

Constraints Experienced by Elite Athletes with Disabilities in Kenya, with Implications for the Development of a New Hierarchical Model of Constraints at the Societal Level

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The purpose of this study was to investigate the constraints to the development of elite sport for people with disabilities in Kenya. A grounded theory research design was utilized to analyze the data collected by means of personal in-depth interviews. Interviews were conducted in 2003 in Nairobi, Kenya with five athletes on the Kenya Paralympic Team and five administrators supporting the Kenya Paralympic team. Seven major themes were identified with respect to the constraints faced by athletes and administrators. Issues related to negative attitudes toward people with disabilities, coaching, equipment, facilities, transportation, ethnic favoritism, and lack of financial resources proved to be the biggest constraints identified by the respondents. Based on the findings of this study we developed a hierarchical model of constraints at the societal level and put forth propositions that explain its operation.

KEYWORDS: *Disability, athletes, constraints, developing countries.*

Introduction

Twenty five percent of the world's population is affected by some form of disability, either personally or through a family member (Ingstad & Whyte, 1995). Leisure activities constitute an important aspect of life of people with disabilities. For some of them, leisure is limited to passive relaxation, while for others it is associated with physical activities, including sport participation, often at an elite level (Ruddell & Shinew, 2006). The reasons why people with disabilities engage in sport vary. Participation in sport can have important physical benefits. It can facilitate physical competence and en-

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hance bodily appearance (Taub, Blinde, & Greer, 1999). It provides means for maintaining physical independence and a sense of individual capability, and helps to keep the potentially harmful effects of disability in check (Page, O'Connor, & Peterson, 2001). Moreover, sport participation has certain important psychological outcomes. It allows people to regain identity, to manage the stigma of a disabled body, to set goals, and to develop a sense of competence and accomplishment (French & Hainsworth, 2001; Martin, Mushett, & Smith, 1995; Page et al.; Ridgeway & Boyd, 1994). From the social standpoint, sport helps to integrate people with disabilities into family and community activities, and serves as a means for social mobility (Page et al.; Wu & Williams, 2001).

People with disabilities participate in sport at both recreational and competitive levels (Campbell & Jones, 1994; DePauw, 1984; Ruddell & Shinew, 2006). Elite athletes with disabilities around the world, out of their free will devote much of their economically free time, discretionary income, and energy to their participation in sport. In accordance with Kaplan's (1975) definition of leisure, participation among the elite athletes in this study was "pleasant in anticipation and recollection, covered the whole range of commitment and intensity, (. . .) provided opportunities for recreation, personal growth, and service to others" (p. 28). The term "elite athletes" in this study was used to refer to athletes with disabilities who represented Kenya on the Paralympic Team and, thus, in contrast to other athletes with disabilities, reached the highest level in the competition in their respective disciplines.

Even though the body of literature on sport for athletes with disabilities is very extensive (e.g., Patterson et al., 2005; Smith et al., 2004; Vinet et al., 2002), research on the challenges athletes face in their sport participation is still limited. Similarly, although the existing literature in the field of leisure includes numerous studies that focus on constraints to leisure participation among the general population (for the most recent comprehensive review see Jackson, 2005) and among people with disabilities (Henderson, Bedini, Hecht, & Schuller, 1995; Perrin, 1992), research that would examine constraints to sport participation among people with disabilities is still underdeveloped.

Moreover, while most of existing research on constraints has been conducted in the context of developed countries, an estimated 80% of the world's population of people with disabilities resides in developing nations (Albrecht et al., 2000). The lives of these people are affected by ongoing presence of civil war, natural catastrophes, and environmental disasters (Ingstad, 2000) and they face limited access to education, employment, and health care. In light of this, the goal of this study was to investigate the challenges, as identified by the participants, that limit the growth of elite sport for people with disabilities in a developing country in East Central Africa. The specific objectives of this study were: 1) To identify constraints affecting sport participation among elite athletes with disabilities, 2) To explore causes of the existing challenges and, 3) To develop a new hierarchical model of constraints that would show their operation at the societal level.

For the purpose of the study, sport was defined as “Institutionalized competitive activities that involve vigorous physical exertion or the use of relatively complex physical skills by individuals whose participation is motivated by a combination of personal enjoyment and external rewards” (Coakley, 1997, p. 19).

As Ruddell and Shinew (2006) in their study of elite female wheelchair basketball players argued, “In order to better understand the socialization process, it is important to study athletes with disabilities who are at different levels of competition” (p. 427). We would argue that certainly the same applies to constraints faced by people who participate in disability sports. Information about constraints they face may provide us with insights useful in understanding lives of athletes with disabilities who participate in sport at the recreational level and, perhaps, even among individuals without disabilities who take part in other types of leisure.

Kenya was chosen as the site of this study for three reasons. First, Kenya provides a good representation of several other East African nations. Its GDP per capita (\$1,100) places it roughly in the bottom one third of all the developing countries (The World Factbook, 2005). Although the latest Census was conducted in Kenya in 1999, the most recent data on disability in this country come from 1989. The 1989 Census reported that 252,000 people (roughly 2% of the country’s population) had a disability (Kenya Society for the Physical Handicapped, 1999). The second reason why Kenya was chosen as the site of this study is because of the history of activism of people with disabilities in this country. The Association for the Physically Disabled of Kenya was established as early as in 1958, and in 1986 The Kenya Institute of Special Education under the Ministry of Education was created. However, despite this history of activism, and despite the passage of The Persons with Disability Act in 2003, people with disabilities in this country “continue to face barriers that prevent them from enjoying their full civil, political, economic, social, cultural, religious and development rights” (Sinyo, 2005, p. 1). The final reason for choosing Kenya was access to respondents via the involvement of the first author of this paper as a consultant to the Kenyan national wheelchair basketball team.

Conceptual Framework and Literature Review

Models of Disability

Devlieger, Rusch, and Pfeiffer (2003) assert that the model-centered way of thinking has been dominant in the disability studies. They identified four separate models of disability—religious, medical, social, and cultural. According to Devlieger et al., the predominant use of models changed throughout history, but that in the “globalized and intercultural worlds, all these models are very much present” (p. 15). As the findings of this study will later show, the majority of the Kenyan society still ascribes to the religious model of disability in which disability is seen as a problem, a curse, and a result of punishment by God. This represents a pre-modern view, attributed by Dev-

lieger et al. to early Hebrew people, who saw disability as an imperfection incompatible with the sacred, or to early Christians who considered disability the result of sin.

The majority of disability studies conducted since the 1950s subscribed to the *medical model* that assumed that impairment of one kind or another was the main reason why people with disabilities were disadvantaged. In the medical model “a passive, dependent role is assigned to disabled people. The emphasis is on treating and alleviating symptoms by ‘experts’” (French & Hainsworth, 2001, p. 36). People with disabilities were seen as powerless victims who were wholly dependent on others and whose lives could only be bettered by the medical profession (Rieser, 2002). Studies that subscribed to the medical model rarely drew attention to the economic and social inequalities encountered by people with disabilities, or questioned the underlying causes of their problems (British Council of Disabled People, 2005).

