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# A SURVEY OF THE CURRENT STATUS OF PHYSICAL ACTIVITY LEVEL OF STUDENTS WITH DISABILITIES AT KENYATTA UNIVERSITY, KENYA

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## ABSTRACT

*In this study, a survey of students with disabilities at Kenyatta University was carried out. A total of thirty (30) out of 42 students registered with the Dean of Students as having a physical or visual disability responded to the questionnaire. The results indicated that most of the students were physically inactive. They rarely engaged in any physical activity even though they were aware that exercises were important to them. They wished they could participate in recreational activities to improve their fitness levels and for pleasure. They were not aware of sports opportunities available to them at campus. They perceived a number of factors as barriers to their participation in physical activities. These include inaccessible facilities lack of encouragement, lack of information and inadequate equipment and facilities, not adapted to suit their abilities. Such barriers as physical discomfort or medical problems were not perceived as limitations.*

## INTRODUCTION

Research generally indicates that people with disabilities are less active in physical pursuits than their non-disabled peers (Kobberling et.al. 1991; Levinson & Reid, 1991; Skaags Hopper, 1996) yet their disabilities put great pressure on them in as far as movement and self management is concerned. Many individuals with disabilities have been noted to become more inactive as they grow old and are family-dependant, home-based and often alone (Levinson & McCubbin 1997). However through a well organized programme it is possible to increase motor skills levels of individuals with disabilities and contribute towards elevating their participation level in recreation and leisure activities. It has also been noted that through a well organized motor skill programme, it is possible to improve the physical fitness levels of individuals with disabilities (Blessing et.al., 1993; Hanna, 1986). Many a times individuals with disabilities have been noted (Tylor & Williams, 1995) to have high incidences of injuries due to insufficient strength and also tend to be obese due to the sedentary lifestyle and lack of exercise.

Within the field of adapted physical activity, various researchers have noted that one way to enhance skill level (Hendrick, 1985) social interactions (Nixon, 1984) and self-concept (Feltz & Weiss, 1982; Greenwood et.al. 1990) of individuals with disabilities is through participation in sports or recreational activities. Unfortunately, many individuals with disabilities have been denied opportunity to participate in sport and recreational activities (Depauw,

1990; Sherrill & Williams, 1996) through inaccessible facilities, ignorance of recreational programmes, protective caregivers or negative attitudes, Many of the physical and social outcomes that could accrue from participation in these activities remain outside their experience. As noted by Allen and Beattie, (1984); Herbert & Bressan (1995) and Morris, (1986), recreational activities have been found to positively contribute towards life satisfaction, adjustment and mental health of people. As for the students with disabilities at Kenyatta University, the hectic academic life, together with the vast compound they have to traverse daily to and from lecturers make it necessary for them to be physically active to cope.

## Current Situation at Kenyatta University

The available information on students with disabilities at the dean of students' office shows that the number of students with varying disabilities have been rising steady. During the academic year 2006/2007 only 43 students had registered as requiring special support systems to enable them cope. Of these, 29 students had a visual disability while 14 having a physical disability. Although there may have been more students with varying disabilities in the university who had not registered with the dean of students office, it is possible that they had fully integrated and did not require special support system to operate.

The dean's office has set up a resource room which provides students with disabilities with such equipment as Brailles and wheelchairs for mobility. The University had also invested in motorized scooters (popularly known as "tuk tuk") to transport students around the Campus. Although, this has had a positive impact on the mobility of the students as they are able to reach class and library easily without being tired or late, their physical fitness levels would be lowered unless they have an alternative

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exercise programme. The lack of research on the effects of participation in physical activity programmes on individuals with disability in Kenya makes it difficult to understand the current status of such individuals. This study therefore was designed to generate preliminary information on the physical activity level of students with disabilities at Kenyatta University. It was also the intent of this study to investigate the perceived barriers to participation in physical activity by students with disabilities.

## METHODS

The sample of the study was drawn from the list of students with disabilities registered in the dean of students' office at Kenyatta University. All the students (Total 43) were surveyed. The participants were reached through their representative. Those who responded to the questionnaire were 30 (70%).

