

The Participation of the Disabled in Sport

**Professor Stewart MacPherson, Gina M. Sequeira
City University of Hong Kong**

August 1996



香港康體發展局
HONG KONG
SPORTS DEVELOPMENT BOARD

The Participation of the Disabled in Sport

<u>Contents</u>	<u>Page</u>
1. Executive Summary	3-5
2. General Introduction	6-7
3. Benefits of Sport for the Disabled	8-10
3.1) Physical	
3.2) Psychological and Social	
4. The Hong Kong Situation	11-20
4.1) Individual Problems	
4.2) External Barriers	
4.3) Improvements for Sport Facilities	
4.4) Recommendations for Future Action	
5. Conclusion	21
6. References	22
Appendix I - Interview Organisations	23
Appendix II - Research Methodology	24

1. Executive Summary

The purpose of this report is to describe the current views of non-government organisations in Hong Kong towards particular subject areas pertaining to the participation of the disabled in sport. International literature was also consulted to give a more global picture of some of the main areas of concern in providing for access to sport for disabled persons. A brief introduction is given which relays the following points:

- the changing attitude towards disability and sports for disabled persons from this past century
- who constitutes the disabled population
- the general terms used today in describing disability and disabled persons

This report is divided into five parts or subject areas:

Part I discusses the benefits of sport for the disabled as expressed through non-government organisations in Hong Kong. The physical benefits of sport exercise for the disabled include better flexibility, respiration, metabolism, cardiovascular function, and increased muscular strength and endurance which are often lacking among disabled persons. Particular attention is paid to how sport participation can improve physical health for elderly persons who suffer from illness and disability. The psychological and social benefits of sports for the disabled are also highlighted. Sport offers disabled persons the element of personal control often denied through disability, increased self-confidence and self-motivation, in addition to being a powerful social outlet for those who lead sedentary lives. Sport as a source of social integration is emphasised. For a great number of disabled people, sport functions as a means of gaining social equality and acceptance from society.

Part II highlights the common individual problems experienced by disabled persons. These are explained in terms of physical problems, economic problems, psychological problems, and social problems. Disabled persons are subject to physical problems such as breathing and coordination difficulty, lack of muscular strength and flexibility, and easy exhaustion. It is therefore recommended that disabled persons choose to engage in sports that are appropriate and realistic. Economic problems are suffered in terms of lack of sport sponsorship and funding, transportation difficulties, and time constraints arising

from unsupportive attitudes of employers and teachers in allowing disabled persons to take personal leave to engage in sport training and competition. Psychological problems encountered by the disabled, such as low self-confidence and low self-motivation are influenced significantly by social prejudice towards the inclusion of disabled persons in sport. The problem of social prejudice towards disabled persons is seen by a number of non-government organisations as the largest obstacle for disabled people to overcome should they wish to participate in sport.

Part III of this report addresses the external barriers to sport participation for the disabled. These include the following:

- the lack of suitable facilities, equipment, and staff to accommodate disabled participants
- the insufficient number of sport activities available today in Hong Kong for the disabled
- the inadequate number of knowledgeable sport instructors and positive role models to encourage disabled persons to engage in sport

Part IV provides suggestions to improving the accessibility of sports facilities for the disabled. Structural modifications to new sport buildings are recommended to accommodate those in wheelchairs (e.g. enlarging changing rooms and door widths, providing disabled toilets, keeping lifts in good operation). Specific recommendations on improving upon swimming pool access and safety are also provided.

Part V presents specific recommendations made by non-government organisations in Hong Kong for future action in enabling disabled persons to participate in sport. These recommendations are:

- Increase in local promotion and sponsorship of sport for the disabled
- More government involvement in the areas of sport funding, sponsorship, and organisation of sport events for the disabled
- Improved training of sport personnel in terms of knowledge of common problems suffered by disabled participants, and better communication skills in dealing with disabled persons
- Additional venues for disabled persons who wish to engage in sport

- Sponsorship of buses and provision of parking or drop-off zones to ease transportation difficulties for the disabled
- Increase in sport staff (physiotherapists, coaches, administrators, sport officials) and cooperation among them
- Provision of different types of sport to accommodate disabled persons of different ages
- Better public education in working to eliminate social prejudice towards the disabled and the participation of the disabled in sport

The conclusion of this report emphasises the need to increase accessibility to sport for the disabled community in Hong Kong in support of the international effort to accept and include those with disabilities into our present society.