The *social model* of disability downplayed the medical condition of a person and stressed that it is society that erects economic, environmental, and cultural barriers that constrain people with disabilities. These barriers can include negative attitudes; disabling language; failing to make education, work, leisure and public services accessible; stereotypes and prejudice; inaccessible education systems and working environments; inadequate disability benefits; inaccessible transport; houses and public buildings; and devaluing of people with disabilities through negative images in the media (British Council of Disabled People, 2005). In other words, these were not the physical limitations that constrained people with disabilities, but rather fear, ignorance, prejudice, and discriminatory practices on the part of society (Rieser, 2002). According to French and Hainsworth (2001), the social model “demonstrates that the limitation of activity is not caused by impairments but is a consequence of social organization” (p. 36).

The social model of disability is internationally recognized as the driving force behind the disability agenda (Equalities Agenda, 2005). This movement believes the solution to the problem of disability lies not in “curing” individuals with disabilities, but in the restructuring of society and removing barriers they face in everyday life (Rieser, 2002). In this research, we adopted the social model of disability, not discounting, however, the influences of the physical status of our interviewees on their lives. Placing this study in the conceptual framework of the social model of disability, our goal was primarily to focus on the constraints erected by the society that limit people’s participation in their desired activity and, only secondarily, on how the physical status itself was constraining the lives of participants.

Constraints on Leisure, Physical Activity, and Sport among People with Disabilities

According to Jackson and Scott (1999), research on leisure constraints has become an established sub-field of leisure studies. The last 25 years produced a multitude of empirical studies focusing on constraints on leisure and some considerable theoretical developments (for a comprehensive re-

view of the literature, see Jackson, 2005). For the purpose of brevity, in this review, we will focus only on the literature that discusses constraints on leisure, physical activity, and sport among people with disabilities.

Among studies that examined constraints faced by people with disabilities in their *leisure* participation, two are especially worth noting. Perrin (1992) identified eight constraints that people with disabilities faced in their leisure. They included, among others, poverty, inaccessible transportation, lack of knowledge of leisure opportunities, and segregation of programs and activities. Henderson et al. (1995) found that "leisure choices [of women with disabilities] were not necessarily disability-determined, but the context of the disability influenced choices and constraints" (p. 17). The authors established that women with disabilities experienced some of the "general constraints," including lack of time or money, ethic of care, safety, energy deficiency, and lack of opportunities and choices, but with a magnified intensity.

Except for studies that focused on constraints on leisure, there exist a number of studies that focused on constraints to *leisure provision* for people with disabilities. For instance, Schleien, Germ, and McAvoy (1996) examined constraints faced by agencies providing community recreation programs for people with disabilities. The most frequently cited constraints by the participants in their study included lack of funds that prohibited hiring specialists and securing additional adapted equipment, difficulties in hiring qualified staff, and lack of adaptive transportation. Tregaskis (2003) found that leisure facilities located in community centers in the U.K. had a number of physical barriers that prevented customers with disabilities from accessing their centers. Physical barriers included heavy doors, heavy carpets that made mobility in a wheelchair difficult, limited space in changing rooms, and poor signage.

A separate group of studies that examined constraints experienced by people with disabilities focused on *physical activity* and *physical education*. Williams (1994) indicated that proportionally fewer individuals with disabilities participate in physical activity than people without disabilities. Henderson and Bedini (1995) found that the level of energy and stamina, pain level, availability of transportation, existence of social fears, accessibility, and social support from recreation partners affected physical activity participation of women with disabilities. In general, Henderson and Bedini established that environmental barriers were more important in limiting physical activity among people with disabilities than disability-related constraints such as illness and physical limitations. According to Grimes and French (1987), the biggest constraints to participation in physical education for youth with disabilities were the misconceptions and fears on the part of physical educators. Moreover, they found that inadequate training and limited materials for teaching contributed to children with disabilities growing up sedentary. Lieberman, Houston-Wilson, and Kozub (2002) conducted a study of the perceived constraints to physical education participation among students with visual impairments. The most prevalent constraints they identified included lack of professional preparation and equipment, unsuitable programming, and lack of time.

A distinct group of studies examined constraints that affected participation by people with disabilities in *sport* (both professional and recreational). For instance, Sherrill and Williams (1996) claimed that people with disabilities face an additional challenge of finding an opportunity to participate in sport. They also argued that the limited number of coaches were the major problems that constrained the development of sport for people with disabilities. Collins (2003) examined sport participation among children with disabilities and found that their participation rates were much lower than those among children without disabilities. The main constraints mentioned by people with disabilities in studies by French and Hainsworth (2001), Sherrill and Rainbolt (1985), and Ferrara, Dattilo, and Dattilo (1994) were cost, lack of transportation, health issues, inadequate equipment, inaccessible facilities and locker rooms, attitude of staff and other users, lack of appropriate programming, staff availability, no one to train/work out with, and lack of adequate knowledge among coaches.

All of the studies on constraints on leisure, physical activity, and sport participation among people with disabilities reviewed in this section have been conducted in developed countries such as the U.S. or the U.K. This research project was designed to extend this research by focusing on barriers to sport participation in the context of a developing country in Africa.

Methods

A qualitative approach was utilized in order to explore, describe, explain, interpret, and build a theory related to the topic of constraints experienced by a group of elite athletes with disabilities living in Kenya. The nature of this research was holistic with unknown variables (Leedy & Ormond, 2001). This type of research design was well-suited to obtain information from a limited number of elite athletes with disabilities and administrators (including coaches) involved in disability sport in Kenya. The goal of our research was not to generalize findings to the population of people with disabilities around the world, but to gain insight into the experiences of the interviewed individuals and to present their own point of view. We utilized grounded theory research design to analyze the data collected by means of personal in-depth interviews. Grounded theory uses collected data to construct a theory by employing a prescribed set of procedures for analyzing the obtained material and developing a theoretical model (Leedy & Ormond). In grounded theory studies, in-depth interviews are typically utilized along with other methods of data collection. In such studies, it is critical that the collected data include the perspectives and voices of those being studied (Strauss & Corbin, 1990).

Study Participants

We used a purposive sampling method in order to identify potential interviewees. In this type of sampling, the researcher intentionally selects individuals and sites to learn or understand the central phenomenon (Cres-

well, 1998; Leedy & Ormond, 2001). Gatekeepers—one athlete and one administrator helped us to identify and establish initial contact with five athletes on the Kenya Paralympic team and five administrators supporting the Kenya Paralympic team. We made an attempt to contact elite athletes and administrators representing a variety of sport disciplines and administrative roles, as well as both males and females. Sampling continued until the theoretical saturation has been achieved.

