	2	3	4	5	6	7
PATINAGE	1	2	3	4	5	6	7
DANSE	1	2	3	4	5	6	7
NATATION	1	2	3	4	5	6	7
AUTRES SPORTS AQUATIQUES	1	2	3	4	5	6	7
CYCLISME	1	2	3	4	5	6	7
BALLON - PANIER	1	2	3	4	5	6	7
BALLON - VOLANT	1	2	3	4	5	6	7
JOGGING/COURSE/ ROULER ("WHEELING")	1	2	3	4	5	6	7
SKI ALPIN	1	2	3	4	5	6	7
ENTRAÎNEMENT AVEC POIDS ET ALTÈRES	1	2	3	4	5	6	7
CLASSES D'EXERCICES	1	2	3	4	5	6	7
SKI DE FOND							
EXERCICES À LA MAISON	1	2	3	4	5	6	7
MARCHE/ROULER ("WHEELING")	1	2	3	4	5	6	7
CAMPING	1	2	3	4	5	6	7
RÂNDONNÉE PÉDESTRE	1	2	3	4	5	6	7
JARDINAGE	1	2	3	4	5	6	7
AUTRES ACTIVITÉS DE PLEIN AIR (S.V.P. SPÉCIFIEZ)	1	2	3	4	5	6	7
AUTRES SPORTS INDIVIDUELS (S.V.P. SPÉCIFIEZ)	1	2	3	4	5	6	7
AUTRES SPORTS COLLECTIFS (S.V.P. SPÉCIFIEZ)	1	2	3	4	5	6	7

17. Retournez à la question 12 et placez un X sur les activités encadrées auxquelles vous participez avec des individus sans handicap physique. Par exemple, si vous avez encadré 2 comme votre niveau d'activité pour danse à la question 12, et vous participez à cette activité avec des individus sans handicap physique, mettez un X à travers le cercle.

Exemple:

ACTIVITÉ

NIVEAU D'ACTIVITÉ

DANSE

1



3

4

5

6

7

15. Ci-dessous se trouve la liste d'énoncé qui se rapporte aux attitudes envers l'activité physique. S.V.P. Indiquez en encerclant la réponse qui vous convient le mieux.

1 - FORTEMENT D'ACCORD 2 - D'ACCORD
3 - DÉSAACCORD 4 - FORTEMENT EN DÉSAACCORD

	<u>FORTEMENT D'ACCORD</u>	<u>D'ACCORD</u>	<u>DÉSAACCORD</u>	<u>FORTEMENT EN DÉSAACCORD</u>
1. Je suis consciente de moi-même et de mon corps à cause de mon handicap, lorsque je participe à l'activité physique.	1	2	3	4
2. Je ne me sens pas victime de discrimination parce que je suis une femme.	1	2	3	4
3. Je ne suis pas intimidé par les individus sans handicap physique lorsque je participe à des activités physiques	1	2	3	4
4. Je ne participe pas à des activités physiques parce que j'ai peur de me blesser.	1	2	3	4
5. Je me sens victime de discrimination parce que je suis handicapée physique	1	2	3	4
6. En observant autres individus physiquement handicapés, ça m'encourage de participer à des activités physiques.	1	2	3	4
7. J'ai besoin d'être traitée spécialement lorsque je participe à des activités physiques parce que je suis handicapée physique.	1	2	3	4
8. Les gens prennent pitié de moi parce que je suis handicapée physique.	1	2	3	4
9. Il est plus acceptable pour un homme handicapé physique de participer à des activités physiques qu'il est pour une femme handicapée physique de participer à des activités physiques	1	2	3	4
10. La raison primaire que je participe à des activités physiques est pour but de réadaptation.	1	2	3	4
11. La société en général devient de plus en plus consciente des besoins des femmes handicapées physique.	1	2	3	4
12. Je suis consciente de moi-même et de mon corps lorsque je participe à l'activité physique.	1	2	3	4
13. Je me sens plus confortable lorsque je suis autour de d'autres individus physiquement handicapés que lorsque je suis autour d'individus non handicapés physiquement.	1	2	3	4

16. Si vous aviez le choix, lequel aimeriez vous le plus comme compagnon pour participer à l'activité physique? (Encerclez le numéro de votre réponse)