A perceived Physical Activity Level (PPAL) questionnaire was developed and used to gather information about the activity level of each student. The questionnaire consisted of 15 closed-ended liker type questions and 6 open-ended questions to elicit personal opinion concerning their participation status in physical activity.

The questionnaire was given directly to each respondent who answered and handed it back to the student representative who served as a research assistant. For the visually impaired respondents the assistant read for them the questions and indicated the choice selected by each respondent. Data was coded for analysis and the results reported as percentages for the closed-ended items. For the open-ended items, descriptive analysis was used and the information qualitatively reported.

## RESULTS AND DISCUSSIONS

A total of 30 students with disabilities responded to the PPAL questionnaire. Of these 22 students were visually impaired while 8 had physical impairments. In total 12 female students responded.

### Participation in Physical Activity

Students with disabilities were asked to describe their present participation level in physical activities. Majority (83%) indicated that they were inactive while 15% said they were somewhat inactive. They reported that their activity level was only limited to walking to lecture halls or pushing their wheelchairs. Owing to the expansive compound, this would provide adequate exercise per day but with the availability of motor scooters, these students rarely walk long distance. They use wheelchairs only for short distances, which does not offer them adequate and meaningful exercise that would result in improved fitness.

## Importance of Physical Activities.

Students with disabilities were asked to indicate how important recreational activities were to them. A high percentage (92%) felt these activities were very important to them. They recognized the value and benefits of physical activity yet they did not participate in the sports programme on campus. They were dissatisfied with the present participation level in physical activities. It appears paradoxical that students with disabilities recognize the importance of physical to their well-being yet they are rarely involved. What these results reflect is that there is need for physical activity planners to focus more on transferring this recognition of importance into provision of suitable activities for these students. Secondly, it may be necessary that more energy is redirected from selling the benefits of physical activity towards providing information to students with disabilities on how they can pursue regular involvement in physical activity. Thirdly, it may mean that programme planners need to monitor closely those who show interest in any physical activity to encourage them so they are not discouraged if their participation level is not necessarily at the same level as their able-bodied colleagues.

## Awareness of Opportunities

On whether they were aware of the physical activities opportunities on campus, more than half (63%) felt they were not at all aware of the sports programmes available for them to participate in. Only 5% felt they were aware while the remaining felt they were somewhat aware. The implication of this is that information should be available to these students on the opportunities available to them. A variety of activities for all students should be encouraged.

## Participation Level Preferred

When asked to indicate the participation level they would prefer, by far the bigger proportion (84%) of students stated that they would wish to be involved in recreational programmes. Very few (2%) wished to be involved in high competitive programmes. It was also interesting to note that most of the students (90%) would prefer to be involved in integrated programmes involving both male and female. It is possible that their preference for organized non-competitive settings is because such settings would offer them an opportunity to participate with and around others. Such a setting is motivating as it offers a definite time and place for participation. In addition, such settings tend to be served by a qualified leader and there is a high potential for personal skill development and enjoyment.

## Responsibility for Initial Participation

Although a number of options, ranging from self, family, friends, health, professionals to teachers were given for

the students to choose the person responsible for their initial participation in physical activities, the largest proportion (80%) stated that they were responsible for their participation in recreational activities. The fact that they are self-motivated and interested in participating in a recreational programme is a good thing. However, it is evident that their participation level is very low. It is important that a well organized programme that meets each student's needs is developed to equip him/her with skills that will form the building blocks to participate at a high skillful level. It also means that information related to physical activity promotion should be directed to the individuals themselves as opposed to agencies.

### Reasons for Being Active

From a list of 13 choices from which the respondents were to choose their reasons for wanting to be active, majority wished to participate in motor activities for pleasure and fun (60%), physical fitness (53%) and for relaxation (45%). Factors related to medical advice, therapeutic reasons were ranked very low (2%). These results concurred with the reasons normally given for participation in physical activity by the general population. These findings are important for recreation providers who may have assumed that exercise for people with disabilities is for medical reasons. Programmes designed for individuals with disabilities should emphasize fun and fitness of the participants, as these are the desirable components for their participation in physical activity.