2. General Introduction

Individuals with physical and mental impairments have endured a long history of maltreatment because they did not conform to the social norms of society in either appearance or behaviour. The historical treatment of those suffering from disabilities has been described as "a pattern of neglect, followed by benign tolerance and limited acceptance." (DePauw and Gavron, 1995).

Today disabled persons still bear the burden of social prejudice but they have made considerable progress towards societal acceptance and integration. One of the most important areas of integration is sport. Sport for disabled individuals is not a new concept but one that has received a significant amount of international recognition and widespread development in this past century.

Most recently, evidence of this lies in the involvement of disabled athletes in the 1992 Summer Olympic and Paralympic Games, the 1992 Winter Paralympics, the 1994 Winter Olympics and Winter Paralympics, and the 1996 Summer Olympics and Summer Paralympics in Atlanta.

Disabled persons in sport have been defined by those who are unable to participate without some "form of special equipment or training" (DePauw and Gavron, 1995). Such persons include the mentally retarded, physically impaired, those that suffer from physiological conditions such as diabetes, asthma, or cardiovascular problems, or are blind, deaf, or mute. The terminology for individuals who suffer from various disabilities has changed over the years. Disability is most currently defined in terms of physical or mental impairment. DePauw and Gavron (1995) refer to *impairment* as "a limiting condition that exists with a person" such as for example, blindness, deafness, mental disorder, paraplegia, or physical injury, and the term *disability* is used "when an impairment adversely affects one's performance."

Today the word *handicapped* is no longer preferred because it implies that a person's disability limits the fulfilment of normal social roles and presumes that one cannot perform as well as others in the social world due to his/her physical impairment (Hutzler, 1990; Jochheim, 1984).

In present society, disabled persons have participated in sport for reasons beyond physical therapy and rehabilitation. Not only do disabled individuals compete against one another, but alongside able-bodied persons. It is relevant to point out that sport is a *social construction* (DePauw and Gavron, 1995) which is highly prevalent in modern society, because it reaches out to all diverse facets of society and is perceived as a means of gaining social equality and acceptance. For this reason, everyone including the disabled, minority groups, and women have been drawn to participation in sport.

3. Benefits of Sport for the Disabled

Various non-government organizations in Hong Kong, specifically those associations that specialize in treating the physically disabled, mentally handicapped, deaf persons, and in rehabilitating those who suffer from long-term illness, outline the *physical, psychological and social benefits* of sport exercise for the disabled residents of Hong Kong.

3.1 Physical Benefits

- The physical benefits of sport exercise for the disabled are apparent in Hong Kong as well as universally justified. Physiotherapy is practiced worldwide in the treatment and rehabilitation of those suffering from mild and chronic disabilities. The physiological benefits of exercise include improved blood circulation, muscle flexibility, respiration, and general metabolism. Individuals with disabilities, particularly those who suffer from mental retardation, or who lack muscular strength and endurance (Rimmer, 1994).
- Sport can offer an avenue to increased body strength and better function of cardiovascular and respiratory systems. For disabled participants who often lead sedentary lifestyles, exercise through sport can alleviate the physical pain and discomfort associated with physical impairment, immobility, and inactivity.
- Physical exercise through sport is particularly beneficial for the elderly. It is common knowledge that as a person grows older, the systems responsible for cardiovascular, respiratory, nervous, sensory, and musculoskeletal function also experience decline, resulting in loss of strength and endurance. Hence, there is a great need for physical activity through sport for the growing number of elderly who are on the threshold of physical ability and are more susceptible to disease and illness.
- Rimmer (1994) reports that there is a progressive amount of converging evidence that physical exercise can "delay the onset of disease and restore functional mobility." Participation in sport can help prevent the onset of illness and rehabilitate those that are suffering from mild or chronic disabilities associated with age.