1. COLLÈGUES DE CLASSE
2. AUCUNE PERSONNE
3. AMI(S) (ES)
4. COLLÈGUES DE TRAVAIL
5. FAMILLE / PARENTÉ
6. AUTRES (S.V.P. SPÉCIFIEZ) _____
7. AUCUNE PRÉFÉRENCE
8. JE NE VEUX PAS PARTICIPER À L'ACTIVITÉ PHYSIQUE

17. Avec qui préférez vous participer à l'activité physique? (Encerclez le numéro de votre réponse)

1. AUTRES INDIVIDUS PHYSIQUEMENT HANDICAPÉS
2. INDIVIDUS QUI NE SONT PAS PHYSIQUEMENT HANDICAPÉS
3. INDIVIDUS PHYSIQUEMENT HANDICAPÉS ET INDIVIDUS QUI NE SONT PAS PHYSIQUEMENT HANDICAPÉS DANS LE MÊME MILIEU
4. AVEC INDIVIDUS PHYSIQUEMENT HANDICAPÉS POUR CERTAINES ACTIVITÉS ET AVEC INDIVIDUS QUI NE SONT PAS PHYSIQUEMENT HANDICAPÉS POUR D'AUTRES ACTIVITÉS
5. ÇA NE ME FAIT RIEN
6. JE NE VEUX PAS PARTICIPER À L'ACTIVITÉ PHYSIQUE

18. Avec qui préférez-vous participer à l'activité physique? (Encerclez le numéro de votre réponse)

1. FEMMES
2. HOMMES
3. FEMMES ET HOMMES
4. ÇA NE ME FAIT RIEN
5. JE NE VEUX PAS PARTICIPER À L'ACTIVITÉ PHYSIQUE

19. Si vous aviez le choix, à quel endroit participeriez vous à l'activité physique? (Encerclez le numéro de votre réponse)

1. PARC/EXTÉRIEUR
2. MAISON
3. INSTALLATION RÉCRÉATIONNELLE (INTÉRIEUR)
4. INSTALLATION COMMERCIALE OU CLUB PRIVÉ
5. AU TRAVAIL
6. ÉCOLE/COLLÈGE/UNIVERSITÉ
7. AUTRE (S.V.P. SPÉCIFIEZ) _____
8. JE NE PARTICIPE PAS

20. A quel endroit, participez vous à l'activité physique présentement? (Encerclez le numéro de votre réponse)

1. PARC / EXTÉRIEUR
2. MAISON
3. INSTALLATION RÉCRÉATIONNELLE (INTÉRIEUR)
4. INSTALLATION COMMERCIALE OU CLUB PRIVÉ
5. AU TRAVAIL
6. ÉCOLE / COLLÈGE / UNIVERSITÉ
7. AUTRE (S.V.P. SPÉCIFIEZ) _____
8. JE NE PARTICIPE PAS

21. La liste suivante consiste de facteurs qui limitent la participation à l'activité physique. Évaluez chaque affirmation et indiquez, en encerculant un des numéros, l'importance de chaque facteur par rapport à la limitation de votre propre participation.

1 - TRÈS IMPORTANT 2 - QUELQUE PEU IMPORTANT
3 - PAS TRÈS IMPORTANT 4 - PAS DU TOUT IMPORTANT

FACTEURS LIMITATIFS

	<u>TRÈS</u> <u>IMPORTANT</u>	<u>QUELQUE PEU</u> <u>IMPORTANT</u>	<u>PAS TRÈS</u> <u>IMPORTANT</u>	<u>PAS DU TOUT</u> <u>IMPORTANT</u>
EMBARRAS/MANQUE DE CONFIANCE EN SOI	1	2	3	4
INCONFORT PHYSIQUE	1	2	3	4
MANQUE D'INTÉRÊT	1	2	3	4
INSTALLATIONS INACCESSIBLES	1	2	3	4
PROBLÈMES DE TRANSPORT	1	2	3	4
HAUT COÛT DES ACTIVITÉS	1	2	3	4
MANQUE D'INFORMATION SUR SERVICES DISPONIBLES	1	2	3	4
CONSEILS MÉDICAUX	1	2	3	4
LIMITE DE TEMPS À CAUSE DU TRAVAIL	1	2	3	4
MANQUE D'ÉQUIPEMENTS APPROPRIÉS (FAUTEUIL ROULANT, ETC.)	1	2	3	4
LIMITE DE TEMPS À CAUSE DE LA FAMILLE	1	2	3	4
LIMITE DE TEMPS À CAUSE DE L'ÉCOLE	1	2	3	4
PROBLÈMES MÉDICAUX	1	2	3	4
FAIT FACE À DES ATTITUDES NÉGATIVES	1	2	3	4
MANQUE D'ENCOURAGEMENT DE LA FAMILLE/PARENTÉ, D'AMI(S)(ES) OU AUTRE	1	2	3	4
MANQUE DE COMPAGNON/COMPAGNE	1	2	3	4
AUTRES (S.V.P. SPÉCIFIEZ)	1	2	3	4

