

**LEISURE FUNCTIONING OF LEARNERS WITH LEARNING AND
PHYSICAL DISABILITIES: A CASE STUDY AT AN ELSEN SCHOOL
IN THE TSHWANE AREA**

by

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DECLARATION

I, Junita de Swardt, hereby declare that this research study was composed solely by myself and is not a copy of any other existing work.

Further, I declare that the language of this research report has been edited by Me Christa de Swardt.

Junita de Swardt

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SUMMARY

Title: Leisure Functioning of Learners with Learning and Physical Disabilities: A Case Study at an ELSEN School in the Tshwane Area

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Nationally and internationally the integration of people with disabilities into mainstream society is gaining attention. Leisure and sport play important roles in this integration process. Few services and opportunities, however, exist for people with disabilities to participate equally in society. It seems that recreation providers focus primarily on recreation programs for able-bodied people in communities. These inequalities are realized. It is also documented in the National Sport and Recreation Act (1998) that the development of sport and recreation opportunities for people with disabilities is important.

Due to the numerous health benefits of leisure participation, lifelong participation needs to be encouraged when leisure opportunities are developed and implemented in communities. It is important that people with disabilities derive maximum benefit from sport and recreation involvement to ensure continued participation throughout the lifespan.

Individuals derive maximum benefits from sport and recreation activity involvement when they perceive freedom during these activities. These activities range from athletics and soccer to chess and art. "Perceived freedom" is the central indicator of leisure functioning. Freedom can only be experienced when the learners with physical and learning disabilities experience satisfactory levels of leisure competence, control during leisure activities, needs satisfaction and depth of involvement as components of leisure functioning.

The following hypothesis was formulated for the study: **“Leisure functioning of learners with learning and physical disabilities does not contribute to an independent leisure lifestyle”**.

The aims of this study were to determine the following components of leisure functioning through the use of the standardised Leisure Diagnostic Battery (LDB):

- leisure competence of learners;
- being able to control the process and outcomes of leisure participation ;
- needs satisfaction and
- depth of involvement in leisure activities.

Data collected in this study were processed by means of quantitative research. Research methods included an external environmental analysis (literature reviews), an internal environmental analysis (internal policies and programs and interview), and a questionnaire. The questionnaire was administered to a sample of learners (38%) with physical and learning disabilities at an ELSSEN (Education for Learners with Special Education Needs) School in Tshwane.

It was found that learners at the ELSSEN School had an 85% (63.73/75) leisure functioning rate. The learners with learning disabilities had a slightly higher leisure functioning rate of 85.32% (63.99/75) than the learners with physical disabilities with an 84.27% (63.2/75) rate.

The high level of leisure functioning indicated that the learners perceived high levels of freedom during their leisure participation at the school. The formulated hypothesis could therefore not be accepted. The leisure functioning of the learners are high and should therefore contribute to an independent leisure lifestyle.

In order to utilize the full potential of the leisure activities at the school the following aspects are suggested for further research:

- In order to increase leisure participation at the school, constraints hindering participation need to be determined.

- Assessment of a broader base of learners (including all the grades) would be recommended for further planning of programs and activities.

Keywords: Leisure functioning, physical disabilities, learning disabilities, lifelong participation, education for learners with special education needs.

SAMEVATTING

Titel:	Vryetydsfunksionering van Leerders met Fisies- en Leergestremdhede: 'n Gevallestudie by 'n skool met leerders met spesiale behoeftes in die Tshwane Metropolitaan.
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Die integrasie van mense met gestremdhede in die samelewing geniet hedendaags, nasionaal en internasionaal, aandag. Vryetydsbesteding en sport speel 'n wesentlike rol in die integrasieproses. Enkele geleenthede en dienste bestaan egter vir mense met gestremdhede om op gelyke terrein in die gemeenskap deel te neem. Dit blyk dat rekreasie voorsiener hoofsaaklik programme vir mense sonder gestremdhede in die gemeenskap ontwerp. Die ongelykmatigheid word onder oënskou geneem en daarom dokumenteer die Nasionale Sport en Rekreasie Wet (1998) die noodsaaklikheid van vryetydsgeleenthede vir mense met gestremdhede.

Weens die gesondheidsvoordele wat vryetydsdeelname inhou, behoort lewenslange deelname aangemoedig te word tydens die ontwikkeling en implimentering van vryetydsgeleenthede aan almal in die gemeenskap. Dit is noodsaaklik dat mense met gestremdhede maksimale voordele uit hul vryetydsdeelname put om sodoende lewenslange deelname te verseker.

Individue put maksimale voordele uit hul vryetydsdeelname indien hulle vryheid gedurende hul deelname beleef. "Waargenome vryheid" is die sentrale indikasie van vryetydsfunksionering. Vryheid kan slegs ervaar word indien die leerders met fisies- en leergestremdhede genoegsame vlakke van vryetydsbevoegdheid, beheer tydens aktiwiteite, behoefte vervulling en 'n sekere mate van betrokkenheid as komponente van vryetydsfunksionering ervaar.

Die volgende hipotese is vir die onderhawige studie gestel: **“Vryetydsfunksionering van persone met fisies- en leergestremdhede dra nie by tot onafhanklike vryetydsbesteding nie”**. Die primêre doel van die studie was om die volgende komponente van vryetydsfunksionering, deur die gebruik van die gestandaardiseerde Vryetydsdiagnostiese Battery, te bepaal:

- vryetydsbevoegdheid van die leerders
- die mate waarin die leerders beheer het tydens deelname
- die mate waarin aan hul behoeftes voorsien word en
- die mate waarin die leerders betrokke raak by die vryetydsaktiwiteite.

Inligting ingewin vir die studie was verwerk deur middel van ‘n kwantitatiewe benadering. Die eksterne omgewingsanalise is deur middel van ‘n literatuurstudie ontleed, die interne omgewingsanalise deur middel van ‘n onderhoud en relevante dokumente en die mark analise deur middel van ‘n navorsingsvraelys. Die navorsingsvraelys is aan ‘n ewekansige 38% steekproef van leerders met fisies- en leergestremdhede by die skool vir leerders met spesiale behoeftes in Tshwane, geadministreer.

Die bevinding is dat leerders by die skool ‘n vryetydsfunksioneringtelling van 85% (63.73/75) het. Die leerders met leergestremdhede het ‘n effense hoër vryetydsfunksionering telling van 85.32% (63.99/75) as leerders met fisies-gestremdhede met ‘n telling van 84.27% (63.2/75).

Die hoë vryetydsfunksionering telling dui daarop dat die leerders ‘n groot mate van vryheid tydens vryetydsdeelname by die skool beleef. Die hipotese van die studie kan dus nie aanvaar word nie. Die vryetydsfunksionering van die leerders is hoog en behoort gevolglik by te dra tot die onafhanklike deelname van leerders.

Om die vryetydsaktiwiteite by die skool maksimaal te benut, word die volgende voortgesette navorsing voorgestel:

- Om die vryetydsdeelname by die skool te verbeter, moet die struikelblokke wat deelname verhinder bepaal word.

- Evaluering van 'n groter steekproef van leerlinge (insluitend al die grade) word vir verdere program beplanning voorgestel.

Sleuteltermes: Vryetydsfunksionering, fisiesgestremdheid, leergestremdheid, lewenslange deelname, skool vir leerlinge met spesiale behoeftes.

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CHAPTER 1

INTRODUCTION, PROBLEM STATEMENT, AIM AND METHODOLOGY

1.1. Introduction

Internationally, the inclusion of people with disabilities into society is of current interest. The General Assembly of the United Nations proclaimed the year 2005 as the International Year of Sport and Physical Education. The overall goal of the year was to highlight the vital contribution sport and physical education makes to Education, Health, Development and Peace. According to the United Nations, sport and physical education provide opportunities for social and moral inclusion for populations otherwise marginalized by social, cultural, or religious barriers due to gender, disability or other discriminations (United Nations, 2005).

In Africa and South Africa the rights of people with disabilities are topical as well. In Africa a 4-year collaboration project for the development of sports programs for youth with disabilities in Africa and the Middle East are provided (Sherrill, 2004). In South Africa “The Integrated National Disability Strategy” (1997) represents the thinking of the government on the contribution, development and protection of the rights of disabled people. Their vision, proposed by the Office of the Deputy President, in the White Paper on the Integrated National Disability Strategy (1997), is a “society for all”. This implies an integration of disability issues in all government development strategies, planning and programmes. Sport is regarded as one of the vital components in the integration of people with disabilities into society. Therefore the White Paper’s specific Sport and Recreation policy objective is:

“... to develop and extend sporting activities for people with disabilities in both mainstream and special facilities so that they can participate in sport for both recreational and competitive purposes.” (Office of the Deputy President of South Africa, 1997, p. 53).

The National Sport and Recreation Act of 1998 also emphasized the importance of the development of sport and recreation opportunities for people with disabilities. The

National Sport and Recreation Act states that the Sports Commission must ensure that women, youth attending school and those who are no longer attending school, *the disabled*, senior citizens and neglected rural areas, receive priority regarding programs for development and delivery of sport and recreation.

Research done by Blinde & McClung (1997, as cited in Dattilo, 2000) found that people with physical disabilities could enhance their sense of control in both their physical and social lives through participation in recreational activities. It was also found that participants of an integrated Unified Sports Program of Special Olympics' social self-perception increased compared to a traditional program (Riggen & Ulrich, 1993 in Dattilo, 2000). Social interaction is one of the most important incentives for people with disabilities to participate in sport (Dattilo, 2000). Nationally and internationally the integration of the disabled community into mainstream society is gaining attention and the value of leisure and sport in this integration process cannot be denied.

1.2. Problem statement and aims of the study

In 2002, a total of 2 657 714 people in South Africa were disabled (this is the most recent statistics according to a phone call made in 2007 to Statistics South Africa). This statistic includes people with visual, auditory, physical, mental, multiple and non-specified types of disabilities (Statistics South Africa, 2002). However, few services and opportunities exist for people with disabilities to participate equally in society (Office of the Deputy President of South Africa, 1997). Goslin & Van Wyk (2005) support this stating that recreation providers focus primarily on recreation provision for "normal" segments of the community. This is a major concern for government. It is documented in the Integrated National Disability Strategy (Office of the Deputy President of South Africa, 1997) that the development and extension of sport and recreation activities and facilities for people with disabilities need attention.

With limited governmental funding, the development of sport and recreation activities and facilities can be cost-effective and efficient. This can only be achieved with quality and scientifically substantiated recreational programs (Goslin, Steyn & Singh, 2000). It is important that people derive maximum benefit from their sport and

recreation involvement to ensure continued participation. The goal of any service delivered is continued participation. The National Curriculum Statement of South Africa proposed that lifelong participation in physical activities promoting fitness needs to be encouraged (National Department of Education, 2002). According to Witt & Ellis (1989) individuals derive maximum benefits from sport and recreation activity involvement which, as stated above, contributes to continued participation. Witt & Ellis (1989) also stated that the benefit of an increased level of freedom/independence is reflected in an independent leisure lifestyle. It is assumed that continued participation and an independent leisure lifestyle is one of the aims when developing sport and recreation programmes for individuals with disabilities.

To achieve perceived freedom, the following conditions must be met:

- 1) a self-perception of competence in a number of leisure activities;
- 2) an ability to control the process of leisure participation and outcomes;
- 3) intrinsically motivated participation in leisure activities (Witt & Ellis, 1989).

“Perceived freedom” is the central indicator of leisure functioning (Witt & Ellis, 1989). Leisure functioning can be defined by how an individual feels about leisure experiences and what kind of outcomes result from these experiences. Meaningful leisure experiences have a positive effect on an individual’s physical; intellectual; social and psychological aspects. Sport and recreation (leisure) have the opportunity to meet some of the basic needs of young learners. According to Edginton, DeGraaf, Dieder & Edginton, (2006) basic needs of young learners include the feeling of independence, autonomy, and control as well as a sense of competence and achievement. It is notable how these needs correlate with the conditions typifying “perceived freedom”. Leisure opportunities have the potential to meet the needs of young learners by promoting and maintaining autonomy from parents. It also facilitates opportunities to achieve success and recognition (Edginton et al., 2006).

McMahon-Beattie & Yeoman (2004) stated that recreation service’s impact in consumers’ lives is most effective when the level of consumers’ leisure functioning is fully understood and accounted for. It is clear that the participants’ baseline leisure functioning needs to be determined and accounted for. Sport and recreation design

and delivery needs to be effective to ensure a continued and independent leisure lifestyle for differently abled persons.

This study aims to measure the perceived feelings of learners with disabilities towards leisure experiences. The primary objective of the study was to determine leisure functioning of learners with learning and physical disabilities at a school for learners with special needs in Tshwane.

The secondary objectives of the study were:

- 1) To conduct research on the value of leisure as well as the determinants of leisure participation and how it correlates with leisure functioning.
- 2) To determine leisure opportunities available for learners with special needs, nationally and internationally.
- 3) To assess leisure functioning of learners with learning and physical disabilities at one of the ELSEN (Education for Learners with Special Education Needs) Schools in Tshwane.
- 4) To determine areas in which improvement of current leisure functioning is needed in order to obtain optimal benefits from their leisure experiences.