3.2 Psychological and Social Benefits

- As most people would agree who work with disabled members of society, there exists a great number of psychological benefits to sport exercise. The element of control over one's life or lack thereof has been the focus of numerous studies on mental health. In a study of wheelchair athletes participating in rehabilitative sports, Hutzler (1990) describes the rehabilitative effect of *empowerment* from sports, where a disabled individual "acquires control over personal and environmental resources in order to provide competencies usually deprived through disability. . ." Disabled persons have reported that sport permits the body to "move more efficiently" enabling them to gain "functional independence" and self-confidence, therefore changing their "whole life cycle" (Hutzler, 1990).
- Furthermore, sports participation often leads to increased self-motivation and encourages disabled individuals to participate in additional hobbies and activities within and outside the residential setting. The incentive to leave familiar surroundings helps those who are disabled to integrate themselves into society better, and therefore they progress in leading more normal and healthy social lives. Sport is a powerful fighting deterrent for laziness and inactivity, known causes of poor physical and psychological health, in that it can serve as a substitute for boredom and activities which lack purpose (e.g. wandering). Most importantly, sport offers the disabled an opportunity to transform in many cases, a socially and physically inactive lifestyle into one that can be made richer through social contact.
- Sport activities are thriving sources of social integration. Disabled members of society can have the opportunity to meet other people, whether disabled or not, and enjoy the company of those persons who they already share a common interest. Sport allows for the disabled to improve upon natural physical abilities and specific skills, and to view themselves in comparison to the skills of able-bodied persons as well as of their disabled peers.
- It is commonly held among sociologists, psychologists, and educators that one of the main benefits of sport is that it serves as a means of gaining equality, social acceptance and social integration. Sadly enough, only within the past century have disabled people sought entry into sport and become more integrated with society. Community integration can foster the

development of individual social identities, that is, the roles we see ourselves in, and increase self-confidence and positive self-image through mutual encouragement and acceptance by society.

- For instance, wheelchair athletes have reported that as a result of sport involvement, they have experienced changes in their educational, occupational, and athletic aspirations and an increase in self-esteem (Hopper and Santomier, 1984). Fundamentally, taking part in competitive community sport whose focus is on individual athletic ability and teamwork, has the major advantages of increasing positive thought, personal growth, and improving the life morale of the disabled.

4. The Hong Kong Situation

From here on, we report the views of a number of organizations in Hong Kong which are concerned with the disabled.

Their responses to our questions are used throughout the following sections, but we deliberately do not identify particular organizations.

The discussion is in sections:

1. Individual Problems
2. External Barriers
3. Improvements
4. Future Action

4.1 Individual Problems Experienced by the Disabled

The individual problems confronted by disabled persons in Hong Kong can be divided under the categories of physical problems, economic problems, psychological problems, and social problems.

4.1.1 Physical Problems

- Ordinarily, disabled people experience more physical pain than the average athletic participant when engaging in sports. There are obvious physiological limitations (e.g. shortage of breath, less muscle flexibility, coordination difficulty, easy exhaustion) associated with the type and severity of disability. The type and amount of sport activity is recommended to a large degree upon the advice of medical practitioners and physiotherapists.
- From the perspective of sports medicine, in order for disabled persons to participate successfully in sport they must choose "appropriate and realistic" activities, and secondly, they should compete with individuals or groups of individuals of equal classification and skill level (Chow, 1985). Despite governing medical restrictions regarding sport participation imposed by doctors and sport promoters on persons with disabilities, the trend for continued participation of the disabled in sport is growing.