22. Si vous n'étiez pas physiquement handicapée, est-ce que vous pensez que vous seriez plus ou moins impliquée dans la participation à l'activité physique? (Encerclez le numéro de votre réponse)

1. PLUS IMPLIQUÉE
2. MOINS IMPLIQUÉE
3. LE MÊME
4. JE NE SAIS PAS

23. Êtes-vous satisfaite du type d'activités physiques et des programmes offerts présentement pour les femmes physiquement handicapées? (Encerclez le numéro de votre réponse)

1. ENTièrement SATISFAITE
2. ASSEZ SATISFAITE
3. QUELQUE PEU SATISFAITE
4. PAS SATISFAITE
5. AUCUNE OPINION

24. Quels genres de programmes pour femmes physiquement handicapées aimeriez-vous voir dans le futur?

INFORMATION GÉNÉRALE

S.V.P. Notez que l'information ci-dessous nous aidera à planifier des activités pour le futur. Tous les résultats seront gardés confidentiels.

25. Quel est votre âge? (Encerclez le numéro de votre réponse)

1. 10-14
2. 15-19
3. 20-29
4. 30-39
5. 40-49
6. 50-59
7. 60 ET PLUS

26. Quel est votre niveau d'éducation? (Encerclez le numéro de votre réponse)

1. ÉCOLE PRIMAIRE/ÉLÉMENTAIRE
2. ÉCOLE SECONDAIRE
3. ÉTUDE POST-SECONDAIRE PARTIELLE
4. CERTIFICAT/DIPLÔME D'ÉTUDE POST-SECONDAIRE
5. DEGRÉ UNIVERSITAIRE

27. Quel est votre occupation? (Encerclez le numéro de votre réponse)

1. PROFESSIONNEL/EXÉCUTIF
2. VENTES/PERSONNEL DE SUPPORT/COMMIS
3. TRAVAIL DE LA BEUR
4. ÉTUDIANTE
5. AUTRE

28. Quel est votre salaire? (Encerclez le numéro de votre réponse)

1. MOINS DE \$10,000
2. \$10,000 - 14,999
3. \$15,000 - 19,999
4. \$20,000 - 24,999
5. \$25,000 - 29,999
6. \$30,000 ET PLUS

29. Avec qui habitez-vous en ce moment? (Encerclez le numéro de votre réponse)

1. AVEC FAMILLE/PARENTÉ AUTRE QU'ÉPOUX
2. AVEC AUTRE QUE LA FAMILLE/PARENTÉ
3. AVEC ÉPOUX
4. SEULE

30. Où habitez-vous? (Encerclez le numéro de votre réponse)

1. DANS UN APPARTEMENT
2. DANS UNE MAISON
3. DANS UN DUPLEX
4. DANS UNE RÉSIDENCE DE GROUPE
5. DANS UN HÔPITAL
6. AUTRE (S.V.P. SPÉCIFIEZ) _____