At the time of the interviews, the participants ranged in age from 27-55 year old. Tables 1 and 2 provide a brief description of each of the interviewees. Administrators interviewed in this study (two women and three men) included coaches from disciplines such as table tennis, athletics, and basketball. Moreover, they represented a number of agencies: the Kenya National Sports Council, the Kenya National Paralympic Committee, Amputee Sport Association, Sports for the Disability Paraplegia, Mentally Handicapped, and the Visually Handicapped, and the Africa Paralympic Sports Confederation. The number of years each administrator was involved with sport for athletes with disabilities ranged from 4 to 30. Four of the administrators have previously competed as athletes in national or international competitions. Their previous involvement in disability sport as athletes provided them with additional insights and more in-depth knowledge of the constraints experienced by those who participated in elite sport.

Five athletes (two women and three men) interviewed in this study represented Kenya on the Paralympic team in the following sports: power lifting, swimming, athletics (running and wheelchair racing), wheelchair basketball, and table tennis. Their occupations included a shoe shiner (who also works as a hawkers selling sweets on the streets as well as a masseuse), a shoemaker, a graphic designer, a tailor, and a businessman who sells used clothing. We

TABLE 1
Interviewed Administrators

<i>Name</i>	Nellito	Peter	Joanna	Marcus	Tandy
<i>Gender</i>	Male	Male	Female	Male	Female
<i>Age</i>	55	44	36	34	47
<i>Paralympic Duty</i>	Variety of committees	Basketball coach	Sports Council	Variety of committees	Track coach
<i>Number of Years Involved</i>	30	7	5	8	6
<i>Occupation</i>	Office work	Government employee	Secretary	Unemployed	Government employee
<i>Marital Status</i>	Married	Married	Married	Single	Married
<i>Number of Children</i>	4	5	No information	0	No information
<i>Ethnicity</i>	Kamba	Kamba	Luhya	Luo	Kikuyu

TABLE 2
Interviewed Athletes

<i>Name</i>	James	Faith	Matthew	Milly	Lucas
<i>Gender</i>	Male	Female	Male	Female	Male
<i>Age</i>	30	30	27	35	46
<i>Disability</i>	Amputee	Polio	Polio	Polio	Polio
<i>Onset of Disability</i>	10 year old	4 year old	6 year old	Young age	Young age
<i>Sport Discipline</i>	Track	Track	Basketball Table tennis	Swimming Table tennis	Power Lifting
<i>Number of Years Involved</i>	5	9	4	3	9
<i>Occupation</i>	Salesman	Hawker	Graphic designer	Tailor	Masseuse Hawker
<i>Marital Status</i>	Married	Married	Married	Single	Married
<i>Number of Children</i>	0	1	0	0	0
<i>Ethnicity</i>	Luo	Kikuyu	Luo	Kikuyu	Luhya

changed names and other identifying details in order to preserve confidentiality of interviewees.

Interviews

In-depth interviews were performed by the first author of this article—herself a wheelchair basketball athlete and a visiting coach of the Kenya National Wheelchair Basketball team who operated three wheelchair basketball clinics during the summer of 2003. It needs to be acknowledged that the first author's background, including her own characteristics and experiences (White, middle class, female athlete with a disability), may have introduced certain bias into the research process. During the course of the study, however, she was fully aware of the possible impact of her characteristics, status of international coach, and prior experiences with sport for athletes with disabilities could have had on the course of questioning, as well as on the analysis of data gathered in the study. Thus, she guarded herself from the negative impacts of her insider position by continually recognizing the possibility of bias, extensive probing during the interviews, and clarifying her understanding of the topic during the conversations.

All interviews were conducted in the English language, as English is one of the official languages in Kenya. The interviews lasted between 30 and 60 minutes and followed a semi-structured format. Participants were asked a series of general, open-ended questions regarding the challenges to the development of sport for elite athletes with disabilities in Kenya. For instance:

Do financial challenges affect the development of sport for athletes with disabilities in Kenya? Are there any architectural barriers that may affect the development of sport for athletes with disabilities in Kenya? Is there a sufficient amount of equipment (e.g., balls, sport chairs) to allow for the development of sport for athletes with disabilities in Kenya? What is the effect of public attitudes on the development of sport for athletes with disabilities in Kenya? Do men and women have the same opportunities to participate in sport for athletes with disabilities in Kenya? General questions were followed by a series of probes designed to elicit more detailed information. These prompting questions revolved mainly around issues of finances, facilities, equipment, and instructors. The questions and the probes were developed based on suggestions from an international Paralympic coach, current Paralympic athletes in developed and developing countries, and on the existing literature on the topic of constraints to participation in disability sport. The questions and probes were slightly modified once the research began to appropriately fit the participants and the context of paralympic sport in Kenya.

All of the interviews took place at the Nyayo National Stadium in Nairobi, Kenya—the primary venue where elite athletes with disabilities train and where Paralympic administrators' offices are located. Interviews were conducted in the offices of the administrators, in the gym, at the stadium restaurants, and in the common areas of the stadium. They were tape recorded to obtain the highest accuracy. Notes were also taken during the interviews and a short summary was written at the end of each interview to help in the recall of initial ideas and thoughts. Audio recordings were re-played every evening following the data collection to aid in the understanding of the data and to inform subsequent interviews. Transcription of the interviews occurred after the entire fieldwork was completed. Although the fact that the interviews were transcribed after the fieldwork had already been completed is inconsistent with the constant comparison method, the fieldwork environment precluded transcribing the interviews immediately after they were recorded. While in Nairobi, the first author of this article who collected the data resided in the house of one of the athletes with disabilities. This house lacked electricity, running water, plumbing, or other basic necessities that, in normal circumstances, enhance our research capabilities.

Data Analysis

We followed three broad steps when analyzing the interview data (Creswell, 1998). The first step involved scanning over all of the collected data to gain a broad understanding of the material and writing notes on the margins of the interview transcripts. The second step involved reading the interviews for the second time and listing categories of factors that affected the development of sport for elite athletes with disabilities in Kenya. We analyzed the data through open coding, axial coding, and selective coding (Creswell, 1998). In this stage of data analysis we identified 15 categories. Items were identified as a category when an interviewee mentioned them as a constraint

that affected the development of elite sport for athletes with disabilities. Once an item was mentioned, we counted the number of times it was quoted by each of the interviewees. We also noted the number of times a single interviewee mentioned this particular barrier. The third step of the data analysis involved reading the interviews for the third time. This time, however we collapsed the original 15 categories into 11 major themes. We conducted additional analysis on the 11 themes to determine if there existed any differences between elite athletes and administrators and males versus females. The 11 initial themes were then further collapsed into seven themes that included negative attitudes toward people with disabilities, coaching issues, availability of equipment, inadequate facilities, problems with transportation, ethnic favoritism, and lack of financial resources.

Methods for Assessing Validity

We validated findings of this study through triangulation, member checking, and external audit. First, we used evidence from different individuals (the administrators and the athletes) to obtain information regarding constraints that affected the development of disability sport in Kenya. Moreover, after transcription of the interviews had been completed, we sent a transcript to each of the interviewees for their verification and feedback. Only three out of 10 participants returned transcripts with some modifications. It is possible that distance, illiteracy of some of the respondents, and possibly the high accuracy of transcriptions affected the small number of returned comments. We later used these comments to confirm and explain interviewees' statements in the data analysis part of the study. Moreover, member checking proved to be helpful in identifying and analyzing ethnic favoritism as one of the constraints affecting the development of disability sport in Kenya.