1.3. Hypothesis

Leisure functioning of learners with learning and physical disabilities does not contribute to an independent leisure lifestyle.

1.4. Delineating the problem statement

The aims of this study were to determine the learners at the ELSEN schools':

- leisure competence;
- leisure control;
- needs satisfaction and

- depth of involvement in leisure activities.

1.5. Terminology

1.5.1. Leisure

The terms “play” (a positive form of human behaviour), “recreation” (a process that restores or recreates the individual) and “leisure” are used interchangeably (Edginton, Hanson & Edginton, 1992). Central to the definition of leisure is the concept of freedom. Leisure is drawn from the Latin word “licere” which means, “to be free” (Edginton et al., 1992). Thus, leisure is pursued when one feels free and is able to do what one wants to do (Westland, 1992). This implies being free from any constraints, but also free to choose from a variety of options (Westland, 1992). Edginton et al. (2006) defined leisure as “a multidimensional construct in which one feels relatively free from constraints, has a feeling of positive affect, is motivated by internal forces, and allows the exercise of perceived competence” (p. 8). Leisure can be defined from an objective view (a time and activity approach) or from a subjective view (a state of mind approach). Distinguishing between objective and subjective definitions of leisure has important implications for theory and practice.

Edginton, Hudson, Dieser & Edginton (2004) defined leisure from seven primary orientations, which included both an objective and subjective view of leisure. These orientations listed below will be explained in more detail in Chapter 2.

Objective view of leisure:

- Leisure is *time* free to do what one chooses.
- Leisure is *activities* in which to participate during free time.
- Leisure implies *action* with direction.
- Leisure is a *symbol of social class*; where the desire to demonstrate one’s ability to be at leisure as opposed to work and to consume leisure goods and products exists.

Subjective view of leisure:

- Leisure is a *state of mind*, one's psychological mind-set and condition.
- Leisure is an end in itself, fulfilling *self-expression* and *satisfaction*.
- Holistically, leisure is a combination of some of the above definitions with emphasis on the individual's *perceived freedom* in relation to the activity and the role of leisure in the *self-actualization* of the individual.

Under an objective view of leisure, effective leisure participation can be measured according to attendance rates and the assessment of psychomotor or social skills. Under the subjective view of leisure, the facilitators focus on feelings of the participant. Attention is given to whether participants view themselves as capable of fully enjoying and deriving optimal benefits from participation (Witt & Ellis, 1989).

In this study, the subjective view of leisure, with emphasis on leisure as a state of mind where leisure takes place when individuals experience a sense of freedom and are motivated to participate in an activity primarily for the enjoyment associated with the activity will be used (Neulinger, 1981, as cited in Datillo, 2000). The subjective view of leisure facilitates the understanding of leisure functioning.

1.5.2. Leisure functioning

Leisure functioning describes how an individual feels about participation in activities and what kinds of outcomes result from these experiences (Witt & Ellis, 1989). How an individual feels and what outcome is derived from leisure experiences seems to be the two central components of the conceptualization of leisure functioning. When an individual experiences freedom during leisure participation, the individual may feel competent, in control and intrinsically motivated to participate. When no or little freedom is experienced during leisure participation, the individual may feel helpless, dependant and externally motivated. The feelings mentioned first will result in independent participation with a feeling of freedom and should contribute to the overall wellness of the participant. The latter feelings will make an individual dependant under the control of a service provider or therapist and could result in a feeling of helplessness (Witt & Ellis, 1989). In order to have good leisure functioning,

the participant thus needs to experience positive feelings and outcomes during leisure experiences.

Edginton et al. (2004) reiterate the above statement by stipulating four basic criteria central to leisure experience: 1) perceived freedom (great internal locus of control); 2) intrinsic motivation; 3) perceived competence and 4) positive affect (ability to control or influence the leisure experience).

Collectively, “perceived freedom” can be identified as the central indicator of leisure functioning as it is characterized by 1) an individual feeling competent and in control of the experience, 2) the extent to which the activities satisfy his/her intrinsic needs and 3) the depth of involvement and playfulness an individual experiences during recreation participation. These conditions are considered essential to successful leisure functioning (Witt & Ellis, 1989).

1.5.3. Learning disability

Learning disabilities are characterized by severe underachievement in language (aphasia), reading (dyslexia), writing (dysgraphia), mathematics (dyscalculia), spelling, and/or reasoning. Children with learning disabilities may have above average learning capacity, but discrepancy between learning potential as measured by intelligence tests and academic performance exists. Theorists believe the cause of learning disability might be contributed to dysfunction of the cerebral cortex, which is responsible for language, higher-order cognitive abilities, and information processing (Feldman, 1995). The dysfunction thus occurs in the way the brain organizes information, and therefore inhibits the normal learning process.

According to section 602 of the United States of America’s Individual with Disabilities Education Improvement Act of 2004, specific learning disability can be defined as: A disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in the imperfect ability to listen, think, speak, read, write, spell or do mathematical calculations. Disorders included in the definition are such conditions as

perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. Specific learning disability does not include a learning problem that is primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantages.

Learning disability can thus be seen as a condition that inhibits a person to attain full potential, due to the dysfunction in the person's cerebral cortex manifesting in language-related areas. Although learning disabilities are not often easily recognized, accepted, or considered seriously (Turkington & Harris, 2002), it is important that the recreation service industry has knowledge concerning the individual with a learning disability, to ensure meaningful service delivery.

1.5.4. Physical disability

Physical disability implies the physical loss or degeneration to an individual due to factors present at birth (prior to or during birth) or after birth, including traumatic factors (Leitner & Leitner, 2004). Howe- Murphy & Charboneau (1987, as cited in Leitner & Leitner, 2004) stipulate the sources from which physical disability may stem:

- Chronic health-related conditions (e.g. diabetes, asthma and cystic fibrosis).
- Congenital malformations (e.g. heart defects and spina bifida).
- Muscular-skeletal system disorders (e.g. muscular dystrophy, arthritis, and scoliosis, which affect the ability to use muscles, joints, and skeletal structure).
- Nervous system impairments (e.g. cerebral palsy, stroke, multiple sclerosis, spina bifida, spinal cord injury, and epilepsy).

Leisure providers should take note that these disabilities might cause weakness of limbs, paralysis, and uncontrolled muscles. Modifications of equipment and rules might be required (Leitner & Leitner 2004).

1.5.5. Education for Learners with Special Education Needs (ELSEN)

South Africa's education system consists of different sectors, namely the General Education and Training (GET), Further Education and Training (FET), Adult Basic Education and Training (ABET), Early Childhood Development (ECD), Education for Learners with Special Education Needs (ELSEN) and Higher Education (HE) (National Department of Education, 2003).

A total of 13 426 914 learners were enrolled in the education system in South Africa in 2001 (National Department of Education, 2003). The distribution of these learners in the different institutions is listed in Table 1.1:

Table 1.1: Distribution of learners in different institutions in South Africa.

Institution	Distribution of learners
Public schools	85.6%
Independent (self-governing) schools	1.8%
ABET, ELSEN and pre-primary/ECD schools or centers	5.0%
Public HE institutions	5.0%
Public FET institutions	2.7%

From the 5.0% learners in ABET, ELSEN and ECD schools, 0.6% were in ELSEN schools. There are 91 ELSEN schools in the Gauteng area. This study is limited to learners with learning- and physical disabilities at one of the ELSEN Schools in the Tshwane Metropolitan Area (National Department of Education, 2003).

1.6. Research Methodology

1.6.1. Type of research

Collected data in this study were processed by means of a quantitative research approach. Some basic characteristics of quantitative research relevant to this study include the following:

- The hypothesis is established at the beginning of the study. The results of the study can either support or reject the hypothesis. The study centres around the hypothesis.
- The investigator uses structured, objective and standardized observation techniques.
- The aim of quantitative research is to explain a certain area of concern. It needs, therefore to be highly operational responsible. It needs to have internal control and it must be reliable (Mouton & Marais 1990, p. 163-176)

The hypothesis of this study was tested using the standardized Leisure Diagnostic Battery (LDB) of Witt & Ellis (1989).

1.6.2. Research instrument

This study was concerned with the status of leisure functioning of learners with learning and physical disabilities at an ELSEN School in the Tshwane Metropolitan Area. According to Thomas and Nelson (1996) descriptive research is concerned with status/conditions. This study used the case study and questionnaire as descriptive research techniques.

1.6.3. Case study

According to Jackson (2003) a case study is an in-depth study to provide detailed information on one or more individuals in the hope of revealing data that can be generalized to other cases of the same type. Using the case study as a research technique has advantages and disadvantages that need to be accounted for.

Disadvantages of a case study:

- The individual being observed may be atypical and generalizations made to the general population would then be a fallacy.
- The researcher may also be biased in the interpretation of the observations, paying attention to data supporting the theory of the study and ignoring problematic data (Jackson, 2003).

Case studies do however have advantages:

- It often suggests hypotheses for future studies.
- It may offer tentative support for theories.
- It also provides a method to study rare phenomena, such as the leisure functioning of a specified group (Jackson, 2003).

Justification for using a questionnaire as a research instrument in this study is as follows:

- The need to obtain responses from persons from a wide (in this case a specified) geographical area.
- It strives to secure information about present practices, conditions and demographic data (Thomas & Nelson, 1996).

1.6.4. Research questionnaire

The Leisure Diagnostic Battery (LDB) is used as research instrument in this study. The LDB is a collection of instruments designed to enable the assessment of the leisure functioning for a wide range of handicapped and non-handicapped individuals. The short version (25 items) of the Standardized Leisure (sport and recreation) Diagnostic Battery (LDB) questionnaire, developed for individuals in therapeutic situations by Witt and Ellis (1989), will be used as research instrument. The LDB utilizes a state of mind approach (subjective view) to understand leisure (sport and recreation) functioning rather than a time and activity (objective view) approach. By viewing leisure from a state of mind perspective, an individual could have the required skills to participate, but still perceive him/herself as unable to fully enjoy and derive optimal benefits from recreation participation. Witt & Ellis (1989) argue that self-definitions of success (as opposed to objectively rated skills based on

external standards) constitute a more reliable approach to remediation strategies and thus assess the individual's: 1) perceived recreation competence scale, 2) the perceived recreation control scale, 3) the recreation needs scale and 4) the depth of involvement in recreation scale.

1.6.4.1 Perceived leisure competence scale

The perceived leisure competence scale, consisting of 5 items in the LDB questionnaire, measures the degree to which an individual believes he/she is competent in leisure. Perceived competence is the perception the individual holds about his/her ability to determine what happens in the course of an activity and to avoid failure. An individual, who believes he/she can control the outcome of leisure participation because of his /her abilities, will feel freer to participate in leisure activities. Harter (1979, as cited in Witt & Ellis, 1989) states that the four domains of competence that are included are: cognitive, physical, social and general competence.

1.6.4.2 Perceived leisure control scale

The perceived control scale, consisting of 10 items in the LDB questionnaire, measures the individual's perceived freedom to control the process and outcomes of leisure endeavours. The control the individual perceives to have, may be a result of being competent in the task or of being persuasive, crafty, or of functioning in an environment where the individual is allowed and encouraged to make choices (Witt & Ellis, 1989).

1.6.4.3 Leisure needs scale

The leisure needs scale, consisting of 6 items in the LDB questionnaire, provides an indication to which extent recreation activities satisfy intrinsic needs and wants. The specific needs included in the scale are the need for catharsis, relaxation, compensation, gregariousness, novelty, arousal, and a need for creative expression. The individual who can satisfy these needs through leisure participation feels a sense of freedom in leisure and derive optimal benefit from leisure (Witt & Ellis, 1989).

1.6.4.4 Depth of involvement in leisure scale

The depth of involvement in leisure scale, consisting of 4 items in the LDB questionnaire, generates information of what feelings an individual have during his/her preferred activities. Items for this scale indicates the extend to which individuals achieve “flow” or become absorbed in the activity and are characterized by the merging of action and awareness, centering of attention, an altered perception of time, and feelings of power and control when they are involved in the activity.

To feel a sense of freedom during the involvement in activities, feelings of excitement, enthusiasm, control and depth of involvement in the activity, are needed (Witt & Ellis, 1989).

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1.6.4.5 Perceived freedom in leisure scale: total score

The sum of scores across the above scales provides an indication of an individual’s degree of perceived freedom in leisure.

Witt & Ellis (1989) stated that high levels of perceived freedom in leisure help individuals to increase their level of independence/freedom. The individual thereby achieves an independent leisure lifestyle. Low levels of perceived freedom at the other end leave the individual with a sense of helplessness with leisure. Helplessness develops as a result of continued failure and continued negative outcomes associated with recreation and leisure experiences. Helplessness needs to be avoided, because it can lead to depression, apathy, and an expectation of failure in other realms of life. The theoretical basis underlining the learned helplessness theory will be explained in Chapter 2.