31. Avez-vous des enfants? (Encerclez le numéro de votre réponse)

1. OUI
2. NON

SI OUI, COMBIEN? _____

32. Quel est la population de votre communauté? (Encerclez le numéro de votre réponse)

1. MOINS DE 10,000
2. 10,000 - 50,000
3. 50,000 - 100,000
4. PLUS DE 100,000

33. Quelle est la nature de votre handicap? (Encerclez le numéro de votre réponse)

1. LÉSION À LA MOELLE ÉPINIÈRE (S.V.P. SPÉCIFIEZ EN COCHANT ✓)

_____ QUADRAPLÉGIQUE

_____ RAPLÉGIQUE

_____ POLIO

_____ SPINA BIFIDA

2. PARALYSIE CÉRÉBRALE

3. AMPUTATION

4. AFFAIBLISSEMENT DE LA VUE

5. AFFAIBLISSEMENT DE L'OÛIE

6. MULTIPLE (S.V.P. SPÉCIFIEZ) _____

7. AUTRE (S.V.P. SPÉCIFIEZ) _____

34. Dans quelle catégorie classifierais vous le degré de votre handicap? (Encerclez le numéro de votre réponse)

1. TOTAL
2. QUELQUE PEU HANDICAPÉE
3. MODEREMENT HANDICAPÉE
4. HANDICAP MAJEUR
5. J'IGNORE LE DEGRÉ

35. Lorsque vous participez à l'activité physique, utilisez-vous des appareils? (Encerclez le numéro de votre réponse)

1. FAUTEUIL ROULANT ÉLECTRIQUE

2. FAUTEUIL ROULANT MANUEL

3. PROTHÈSE (S.V.P. SPÉCIFIEZ) _____

4. CANE

5. RÉQUILLES

6. MARCHETTE

7. CHAUSSURES ORTHOPÉDIQUES

8. AUTRES APPAREILS (S.V.P. SPÉCIFIEZ) _____

MERCI BEAUCOUP POUR VOTRE TEMPS ET VOTRE COOPERATION

APPENDIX C

LETTER OF REQUEST



University of Alberta
Edmonton

Canada T6G 2H9

Department of
Physical Education and Sport Studies

P-421 Universiade Pavilion

Van Vliet Physical Education and Recreation Centre.

September 22, 1986

<name>
<street>
<city>,
<postal code>

Dear Sir/Madam:

A recent report by statistics Canada indicates there are 2.7 million functionally disabled people in Canada, half of whom are female. Given this number and the popularity of physical activity, there is a growing concern that the physical activity needs of the physically disabled female are not being met.

The Department of Physical Education and Sport Studies at the University of Alberta has been commissioned by Fitness and Amateur Sport Women's Program to conduct a nationwide survey to examine the physical activity patterns of physically disabled women across Canada.

The population under study includes the following disabilities: spinal cord impairments, amputee, cerebral palsy, visual impairments and auditory impairments. It is the intention of the researchers to sample from as wide an age range and activity base as possible. We want to include females aged 10 and upwards, as well as the non participant and elite performers in our sample.

In order to achieve this goal the project researchers require the assistance of the many associations for the physically disabled located across Canada. At this time, we ask that your association supply us with a list of female members who are physically disabled. If this is not possible (realizing that this may be deemed an invasion of privacy) would your organization be willing to circulate the survey to female members? As the project researchers, we would supply your association with a complete survey package and handle all postage and handling fees. In any case you may be assured of complete confidentiality.

....2

Setember 22, 1986
Page 2.

We look forward to your reply and you can expect to hear from us within the week. Thank you for your assistance.

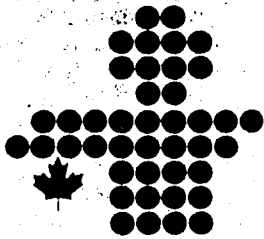
Sincerely,

E.J. Watkinson
Project Coordinator
Department of Physical Education
and Sport Studies
University of Alberta
Edmonton, Alberta
T6G 2H9

EJW/pe

APPENDIX D

COVER LETTERS (ENGLISH)



Canadian Federation
of Sport Organizations
for the Disabled

Fédération Canadienne
des Organisations
de Sport pour Handicapés

129

There is a growing concern for fitness in our society today. We are constantly exposed through the media to the benefits of fitness. More often than not this image of fitness has related to the able bodied individual. Most of the attention paid to the disabled individual has dealt primarily with the disabled athlete. The opportunity to participate in physical fitness activities should be available to anyone who wants to be involved.

The Department of Physical Education and Sport Studies at the University of Alberta has been commissioned by Fitness and Amateur Sport Women's Program to conduct a nation-wide survey to investigate the physical activity patterns of physically disabled females across Canada. The University of Alberta, together with the Canadian Federation of Sport Organizations for the Disabled (C.F.S.O.D.) is concerned primarily with identifying the needs and issues surrounding physical activity and the physically disabled female.

In order to assess the situation we need your input. By filling out the enclosed questionnaire we can help increase an awareness for able-bodied and disabled people regarding physical activity and the disabled female.