### PERCEIVED BARRIERS TO PARTICIPATION IN PHYSICAL ACTIVITY.

#### Factors Limiting Participation

Respondents were asked to choose factors from a list of 18 items that they felt were barriers to their participation in physical activity. Issues that many people think are barriers to individuals with disabilities participation in physical activity were non-significant to those surveyed. For example, physical discomfort, medical problems, medication were the least mentioned (4%) as hindrances. These factors which could be real barriers were in fact not the primary limiting factors. The limiting factors consistently stated by majority of respondents included:-

- a) Inaccessible facilities (67%)
- b) Lack of encouragement (54%)
- c) Lack of information (46%)
- d) Lack of equipment (46%)
- e) Inappropriate activities (38%)
- f) Lack of skills (38%)

These barriers can easily be addressed to allow more participation by students as they do not emanate from the students but rather the environment in which they live.

### Inaccessible Facilities

Although efforts have been made for students with disabilities to access most of the building areas at Kenyatta University, a number of sports facilities are still inaccessible. The swimming pool is not heated. The changing rooms and bathrooms in both the swimming pool and the gymnasium are inaccessible. The toilets have no support rails and are not wide enough to allow those on wheelchairs to use. Hand-wash basins and bathroom taps are too high for those on wheelchairs to use. In addition, the corridor floor in the gymnasium is very slippery and walls have no handrails for support.

Many students with physical disabilities use hand-wheeled tricycles. These are cumbersome to use and maneuver around. They cannot be used by these students in such games as wheelchair basketball, tennis, badminton, table tennis or wheelchair racing. With a few wheelchairs for competition, these students can be taught these recreational sports as the facilities are in place.

### Lack of Encouragement

Like their able-bodied colleagues, students with disabilities require encouragement, they need a sense of belonging and a sense of accomplishment and treated as individuals with needs and interests. It is therefore important for the department of physical education and that of sports and games to encourage students with disabilities to participate in the various sports programmes. This could be achieved through development of flexible inter-mural programmes based on varying abilities, interest, encouraging support systems for students with disabilities to learn various sports skills and also providing opportunities for them to meet other individuals who have succeeded in sports despite their disability.

### Lack of Information

Many respondents reported that they did not participate in any recreational programme and that they did not have any information about what was available on campus. The university's sports and games department has many programmes scheduled for students daily but these activities are only geared towards the able-bodied students. The advertisements or fliers normally printed on notice boards announce recreational activities, camping activities and even demonstrations of new sports (e.g. cricket, softball) without indicating that individuals with disabilities could also participate. Without information being geared towards students with disabilities, they may not be encouraged to get involved in learning or participating in physical activities.

### Lack of Equipment

Individuals with disabilities can participate in many of the physical activities engaged in by able-bodied peers without much modification. Such activities as running, aerobics,

swimming, weight training, wrestling are some of the activities individuals with visual impairments participate in with able-bodied individuals. As for students with physical impairments, a number of activities can be done. These include weight training, swimming, wheelchair racing. For these students however, the facilities and equipment available are in most cases not adaptable to their needs. The gymnasium at Kenyatta University boasts of new and state-of-the-art equipment. There is need for handrails along the walls for support. The swimming pool should be made more accessible. There is need for a few wheelchairs that are suitable for racing and playing basketball. For the students with visual impairment the sports and games department should invest in equipment for sports that are specific to individuals with disabilities. These sports include, goal ball, sound balls, bipaddles bats, showdown and others.

### Lack of Skills

It has been documented that individuals with disabilities generally perform below the levels of their peers in sports (Bruninks, 1974). This is because their disability limits them from acquiring motor skills at the same rate as their able-bodied peers. It is therefore necessary that successful sports programmes should include skill upgrading (Reid, 1987) as a starting point if they have to fully enjoy the benefits of a recreational activity. The students surveyed in this study have indicated their interest in learning a number of motor skills activities. These include swimming, wheelchair racing, badminton, tennis, wrestling, and wheelchair basketball. These activities can be learned by the students in an integrated setting with limited adaptation. What is required is to provide them with the equipment and also volunteers who will be on hand to provide individualized teaching. Already the students of adapted physical activities form a strong support team as they are knowledgeable in adapting for individuals with disabilities.