All items (25) of the shortened LDB are measured on a 3-point Likert scale where 1=do not agree; 2=do not know and 3= agree. The collective mean score (x) for the 25 items across the four scales provide an indication of the learners’ perceived freedom or functioning in leisure. As stated before, a participant is more likely to continue participation when the participant experiences a sense of freedom in his/her leisure pursuit.

The research instrument was translated in Afrikaans due to the percentage of Afrikaans learners in the class. A pilot study was done with 3 disabled learners. Adaptations were made according to their abilities. The questionnaire was administered in controlled circumstances under the supervision of the researcher and one educator per class.

1.7. Reliability and validity of the Leisure Diagnostic Battery (LDB) as research instrument

1.7.1. Reliability overview

The LDB has been examined relative to two types of reliability namely, stability and internal consistency. Stability describes the extent to which comparable scores are obtained over time. No test-retest data are available yet. Internal consistency refers to the extent to which the items measure or converge on a single concept. Thus, items that have strong relationships among themselves and which consistently elicit the same meaning to individuals. Alpha reliability is available from seven of the samples and ranges from .83 to .94 with six of the seven greater than .89 (Witt & Ellis 1989).

1.7.2. Validity overview

Validity is determined by how well the instrument measures that which it claims to measure. Different types of validity are discussed in literature for example empirical validity, statistical validity, criterion-related validity, concurrent validity, face validity, trait validity, and factorial validity. Witt & Ellis (1989) used Nunnally's (1978) categorization of these types of validity into three areas: 1) content validity, 2) predictive validity and 3) construct validity. Predictive and construct validity is of particular interest related to tests of psychological constructs where the tests assume that the results a reflection of complex underlying concepts and traits are.

1.7.2.1. Predictive validity

Predictive validity refers to the extent to which the instrument correlates with an external criterion (Witt & Ellis, 1989). Studies undertaken with the LDB have provided evidence of predictive validity. Correlations between the LDB scores and life satisfaction, leisure satisfaction, leisure attitudes, self-esteem, and self concept have been found (Witt, 1990).

1.7.2.2. Construct validity

Construct validity is concerned with the extent to which a group of related instruments converge on a central concept as well as the extent to which the instrument predict appropriate related criteria. The LDB are highly interrelated, converging on a central concept of perceived freedom in leisure. Perceived freedom in turn, might be used to predict such related variables as self-concept, self-esteem, wellness, and life satisfaction (Witt & Ellis 1989).

According to Nunnally (1978, as cited in Witt & Ellis, 1989), construct validity requires three major types of inquiry and investigation. These inquiries are listed in three steps:

- 1) The domain of observables related to the construct needs to be specified.
- 2) From empirical research and statistical analysis, the extent to which the observable tend to measure the same thing, several different things, or many different things needs to be determined.
- 3) To perform studies of individual differences and /or controlled experiments to which the supposed measure of the construct produce results which are predictable from highly accepted theoretical hypotheses concerning the construct (Witt & Ellis 1989, p. 30).

Relatively to the LDB, efforts have been made in the construct validation process. Specifying observables, as noted in the first step, has been accomplished through literature review and data analysis in the developmental process. Witt & Ellis (1989) established that perceived competence, perceived control, need satisfaction, depth of

involvement, and playfulness are all components of “perceived freedom”. Perceived freedom as components of an individual’s leisure lifestyle correlates with life satisfaction, self-concept, self-esteem, and other components of physical and psychological well-being. Examinations of relationships within measures of the construct as well as relationships between measures of the construct and related variables have been investigated relative to the second and third steps of Nunnally’s process.

Data to date justify the use of the LDB as assessment and research tool due to its strong psychometric properties (Witt, 1990). The Leisure Diagnostic Battery is a reliable and standardized instrument.

1.8. Research area

One of the ELSEN (Education for Learners with Special Education Needs) schools in Tshwane was selected as a research area. According to the Department of Education (2001) there are between 25 000 and 27 000 learners in the 91 ELSEN schools in the Gauteng area. This study is limited to one of the ELSEN Schools in Tshwane.

This specific school

accommodates learners with learning- and physical disabilities. The school gives opportunity for physical education through sport and recreation periods once a week. The arrangement of these periods is thoroughly discussed in the interview (Appendix A, p158). Physiotherapists and occupational therapists focus on rehabilitation as part of the service scope.

1.9. Sample design

All Grade 6 (n=30), 7 (n=27) and 8 (n=35) learners with learning- and physical disabilities at the specified school were included in the sample. The decision made to use the Grade 6, 7 and 8 learners, as sample group was three-fold. First, a school is

a good platform where children can develop lifestyle behaviours and learn skills that serve them throughout their lifespan (Seaman, 1999). Secondly, the physical education teacher suggested the use of the Grade 6-8 learners considering the practicality of administering the research questionnaire. In the third place, the LDB short version (25 items) used as research instrument was originally designed for use with 9 to 14 years old non-disabled or orthopedically impaired individuals and/or higher functioning level educable mentally retarded individuals. Learners with physical- and learning disabilities in Grade 6-8 are on average 13 years of age. The use of the short version of the LDB is, therefore, suitable for the sample used in this study.

A 60% (n=18) response rate was obtained from the Grade 6 learners. A 33.33% (n=9) from the Grade 7 learners and 22.86% (n=8) response rate from the Grade 8 learners were obtained. Learners with physical disabilities represented 37.14% (n=13) of the group. The learners with learning disabilities represented 62.86% (n=22) of the group. Respondents included in the sample were those learners present on the day of the evaluation with consent from their parents or guardians. In total a 38% (n=35) response rate was obtained from the entire Grade 6, 7 and 8 learners. The sample represented 63% (n=22) male and 37% (n=13) female learners. The sample group was represented by 8.57% (n=3) coloured learners and 91.43% (n=32) white learners.

1.10. Administering the research instrument

The data collection procedures were performed in collaboration with the Deputy Principal and the teachers of the respondents at the ELSEN School. Lists of the specified classes were available. The lists provided information regarding the age, gender, language and nature of disability of the learners.

The questionnaires were administered under controlled circumstances in all classes. Learners answered questionnaires in the familiarity of their own classes and under supervision of their own teachers. The following procedures were followed to ensure consistency:

- Learners completed the LDB individually. Exceptions were made where an adult helped a learner with a physical disability to answer the questions on the computer and where friends helped those who have difficulty reading.
- Terms were clarified before answering the questionnaire.
- Instructions were clearly explained beforehand.
- Learners understood that it was not a test and there were no right or wrong answers.
- Learners understood that they might ask questions where uncertainty existed.

The duration of answering the questionnaire was 30 - 40 minutes. Where necessary, questions were explained without suggesting a response to the test item. Learners silently left the room after answering the questionnaire.

1.11. Statistical interpretation

The 25 items of the LDB were scored according to the standardized protocol and frequencies and percentages were calculated for questions on the recreation participation profile. A distinction between the learning and physical disabled learners was made in order to make an evaluation and comparison.

1.12. Data collection

The following research methods were used to collect data:

1.12.1. External environmental analysis

- A literature review concerning the value of leisure and the importance of developing optimal leisure functioning for people with disabilities was conducted. Theories explaining motivation towards leisure participation as well as barriers hindering participation were examined.
- A literature analysis of leisure opportunities available for learners with disabilities was completed.

1.12.2. Internal environmental analysis

A review of internal policies and programs, documents, interviews and the research questionnaire were used to collect data on recent sport and recreation program status (leisure services) at the specified school.

1.13. Outline of the proposed study

Chapter 1: Introduction, problem statement, aim and methodology

In this chapter the rationale for the study, the formulation of the hypothesis, the aims and importance of the study along with the research methodology were presented.

Chapter 2: The nature of leisure functioning: a theoretical frame of reference

This chapter discussed the value of leisure experiences as reason for the importance of fostering independent leisure participation (high leisure functioning) for people with disabilities. Attention was given to motivational factors contributing towards, as well as the barriers hindering independent leisure participation.

Chapter 3: Leisure opportunities for learners with special needs- a literature review

The leisure opportunities available, national and international, for learners with special education needs were examined. The status of the current leisure services at the ELSEN School was examined mainly through interviews.

Chapter 4: Research design, results and interpretation

In this chapter the research questionnaire was analyzed and interpreted and the findings of the study were discussed.

Chapter 5: Conclusions and recommendations

The final chapter summarized all the previous chapters. Conclusions were drawn on the leisure functioning of learners with learning- and physical disabilities at the specified school. Recommendations were made on how to increase the leisure functioning score of learners and to eliminate any constraints.

CHAPTER 2

THE NATURE OF LEISURE FUNCTIONING: A THEORETICAL FRAME OF REFERENCE.

2.1. Introduction

The Bill of Rights, found in chapter 2 of the Constitution of the Republic of South Africa (the “Constitution”), is the cornerstone of democracy in South Africa. It enshrines the rights of all people in the country and affirms the democratic values of human dignity, equality and freedom (section 7(1) of the Constitution). According to the Bill of Rights equality includes the full and equal enjoyment of all rights and freedoms (section 9(1) of the Constitution). To promote the achievement of equality, legislative and other measures designed to protect or advance persons, or categories of persons, who were disadvantaged by unfair discrimination, may be taken (section 9(2) of the Constitution). With the new legislation the integration of people with disabilities into society gained attention during the past decade in order to create an equitable dispensation for all people. Key areas have been identified to help with this integration process. These include prevention, health care, rehabilitation, public education, barrier free access, transport, communication, data collection and research, education, employment, human resource development, social welfare and community development, social security, housing and sport and recreation (Office of the Deputy President of South Africa, 1997). Sport and recreation are regarded as vital components in the integration of people with disabilities into society. In chapter 1, one of the government’s priorities regarding the integration of people with disabilities was highlighted through the Integrated National Disability Strategy’s Sport and Recreation policy objective:

“...to develop and extend sporting activities for people with disabilities in both mainstream and special facilities so that they can participate in sport for both recreational and competitive purposes” (Office of the Deputy President of South Africa, 1997, p. 53).

The purpose of chapter 2 is to argue the importance of effective leisure experiences. The leisure service industry must understand human behaviour and the factors influencing motivation towards participation to ensure continued participation. Chapter 2 will discuss and compare theories on motivation and leisure participation as well as barriers preventing leisure participation and how it relates to leisure functioning.

Prior to discussing the benefits of leisure, related concepts need to be defined. Play, recreation and sport, by definition, demonstrate qualities distinguishing them from the definition of leisure (Kelly, 1996). Even though these four concepts possess the same central qualities of freedom and satisfaction, each concept must be understood in order to fully understand the scope of leisure for the purpose of this study.

2.2. Underlying concepts

2.2.1. Play

Play is often regarded as an activity engaged in by children. Play is however visible in all facets of life, at home, school and work. According to Kelly (1996, p. 31) play is:

“...leisure activity with the childlike characteristics of spontaneity, self-expression, and the creation of its own non-serious realm of meaning. Its satisfaction is concentrated in the experience of doing the activity and accepting the intrinsic meaning of its playful context.”

Play can be characterized as a self-initiated activity, either mental or physical by nature, spontaneously undertaken for its own sake and for the innate satisfaction and value deriving from participating. Play is fun, purposeless and though it is pretentious, it is often very serious (Torkildsen, 1999).

Play is any self-initiated activity, characterized by spontaneity, purposelessness, fun and self-expression. The reason for partaking in playful encounters is concentrated in the intrinsic value and satisfaction deriving from it.

A source of enjoyment for people, play can also provide learning of skills (Dattilo, 2000). Children develop their physical, social, intellectual and emotional skills and abilities through play (Torkildsen, 1999). Play can also be used as a therapeutic medium. Through play children with disabilities can improve their cognition, social interaction and physical skills (Dattilo, 2000).

The cornerstone, play is the essence of leisure, recreation and sport (Torkildsen, 1999). The play element however often disappears in sport due to the importance of the outcome and external rewards. According to Torkildsen (1999) leisure professionals need to create situations promoting the opportunity for play to transpire.

2.2.2. Recreation

Recreation stems from the Latin word "*recreatio*" which means "restoration to health" (Torkildsen, 1999). Different definitions of recreation with different viewpoints have been documented. According to Edginton et al. (1992), most definitions of recreation focus on it as a form of activity. Other definitions focus on recreation from a contemporary standpoint where recreation assists to rejuvenate or restore individuals (Edginton et al., 1992). Kraus (1978, as cited in Torkildson, 1999, p. 58) describes a definition that comes close to describing recreation in its complexity:

"Recreation consists of activities or experiences carried on within leisure, usually chosen voluntarily by the participant- either because of satisfaction, pleasure or creative enrichment derived, or because he perceives certain personal or social values to be gained from them. It may also be perceived as the process of participation, or as the emotional state derived from involvement..... "

The above definition of recreation describes it as consisting of 1) activities or 2) experiences carried on within leisure. These *activities* are classified by Leitner & Leitner (2004) while Torkildson (1999) describes the *experiences* felt within leisure:

1) Classification of recreation activities:

- Simple entertainment (e.g. spectator sport or television. Activities that require not much physical, mental or social demands).
- Mental activity (e.g. meditation or reading and writing for pleasure).
- Sport and exercise (e.g. basketball, aerobics and weight lifting).
- Music (e.g. listening and participating as well as composing).
- Art (e.g. painting and sculpting) (Leitner & Leitner, 2004).
- Outdoor activities which occur in the environment (e.g. sailing and walking in the park) (Edginton et al., 1992)

2) The following factors need to be incorporated into recreation programmes for the experience to be “felt”:

- Recreation is personal; therefore, individual satisfaction needs to be addressed.
- Recreation incorporates the notion of freedom, thus meaningful choices need to be offered.
- Recreation is refreshing. Activities need to be stimulating, novel and have immediate value.
- Recreation can be found in any activity. Programs must incorporate the whole person, physically, intellectually, spiritually and socially.
- Recreation is creative; programs need to be flexible for the indirect benefits arising from the activities.
- Recreation might arise through play. It is therefore necessary to create opportunities with the spirit of play as a basis from which the players are in control of the activity.
- Recreation is found in unity and oneness. Activities need to give opportunities for “peak” experiences (Torkildsen, 1999).