If, by some chance, you have already received a copy of this questionnaire or you are not a physically disabled female would you please pass this questionnaire onto someone you may know who is. Otherwise return the questionnaire to C.F.S.O.D.

You may be assured of complete confidentiality. The questionnaire has an identity number for mailing purposes only. This is so we may check your association off the mailing list when your questionnaire is returned. Your name will never be placed on the questionnaire.

Thank you for your assistance.

Sincerely,

Jane Watkinson
J. J. Watkinson,
Project Coordinator,
C.F.S.O.D.
333 River Road,
Ottawa, Ontario
K1L 8H9

333 RIVER ROAD
OTTAWA ONTARIO K1L 8H9
(613) 745-5630 Telex 053 3660



Government of Canada Gouvernement du Canada
Fitness and Amateur Sport Condition physique et Sport amateur
365 Laurier Avenue West
Ottawa, Ontario
K1A 0X6

130

According to Statistics Canada, there are 2.7 million functionally disabled people in Canada, half of whom are female. Given this number and the popularity of physical activity, there is a growing concern that the physical activity needs of the physically disabled female are not being met.

In order to identify these needs for the various disability associations across Canada, the Physical Education and Sport Studies Department at the University of Alberta has been commissioned by Fitness and Amateur Sport Women's Program to conduct a nationwide survey.

The plans are to send a questionnaire to a sample of physically disabled women across Canada that will investigate their physical activity patterns and identify their major needs and concerns related to physical activity programming.

The success of this study depends largely on your participation in this survey. The Women's Program strongly supports this project and requests your cooperation in the completion of the enclosed questionnaire.

If you have any questions regarding this study, please contact E.J. Watkinson, Project Coordinator, Department of Physical Education and Sport Studies, The University of Alberta, Edmonton, Alberta, T6G 2H9.

Thank you for your assistance.

Sincerely,

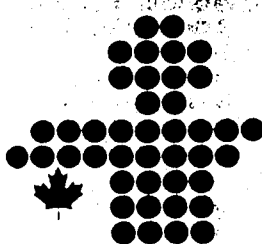
Diane Palmason
Women's Program Manager
Sport Canada

Encl.

Canada

APPENDIX E

COVER LETTERS (FRENCH)



Canadian Federation
of Sport Organizations
for the Disabled

Fédération Canadienne
des Organisations
de Sport pour Handicapés

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De nos jours, la condition physique occupe une place de plus en plus grande dans notre société. Constamment, les médias évoquent la condition physique en nous rappelant les bienfaits qu'elle a surtout pour les personnes non handicapées et, lorsqu'il s'agit de personnes handicapées, l'attention sera portée principalement sur les athlètes handicapés. La possibilité de participer à des activités physiques doit être offerte à tous ceux et celles qui souhaitent y prendre part.

Le Département d'éducation physique et d'études sur le sport de l'Université d'Alberta a été chargé par le Programme pour les femmes de Condition physique et Sport amateur de mener une enquête nationale sur les habitudes d'activité physique des femmes handicapées à la grandeur du Canada. L'Université d'Alberta, de concert avec la Fédération canadienne des organisations de sport pour handicapés (FCOSH) aimeraient connaître quels sont les besoins et intérêts liés à l'activité physique chez les femmes handicapées.

Votre participation nous permettra d'évaluer la situation actuelle. En remplissant le questionnaire ci-joint, vous pourrez aider à sensibiliser davantage les personnes handicapées ou non aux besoins des femmes handicapées en matière d'activité physique.

Si, par hasard, vous avez déjà reçu une copie de ce questionnaire ou s'il advenait que vous ne soyez pas une femme handicapée, auriez-vous l'obligeance de le remettre à une femme handicapée de votre entourage ou encore de retourner ce questionnaire à la FCOSH.

Nous tenons à vous assurer que les renseignements fournis demeureront entièrement confidentiels. Le questionnaire porte un numéro d'identification pour des fins d'envoi uniquement et afin de nous permettre de rayer votre association de la liste d'adresses une fois que le questionnaire nous sera retourné. Vous n'aurez pas à inscrire votre nom à aucun endroit sur le questionnaire.

Nous vous remercions de votre aide.