4.1.2 Economic Problems

- People with disabilities encounter economic problems when going outside their homes or rehabilitation centres to engage in sports. Namely, they must provide lunch for themselves or be close to eating facilities accessible for the disabled; they must cope with the hazards of traffic and traffic jams, and they often have neither monetary nor social support from family members. Disabled athletes need to pay for the remaining portion of expenses associated with sport activities after sponsorship from government. Even 30-40% of sports fees is a significant amount for the average disabled person.
- Non-government organisations have also pointed out that social centres are often too busy to arrange for sports for the disabled and have little or no time and the manpower to provide for training of disabled persons in their sport of choice. In terms of funding, one of the most efficient long-term sources is through corporate donations in the United States, aside from the fund-raising efforts of individual sports organisations for the disabled (Paciorek and Jones, 1989). Private donations from individuals are also an important source of revenue.
- In addition, frequently access to venues suitable for the disabled to participate in particular sports can still be a problem. If one becomes available it may be quite far away. Transport provided by social organisations such as buses from rehabilitation centres may be few and are without time or funding to travel great distances. Training in a particular sport also takes time away from school and/or work, and educators and employers alike are often dissatisfied and discontented with taking personal leave for sport training and competition.

4.1.3 Psychological Problems

- The unfortunate image of a disabled person is one who leads a passive life, one who is physically weak, lacks sustained concentration, and has little or no self-confidence and therefore a lack of initiative to adopt new hobbies and activities. Non-government organisations also report that it is common for disabled people to fear the outdoors since the outside world is unpredictable and more unfamiliar to those suffering from various disabilities.
- Aside from these common inherent problems of those with disabilities, a greater psychological barrier to the successful participation of the disabled in Hong Kong sports and elsewhere has to do with the attitude of society towards disabled persons.

The persistent stereotype and social labeling of disabled persons as for example, too frail to compete or too mentally incompetent to really enjoy the personal and social benefits of competition, plagues disabled persons with self-doubt. Consequently, their goals for change and self-improvement become blocked by negative social reinforcement. The psychological effects of stereotyping are therefore particularly damaging for disabled persons who desire to participate and succeed in sport competition.

4.1.4 Social Problems

- Since disabled persons were perceived as too frail or physically unfit for sport, they were not allowed to participate in the past. Some non-government organisations in Hong Kong are in agreement that in view of all the problems discussed herein, the greater barrier has to do with societal disregard and prejudice towards disabled persons in sport.
- Nixon (1984) identified several parameters that were "considered salient to appropriate integration" of the disabled in sport. These were "a) type of disability; b) severity of disability; c) amount of sports background; d) type of sport; e) amount of adaptation; and f) degree of competition." He suggests that if these factors are handled properly, the living "stigmatization of handicapped participants" could be diminished.
- Although the sport participation of the disabled has finally been accepted around the world, disabled persons are still discouraged from competing due to the prevailing attitude that they are "physically and mentally inferior," and can therefore gain no personal benefit from sport other than that for "rehabilitation or therapeutic reasons". Fortunately, societal disapproval of the participation of the disabled in sport has lessened as a result of sports promotion and education about disability. These have functioned to improve social attitudes towards disability and disabled persons.
- Nonetheless, despite the fact that social attitudes and social behavior towards the disabled have matured, the problem of prejudice has not been eradicated. For instance, parents of disabled children in Hong Kong are often reluctant to permit their children to play sports for fear of injury and harassment from other children. There can be no disagreement that socialization is an important part of childhood. When disabled youth are deprived of early experiences through socialization with other children, which is often through sport, it sets the foreground for abnormal development and psychological problems in later life.

- There is also the problem of inadequate coaching by sport professionals. Parents lack faith in coaches whose experience in dealing with disabled children is deemed insufficient. There are many situations where sport instructors in Hong Kong do not fully understand the special needs of the disabled participant. This is usually due to insufficient knowledge, experience and skill of sport instructors in working with disabled people.
- In general, if disabled persons are to successfully engage in sports, they must learn to overcome the major obstacle of social prejudice. With the difficulty in getting help from others, many disabled persons are left to tackle social hardships themselves that are caused by social prejudices.