Lastly, we contacted experts in the field who were not involved in the research project and we asked them to conduct a review of the study and to comment on its strengths and weaknesses. Six individuals were asked to provide the external audit. They included: the International Paralympic Development Manager, the former Secretary General of the International Wheelchair Basketball Federation, the former Vice President of the International Wheelchair Basketball Federation, the Vietnam Veterans of America Sports for Life Program Manager in Angola, an Executive Committee Member in various functions at the International Stoke Mandeville Wheelchair Sports Federation, and an international athlete. We utilized their comments in analyzing the interview data and to evaluate the accuracy of findings of this study. One of the main suggestions made by the auditors was the need to underscore that the study has focused on *elite* athletes with disabilities only and not on a broader population of athletes with disabilities in Kenya. In addition, questions about the role of the Paralympics in establishing disability sport in developing countries were raised and the confirmation of the identified constraints for elite athletes with disabilities was obtained.

Findings

Seven major themes were identified with respect to challenges to the development of elite sport for athletes with disabilities in Kenya. Issues related to negative attitudes in society toward people with disabilities, coaching, availability of equipment, inadequate facilities, transportation problems, ethnic favoritism, and lack of financial resources, were the categories of constraints we developed in order to encapsulate specific issues raised by the participants.

Negative Attitudes toward People with Disabilities

Negative attitudes were a powerful barrier faced by the interviewed individuals not only in and of themselves, but also they were embedded in and affecting other constraints that conditioned development of sport for athletes with disabilities in Kenya. Each of the participants described the negative treatment he or she received from the public at large and from the Kenyan government. Moreover, many provided insights into possible causes of negative attitudes. Faith, a track athlete in her thirties, contracted polio when she was four and has been paralyzed since. She lived with her mother and supported herself and her four year old son from hawking. Faith has competed with the Kenya Paralympic team for nine years. She commented,

Able-bodied people don't see us like human beings. They do not treat us well. They don't help us when we have any kind of accident or need any help for anything. I don't know how to say, they hate disabled people here in Kenya. They don't care for us.

Faith's comments were echoed in other interviews as well. Milly was a 35 year old, single woman, who contracted polio at a very young age and who walked with the aid of braces. She has competed in swimming in the free style event and table tennis for the past three years and represented Kenya in the 2002 Commonwealth Games. She stated that people with disabilities in Kenya were "not equal humans," while James, a track athlete, commented, "Disabled are still looked down upon by the able-bodied (. . .) they are treated like second rate citizens." Similarly, Matthew, the captain of the wheelchair basketball team, passionately remarked, "We are put aside. We are always taken as a second choice. . . People think your disability is all the way up to your brain. . . what we need is an opportunity to prove that we can do something." Likewise, Marcus, the table tennis coach sadly stated, "This society has not accepted it completely that we are just like anyone else, apart from maybe our disability."

The government and administrative support for athletes with disabilities was limited as well. Athletes James and Matthew expressed their frustration with the lack of support for their sport. Matthew commented that the government did not encourage athletes with disabilities. Administrators also felt that the Kenyan government failed to support the athletes. For instance, Nellito, a 55 year old member of the Kenya National Paralympic Committee

who has been involved with athletes with disabilities for over 30 years commented that he had turned to the Kenyan government for support on numerous occasions, but that all of his requests were denied.

Several of the interviewees also elaborated on the potential causes for the existence of the negative attitudes toward people with disabilities. Joanna, a 36 year old administrator who worked for the Kenya Sports Council, commented that the Kenyan public did not pay attention to sport for athletes with disabilities because they lacked knowledge regarding people with disabilities. She believed that people were unaware that individuals with disabilities were capable of competing in sports. The negative attitudes were also thought to be rooted in the religious beliefs of the population. Disabilities were attributed to curses or a punishment from God. In the words of James: "There are a lot of stereotypes. Like, [that disability] is perceived as if it was a curse." The notion of curses was associated with the supernatural world. Joanna stated, "Some think that when you are disabled it is because you are cursed or your parents did something and God is punishing them." This curse has extended to the entire family of an individual with a disability and resulted in their differential treatment by the general population. For instance, Marcus, the table tennis coach, commented, "I think people with disabilities mostly suffer here because for many years if you had someone with a disability in your family [it was] a curse and people treated you differently."

Coaching Issues

Problems related to coaching were one of the most frequently identified constraints by the interviewed athletes and administrators. The most pressing issues included inconsistent coaching, poor qualifications of coaches, lack of funding for coaches, and hidden agendas some of the coaches had for being involved with sport for athletes with disabilities. Athletes recognized the importance of having a coach and commented that a qualified coach was essential to improving their athletic skills. Lack of coaches was mentioned by all of our interviewees, including Milly. She trained three to five times a week, but lack of a coach posed a significant problem for her. In her own words:

We don't have coaches. Like right now we are training and we don't have a coach. In the Paralympic year, if we don't have a coach we cannot compete. Some of the coaches don't attend practices. I don't think they are qualified. . . Just the other day I saw a man and I came to know that he was our coach and I didn't even know his name . . . and he said that he didn't know what I was doing. I also don't understand what I am doing and I don't know how to improve.

Administrators confirmed that the lack of coaches constituted a major constraint on the development of elite sport for people with disabilities in Kenya. Nellito, a member of the Kenya National Paralympic Committee, stated, "We don't have qualified coaches for the disabled. It is a big problem."

Moreover, interviewees indicated that the available coaches had experience in training only able-bodied athletes and had limited knowledge of disability issues. Faith mentioned the frustration of being constantly compared to athletes without disabilities: "Because the coach has been training able people she thought that this is how people do it, but we can't do like able people when you are disabled."

Interviewed coaches indicated that lack of knowledge of disability sports was the most important obstacle they had to contend with. One of the administrators attempted to locate resources on the Internet to educate himself about sport for athletes with disabilities, yet found it hard to find information. Peter, a 44 year old father of five, voluntarily coached wheelchair basketball. Prior to his involvement with the team he played basketball for 10 years and was on the Kenya national team from 1991 to 1994. He commented,

The difficulties that I face is how to address those boys with what is a basketball, how to dribble a basketball. There was nobody who knew how to dribble a basketball while sitting on the wheelchair. It was difficult to figure out how. I face so many questions from the disabled people, [they] ask me how can you dribble the ball while sitting, how can you shoot when you are sitting.

Instructors for disability sport in Kenya are volunteers who only receive funding when traveling to international competitions. Except for the lack of knowledge, the inability to fund coaches posed another major problem for the development of elite sport in Kenya. The coaches stated that it was difficult for them to pay for rent, food, and other family needs. They desired to give more time to their athletes yet, as one of them said, "It is hard because we know that it will mean that I went to train with these people and there will be no one to pay me. . . People try to shy away from responsibilities because there is no payment."