Similarity between recreation and leisure is notable. Focusing on the roots of the concept can eliminate confusion. Leisure has the word formation roots signifying freedom and intrinsic satisfaction while recreation has the restorative (healing) and social benefit meanings (Kelly, 1996).

2.2.3. Sport

The term “sport” was first used in England around A.D. 1440. The origin of the word has its roots in the Latin word “deportare” which means “to amuse oneself”. Over time the meaning of the word grew to an interpretation that was used extensively throughout England, referring to competition in the form of games, individual exploits, and hunting (Mechikoff & Estes, 2006).

According to Drewe (2003), an activity can be considered as sport when certain necessary and sufficient conditions are present. The activity should include gross physical skills, competition, and institutional aspects such as rules, history and a wide geographical base.

These concepts can be explained as follows. Loy’s concept of physical skills requires the employment of developed physical skills and abilities within the context of gross physical activity to conquer an opposing object of nature (Loy, 1968, as cited in Drewe 2003). This definition will include for example bowling (gross physical activity) but not chess (small motor skill). The concept of competition can be explained through the root of the word competition, “com-petitio”, that means “to strive together”. This striving requires an “other” to strive with. Controversy exists whether this strive with others includes only other people, or whether it includes oneself in self-improvement, scores, other records and mountains and rivers. Drewe (2003) concluded the argument by the following statement:

“Although philosophers have questioned whether a person “strives together” with an animated object such as a mountain or a river, one could consider the “striving together” to take place between other mountain climbers or river rafters” (p. 28).

With these conditions incorporated, sport can be defined as an activity that is physical in nature, competitive, requiring physical skill and that is widely practised over a long period of time.

2.2.4. Leisure

The term leisure is derived from the Latin word “licere” meaning, “to be free” (Edginton et al., 1992). Leisure is undertaken when one feels free and is able to do what one wants to do. This implies being free from any constraints, but also free to choose from a variety of options (Westland, 1992).

Probably the most commonly used definition of leisure is where leisure is defined as free or unobligated time during which one is not working or performing life-sustaining obligations (Leitner & Leitner, 2004). However, this definition is limited to an objective view of leisure. In Chapter 1, p.23, a distinction between the objective (time and activity approach) and subjective view (a state of mind approach) of leisure was made. It was also mentioned that the subjective view of leisure, facilitates the understanding of leisure functioning. For the purpose of this study a subjective view of leisure (discussed in 2.2.5, p.49 in more detail) was utilized. The subjective view of leisure incorporates the attitudes, conditions and experiences related to the leisure experience in order to ensure satisfying leisure experiences for people with disabilities.

Edginton et al. (2004) defined leisure, which includes both an objective and subjective view. The objective view of leisure has a time and activity approach where leisure involves personal choice and free time. Leisure implies action with direction. It is a symbol of social class; where the desire to demonstrate one’s ability to be at leisure as opposed to work and to consume leisure goods and products exists. The subjective view explains leisure as a state of mind (one’s psychological mind-set and condition), where leisure is an end in itself, fulfilling self-expression and satisfaction. Holistically, leisure is a combination of some of the above definitions with emphasis on the individual’s perceived freedom in relation to the activity and the role of leisure in the self-actualization of the individual.

Leisure can be regarded as a state of mind during the experience of enjoyable activities during unobligated time. The participant will choose an activity free from any obligations, external motivators or barriers mainly for the sake of enjoying the activity and experience personal growth. Datillo (2000), Edginton et al. (2006), Kelly (1996)

and Leitner & Leitner (2004) elaborated on the above objective and subjective orientations stated by Edginton et al. (2004). In order to clarify the concept of leisure, these orientations will be fully discussed.

2.2.4.1. Leisure as free time

Leisure time is residual (remaining) time, time left over from obligations to meet work and self-maintenance requirements. Leisure time is that which we may choose what we do; it is “free time” (Brightbill, 1960, as cited in Kelly, 1996). However, Kelly (1996) asks the question whether leisure time is really ever free from obligation or if time is ever left over? This question is best explained with an example: When a cricket player chooses to join a cricket team, he is obligated to get to practice and games on time and play the game according to the rules. A person may choose to take a walk in the park, but knowing that homework is waiting. One is thus free to choose to delay the homework, but time used for leisure is seldom leftover. Therefore discretionary time can be defined as leisure time where one might not be completely free, but it is time in which one exercises some choice. It is thus important to ask the question how free from constraints the decision was made. The freedom of choice, not time as a remainder or amount, determines whether it is discretionary time or not (Kelly, 1996).

The above definition of leisure as free time, gives a new perspective on leisure and people with disabilities. From an objective view of leisure (time approach), people with disabilities might be thought of as having a lot of leisure time. From a subjective view of leisure however, people with disabilities have a lot of free time, but doesn't experience leisure due to, among other factors, the limiting freedom of choice they experience (Westland, 1992) hence influencing their leisure functioning.

2.2.4.2. Leisure as activity

Defining leisure as activity, it is important to note that the context of the activity might influence whether the activity is leisure or not. According to Pavelka (2002, as cited in Edginton et al., 2006) an activity might be considered as leisure by some individuals but the same activity can be seen as work-oriented by others. Kelly (1996, p. 19) tries to explain this with a question: “Is playing hockey leisure when playing it after school

and not when playing it in a required physical education class? Or are cocktail parties with friends leisure but not at a sales conference?”

Kelly (1996) presents two criteria for an activity to be leisure and not merely an obligated activity: 1) The participant needs to be free to choose the activity and 2) The activity needs to benefit the participant at that time and at that place.

Leisure is thus indeed activity, but the quality of the experience during the activity, not the activity itself makes it leisure. The freedom perceived and the benefits anticipated by the participant define an activity as leisure and not so much the form of it (Kelly 1996). These criteria for an activity to be defined as leisure have great implications for leisure services providers as well as therapeutic recreation facilitators. Freedom of choice and anticipated benefits need to be incorporated in the program, whether the participant participates voluntarily or because of a therapeutic program.

2.2.4.3. Leisure as action

According to Kelly (1996), leisure is realized action, not just a feeling or mood. It involves doing, not just being done to. It is the response rather than the stimulus. Leisure is connected to identifiable space and time and it has a form. Leisure as action involves doing something, whether a person visualizes a canoe trip; planning how to landscape the garden or actively painting a picture (Edginton et al., 2006). Kelly (1996, p. 23) makes a statement that explains the relation between the definitions of leisure as action (objective view of leisure), with the definition of leisure as an experience (subjective view of leisure):

”Leisure is taking action that does something and that has outcomes for the actor. Such action causes the experience rather than simply absorbing it”

2.2.4.4. Leisure as a symbol of social class

Exotic travel tours, fancy boats and swimming pools are all leisure-related possessions for use in free time. These are all visible signs of wealth and are used

for leisure (Leitner & Leitner, 2004). Although these symbols of social class are still noticeable today, Leitner & Leitner (2004) argue that this negative view of leisure is not as relevant in modern society as it was in the past. In several periods in history, the noble individuals were free to engage in leisure pursuits while the lower classes needed to work long hours with very little free time. In modern society the rich and the poor may participate in the same activities, with the only difference being the type of facilities or equipment used.

The financial implication of leisure experiences are even more relevant and of greater concern for people with disabilities. Adaptive equipment, transport and personal assistance are expensive and not available to all.

2.2.4.5. Leisure as experience

Leisure cannot primarily be defined by time or activity (an objective view of leisure). The second approach in defining leisure is the state of mind orientation (subjective view of leisure), thus emphasizing what happens in a person's mind during a leisure experience (Edginton et al., 2006). The state of mind approach incorporates the attitudes, conditions, experience, or the definition of the leisure actor (Kelly, 1996). The attitudinal (state of mind) approach to leisure includes three dimensions:

1. perceived freedom (participation has been chosen, not coerced);
2. intrinsic motivation (the reason for participating is intrinsic to the activity and not a means to another end);
3. non-instrumentality (Neulinger, 1974, as cited in Kelly, 1996).

The main elements of leisure as stipulated above are choice and motivation. Kelly (1996) concludes by stating that leisure is the attitude towards, or the definition of activity by the participant.

2.2.4.6. Holistic view of leisure

According to Kelly (1996), holistically, leisure can be discovered in any activity anywhere. All parts of life have thus the potential for leisure. The holistic perspective

of leisure addresses the time, activity and experience dimensions of leisure. The quality of the experience defines it as leisure or not. The holistic view of leisure combines a lot of features mentioned in the previous definitions, however emphasize is placed on the participant's ability to shape and control their own leisure experience (Edginton et al., 2006).

2.2.4.7. Leisure as social and political construction

Social and political construct of leisure are clearly seen in the statement made by the United Nations that sport and physical education provide opportunities for social and moral inclusion for populations otherwise marginalized by social, cultural, or religious barriers due to gender, disability or other discriminations (United Nations, 2005). The Integrated National Disability Strategy (Office of the Deputy President of South Africa, 1997) emphasized this fact by stating that sport is regarded as one of the vital components in the integration of people with disabilities into society.

The politics of gender, race, social class, age, able-bodiedness and other markers of social stratification shape the context and culture of a society. In return, leisure is shaped by context and culture. As one researcher puts it "leisure is a political act where the privileges that accompany dominant culture (for example white males over black females) are challenged and negotiated" (Edginton et al., 2006, p. 44).

The seven orientations defining leisure as described above reveal the complexity of leisure. A single dimension cannot define leisure. Kelly (1996) describes leisure in its complexity clearly:

"It involves freedom, but in a sense of action rather than lack of constraint. It includes decision, but always in a social as well as time and space context. It focuses on the experience, but with a history and future orientation. It is motivated intrinsically, but not without long-term meanings and intentions. It is existential and social, immediate and processual, personal and political" (p. 414).

Even though the seven orientations are quite different, three common elements are noted. Perceived freedom, intrinsic motivation and anticipated benefits are crucial elements that determine leisure.

When defining leisure as a state of mind, where leisure takes place when individuals experience a sense of freedom and are motivated to participate in an activity primarily for the enjoyment associated with the activity (Neulinger, 1981, as cited in Dattilo, 2000), people with disabilities might find it difficult to experience leisure. Many people with disabilities often lack the necessary skills for experiencing leisure independently (Dattilo, 2000). A feeling of incompetence in a leisure activity will surely hamper the enjoyment and freedom associated with leisure. As noted in Chapter 1, perceived freedom needs to be determined and accounted for as baseline for effective sport and recreation design and delivery to ensure a continued and independent leisure lifestyle for differently abled. Therefore, the subjective view of leisure, with emphasize on freedom of choice and motivation, will be used in order to determine the leisure functioning (perceived freedom) of learners with disabilities.

2.2.5. Subjective view of leisure / Leisure as experience

This study used the subjective view of leisure, with emphasis on leisure as a state of mind as the basis for understanding leisure functioning. In order to meet the leisure needs of people with disabilities, their experiences of leisure activities needs to be understood. Increased personal fulfilment, well-being and self-esteem that are so closely linked to leisure experiences are often denied to individuals with disabilities due to the restricted freedom they have (Prost, 1992). Even if the individual has the skills to participate, self-definitions of success, competence, and ability can still make the individual view him/herself as unable to fully enjoy and derive optimal benefits from participation (Witt & Ellis, 1989). An objective view of leisure where a particular block of time or a particular set of activities defines leisure can therefore not be used solely. To agree on the feelings or perceptions that an individual will experience in order for a given endeavour to be referred to as leisure, a more subjective and state of mind view of leisure are required. According to the subjective view of leisure, government, program developers, facilitators and physical education teachers will be much more concerned with creating environments and utilizing leadership strategies

that maximize feelings and perceptions that have been denoted as typifying leisure rather than scheduling and attendance rates (Witt & Ellis, 1989).