4.2 External Barriers to Sports Participation

4.2.1 Lack of Suitable Facilities

- Hong Kong non-government organisations have stressed that there is a serious shortage of proper sports facilities and equipment for the disabled, making it extremely difficult for them to participate fully in popular Hong Kong sports. Public facilities such as wheelchair ramps and toilets for the disabled are rare in Hong Kong.
- Understandably the cost for special facilities, additional equipment, and staff to accommodate disabled participants in sport (e.g. wheelchairs, personal guides for sight and hearing) can be a prohibitive factor. An increase in sport sponsorship from local organisations and government can help to ease the economic barrier to participation. Some recommended general improvements for sport facilities are given under the section, *Improvements for Sports Facilities*.

4.2.2 Insufficient Activities

- There are insufficient sport activities to accommodate the disabled population. According to one of our key informants, on average about ten sport activities per year are available to 200,000 disabled persons in Hong Kong. Disabled sports organisations in the United States (e.g. Committee on Sports for the Disabled (COSD); Special Olympics International (SOI); National Wheelchair Athletic Association (NWAA)) have offered a number of competitive sports and recreational activities in the past for individuals with disabilities (Paciorek and Jones, 1989). Some of

these include archery, basketball, boccia, bowling, canoeing, cross country, cycling, diving, floor hockey, gymnastics, handball, judo, power lifting, soccer, swimming, table tennis, team handball, tennis, track and field, volleyball, weight lifting, and wrestling. Efforts should be made to include some of these sport activities that would be economically and climatically suitable for disabled residents of Hong Kong.

4.2.3 Sports Instructors and other Role Models

- Positive role models, such as knowledgeable and sensitive sport instructors, sport promoters, and successful athletes with disabilities are important for disabled persons who wish to compete in sport, and these are currently lacking. As aforementioned, many NGOs emphasize that the greater majority of athletic instructors lack the knowledge and skill to train disabled persons in sport. DePauw and Gavron (1995) report that the most disabled persons in the U.S. who engage in sport are self-coached because there is a serious lack of coaches available who are trained in meeting the needs of disabled participants. Problems of bad attitude and prejudice from instructors also place added hardships for the disabled in sport.

4.2.4 Sports Promotion for the Disabled

- Local government and sport authorities in Hong Kong play a significant role in promoting sports for the disabled. Unfortunately, organised sport programs and sport sponsorship for the disabled is inadequate. It has been reported by some NGOs that the Hong Kong media does little to promote sports for the disabled. With the lack of advertisements and promotional activities, disabled persons are unaware of sporting activities that may be suitable for them. For instance, visible role models in terms of athletes with disabilities featured in commercials along with media coverage of sporting events where disabled athletes compete against normal athletes can encourage people of all ages with disabilities to become actively involved in sport.

4.3 Improvements for Sports Facilities

- Currently in Hong Kong, there are insufficient sport clubs which have suitable and special facilities for the disabled are insufficient. Improving upon existing sports facilities to enable disabled persons access and comfort has always been an international concern. Even small and economical improvements within and outside sport venues can make huge differences to disabled and able-bodied individuals who wish to participate in athletics. Thomson et al. (1984) point out that making improvements to allow for disabled

access to new sport buildings is generally well-accepted. High cost modifications such as enlarging changing rooms and providing toilets to accommodate disabled persons can also benefit the general public.