Some of the interviewed athletes also suspected coaches of having a hidden agenda for being involved in sport for athletes with disabilities and accused them of lack of commitment. A few of the athletes commented that on several occasions a coach would "appear" only a month prior to the international competition in hopes of traveling out of the country. James, a 30 year old used clothes salesman who lost his arm at the age of 10, has been a track athlete for five years. He commented, "The coaches that volunteer to assist usually have an agenda. They usually hope to accompany the team when we go to international events."

One can argue that the problems related to availability and qualifications of coaches stem from larger societal forces at play in this developing country. In a society that devalues people with disabilities and that attributes disabilities to a curse or a punishment by God, there are a limited number of individuals who are committed to disability sport and willing to volunteer their time and effort to train athletes. Moreover, due to the lack of attention to disability issues, few resources exist in Kenya that genuinely committed individuals can use to educate themselves about coaching the disability sport.

Lastly, because of the difficult economic situation many people who are willing to extend the effort to work with athletes with disabilities, cannot afford the time and forgone income. Thus, the constraints related to coaching are very much ingrained in the broader societal forces at work in Kenya.

Limited Availability of Equipment

Social attitudes toward people with disabilities may also be at the root of the problems with the equipment. They included high cost of specialized and general equipment and scarcity of adapted mobility equipment. Basketballs, table tennis rackets and balls, and weights for lifting were difficult to come by and expensive. Since the employment opportunities for people with disabilities in Kenya were limited, athletes had a difficult time purchasing the necessary equipment. Marcus, a 34 year old, single man who volunteered as the table tennis coach commented,

Buying the racket [costs] a huge amount of money, like 600 shillings [\$8US] or more and most of these people are jobless. They are hawkers and they normally get maybe 80 shillings [\$1US] or 100 shillings [\$1.30US] a day. So if you tell someone that we need 300 shillings [\$4US] or 200 shillings [\$2.60US], it means [that] for two days they won't have anything to eat.

Some of the interviewees commented that the sporting equipment was scarce in Kenya due to its limited production throughout Africa. Joanna, an administrator who worked for the Kenya Sports Council stated, "Some of the equipment is not even available in the country. So for it to be bought we have to order it from America or Europe . . . it is expensive because it is rare." Similarly, Nellito, one of the administrators commented, "We have to import everything. It is very expensive to have it come from outside." Although imported sporting equipment for athletes without disabilities was also quite expensive in Kenya, we can speculate that the costs and the scarcity of equipment is more of an issue for athletes with disabilities. It can be attributed to the fact that there are only few manufactures of the disability sport equipment in the world and that, even in developed countries, high costs of some equipment can make it prohibitively expensive for most athletes with disabilities.

The high cost of equipment forced athletes to use whatever was readily available, even though it was not proper equipment to be used during international competitions. Milly commented that they practiced with tennis rackets that were too light to be allowed in competition. The proper tennis rackets were too expensive at roughly 700 shillings (\$9US). Lucas, a 46 year old man with polio who works as a masseuse, shoe shiner, and hawker also commented that he lacked equipment to train power lifting. The income from selling sweets was insufficient to purchase a power-lifting bar priced at approximately 2200 shillings (\$29US). Thus he had to rely on a bench he made out of wood in place of the power-lifting bar. Wheelchair basketball athletes used 10 general-purpose chairs donated in 1985 by the British Paralympic Committee. Other athletes tried to share the equipment with the

able-bodied teams. Yet, in the words of Matthew, a 27 year old graphic designer who competes in wheelchair basketball, table tennis, and bowling:

Most of the balls belong to the other team, the able team. When they find [one person with a disability] playing and practicing with their balls, they feel bad and take their balls. And you have no other option [but] to give all the balls to them. Now you are playing without a ball.

Problems with Facilities

Social forces were also at work when it came to facilities that athletes with disabilities could utilize to participate in sport. Lack of attention to problems faced by people with disabilities translated into the poor quality, overcrowding, and lack of accessibility of facilities. Problems with facilities were related not only to the physical lack of resources, but also to social interactions involved in the competition for scarce resources. As Nellito, a member of the Paralympic Committee commented, "We are definitely lacking facilities. Here in Nairobi there are only two facilities for about 200 athletes with disabilities." Similarly, Marcus, a table tennis coach explained his frustration with the limited number of facilities for athletes with disabilities:

We don't have sufficient number of facilities, [keep] in mind that what we are using is for the able-bodied. There is no single facility [that can be used] by the disabled people all the time. We have to come to the able-bodied and request from athletes to give us a few hours so that we can train in their facilities. It is very hard and [it is] a problem for the disabled sports.

A majority of interviewees mentioned the poor treatment they received from athletes without disabilities, which is also a testimony to the negative attitudes toward people with disabilities in the Kenyan society. For instance, James, a track athlete, commented,

We are never taken seriously and even when we have to share facilities we have to wait for them to finish their workout first. It is like we don't really matter . . . and I tell you, when we use the gym, like when you train with the able-bodied, they usually look down upon us like we don't need to use the facilities, like we don't matter.

Several athletes also commented on the poor quality of facilities and accessibility problems. For instance, Milly, who represented Kenya in freestyle swimming, remarked,

When you come to the gym you don't have quality. . . For the last one month and a half I stopped swimming because the water in the pool was green, really green. Once you get in the water and soon your eyes would turn red just doing two laps.

Stadiums in Kenya were not designed with accessibility in mind. For instance, the basketball court at Nyayo National Stadium had five stairs at each of the four entrances and the track venue had stairs down to the field. James, a track athlete, commented,

Facilities are not accessible to disabled athletes, especially to the ones in wheelchairs. There is some equipment in the gym that cannot be accessed and that is a challenge. Especially for amputees, there are lots of facilities that [cannot be accessed because] you have to use two hands.

Nellito, a member of the Paralympic Committee remarked that the Kenyan government tried to remedy the situation, but that the welfare of athletes with disabilities was not a priority in this developing country. "They [the government] are trying to improve the stadiums. They are trying to modify them for the disabled people, but there is no law." [The interview was conducted prior to the passage of The Persons with Disability Act in Kenya]. For a long time, the lack of legislation protecting the rights of people with disabilities and the physical barriers at the only training facility in Kenya available to athletes with disabilities has hindered the development of sport. As Faith summed it up: "If we could get facilities we could do better. We have men and women that are really good, but because of lack of facilities we don't do well."