2.2.6. Leisure functioning

Leisure functioning can be defined by how an individual feels about personal leisure experiences and what kind of outcomes result from these experiences. “Perceived freedom” is the central indicator of leisure functioning (Witt & Ellis, 1989). Perceived freedom is central to leisure experiences, and it will be discussed in the following paragraph. Due to the impact of leisure on the life of the individual it is important to measure the leisure functioning of individuals in order to obtain optimal benefits from their leisure experiences (Witt & Ellis, 1989). McMahon-Beattie and Yeoman (2004) stated that recreation service’s impact on consumers’ lives is most effective when the level of the consumer’s leisure functioning is fully understood and accounted for.

2.2.7. Perceived freedom in leisure

According to the subjective view of leisure, it is necessary to agree on the feelings or perceptions that an individual will experience in order for a given endeavour to be referred to as leisure (Witt & Ellis, 1989). Witt & Ellis value the assumption that involvements become leisure experiences when certain conditions are met. These conditions involve an individual perceiving him/herself as competent, being able to control the initiation and the outcomes of experiences, and participating more out of intrinsic desire than extrinsic reward expectations. According to Witt & Ellis (1989), perceived competence and perceived control are characteristics of an individual who perceives freedom in leisure.

High levels of perceived freedom in leisure help individuals to increase their level of independence/freedom and thereby achieve an independent leisure lifestyle (Witt & Ellis, 1989). The importance of developing an independent leisure lifestyle in persons with disabilities is discussed in the next paragraphs. The benefits of an active lifestyle as contributing factor to an independent leisure lifestyle are also presented.

2.3. The value of leisure experiences

Numerous benefits derive from leisure experiences and the value of it for individuals, groups, society and the environment are debated by numerous scholars such as Edginton et al. (2004), Edwards et al. (2005), Weinberg & Gould (1999), Henderson (1999), Peniston (1998) and Taylor, (1985). Stipulating the benefits of leisure experiences highlights the importance of development of services fostering an independent leisure lifestyle for individuals with disabilities.

Meaningful leisure experiences have a positive effect on an individual's physical, intellectual, social and psychological aspects (Table 2.1, p. 52)

Table 2.1: The value of leisure participation

DOMAIN	BENEFITS	RESEARCHERS
<p>2.3.1. Physiological benefits</p> <p>1. Cardiovascular</p> <p>2. Musculoskeletal</p> <p>3. Increased quality of life</p>	<ul style="list-style-type: none"> • Reduce or prevent hypertension. • Reduce serum cholesterol and triglycerides. • Increase lung capacity. • Decrease body fat mass. • Increase muscle strength. • Improve bone mass. • Improve structure and function of connective tissue and joints. • Increase life expectancy. • Prevent secondary illnesses. • Improve functioning of immune system. 	<ul style="list-style-type: none"> • Edginton et al., 2004; Peniston, 1998; Henderson, 1999. • Edginton et al., 2004 • Edginton et al., 2004; Peniston, 1998 • Edginton et al, 2004; Peniston, 1998 • Edginton et al., 2004; Peniston, 1998; Henderson, 1999 • Edginton et al., 2004 • Peniston, 1998. • Edginton et al., 2004 • Henderson, 1999 • Edginton et al., 2004

<p>2.3.2. Psychological benefits</p> <p>1. Psychological well-being</p>	<ul style="list-style-type: none"> • Enhance feelings of control and improving self concept; self-esteem; self-efficiency and positive social interactions. • Improve confidence; emotional stability; internal locus of control and self control. • Improve sense of humour; perceived quality of life and positive outlook on life. • Improve stress management and catharsis. • Reduce depression and anxiety. • Reduce anger. • Reduce confusion; headaches; hostility; phobias; psychotic behaviour; tension and type-A behaviour. • Improve sense of freedom; self-actualization and appreciation of nature. 	<ul style="list-style-type: none"> • Edwards et al., 2005 • Weinberg & Gould, 1999. • Peniston, 1998. • Edginton et al., 2004. • Edginton et al., 2004; Taylor, 1985; Hendorson, 1999 and Weinberg & Gould, 1999. • Edginton et al., 2004; Weinberg & Gould, 1999 • Weinberg & Gould, 1999. • Edwards et al., 2005
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<p>2. Personal satisfaction</p>	<ul style="list-style-type: none"> • Improve creative expression and spirituality. 	<ul style="list-style-type: none"> • Edwards et al., 2005; Peniston, 1998.
<p>2.3.3. Intellectual benefits</p> <p>1. Improve learning ability</p> <p>2. Improve work efficiency</p>	<ul style="list-style-type: none"> • Enhance: skill learning; factual learning; concept learning; schemata learning; metacognition learning; value- and attitude learning. • Improve intellectual functioning; memory and perception. • Enhance academic performance. • Reduce absenteeism at work and work errors. 	<ul style="list-style-type: none"> • Peniston, 1998. • Weinberg & Gould, 1999. • Edginton et al., 2004, Weinberg & Gould, 1999. • Weinberg & Gould, 1999.

2.3.4. Social benefits		
1. Individual	<ul style="list-style-type: none">• Improve social skills; team membership; adaptability and resiliency and balanced competitiveness.	<ul style="list-style-type: none">• Peniston, 1998.
2. Community	<ul style="list-style-type: none">• Enhance community satisfaction; cultural and historical awareness; ethnic identity; family bonding; understanding and tolerance for others; reduced social alienation; pride in the community and nation; social support; enhanced worldview and prevention of social problems by youth at risk.	<ul style="list-style-type: none">• Edginton et al., 2004.

As seen from Table 2.1., leisure can have physiological, psychological, intellectual and social benefits. It is important to note that, for the most part, people with disabilities can gain similar benefits from physical activity and the accrued physical fitness as people without disabilities (Seaman, 1999). Researchers show that people with disabilities have even more reason to participate. People with learning disabilities have a higher mortality rate than the general population and there is a suggestion that an inferior cardiovascular fitness level is one of the main contributions to a shorter life span (Messent, Cookes & Long, 1999). People with disabilities could therefore benefit from regular participation in physical leisure activities.

Despite all the benefits, researchers have shown that more than 50% of individuals starting a fitness program discontinue it after six months or less (Howley & Franks, 1992 in Alexandris, K; Tsorbatzoudis, C & Grouios, G, 2002). Reasons for the withdrawal of participation need to be determined. A number of theories are discussed below in an attempt to explain the motivational forces underlying leisure participation.

2.4. Leisure participation

It is very important for both the leisure service provider and program developer to know what influences a person's decision-making. Marcus & Forsyth (2003) analyzed a number of theories as a basis for understanding motivational forces underlying leisure participation of the general population. Key elements most frequently used in the behavioural and social science research on physical activity are described through a number of these theories. The theories are identified as the Learning theory, Decision-making theory, Behavioural choice theory, Social cognitive theory, the Ecological model and the Relapse prevention model.

2.4.1. Motivational Theories

2.4.1.1. Learning theory

Learning theories emphasize that when learning new, complex behaviour, such as becoming physically active, it is crucial to start with small steps and then progress slowly toward the desired result (Skinner 1953). If for example, an exerciser wants to take a 30 minute walk every day the exerciser can, in order to achieve this goal, start with a 10 minute walk every day and gradually increases it with 5 minutes until the learner walks 30 minutes. By setting small, achievable goals the new exerciser can develop a sense of accomplishment and learn strategies for overcoming barriers that may have led to failure to persist in the past. As these small steps are mastered, the goals can be gradually increased with rewards given after accomplishments (Marcus & Forsyth, 2003).

According to the learning theory, a person is more likely to be physically active when the right circumstances (place, time, previous accomplishment) are in place and pleasurable consequences occur as a result of physical activity. In turn if a person feels that the activity is rewarding, he will more likely put circumstances in place that will allow him to be active in the future. These rewards can either originate from outside the individual, for example the social recognition of friends and family that serves as extrinsic motivation, or it can originate from inside the individual, for example personal satisfaction as an example of intrinsic motivation (Woods, 1998). In leisure participation where physical fitness is one of the motivational forces for participation, this is quite relevant. Participation might feel like punishment with some of the rewards occurring only in the long term (Marcus & Forsyth, 2003).

Several learning theories exist. Two theories that need to be understood when working with learners with disabilities are the Cognitive learning theory and Motor learning theory. Cognitive learning theories explain learning in terms of changes in cognitive processes. Two forms of cognitive learning are discovery learning and meaningful reception learning. Discovery learning allows students to obtain knowledge for themselves by forming and testing hypotheses (Schunk, 2000). The leisure provider needs to arrange activities for the learner to explore. Learners with

mild disabilities might find this approach most interesting for discovering the best methods of moving within their physical environment (Seaman et al., 2003). Meaningful reception learning of facts, concepts, and principles occurs by relating new information to knowledge in memory. It is important to build hierarchical structures in memory in which more general concepts subsume specific ideas (Schunk, 2000). Seaman et al. (2003) refer to the effect that previous learning or experience has on the learning of a subsequent task as transfer of learning. According to Seaman et al. (2003) one can not assume with students with severe disability that transfer has taken place. For instance, once a learner learns to catch and throw a ball, he or she may require instruction to apply those skills to different types of balls, games and settings. The leisure provider needs to accommodate these learners in order to prevent withdrawal from the activities.

Motor learning theories offer a clearer understanding of the processes involved in learning motorically (Kluka, 1999). Many individuals with a disability have difficulty in motor performance and demonstrate “atypical” motor behaviour. It is important that the leisure provider understands the role of development in motor skill acquisition and motor performance, the neurological processes underlying movement, identify sources of atypical motor behaviour and other factors influencing motor performance (Seaman et al., 2003).

Motor learning theories also support the idea of creating optimal learning environments to enhance effectiveness and efficiency in performance (Kluka, 1999). Knowledge on the motor abilities of learners with disabilities and necessary adaptations are thus required to create optimal learning environments and to keep the learners motivated.

2.4.1.2. Decision-Making Theory

The decision-making theory of Janis & Mann (1997) attempts to explain how people decide whether to engage in a particular behaviour based on a comparison of the perceived costs and benefits of the behaviour (Janis & Mann, 1977, as cited in Marcus & Forsyth, 2003). When the benefits outweigh the costs, participation is likely

to occur. A list of the benefits and costs, both in the short- and long-term, can be used as discussion on ways how to eliminate barriers and increase benefits.

2.4.1.3. Behavioural choice theory

Behavioural choice theory is based on decision-making theory but also incorporates research in the areas of learning, planning, and economics (Epstein 1998, as cited in Marcus & Forsyth, 2003). This theory attempts to explain the manner in which individuals choose between different various behavioural options available and how they then divide their time between selected activities. According to this theory, people have a choice between being sedentary and physically active. This choice is influenced by many factors, such as availability of physical activities versus sedentary behaviours, perceived benefits versus barriers, reinforcement (rewards), and degree of effort. Factors influencing individuals to be rather active than having a sedentary lifestyle are:

- Enjoyable and readily available options.
- Participating because of intrinsic desire and not to please someone else.
- Time delay between making the choice and reaping the benefits of the choice.

In the case of physical activity, many of the benefits (for example less risk of developing heart disease) are delayed, while the benefits of being sedentary (for example having fun watching a movie) are immediate. Therefore, it is important to encourage participants to look for immediate, but often overlooked, rewards of being active (for example feeling energized, being a good role model for friends) and to keep in mind the long-term effects of sedentary behaviours that are often neglected at the moment of choice (Marcus & Forsyth, 2003).

Bressan & Rossouw (2002) emphasized the importance of enjoyment in sport as it attracts participants towards an active lifestyle and sustain participation. They concluded that consideration must be given to the following to maximize enjoyment to cultivate sport commitment for visual impaired participants to enjoy sport:

- 1) Develop levels of competence and fitness required to allow individuals the chance to win.

- 2) Maximize opportunities to work hard and to be challenged both physically and mentally.
- 3) Give attention to the cathartic value of physical competition (the release of tensions and frustrations).
- 4) Give special attention to the social dimension of sport. The opportunity to make friends with other individuals with visual impairments contributed to the feelings of enjoyment.

2.4.1.4. Social Cognitive theory

According to the social cognitive theory (Bandura, 1986, as cited in Marcus & Forsyth, 2003), behaviour change is affected by interactions between the environment (for example green space for walking; safe neighbourhood and partner for walking), personal factors (previous physical activity experiences, fitness level, outcome expectations) and attributes of the behaviour itself (enjoyable activity, produces desired benefits, moderate intensity). Each of these three forces may affect or be affected by the other two. Coaches and program developers must be sensitive to the multidimensional nature of participant enjoyment in order to sustain participation.

Central concepts in the social cognitive theory are self-efficacy and confidence. People's perception that they can perform successfully, increases the likelihood that they will engage in that behaviour. Self-efficacy is related to physical activity behaviour (Sallis et al., 1989, as cited in Marcus & Forsyth, 2003), therefore it is important to evaluate and improve a client's self-efficacy for the targeted activity. Other factors positively influencing physical activity are direct reinforcement and observing positive consequences other people experience due to physical activities. According to the social cognitive theory, positive outcomes following participation must outweigh any negative outcomes in order for the individual to participate.