- Changing rooms, as in those used for swimming pools, ideally should include multi-purpose spaces that have a shower, toilet and washbasin at the appropriate heights to allow for disabled access. Less expensive modifications such as installing extra handrails (especially on both sides), increasing the light available for added safety, and providing large and well-placed signs in sport facilities help to prevent unnecessary accidents and increase accessibility for disabled persons.
- As steps are the main obstacle for disabled persons, sport facilities should have ramps at either main or back entrances. Door widths should also be large enough to accommodate wheelchairs, and if help is needed a clearly labeled doorbell should be well-placed at entrances to contact the reception desk for additional assistance. All lifts should be maintained regularly to accommodate those in wheelchairs.
- Swimming pools are especially popular for individuals with disabilities because they allow for freedom of movement for those confined in wheelchairs, and are an enjoyable source of recreation and physical therapy. Modifications to existing pool areas should be implemented to allow for use of disabled persons. These include improvements such as installing continuous handrails along access routes to the pool area, and providing an alternate pathway for disabled persons who are unable to pass through a pre-cleansed foot barrier. A mechanical hoist should also be available to lift disabled persons into and out from the water, although some disabled persons prefer to be assisted by pool attendants during public sessions.
- For the visually impaired, lighting is important as well as a well-defined pool edge to prevent slipping. A convenient storage space for wheelchairs and other large aids should be located nearby but so as to not present a hazard for other users. In general, all facilities within the sport complex (e.g. changing rooms, spectator areas, restaurants/snack bars) should be altered to allow for wheelchair access to enable disabled persons to participate in sport.

4.4 Recommendations for Future Action

4.4.1 Promotion of Sport

- It is felt that sport promotion for the disabled in Hong Kong is not progressive enough. There is a great need for local sponsorship so that disabled persons will have the same opportunities as able-bodied individuals to participate fully in sports. Internationally, sport federations are urged to assume more responsibility in educating coaches and trainers, in developing training programs for the disabled, and in organising and officiating regular and special sports events for disabled persons. Sport for the disabled has not been promoted uniformly to media, government, the private sector, and disabled persons (Steadward, 1990) and there continues to be confusion as to the function and services provided by various sports organisations.
- Nonetheless, there has been a reasonable amount of progress in the promotion of international sport for the disabled in the last several decades (Jaaskelainen et al., 1984). Sport for disabled persons has been promoted internationally through major sport federations such as the *International Sports Organization for the Disabled*, the *International Committee of Sports for the Deaf*, the *International Stoke Mandeville Wheelchair Sports Federation*, the *Cerebral Palsy-International Sport and Recreation Association*, the *International Blind Sports Association*, the *International Fund Sports Disabled*, the *Recreational Sports Development and Stimulation Disabled International*, the *International Coordinating Committee of the World Sports Organizations for the Disabled*, the *International Sports Federation for Persons with Mental Handicap*, and the *International Paralympic Committee* (DePauw and Gavron, 1995).
- Such organisations serve in general to develop, control, promote, and supervise sport programs, to exchange information at the international level, and to provide sport education for the disabled. Although there has been substantial progress internationally towards integrating disabled persons into sport, much work remains to be done at the local and regional level (Paciorek and Jones, 1989).
- The Hong Kong non-government organisations suggest that the media should make more effort in making opportunities in sport known for disabled persons who wish to participate. Not only does the media serve as a powerful tool in recruiting disabled persons into sport, but it also helps to defeat social prejudices against disability and the disabled.

4.4.2 Government Involvement

- Governments have the responsibility to ensure equal opportunity for all people to participate in sport. The government needs to provide disabled persons with sport funding, and with more joint programs between local sport centres and social centres for the disabled so that the disabled may participate in sport. In the past, governments, social services, and private donators have been successful in organising national and international sporting events and providing medical care for the disabled (Jochheim, 1984).
- Smaller non-government organisations are especially in need of government involvement and sponsorship. Furthermore, it has been suggested in the U.S. (DePauw and Gavron, 1995), that change must be lobbied at the local level as well as at the state and federal levels in providing accessible facilities and physical accommodation for the disabled who wish to participate in sport.

4.4.3 Training of Sport Personnel

- As discussed previously, the majority of sport instructors in Hong Kong have little or no knowledge and/or experience in dealing with disabled participants. In order for instructors to coach disabled persons, sport organisations need to educate their instructors on safety measures and problems specific to the disabled when engaging in various sports.
- In order to make athletic activities safer, less threatening, and more enjoyable for the disabled, more professionals trained in sport and recreation and physical educators, particularly those trained in adapted physical education are in need. Sport personnel should be trained in knowledge of various disabilities, knowledge of appropriate physical activities for different types of disabilities, knowledge of research in adapted physical activity, and communication skills toward persons with disabilities. Teachers should function as a "mediator between the learner and environment" (Hutzler, 1990) and should be responsive to the thoughts and needs of the disabled participant.
- Furthermore, at the onset of sport activity, Hutzler (1990) advises that stressful experiences should be avoided because most often, disabled participants will resign early due to initial failure. Role models such as co-instructors, veteran athletes, sports organisers, referees, and peer counselors are also effective in encouraging disabled individuals to participate and succeed in sport.