Problems with Transportation

All of the interviewees who used wheelchairs or who crawled for mobility mentioned transportation as a major constraint. Since the inexpensive housing that people with disabilities could afford was located farther from the city, it took them longer to travel to the stadium to train and added an extra cost because of the number of transfers an athlete had to make. Joanna, an employee of the Sports Council, commented that it was difficult for athletes to pay the fare to travel to the stadium to train. Moreover, according to Marcus, a tennis coach, public transportation in Kenya was not accommodating of people with disabilities. "Most of the matatus [public buses] are not used to carrying people with wheelchairs. They tend to think that it will take a lot of space and that they will need to charge more and it is quite hard." Likewise, the previously quoted Joanna stated, "Transportation in the city as a whole is not friendly for people with a disability." She mentioned that people with disabilities had to adjust their training schedules to account for the rush hour congestion. Such constraints are good examples of barriers that stem from the inferior position of people with disabilities in the Kenyan society. While in many countries the issues of transportation for people with disabilities are addressed in the legislature, making transportation accessible, such accommodations were not provided in Kenya. To the contrary, people with disabilities were seen as obstacles and brought down to the level of objects "taking up space" in public transportation.

Ethnic Favoritism

Some of the athletes also remarked that the ethnic group they belonged to might have had an influence on the level of support they received from the Kenyan government and from the athletic officials. For instance, James, a track athlete commented,

Ethnicity is a major issue, especially with the older generation. There are times when it is so obvious. . . . For example, when our former head of state was in power, members of his community (Kalenjin) held nearly all the key positions in government and dominated the public sector. The same is happening now with the current administration. Most of the officers from the past regime have been replaced by the current presidents' tribesmen (Kikuyu). On the last Paralympic team, the majority of the team officials were from one community (Luo) and coincidentally the minister for sports and the top government officers in the sports department also belong to the same community. There was a war between the chairman and this group with the chairman claiming that they had schemed to ensure that the majority of their own were on the team.

There were also other cases of alleged favoritism described by the athletes. For instance, only athletes from one ethnic group (Luo) were selected to become members of the wheelchair basketball committee, who was already dominated by the Luo people.

We found that athletics in Kenya (and particularly the marathon) had been dominated for a long time by one ethnic community—the Kalenjin and other cattle raising tribes such as Masai residing around the Great Rift Valley. The current Chairman of the Kenya National Paralympic Committee and the Chairman of the Kenya Athletic Association are both from the Kalenjin tribe. In soccer, boxing and rugby the predominant ethnic communities are Luos and Luhya residing around Lake Victoria and the Kikuyu residing around the slopes of Mount Kenya. None of the interviewed athletes or administrators, on the other hand, belonged to the Kalenjin tribe, which may have contributed to their perceptions of inferior treatment and lack of support from the government officials. Conversely, two of the interviewed athletes and one interviewed administrator belonged to the Kikuyu tribe that was known to be well represented on the wheelchair basketball committee. It is difficult for us to establish whether ethnic favoritism was unique to the world of athletes with disabilities, or, perhaps, whether it was more pronounced among athletes with disabilities than it was among other athletes. Anecdotal accounts and cursory observations suggest that ethnic favoritism in Kenya is highly ingrained in the general athletic world as well. Since no athletes without disabilities were interviewed in this study, however, we cannot attempt to address this issue.

Lack of Financial Resources

Several of the interviewees claimed that the inability to secure sufficient income by Kenyans with disabilities was one of the main reason athletes were unable to participate in sport. Nellito, one of the administrators, commented,

Some of them cannot afford [to participate]. They want to participate in sports, but they lack the money, even for transport, even for food, even for their own personal upkeep. That is why some people are unable to participate in sports because they have to hawk for meals. They can only come and train here when they have money to feed themselves.

James, a track athlete, started a small business with the stipend received from international competitions. He expressed his frustration with the discrimination toward people with disabilities in Kenya: "I cannot get normal employment like an able-bodied person. There is no employment for a disabled person, regardless if you are qualified or not." This quote clearly supports the notion that the lack of employment for people with disabilities and the resulting lack of financial resources stemmed from larger societal attitudes toward people with disabilities in Kenya.

According to the interviewees, women experienced many of the constraints with greater intensity than did males. All of the interviewees commented that since female athletes with disabilities had fewer opportunities to secure informal employment, they were much more constrained by the lack of finances. For instance, one of the coaches stated, "Many women find it very hard to be a shoe shiner or to sell sweets, so that is why they cannot make it." Joanna, an administrator, explained why women with disabilities did not participate in sport in the same manner as men: "I think partly because of finances. I don't know if they are discouraged. You find most [women with disabilities] never leave their home or if they are doing their small business then you find they just don't see a need for sport."

Economic constraints were particularly pronounced among athletes who had to choose between providing for the basic needs of their families and participation in sport. All of the interviewees expressed a concern that the athletes were not receiving proper nutrition. For instance Peter, the wheelchair basketball coach, mentioned that it was difficult to ask more of his athletes because he did not know if they had eaten that day and had the energy to practice.

There are a lot of difficulties because you don't know whether the players have eaten anything or they just come on empty stomach. So that is my difficulty.

Sometimes I just look at their face and I can see. Then we just practice half.

Milly reiterated coaches' frustrations with athletes not being able to reach their fullest potential because of the lack of food: "Some come and train and they don't have the food. People are training the whole day without eating." The inadequate nutrition prevented elite athletes from participating in sport, and practicing prevented them from securing income necessary to obtain adequate nutrition. As Matthew, a wheelchair basketball player, commented, "If you spend more time practicing, you can't get any money to feed your family." Milly further commented,

We are almost nearing the championship so we need to really try to attend at least three times a week, but sometimes we cannot afford to. [We] train and train and sometimes go without lunch . . . you can take a cup of tea for lunch that costs 10 shillings [\$0.13 US] and a chapati for lunch, yet most of us cannot even afford that.

Even in many developed countries of the West, people with disabilities have to battle high unemployment rates and lower incomes (Beresford, 1996). In a country such as Kenya, where a large proportion of the general population

has to struggle to provide for themselves and for their families, people with disabilities have to contend with many additional disadvantages. Despite the passage of The Persons with Disability Act in 2003, they have to battle societal attitudes that devalue people with disabilities and lead to their exclusion from the job market (Sinyo, 2005).

Discussion

Implications for the Existing Literature on Constraints among Athletes with Disabilities

Through giving voice to five athletes and five administrators involved with the Kenya National Paralympic team, constraints to the development of elite sport for people with disabilities in Kenya were identified. Most of the barriers could be categorized as structural, and included lack of funding, problems with facilities and transportation, and lack of equipment. One of the major interpersonal barriers identified in this and other studies on the subject (Ingstad & Whyte, 1995), was the negative attitudes toward people with disabilities. Intrapersonal constraints did not surface in this study, however, one can argue that the interviewed elite athletes may have already negotiated them at the earlier stages of their careers. Such constraints might be more pronounced among people who are only beginning to contemplate their involvement in sport. Since intrapersonal constraints affect formation of leisure and sport preferences, it is quite likely that they constitute powerful barriers to participation. They would not have been captured, however, given the focus of this study on elite athletes.