Sincères salutations,

E.J. Watkinson
Coordonnatrice du projet
FCOSH
333, chemin River
Ottawa (Ontario)
K1L 8H9

333 RIVER ROAD
OTTAWA, ONTARIO K1L 8H9
(613) 748-5630, Telex 053 3660



Government of Canada Gouvernement du Canada
Fitness and Amateur Sport Condition physique et Sport amateur
365 Laurier Avenue West
Ottawa, Ontario
K1A 0X6

133

Selon les rapports de Statistique Canada, le Canada compte 2,7 millions de personnes handicapées, dont la moitié sont des femmes. Compte tenu de ce grand nombre de femmes et de l'importance de l'activité physique, plusieurs constatent que les besoins en activité physique des femmes handicapées ne sont pas comblés.

Afin de déterminer la nature des besoins des divers organismes pour handicapés au Canada, le Département d'éducation physique et d'études sur le sport de l'Université d'Alberta a été chargé par le Programme pour les femmes de Condition physique et Sport amateur de mener une enquête à l'échelle nationale.

Le Département fera parvenir un questionnaire à un échantillon de femmes handicapées représentatif de l'ensemble du pays afin d'étudier leurs habitudes d'activité physique et de déterminer leurs principaux besoins et intérêts en matière de programmes d'activité physique.

Le succès de cette étude repose sur votre participation à cette enquête. Le Programme pour les femmes appuie entièrement ce projet et vous demande d'y collaborer en remplissant le questionnaire ci-joint.

Si vous avez des questions au sujet de cette étude, n'hésitez pas à communiquer avec E.J. Watkinson, Coordonnateur du projet, Département d'éducation physique et d'études sur le sport, Université d'Alberta, Edmonton (Alberta), T6G 2H9.

Nous vous remercions d'avance de votre appui.

Sincères salutations,

La Directrice du Programme pour les femmes
Sport Canada

Diane Palmason

P.J.

Canada

APPENDIX F

FOLLOW-UP LETTERS (ENGLISH & FRENCH)



University of Alberta
Edmonton

Canada T6G 2H9

Department of
Physical Education and Sport Studies

P-421 Universiade Pavilion
Van Vliet Physical Education and Recreation Centre

Last week you received a questionnaire seeking information about the physical activity patterns and physical activity needs of physically disabled females in Canada. You were chosen through a random sample of associations across Canada dealing with physically disabled individuals. The association to which you belong was kind enough to distribute the questionnaire on behalf of our staff to ensure confidentiality and anonymity.

If you have already completed and returned the questionnaire please accept our sincere thanks. If not, we would appreciate it if you could do so today. The questionnaires have been sent to only a small but representative sample of physically disabled females. Therefore it is extremely important that yours also be included in the study if results are to accurately represent physically disabled females across Canada.

If by some chance you did not receive the questionnaire, or it has been misplaced, please mail this card back to us and we will send a questionnaire to you immediately.

Sincerely,

Jane Watkinson

E.J. Watkinson
Project Coordinator
C.F.S.O.D.,
333 River Road,
Ottawa, Ontario
K1L 8H9



La semaine dernière, nous vous avons fait parvenir un questionnaire portant sur les habitudes et les besoins des femmes handicapées au Canada en matière d'activité physique. Votre association compte parmi un échantillon de regroupements canadiens s'occupant des intérêts des personnes handicapées choisis au hasard pour répondre à ce questionnaire. L'association dont vous êtes membre a eu l'obligeance de vous faire parvenir le questionnaire en notre nom afin de respecter l'anonymat des participants et la confidentialité des réponses.

Si vous avez déjà rempli le questionnaire et vous nous l'avez retourné, nous vous en remercions. Dans le cas contraire, nous vous saurions gré de nous le faire parvenir dès aujourd'hui. Le questionnaire n'a été distribué qu'à un nombre limité de femmes handicapées représentant un échantillon représentatif. C'est pourquoi il serait très important que figurent dans la compilation des réponses du questionnaire les renseignements que vous nous aurez fait parvenir afin que les résultats représentent avec justesse l'ensemble des femmes handicapées au Canada.

S'il advenait que vous n'ayez pas encore reçu le questionnaire ou que vous l'ayez égaré, veuillez nous faire parvenir cette carte et nous vous en ferons parvenir aussitôt une autre copie.

Sincères salutations,

La Coordonnatrice du projet,

Jane Watkinson

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