4.4.4 Create More Venues for Disabled Sport

- Additional venues to serve as sources for sport participation for disabled persons are necessary. Adding sport programmes in community-based settings can provide for more opportunity for socialization among disabled and able-bodied persons. New and suitable sports for the disabled are also in demand. Even sporting games and activities can be modified to fit the limitations of disabled people.

4.4.5 Ease the Transportation Problem

- Increased sponsorship of buses in rehabilitation centres to transport disabled persons to and from sport centres would help in easing individual transportation difficulties. In addition, parking or well-marked drop-off points for disabled users should be provided for easy access to sport facilities.

4.4.6 Increase in Manpower and Cooperation

- It has been reported by many non-government organisations in Hong Kong that the number of staff in sport physiotherapy as well as the number of coaches in sport for the disabled is currently inadequate. There is also a need for increased cooperation between physiotherapy centres and sport promoters in order for the disabled to take advantage of sports in Hong Kong with disabilities. In fact, there should be increased cooperation and coordination between all professionals involved in the area of disability and sport in order to promote sport for the disabled more effectively.
- Physicians, educators, physical and occupational therapists, and sport administrators should work together to implement changes such as making sport facilities more accessible for the disabled, providing more sport programs and special aids for disabled children, adults, and seniors to participate in sport.
- There is an international concern for the inclusion of greater numbers of coaches, administrators, and sport officials to promote sport for the disabled (DePauw and Gavron, 1995), and for closer cooperation between doctors and coaches in particular in treating the special needs of disabled participants in sport (Jochheim, 1982).

4.4.7 Sports for Different Ages

- Not all sports are geared for persons of every age. Disabled adults, children, and elderly alike should have equal opportunity in choosing from a range of suitable and safe sports to take part in. Sport participation should not be age-specific but made accessible for individuals with disabilities of all ages to partake in sport at all levels.
- Sport exercise can significantly improve the quality of life for the elderly. Apart from the known physiological benefits of sport (improved cardiovascular, respiratory, and musculoskeletal systems) in enhancing mobility, flexibility, and general coordination that decline with age, sport can serve as physical therapy for older persons who are recovering from illness or surgery. In addition, due to the element of individual control demanded in sport, disabled persons, particularly the elderly can have the satisfaction of not having to rely on others continually, and gain better control over their own lives.

4.4.8 Work towards Eliminating Prejudice

- As discussed, one of the greatest psychological barriers to sport participation for the disabled population is prejudice. The Hong Kong society requires more education in learning to accept and live among the disabled population. Education can be promoted in schools, special youth programs, the media, and the work place. Only with concern and understanding from society will the disabled feel more at ease in leaving familiar surroundings to participate in sport which can do a great deal for their health and livelihood. In addition, psychological counseling should be readily available to the disabled in learning to deal with problems stemming from prejudice.

5. Conclusion

During this century, disabled individuals world-wide have strived for the opportunity to participate in sport at the amateur and professional levels and have made good progress. As a result, sport for the disabled has been supported internationally by numerous organizations. The perception of disabled persons internationally has shifted from one which focuses on limitation to the awareness that individuals with disabilities have the potential like everyone else to maximize their abilities and improve upon their quality of life.

In Hong Kong today and elsewhere, individuals with disabilities have greater opportunities to participate in sport than they did 50 years ago, but much work needs to be done to enhance accessibility to sport for the disabled community.