2.4.1.5. Ecological model

Interest has developed in ecological approaches to increase participation in physical activity (McLeroy et al. 1988; CDC 1988; Stokols 1992). These approaches place the

creation of supportive environments on the same level with the development of personal skills and the reorientation of health services (U.S. Department of Health and Human Services, 1996). The ecological model seeks to explain behaviour change in relation to socio-cultural and environmental variables. The basis of this approach is that some environments restrict physical activities by promoting sedentary behaviours and limiting possible active pursuits (for example the position of the elevator motivating usage rather than the staircases positioned at the furthest end) (Sallis, Bauman, & Pratt, 1998, as cited in Marcus & Forsyth, 2003). This model states that it is important to develop physical environments and policies that support activity, in addition to helping individuals develop personal skills, because there are multiple levels of influence on physical activity (McLerory, Bibeau, Steckler, & Glanz, 1988, as cited in Marcus & Forsyth, 2003). The following components indicate the levels of influence.

Components of the ecological model:

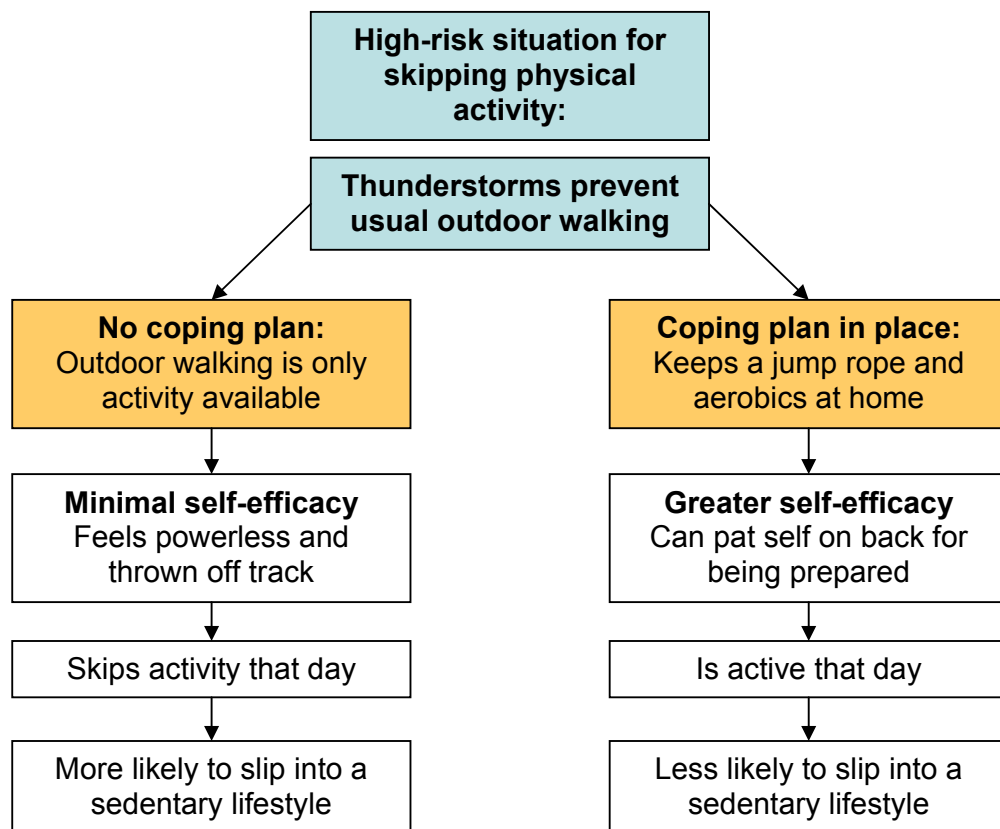
- Personal factors: Psychological, biological and developmental.
- Social factors: Friends, family and co-workers.
- Institutional factors: Companies, schools, and health care facilities.
- Community factors: Organization of physical activity resources, activity-related events in place, safe walking and biking trails.
- Public policy: Tax breaks for healthy behaviours, laws protecting green space, better insurance rates for fit individuals.

2.4.1.6. Relapse Prevention Model

Scholars have used concepts of relapse prevention (Marlatte & Gordon, 1985) to help new exercisers anticipate problems with adherence (U.S. Department of Health and Human Services, 1996). The relapse prevention model aims to maintain change over the long term and prevent participants to become sedentary again. Firstly it is important to identify situations that place a person at a high risk for not being physically active (for example putting a lot of hours at work) and then to develop a "game plan" to avoid or to cope with each of these situations (for example take 10 minute walks as work breaks). Factors that might contribute to the relapse of the new exerciser are negative emotional or physiologic states, limited coping skills, social

pressure, interpersonal conflict, limited social support, low motivation, high-risk situations and stress (Brownell et al. 1986; Marlatt & George 1990, as cited in U.S. Department of Health and Human Services, 1996). By overcoming temptations, self-efficacy is likely to increase. This theory is best explained through the relapse prevention model diagram 2.1, p. 61 as adapted by Marlatt and Gordon (1985, as cited in Marcus & Forsyth, 2003):

Diagram 2.1: Relapse Prevention Model Diagram as adapted by Marlatt and Gordon (1985, as cited in Marcus & Forsyth, 2003)



2.4.2. Motivation theories and leisure functioning

The central concept to almost all the above theories is that participation will likely occur when the perceived benefits of participation outweigh the perceived costs and barriers. According to Witt & Ellis (1989) to derive maximum benefits from leisure involvement, participants need to perceive freedom during these activities. Collectively, “perceived freedom” can be identified as the central indicator of leisure functioning as it is characterized by an individual feeling competent and in control of the experience, as well as the extent to which the activities satisfy his/her intrinsic needs and the depth of involvement and playfulness an individual feel during recreation participation. The characteristics of perceived freedom correlate with the benefits mentioned in the above motivational theories that can be regarded as motivators for leisure participation. Table 2.2 presents the similarities between motivational theories and elements of leisure functioning.

Table 2.2: Motivational theories and leisure functioning

Motivation forces underlining participation <i>(Motivational theories)</i>	Characteristics of perceived freedom <i>(Leisure functioning)</i>
<ul style="list-style-type: none"> - Previous accomplishments (Social Cognitive theory). 	<ul style="list-style-type: none"> - Perceived competence.
<ul style="list-style-type: none"> - Socio-cultural and environmental variables supporting physical activity (Ecological model). 	<ul style="list-style-type: none"> - Perceived control.
<ul style="list-style-type: none"> - Enjoyable experiences (Behavioural choice theory). 	<ul style="list-style-type: none"> - Depth of involvement and playfulness.
<ul style="list-style-type: none"> - Intrinsic motivated (Learning theory). 	<ul style="list-style-type: none"> - Intrinsic needs satisfaction.

The relationship between elements of motivation forces and leisure functioning supports the rationale of this study. In order to determine whether learners are motivated to participate, the learners leisure functioning needs to be determined.

Some of the factors mentioned in the theories that can either be motivators or barriers are personal factors, social factors and environmental factors like availability of time, activities and facilities. Torkildsen (1999) listed the influences of these three categories on leisure participation as well:

Table 2.3: Factors influencing leisure participation (Torkildsen, 1999, p. 114)

Personal factors	Social and circumstantial factors	Opportunity factors
Age	Occupation	Resources available
Stage in life-cycle	Income	Facilities-type and quality
Gender	Disposable income	Awareness
Marital status	Material wealth and goods	Perception of opportunities
Dependants and ages	Car ownership and mobility	Recreation services
Will and purpose of life	Time available	Distribution of facilities
Personal obligations	Duties and obligations	Access and location
Resourcefulness	Home and social environments	Choice of activity
Leisure perception	Friends and peer groups	Transport
Attitudes and motivation	Social roles and contacts	Costs: before, during, after
Interests and preoccupation	Environment factors	Management: policy and support
Skills and ability-physical, social and intellectual	Mass leisure factors	Marketing
Personality and confidence	Education and attainment	Programming
Culture born into	Population factors	Organization and leadership
Upbringing and background	Cultural factors	Social accessibility
		Political policies.

Factors motivating and hindering participation also need to be understood by the leisure service providers in order to manage leisure services effectively.

2.4.3. Leisure participation constraints

Numerous studies have been conducted to identify barriers hindering leisure participation (Edginton et al., 2006; Henderson, 1999; Messent et al., 1999 and Peniston, 1998). For the purpose of this study, the word “constraint” has been used rather than “barrier” due to the nature of the word. Edginton et al., (2004) have discussed the difference between constraints and barriers. They write, “Whereas a leisure barrier presupposes that people have an interest in participating in a leisure activity but are blocked by doing so, a leisure constraint acts to limit interest in a leisure activity itself” (p. 477). “Constraints” include thus a wider range of reasons for behaviour. Constraints include obstacles, limitations, impediments, restrictions, and other factors placed in front of individuals either by themselves or by the culture, society, or environment” (Edginton et al., 2006, p. 28). Jackson (1990, as cited in Edginton et al., 2006) suggests two categories of constraints namely antecedent constraints and intervening constraints. Antecedent constraints imply the interference upon one’s preferences for certain leisure activities. This might include incomplete knowledge of leisure opportunities, personal beliefs about entitlement to leisure, especially those with disabilities, and buying into socially imposed gender roles. Intervening constraints mean those barriers that come between a preference for an activity and actual participation. This might include availability of recreation facilities, hours of operation, the financial implication and the safety of the facilities. For the purpose of this study constraints will be classified under the three main constraints as identified by Crawford & Godbey (1987, as cited in Alexandris, Tsorbatzoudis & Grouios, 2002) as it also correlates with the motivational theories explained above. Three main constraints hindering participation are:

- structural,
- interpersonal and
- intrapersonal barriers.

2.4.3.1. Structural constraints

Structural constraints imply the unavailability of resources facilitating participation. (Alexandris et al., 2002). Torkildsen (1999) listed some of the structural factors

influencing participation. He referred to it as opportunity factors such as available resources; type and quality of facilities; awareness; perception of opportunities; recreation services; distribution of facilities; access and location; choice of activity; transport; costs involved; management; policy and support; marketing; programming; organization and leadership; social accessibility and political policies.

For people with disabilities there are even more constraints to participation. Apart from unavailable programs (Peniston, 1998); inaccessible facilities and areas; unmodified equipment and transportation problems (Henderson, 1999), people with disabilities also experience the human resource environment just as hostile. According to Peniston (1998) programs available for people with disabilities are not always equitable to programs available for people without disabilities. Few recreationists are knowledgeable on topics of disabilities and some agencies are inflexible to change staffing patterns to accommodate a person with special needs. This problem is also relevant to South Africa. The White Paper on the Integrated National Disability Strategy (Office of the Deputy President of South Africa, 1997) therefore states:

“The development of trainers/coaches familiar with sport for disabled people is an essential component which needs to be urgently addressed. This process should involve both familiarizing existing coaches and trainers with aspects relevant to the coaching of disabled athletes, as well as the training of trainers specializing in sport for disabled athletes” (p. 53).

Henderson (1999) found that in many instances constraints towards participation are not the disability itself, but rather a hostile environment unable to meet the needs of the disabled community. This is reiterated in research done by Messent et al. (1999) who identified structural constraints preventing disabled adults living in hostel accommodations from making choices to be physical active. These constraints include:

- Unclear policy guidelines for residential service provision.
- Residential resources (financial).
- Residential staffing (ratios).
- Personal resources (income and expenditure).

- Physical active community leisure (limited options and choices).

As stated before, freedom is central to the notion of leisure. People with disabilities don't always have the freedom to choose due to a lack of financial resources or unavailable services. Structural constraints can thus prevent people with disabilities to participate freely in leisure activities.

2.4.3.2. Interpersonal constraints

Interpersonal constraints imply interpersonal interaction. It might be a main barrier to participation if the participant can not find a partner to do the activity with or have social fears concerning participation. Henderson (1999) reported that particular conditions resulting in inactivity in people with disabilities are social fears, social stigma and the lack of social support. According to Shulman (1976, as cited in Kavale, Forness & Bender, 1988) learning disabled children functioned inadequately in regular community recreation programs. One of the reasons was a lack of necessary social skills to participate.

Social support of recreation partners or friends and professionals who understand the disabled participant's abilities, can greatly contribute to participation in physical activities (Henderson, 1999).

2.4.3.3. Intrapersonal constraints

Intrapersonal constraints are internal constraints related to individual psychological states and attitudes. According to Crawford & Godbey (1987, as cited in Alexandris et al., 2002) examples of intrapersonal constraints are:

- perceived skills and fitness level;
- perceived self-competence;
- subjective evaluation of the appropriateness of opportunities;
- perceived awareness; and
- negative attitudes related to past experiences (Alexandris et al., 2002).

According to Alexandris, Grouios, Tsorbatzoudis & Bliatsou (2001, as cited in Alexandris et al., 2002), intrapersonal constraints are the most powerful predictors of commitments to participation.

Considering all the motivation forces and constraints mentioned above, it becomes clear that a number of determinants influence leisure participation. For an individual to participate, the activity needs to be enjoyable and he/she needs to feel competent and in control. Structural-, interpersonal- and intrapersonal constraints also need to be minimal for participation to continue. Subsequently, for the purpose of this study, attention will be given to intrapersonal constraints as it relates to leisure functioning.