This study identified a number of constraints such as cost and poorly maintained facilities that are known to affect sport and leisure participation among the general population in developed countries (Jackson & Scott, 1999). We can argue however, that although many barriers identified in this study were similar to those affecting people in developed nations, they were exacerbated given the context of a developing country. For instance, while many people are known to list "lack of money" as a constraint (Rimmer et al., 2000), in Kenya lack of financial resources caused athletes to come hungry to practice, and training led to their inability to provide their families with basic necessities. While a large portion of the Kenyan population find it difficult to adequately provide for their families, the effect of this barrier was exacerbated for people with disabilities due to the fact that in Kenya people with disabilities have an extremely limited access to most forms of paid employment. In that sense, participation in sport that is available to many people with disabilities in developed countries, in Kenya, constituted a luxury people had to pay for with energy, forfeited income, and even hunger.

Many of the disability-specific constraints identified in this study have also been found to affect people in developed countries. Difficulties in obtaining employment (Ingstad & Whyte, 1995), inaccessible facilities and transportation (Imrie & Wells, 1993), and negative attitudes (Groce & Zola,

1993) described by the participants parallel findings of the existing research. However, similarly as with the “general” constraints, we can argue that their magnitude was exacerbated in the context of Kenya. For instance, the lack of accessible facilities was identified as a barrier by athletes in studies conducted in the context of Western nations (Collins, 2003; French & Hainsworth, 2001). However, we can safely argue that the number of training facilities in any given American city far outnumbers the number of facilities available in most places in Kenya.

Findings of this study present a unique perspective on constraints faced by athletes with disabilities. Although the strength of constraints identified in this study was magnified, the findings confirmed Jackson and Henderson’s (1995) assertion about a core of constraints experienced by people with different abilities and operating in different environments. Even though the majority of athletes were able to identify barriers to participation in disability sport, these constraints did not completely block their participation. Most of the interviewees were able to negotiate these barriers and still participate in their desired activity, confirming the validity of the constraints negotiation concept (Jackson, 2005).

As the findings of this study showed, such constraints negotiation has been particularly challenging to female athletes with disabilities who experienced a triple burden of their disability status, poverty, and gender (Henderson & Bedini, 1997). They had fewer opportunities to secure informal employment (and thus were more constrained by the lack of money), were often single mothers, and societal expectations related to parenting roles and to their disability status negatively affected their sport participation. As Snyder (1999) has indicated, women with disabilities living in less developed countries have lower chances for obtaining education and are often victims of violence and abuse.

The Hierarchical Model of Constraints at the Societal Level

The unit of analysis used in research on constraints phenomena has typically been the individual (Iso-Ahola, 1981; Iso-Ahola & Mannell, 1985) or family (Crawford & Godbey, 1987; Witt & Goodale, 1981). Furthermore, some of the established models of constraints asserted that constraints are organized in a hierarchical manner with intrapersonal constraints experienced first and structural constraints experienced last (Crawford & Godbey; Crawford et al., 1991). As an extension of the traditional models, findings of this study provide an understanding of constraints at the *societal level*. Based on this research we developed a model that shows layers of constraints influencing athletes’ ability to participate in disability sport and the way participation in sport affects the levels of perceived constraints (a reciprocal relationship) (see Figure 1). To develop the model, we first grouped constraints into three distinct categories, based on the degree to which they were imbedded in the structures of the society and on the individuals’ capacity to negotiate them at the individual level. Second, we aligned them hierarchi-

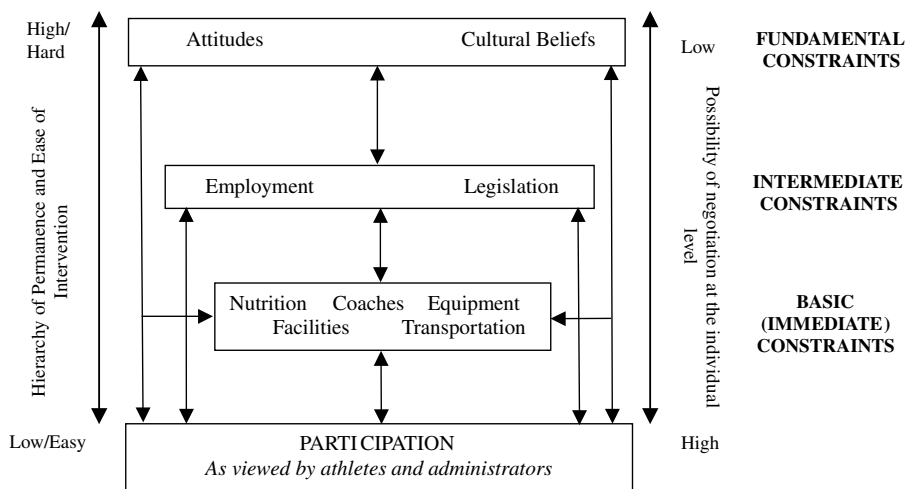


Figure 1. Hierarchical model of constraints at the societal level.

cally, and, third, we examined the interrelationships between distinct categories of constraints. The model identifies three different types of constraints that operate at three distinct levels.

Basic (or immediate) constraints involve barriers that are most proximal, that affect the daily lives on the most personal level, and that participants can negotiate at the individual level. Examples of basic constraints we identified include lack of adequate nutrition, coaches, equipment, facilities, or transportation. Some additional basic constraints, revealed in the previous literature, include mental state or physical ability level (Rimmer et al., 2000). As our findings showed, basic obstacles such as hunger, thirst, or tiredness may affect people's desire to participate in an activity or their degree of participation. The qualifications of coaches also affect the quality of training athletes receive. Moreover, the availability of equipment, facilities, and transportation influences the degree of participation. Participation in sport, on the other hand, affects the strength of constraints at the immediate level in that individuals with disabilities who participate in sport have higher nutritional needs and the time and energy that they devote to sport is diverted from other areas of their life and, thus, may put additional strain on resources. On the other hand, as numerous existing studies have suggested (Campbell & Jones, 1994; Wells & Hooker, 1990), sport participation may improve people's mental and physical state and, thus, reduce some of the basic constraints they experience.

Intermediate constraints involve barriers that are more ingrained in the structures of the society, that participants or potential participants have fewer possibilities of negotiation at the individual level, that are more difficult to overcome, and that have an effect on the first layer of constraints—

immediate constraints. Examples of intermediate constraints include economic structure that hinders opportunities for employment or ineffective (or non-existent) legislation protecting rights of people with disabilities. Such barriers may directly influence participation of athletes. For instance, we may speculate that if there are no employment opportunities for people with disabilities, athletes will be less likely to consider participation in their desired sport or recreation activity. This argument needs to be treated with caution, however, as in our study we did not interview people with disabilities who did not participate in sport. Similarly, if the legislation protecting rights of people with disabilities is ineffective, athletes with disabilities may be prevented from participating in certain disciplines.