### IMPLICATIONS FOR UNIVERSITY SPORTS PROGRAMMES

From this preliminary survey it seems the problem of non-participation of students with disabilities in campus sport is neither due to lack of interest nor due to lack of

### REFERENCES

- Allen, R.L. & Beattie, R.J. (1984). The role of leisure as an indicator of overall satisfaction with community life. *Journal of Leisure Research*, 99-109.
- Blessing, O.I.; McCrimmon, D. Stovall, J.; & Willford, N. (1993) The effects of regular exercise programmes for visually impaired and sighted school children. *Journal of Visual Impairment and Blindness*, 87, 50-52.

information about the importance of physical activity, but rather, limitation due to accessibility, suitable facilities and equipment, lack of encouragement from programme leaders. It is important that university sports programmes should start addressing the issue by programming with these students in mind. They definitely are now "visible" minorities and their interest should be catered for. Recreational programmes should move away from elite interest should be for every individual irrespective of his/her abilities will find. Information as to what is available for individuals with a disability is lacking. Programmes planners need to make available information about these activities and encourage all students to come out and participate.

Budgeting for sports equipment should include equipment that can be used by those with a disability. In many cases, students with disabilities would be able to use equipment normally used by their able bodied peers. What they need is more individualized attention and support in learning the sport skills. Some sports played by individuals with physical or visual impairments should be encouraged. It is interesting to note that there has been no sound ball in the Kenyatta university games yet this is an important equipment for use by individuals with visual disabilities in a variety of games.

According to the survey, the preference of the majority of students with disabilities and without disabilities is in line with the worldwide trend towards integration. If sports leaders accept and practice the concept of integration within the programme plans, they will be able to establish effective delivery channels to reach many individuals with disabilities in their institutions

### CONCLUSION

This study has provided valuable information for additional consultation and planning for and with individuals with disabilities. It is not enough to determine the current status of physical activity of students with disabilities but we need to take the challenge as sports experts and improve the existing status of affairs.

- Blinde, E.M. & McClung, L.R. (1997). Enhancing the physical and social self through recreational activity. *Accounts of individuals with physical disabilities. Adapted Physical Activity Quarterly*, 14, 327-344.

- Bruininks, R.H. (1974). Physical and motor development of retarded persons. In NR Ellis (Ed.) *International Review of Research in Mental Retardation* Vol. 7 pp 209-216 New York, N Academic Press.

- Depauw K.P. (1990). Sport, Society and Individuals with disabilities. In G.Reid (Fd) Problems in Movements Control, pp B 19-33) New York Elsevier.
- Feltz, I.D. & Weiss, R.M. (March 1982). Developing self-efficacy through sport. *Journal of physical Education, Recreation and Dance*. 24, 26-36.
- Greenwood, CM, Dzewaltoski, DA French, R. (1990). Self-efficacy and psychological well-being of wheelchair tennis participants and wheelchair non-tennis participants. *Adapted physical Activity Quartely*, 7, 12-21.
- Hanna, R.S. (1986) Effect of exercise on blind persons. *Journal of Visual Impairments and Blindness*, 80, 722-725.
- Herbert, B. & Bressan, E. (1995) The value of sport and physical activity programmes for children with physical disabilities. In E.H. Katzenellenbogen (Ed) pp 155-163. the importance of children's participation in physical and sporting activities. Proceedings of 7th international Rainbow week symposium 3-10 Dec. Cape town SA.
- Hendrick, B.N. (1985) The effect of wheelchair tennis participation and mainstreaming upon the perceptions of competence of physically disabled adolescents. *Therapeutic Recreations Journal*. 91(2) 34-46.
- Kobberling, G. jankosonski, L.W. J. & Leger, L. (1991) The relationship between aerobic capacity and physical activity in blind and sighted adolescents. *Journal of Visual impairments and blindness* 85, 382-384.
- McCubbin, A. J., Rintala, P. & Frey, C. G. (1997): Correlation Study of Three Cardio- Respiratory, Fitness Test for Men with Mental Retardation. *Adapted Physical Activity Quarterly*, 14 (1), 43 – 50.
- Reid, G. (1987). Skill Upgrading Programs. *Canadian Association of Health, Physical Education and Recreation Journal*, 53(5), 6 – 11.
- Sherril, C. & Williams, T. (1996): Disability and Sport; Psychosocial Perspectives on Inclusion Integration and Participation. *Sport Science Review*, 5(1), 42 – 64.