2.4.4. Leisure participation constraints and leisure functioning

Similarity exists between intrapersonal constraints and leisure functioning. As noted above, intrapersonal constraints are the most powerful predictors of commitments to participation. This validate the aim of this study, namely to determine the leisure functioning of learners with disabilities to measure their commitment for participation. In order to clarify the link between intrapersonal constraints, leisure functioning and motivation, the self-determination theory as theoretical basis of this assumption, needs to be discussed.

2.4.4.1. Self-determination theory

Self-determination theory (Deci & Ryan, 1985) suggests three psychological needs (mediators) that influence motivation through cognitive processes. These needs that are important to energize human action are the need for autonomy, competence, and relatedness (Alexandris et al., 2002). These needs can be described as a need to feel connected to others within a social milieu (relatedness), to function effectively in that milieu (competence) and to feel a sense of personal initiative in doing so (autonomy) (Deci & Ryan, 1994, as cited in Weinberg & Gould, 2003).

Iwasaki & Mannell (1999, as cited in Alexandris et al., 2002) suggested the following similar constructs as cognitive mediators for motivation:

- perceived autonomy

- perceived competence;
- performance pressure;
- task involvement and
- perceived playfulness-leisureliness.

Self-determination theory also suggests that social factors and the social environment (e.g. social values, culture and other people's behaviour towards us) can influence these psychological mediators either positively or negatively. Vallerand and Losier (1999, as cited in Alexandris et al., 2002, p. 238) combined the self-determination theory with motivation research and used a motivational sequence as illustration:

“social factors → psychological mediators → types of motivation → behavioural consequences”

This sequence suggests that social factors influence the participant's perception of psychological mediators, which affects their motivation and determine their behaviour. Theorists and researchers correlate intrapersonal constraints to psychological mediators (Alexandris et al., 2002). Therefore intrapersonal constraints need to be identified and accounted for to motivate individuals towards leisure participation. Alexandris et al. (2002) suggested that in order to better conceptualize intrapersonal constraints, future studies should emphasize the investigation of intrapersonal constraints, such as perceived competence, perceived autonomy, task involvement and perceived playfulness, which act as psychological mediators of motivation.

The intrapersonal constraints listed above are similar to the prerequisite conditions identified by Witt & Ellis (1989) for individuals to derive maximum benefits from their leisure experiences. These conditions are:

- perceived leisure competence;
- perceived leisure control;
- whether the perceived needs of the participant are met;
- depth of involvement and
- playfulness.

As stated in chapter 1, p. 21 the conditions listed above are elements contributing towards feelings of freedom during leisure participation. It was also noted that “Perceived freedom” is the central indicator of leisure functioning (Witt & Ellis, 1989). The similarity between the psychological mediators for motivation towards participation and leisure functioning is listed in Table 2.4:

Table 2.4: Psychological motivation and leisure functioning

Psychological mediators for motivation (self-determination theory)	Conditions for individuals to derive maximum benefits from their leisure experiences (leisure functioning)
<ul style="list-style-type: none"> - perceived competence; - perceived autonomy; - performance pressure; - task involvement and - perceived playfulness-leisureliness (Alexandris et al., 2002).	<ul style="list-style-type: none"> - perceived leisure competence; - perceived leisure control; - whether the perceived needs of the participant is met; - depth of involvement and - playfulness (Witt & Ellis, 1989).

Thus, the self-determination theory supports the argument that by determining the perceived leisure functioning of individuals, their probability of continued participation can be identified through an analysis of their psychological mediators of motivation. Collectively, the conditions listed above, reflect the perceived freedom an individual experience during leisure participation (Witt & Ellis, 1989).

2.5. Leisure functioning: Perceived freedom versus helplessness

Witt & Ellis (1989) states that high levels of perceived freedom in leisure help individuals to increase their level of independence/freedom and thereby achieve an independent leisure lifestyle. According to Witt & Ellis (1989) it can be assumed that on the other hand low levels of perceived freedom can leave the individual with a sense of helplessness in terms of leisure. Learned helplessness is defined as an

acquired condition in which a person perceives that his or her actions have no effect on the desired outcome of a task or skill (Dweck, 1980, as cited in Weinberg & Gould, 2003). Helplessness in leisure develops as a result of continued failure and continued negative outcomes associated with recreation and leisure experiences. Helplessness needs to be avoided, because it can lead to depression, apathy, and an expectation of failure in other realms of life.

Attribution theory provides the theoretical framework for understanding the relationship between perceived freedom in leisure and the determination of the participant's perceived leisure functioning. Factors contributing to helplessness are better explained through the Attribution theory in the next section as well.

2.5.1. Theoretical basis: Attribution theory

According to Witt & Ellis (1989) attribution theory provides the main conceptual basis for understanding perceived freedom in leisure. Attribution theory is based on the assumption that people need to understand events and activities in their lives. To achieve this understanding people assign or attribute causes to events and characteristics to other people in situations in which they are observed. The most basic attribution categories are stability (a factor to which one attributes success or failure is either fairly permanent or unstable), locus of causality (a factor is either external or internal to the individual), and locus of control (a factor is or is not under our control) (Weinberg & Gould, 2003). These three categories are explained in the following paragraphs:

a) Stable/unstable dimensions

This dimension relates to the occurrence of the cause over time. Stable causes are characteristics that change gradually over time with only deliberate and concentrated effort for example, ability. Unstable causes are unpredictable, dynamic and change frequently for example luck, fate and effort. The second category is the internal or external dimension.

b) Internal/external dimension

This dimension explains the degree to which a cause is associated with the characteristics of the individual (ability and effort), or to some influence beyond the control of the individual (luck, fate and task difficulty). For example, when an athlete wins a race he/she may feel the good performance was due to his/her ability (internal cause) or the athlete may feel luck was on his/her side (external cause). The third category explains whether a participant believes that success and failure is in or out of his/her control.

c) In one's control/ out of one's control

This category explains the degree to which the individual attributes success or failure to factors in one's control (for example skills and effort) or not in one's control (for example task difficulty or cost of the program). For example, a learner wins a golf match and attributes the success to a factor he/she can control (for example his/her exercise program) or a factor out of his/her control (for example the opponents lack of physical conditioning).

Weinberg & Gould (2003, p. 64) documented the emotional reactions resulting from attributing causes to different stability, causality and controlling factors:

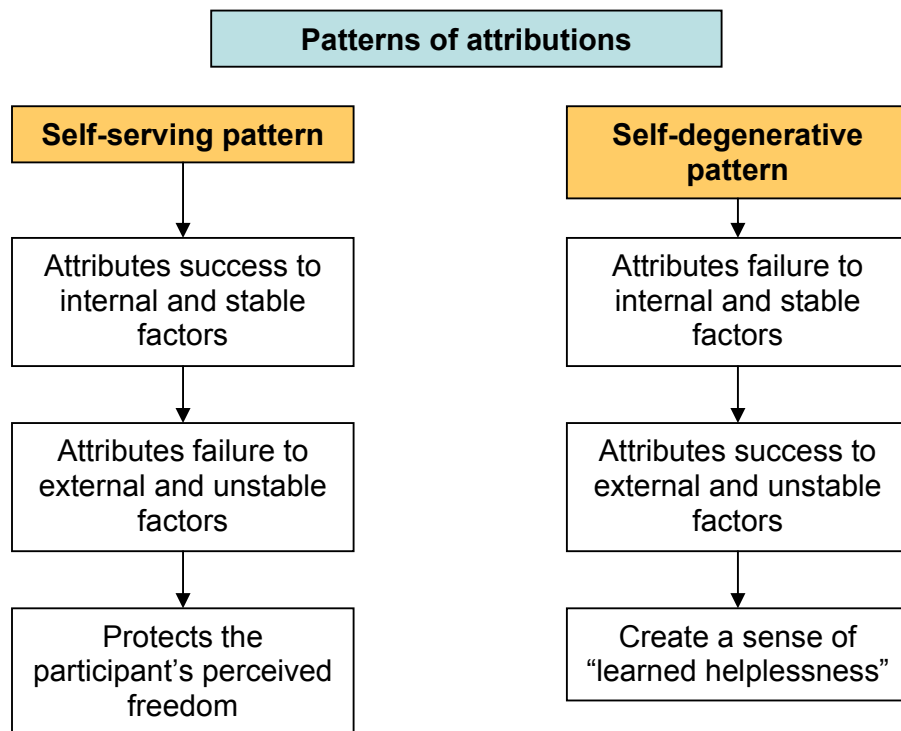
Table 2.5 Psychological results caused by different attributions

Attributions	Psychological results
<i>Stability factors</i>	<i>Expectancy of future success</i>
Stable (for example talent and ability)	Increased expectations of success
Unstable (for example good luck and fate)	Decreased expectations of success
<i>Causality factors</i>	<i>Emotional influence</i>
Internal causes (for example effort and ability)	Increased pride or shame
External causes (for example luck or competitors ability)	Decreased pride or shame
<i>Control factors</i>	<i>Emotional influences</i>
In one's control (for example skills and effort)	Increased motivation
Out of one's control (for example task difficulty or cost of the program)	Decreased motivation

Two patterns of attributions are noticeable, the self-serving and self-degenerative pattern. The self-serving pattern attributes success to internal and stable factors and failure to external and or unstable factors. Thus, a participant operates in the self-serving pattern when he/she attributes success to personal abilities and failure to something other than the lack of ability. The self-serving pattern protects the participant’s “perceived freedom” in leisure.

In contrast the self-degenerative pattern attributes success to external and unstable causes and failures to internal and stable causes. Thus, the participant denies credit for successes in his/her live, but takes responsibility for failures in his/her life. Research (Abramson, Garber, & Seligman, 1980; Langer, 1983; Iso-Ahola, 1980 and Ellis & Niles, 1985, as cited in Witt & Ellis, 1989) has shown that the results of the degenerative pattern can create a sense of “learned helplessness” where failure is overly attributed to oneself and success is denied to oneself. Diagram 2.2 displays these patterns graphically:

Diagram 2.2: Patterns of attributions



2.5.2. Perceived freedom

Collectively, intrinsic motivation, perceived competence, perceived control, and playfulness describe an individual's degree of "perceived freedom" in leisure (Witt & Ellis, 1989). Perceived freedom can be identified as the central indicator of leisure functioning. These conditions are considered essential to successful leisure functioning (Witt & Ellis, 1989).

The self-serving pattern is assumed to enhance the sense of competence, control and intrinsic motivation, which provides the basis for playful encounters with others. The enhancement of the self-serving pattern can therefore contribute to the participant's perceived freedom.

2.5.3. Learned helplessness

The self-degenerative pattern can create a sense of learned helplessness. Weinberg & Gould (2003) states that the person with a sense of helplessness feels doomed to failure and feels that nothing can be done about it. This needs to be evading as it can lead to depression, apathy, and an expectation of failure in other realms of life.

High levels of perceived freedom (leisure functioning) of individuals can thus be an indication of the probability of continued participation. The Attribution theory indicated how learners can perceive freedom or feel helpless through the different patterns of attributing causes to events. Leisure providers need to foster self-serving patterns in order to develop perceived freedom. Self-degenerative patterns of attributions need to be discouraged in order to evade the feeling of helplessness.

2.6. Conclusion

In this Chapter, the nature of leisure functioning has been explained from a subjective view of leisure and with "perceived freedom" as the central indicator. The

level of participants' leisure functioning is determined by the level of freedom they experience in their leisure endeavours.

The importance of developing an independent leisure lifestyle in persons with disabilities was discussed. Leisure has physiological; psychological; intellectual and social benefits that are just as important for people with disabilities than people without disabilities. Despite all the benefits, research has shown that more than 50% of individuals starting a fitness program discontinue it after six months or less. The motivational theories were discussed in order to understand human motivational forces underlying leisure participation. The correlation between the motivational forces and the components of leisure functioning was notable.

Leisure constraints were also examined to determine factors that might hinder leisure participation. The three main constraints (structural, interpersonal and intrapersonal constraint) hindering participation were discussed. Intrapersonal constraints, which are the most powerful predictors of commitments to participation, had also components similar to leisure functioning. The link between intrapersonal constraints, leisure functioning and motivation were clarified through the self-determination theory. The attribution theory provided the main conceptual basis for understanding perceived freedom in leisure. Learned helplessness as a result of wrong patterns of attributions was also explained through the Attribution theory. The similarities between the components of leisure functioning, motivational forces and constraints hindering participation, validates the aim of the study. The aim of the study were to determine the leisure functioning (level of freedom) of learners with learning and physical disabilities.

CHAPTER 3

LEISURE OPPORTUNITIES FOR LEARNERS WITH SPECIAL NEEDS – A LITERATURE REVIEW

3.1. Introduction

Leisure and how it relates to disability have been studied from a physiological, psychological and social integration perspective. Little has however been written on what leisure means to people with disabilities (Prost, 1992). What do freedom, discretionary time and meaningful experiences mean to a person with a disability? (Prost, 1992). In Chapter 2 it was concluded that perceived freedom during leisure participation is vital for meaningful and continued participation. It is also discussed that a lot of people with disabilities often do not experience freedom during leisure participation due to numerous constraints (Prost, 1992). According to Kelly (1996) realization of leisure freedom requires opportunities that are accessible and attractive.