Intermediate constraints may not only directly influence participation, but they may also influence the basic constraints that, in turn, affect a person's opportunity to participate. As suggested by our findings, the lack of employment affects the ability of athletes to acquire money necessary to facilitate their participation and prohibits coaches from obtaining proper training. Moreover, lack of appropriate legislation affects the policy that makes the facilities and transportation accessible, which, in turn, may directly influence people's participation patterns (Canada Transportation Act Review, 2001). On the other hand, participation in sport may also affect the strength of constraints at the intermediate level. The independence, sense of empowerment, and greater self-confidence gained by participation in sport can improve a person's with a disability economic opportunities, make him or her more desirable on the job market and more active in community matters, thus affecting policy development (United Nations, 2005). Moreover, basic constraints may affect constraints at the intermediate level in that providing for the basic needs of people with disabilities equips them with the tools necessary to pursue upward mobility in employment and promotes their involvement in communities matters and legislative bodies (Snyder, 1999).

Fundamental constraints represent barriers that are most ingrained in the structures of the society, most difficult to negotiate at the individual level, and hardest to overcome. Examples of fundamental constraints include attitudes and cultural beliefs. Negative attitudes toward individuals with disabilities can directly affect participation, as people may not be socialized to participate in sport. Similarly, as has been shown in research on ethnic minority populations, attitudes of the reference group of the individual can make him or her opt out from involvement in an activity (Woodard, 1988). In addition to directly influencing participation, fundamental constraints may also have an effect on intermediate and basic constraints. The attitudes and cultural beliefs of a society are likely to influence the type of policy a government will uphold or the type of employment opportunities available to a person with a disability (Sinyo, 2005). Moreover, as the findings of this study showed, basic constraints may also be affected by fundamental constraints if the individuals without disabilities are not willing to share facilities or equipment with athletes with disabilities. As some of our themes have demonstrated, the attitudes of coaches and their lack of desire to train ath-

letes with disabilities will also influence athletes' ability to participate in sport. In the same fashion, the attitudes of those operating public transportation will determine if an athlete's disability will be accommodated for or not. The distribution of food may also be affected by attitudes and cultural-beliefs if priority is given to family members without a disability. The relationship between sport participation and fundamental constraints, however, is reciprocal, as participation in sport can affect the strength of the fundamental constraints. For instance, it has been shown that sport participation can promote integration of people with disabilities into the broader society and lead to the subsequent improvement of public attitudes toward individuals with disabilities (Martin et al., 1995). Exposure obtained with the help of sport can erase some of the existing stereotypes, dispel the stigma of weakness associated with disability, and thus decrease some of the fundamental constraints (Martin et al.). Moreover, fundamental constraints may be affected by intermediate constraints in that the more a society is exposed to people with disabilities successfully functioning in mainstream settings, the more the stigmas are erased and attitudes improved. Appropriate legislation may, with time, lead to changes in public attitudes and beliefs.

Based on the findings of this study we can develop two propositions that show the operation of the hierarchical model of constraints at the societal level.

Propositions

Proposition 1: Ability to negotiate at the individual level. Basic constraints are experienced on a daily basis and can be most readily negotiated by participants or potential participants at the individual level. After all, these are the constraints most proximal to an individual as they affect his or her everyday actions, such as the ability to get to an activity or receive a proper training. Fundamental constraints are the hardest to negotiate at the individual level, as they are embedded in the structures of the society and filter down to the intermediate and basic constraints. For instance, although in cases of developing countries "finding money to participate" or "getting food" is far more difficult to overcome than in the developed countries, still, it is far easier for participants or potential participants to negotiate daily nutrition and transportation needs than to tackle issues such as employment structure or negative attitudes on the part of the broader society. Such divisions might be particularly pronounced in the affluent Western countries where negotiation of constraints such as time, money, transportation, or lack of knowledge of opportunities is far more accessible to individuals than tackling broader societal issues.

Proposition 2: Hierarchy of permanence and difficulty of intervention. Fundamental constraints are the most permanent and the most difficult to overcome as they are embedded into the social fabric of a society, often have deep historical roots, and filter down into the lower levels of the constraints hierarchy. Constraints at the immediate, most proximal level are least per-

manent and can be most easily overcome. Food handouts, or sporadic training sessions from international experts are likely to address the immediate problems of hunger or lack of appropriate training. Such interventions, however, are unlikely to lead to a lasting change, and the constraints are likely to re-appear soon after the intervention has been withdrawn. It is only through addressing constraints at the higher levels of the hierarchy that we can provide long-term solutions and permanently eradicate constraints at the lower levels of the constraints structure.

Conclusions

The findings of this study provided some preliminary evidence of the social influences on the experience of constraints among a group of select athletes with disabilities in a developing country in Africa. The study showed that despite facing a multitude of constraints, interviewed athletes with disabilities continued to compete in a variety of sports at the international level. However, the constraints that they experienced forced them to expend considerable amounts of time, energy, and resources to make their participation possible. The findings of this project have numerous scientific and practical implications. From the scientific standpoint, this research: 1) Showed that the interviewed elite athletes with disabilities living in a developing country experienced certain common constraints with athletes residing in developed countries of the world. These constraints, however, differed in their strength and meaning. 2) Provided confirmation to the findings of numerous empirical studies on leisure constraints, constraints negotiation, and disability studies. 3) Filled an existing gap in the literature on leisure constraints, disability sport, and general disability issues in a developing country. 4) Developed a model that suggests how constraints may operate at the societal level. In particular, by showing the operation of societal constraints that affect athletes with disabilities, our study lends support to the agenda of academics and professionals who ascribe to the social model of disability.

In addition, this study has numerous implications for professional practice. The results suggest that we need to consider constraints not only from an individual, but also from a societal perspective. We propose that simultaneous interventions at all levels of the constraints hierarchy are necessary in order to provide long-term and sustainable solutions to barriers experienced by people with disabilities. We believe that targeting only basic constraints would not alleviate underlying problems, while tackling fundamental barriers only would not help in providing for the immediate, short term needs of the population.

While the model and the propositions derived from it provide tentative explanation of how constraints may affect participation of elite athletes with disabilities in a developing country, its application can be extended to other constraints, other populations, and other settings beyond those described in this study. For instance, the model can be applied to study constraints on sport *and* leisure experienced by members of racial/ethnic minorities, gays

and lesbians, women, and older adults living in developed and developing countries of the world.

Although useful information was obtained from this research project, there are number of limitations of this study that should be considered when interpreting the data. The relatively short time spent in the field prohibited further investigation of the topic and the fact that transcription of the interview recordings was not done until the entire fieldwork was completed, might have impacted the quality of the data analysis. In addition, the cultural context of sport participation among people with disabilities in Kenya could only be superficially explored due to the limited time spent in the field. Furthermore, since only *elite* athletes with disabilities and administrators were interviewed, constraints experienced by people at the earlier stages of their sporting careers are yet to be determined. Lastly, the background of the primary researcher, herself being a wheelchair basketball coach and athlete, may have influenced the interview process. For instance, the context with which participants associated the researcher may explain why the lack of coaching was the constraint most often mentioned by those interviewed.

This study represents an initial step in our understanding of constraints experienced by athletes with disabilities around the world. Since its primary focus was on elite athletes, further research is needed to isolate constraints to sport participation at the grassroots level. Moreover, we suggest that additional qualitative research is necessary to identify the meaning behind such constraints as negative attitudes or cultural beliefs among different cultures of the world.

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