The trend for inclusion of disabled persons in sport will continue onto the next century. Societal inclusion or integration means that the disabled will have a choice as to whether or not they wish to participate in sport in contrast to former exclusion because of physical or mental impairment. If we make the necessary improvements for the inclusion of the disabled of Hong Kong in sport, the undesirable social gap between disabled persons and other members of Hong Kong society can be significantly lessened.

6. References

- Chow, Y. (1985). *Sports medicine for the disabled - past, present, and future*. In: Proceedings of Sports Conference, from Theory to Practice, March 23, 1985. Chinese University of Hong Kong.
- DePauw, K. P. and S. J. Gavron (1995). *Disability and Sport*. Human Kinetics, U.S.A.
- Hopper, C. and J. Santomier (1984). *Self-esteem and aspirations of wheelchair athletes*. *Journal of Social Relations*, 12:1, fall-winter, 24-35.
- Hutzler, Y. (1990). *The concept of empowerment in rehabilitative sports*. In: Doll-Tepper, G. et al. (eds.) (1990). *Adapted Physical Activity: An Interdisciplinary Approach*. Springer-Verlag.
- Jaaskelainen, M. et al. (1984). *The improvement of international co-operation and exchange of information in relation to sports for the disabled and other special groups*. In: Ilmarinen, M. (ed.) (1982). *Sport and International Understanding: Proceedings of the Congress held in Helsinki, Finland, July 7-10, 1982*. Springer-Verlag.
- Jochheim, K. A. (1984). *The extent, content and organization of international sport for the disabled in the past, present, and future*. In: Ilmarinen, M. (ed.) (1982). *Sport and International Understanding: Proceedings of the Congress held in Helsinki, Finland, July 7-10, 1982*. Springer-Verlag.
- Nixon, H. L. II (1984). *The creation of appropriate integration opportunities in sport for disabled and nondisabled people: a guide for research and action*. *Sociology of Sport Journal*, 1:2, June 1984, 184-192.
- Paciorek, M. J. and J. A. Jones (1989). *Sports and Recreation for the Disabled: a Resource Manual*. Benchmark Press, Inc., U.S.A.
- Rimmer, J. H. (1994). *Fitness and Rehabilitation Programs for Special Populations*. WCB Brown and Benchmark Publishers, U.S.A.
- Steadward, R. D. (1990). *Sports for athletes with disabilities: future considerations*. In: Doll-Tepper, G. et al. (eds.) (1990). *Adapted Physical Activity: An Interdisciplinary Approach*. Springer-Verlag.
- Thomson, N., Dendy, E. and D. de Deney (eds.) (1984). *Sports and Recreation Provision for Disabled People*. The Architectural Press Limited, U.K.

Appendix I

- List of non-government organisations interviewed
 1. Heep Hong Society for Handicapped Children
 2. Hong Kong Association for the Scientific Study of Mental Handicap
 3. Hong Kong Sports Association for the Mentally Handicapped
 4. Hong Kong Sports Association for the Physically Disabled
 5. Hong Kong Sports Association of the Deaf
 6. Hong Kong Sports Institute
 7. MacLehose Medical Rehabilitation Centre
 8. Parents Association of the Mentally Handicapped Ltd
 9. The Hong Kong Society for Rehabilitation
 10. The Spastics Association of Hong Kong

Appendix II

- **Research Methodology**

Data collection was basically from two sources:

- 1) telephone interviews with a number of non-government organisations in Hong Kong which are concerned with the disabled in sport;
- 2) international literature which provided a global picture on some of the main areas of concern for access to sport of disabled persons.

All the interviews were conducted on the telephone. First, a letter indicating four broad areas was faxed or sent to about 50 sport organisations in Hong Kong. These included disabled sports and rehabilitation associations (30) and district sports associations (20). The district sports associations were not able to provide any information for they were government bodies and not activities organisers.

The broad areas covered during the interview were:

- a) benefits of participation
- b) problems for individuals
- c) barriers to participation
- d) possible improvements

About (10) 30% responded to our questions. Their responses were compiled in the main body of the report and reflected the current view of relevant organizations in Hong Kong on the sports participation of disabled persons.