This chapter will focus on the leisure opportunities available to learners with disabilities in an internationally and nationally context, as well as the opportunities available at the specific school for the purpose of this study. Before the opportunities for people with disabilities are discussed, terminology relating to “disability” will be clarified.

3.2. Terminology

3.2.1. Handicap

According to the World Health Organization a handicap is a disadvantage, resulting from an impairment or disability that limits or prevents the individual to fulfil a role that is normal (depending on age, sex, social and cultural factors) (The National Multiple Sclerosis Society, 2006).

According to Nagler & Wilson (1995) the environment, society and attitudes of people can limit the individual with a disability, to fulfil a role that is normal for that person. They refer to a handicap as:

“...the presence of physical and social barriers constructed by individuals, institutions, and societies that prevent people with disabilities from participating equally or fully in their environments” (p. 257).

Wright (1960, as cited in the article written by Ward & Fletcher-Janzen, 2000) makes a distinction between handicap and disability in the Encyclopedia of special education (Reynolds & Fletcher-Janzen, 2000). She views disability as a medical condition and a handicap reflecting the demands placed on an individual in a particular situation. The different medical conditions limiting people will be discussed under the next heading.

3.2.2. Disability

According to the United States of America’s federal government disability is the “inability to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to last or has lasted for a continuous period of not less than twelve months” (Anderson, 1994, p. 476). The World Health Organization supports the above definition by means of defining disability as the “consequences of impairment in terms of functional performance and activity by the individual” (Ward & Fletcher-Janzen, 2000, p. 600). Disability may refer specifically to activity limitation, attributed to interactions between personal and environmental factors (Ustun, 2003, as cited in Sherrill, 2004). The definitions mentioned above view disability as the inability to function normally because of the impairment and not the impairment itself. Oyiborhoro (2005) made a distinction between the word “disability” and “handicap” which highlights this definition of disability:

“Disability refers to a physical, physiological, mental, or sensory abnormality, whereas handicap refers to the consequences caused by the disability. A handicap is the extent and degree to which a disability impedes, limits, or

restricts an individual's participation in certain activities or tasks for which a normal body function is needed. Disability therefore results in activity limitation or participation restriction as a result of the presence of a physical or physiologic dysfunction that an individual may present" (p. 3).

Cerebral Palsy for instance, causes activity limitation (disability) and social participation restriction (handicap) (Oyiborhoro, 2005).

Disabilities can be categorized by their origin. A disability can be a) congenital, b) developmental or c) acquired. These three categories are explained separately in the following paragraphs.

a) Congenital disabilities

"Congenital disabilities refer to a disability existing at, and usually before, birth. It refers to a condition that is present at birth, regardless of its causation" (Anderson, 1994:368). Serious congenital defects, leading to lifelong handicap, affect 3-8% of Third World populations. Some of the common disorders include fetal alcohol syndrome, Down syndrome, neural tube defects, and fragile-X syndrome (See glossary p. 169 for definitions) (Anderson, 1994).

b) Developmental disabilities

"Developmental disability is a substantial handicap having its onset before the age of 18 years and of indefinite duration" (Anderson, 1994, p. 476). It is defined as difficulty in seeing, hearing, walking, writing, conceptualizing, or in performing other functions within the normal range for a child's age. It is diagnosed by specific symptoms for example epilepsy, mental retardation and cerebral palsy (Anderson, 1994).

c) Acquired disabilities

According to Anderson (1994, p. 18) the concept "acquired" can be defined as "not genetic, but produced by influences originating outside the organism". Acquired disability occurs through disease, accident or injury. It can prevent full physical and/or mental functioning for example quadriplegia or brain damage (Nagler & Wilson, 1995).

Different disabilities with different times of onset of the disability exist. Each disability has its own definition and challenges. The Individuals with Disabilities Education Act of 1997 (IDEA, 1997) defined the 13 most commonly occurring disabilities. These disabilities include autism, deaf-blindness, deafness, emotional disturbance, hearing impairment, mental retardation, multiple disabilities, orthopaedic impairment, other health impairment, specific learning disabilities, speech or language impairment, traumatic brain injury and visual impairment (Seaman, DePauw, Morton & Omoto, 2003).

Table 3.1: Definitions of different impairments

Term	Definition
Autism	“A developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age 3 that adversely affects a child’s performance. Other characteristics often associated with autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change in daily routines, and unusual responses to sensory experiences. The term does not apply if a child’s educational performance is adversely affected primarily because the child has a serious emotional disturbance” (U.S. Department of Education, 1999, as cited in Seaman et al., 2003, p. 376).
Deafness	A severe hearing impairment. The child is not able to process linguistic information through hearing, with or without amplification.
Deaf-blindness	A simultaneous hearing and visual impairments of which the combination causes such severe communication and other developmental and learning needs that the person needs supplementary assistance to address their

	educational needs. Special education programs solely for children with hearing impairments or severe disabilities are not sufficient for appropriate education.
Hearing impaired (Hard of hearing)	A disability in which the person has residual hearing that, with the use of a hearing aid, is sufficient to enable the successful processing of linguistic information.
Mental retardation	“Mental retardation refers to substantial limitations in present functioning. It is characterized by significantly subaverage intellectual functioning, existing concurrently with related limitations in two or more of the following applicable adaptive skill areas: communication, self-care, home living, social skills, community use, self-direction, health and safety, functional academics, leisure, and work. Mental retardation manifests before age 18” (Luckasson et al., 1992 as cited in Seaman et al., 2003, p. 378)
Multiple disabilities	It is a combination of any of the disabilities defined independently. Common combinations include mental retardation-orthopedic impairment, orthopedic impairment-speech impairment, and mental retardation and other health impairment.
Orthopedic(Physical) impairment	A severe orthopedic (deformities of the musculoskeletal system) impairment affecting a child’s educational performance. Impairments can be caused by congenital anomaly (for example clubfoot and absence of some member); disease (for example poliomyelitis and bone tuberculosis) and impairments from other causes (for example cerebral palsy, amputations, fractures and burns).
Other health impairments	a) Having an autistic condition characterized by

	<p>severe communication and other developmental and educational problems.</p> <p>b) “Having limited strength, vitality and alertness, due to chronic or acute health problems such as heart conditions, tuberculosis, rheumatic fever, nephritis, asthma, sickle cell anemia, hemophilia, epilepsy, lead poisoning, HIV and AIDS, leukemia, or diabetes, which adversely affect a child’s educational performance.”</p>
Emotional disturbance	<p>One or more of the following characteristics need to be present over a long period of time and to a marked degree, which negatively affects educational performance:</p> <ol style="list-style-type: none"> 1) An inability to learn not due to intellectual, sensory, or health factors; 2) “An inability to build or maintain satisfactory interpersonal relationships with peers and teachers; 3) Inappropriate types of behaviour and feelings under normal circumstances; 4) A general pervasive mood of unhappiness or depression; or 5) A tendency to develop physical symptoms of fears associated with personal or school problems.” 6) Schizophrenia
Specific learning disability	<p>“Specific learning disability means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual disabilities,</p>

	brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not apply to children who have learning problems that are primarily the result of visual, of hearing, of motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantages.”
Speech impairment	A communication disorder that affects a child’s educational performance negatively. These disorders include stuttering, impaired articulation, language impairment, or voice impairment.
Traumatic brain injury	“An acquired injury to the brain caused by an external physical force, resulting in total or partial functional disability or psychosocial impairment, or both, that adversely affects a child’s educational performance. The term applies to open or closed head injuries resulting in impairments in one or more areas, such as cognition; language; memory; attention; reasoning; abstract thinking; judgment; problem solving ; sensory, perceptual, and motor abilities; psychosocial behaviour; physical functions; information processing; and speech. The term does not apply to brain injuries that are congenital or degenerative, or to brain injuries induced by birth trauma” (U.S. Department of Education, 1999, as cited by Seaman, 2003, p. 385).
Visual impairment	“One who has visual acuity of 20/200 or less in the better eye even with correction or whose field of vision is narrowed so that the widest diameter of his visual field subtends an angular distance no greater than 20 degrees” (American Foundation for the Blind, 1963, as cited in Seaman, 2003).

For the purpose of this study the focus was on leisure functioning of learners with learning and physical disabilities. These two impairments will subsequently be discussed in detail.

3.2.3. Learning disability

Learning disability is used as the umbrella term referring to different types of disorders. Due to the numerous characteristics and manifestations of this disability, it is difficult to define. According to the Individual with Disabilities Education Improvement Act of 2004, specific learning disability can be defined as a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in the imperfect ability to listen, think, speak, read, write, spell or do mathematical calculations. Disorders included in the definition are such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. Specific learning disability does not include a learning problem that is primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage.

Thus, learning disability can be seen as a condition that prevents a person to attain his or her full potential due to a dysfunction in a person's central nervous system manifesting in language-related areas.

Peniston (1998) lists the types of disorders that can occur under the umbrella category of learning disabilities:

1. *Dyscalculia*: The inability to do mathematics.
2. *Dysgraphia*: The inability to write.
3. *Dyslexia*: The inability to read.
4. *Associative reaction*: The involuntary movement of one part of the body because of movement of another part of the body (for example the left arm moves when the right arm moves).
5. *Auditory perceptual problem*: The individual experience difficulty absorbing information through the sense of hearing and or processing that information.

6. *Catastrophic response*: The involuntary response to too many sounds, sights, extreme emotions, or other strong stimuli. The individual experiences an overloading of senses.
7. *Cognitive disorganization*: The individual finds it difficult to think in an orderly and logical way and therefore have difficulty planning tasks and organizing time.
8. *Crossing the midline*: The individual experiences difficulty in moving his/her limbs across the centre of his/her body. This results in difficulty writing across a page or catching a ball on either side of the body with the opposite hand.
9. *Directional problems*: The learner has difficulty in automatically distinguish between left and right; learning north, south, east and west; and learning the layout of a large symmetrical building.
10. *Disinhibition*: The learner has difficulty behaving appropriately in an automatic way for example laughing in inappropriate situations or exhibit poor social graces.
11. *Intersensory problem*: The difficulty to use two senses at once or associate two senses, for example, the learner will have difficulty driving a car and having a conversation at once.
12. *Short-term memory problem*: The learner can not remember numbers, names or facts that occurred only a few minutes ago.
13. *Perceptual motor problems*: The learner finds it difficult to perform a task that requires co-ordination due to inaccurate information received through the senses.
14. *Visual motor problems*: The learner can not imitate a task, for example learning a dance step while watching the instructor.
15. *Auditory motor problem*: The learner has trouble hearing something and then performing the task.
16. *Pro-prioceptive perceptual problem*: This includes a couple of areas. One area is defensiveness- avoidance to be touched. Another area is a discrimination problem. This implies the learner has difficulty determining the difference between similar objects for example acrylic and wool yarn. Tactile pressure problems are another area. This problem cause the learner to misjudge the correct amount of pressure needed for fine motor acts such as holding small items like crayon without breaking it.
17. *Visual figure-ground problem*: The difficulty to find things like keys on a crowded desk, or a ball in the playing field.

18. *Visual sequencing problem*: The learner has trouble seeing letters, words or numbers in the correct order.

19. *Visual discrimination problem*: The learner has difficulty identifying the difference between similar objects for example the difference between the letters “v” and “u”.

20. *Depth perception problem*: The learner facing obstacles in perceiving how far away or close an object is.

As can be seen from the above types of disorders, the term learning disability represents a diversity of characteristics. Researchers are unable to identify one single cause for learning disability that is consistent in all cases. Possible causes as a familial factor are listed as: previous diagnoses in a close relative; difficult pregnancy; post-birth traumas (e.g. oxygen deprivation and head trauma); and chronic ear infections and allergies (Peniston, 1998). Other possible causes listed by Feingold, 1974, 1976; Kavale, Forness, & Bender, 1987; & Mercer, 1987, as cited by Jansma & French, 1994, p. 148 include the following:

- “Chemical neurotransmitters break down at one or more of a neuron’s synaptic gaps, which prevents a smooth flow of sensory messages.
- Low blood sugar (hypoglycemia) causes learning disabilities.
- Artificial food additives cause learning problems.
- A vitamin synthesis deficiency may result in learning disabilities.
- The process of myelinization occurs prematurely within the nervous system.
- There is some evidence available that certain cases are genetically determined”.

In addition, limited environmental stimulation, malnutrition and poor teaching strategies can have an influence on the learners’ emotional development and motivation to learn (Jansma & French, 1994).

Many investigations have been published on the impact learning disabilities have on learners’ motor skills. Longhurst, Coetsee & Bressan (2004) summarized some of these findings:

- Not all, but many do display motor problems (Bruininks & Bruininks, 1977; Miyahara et al., 1995; Schaffer et al., 1989; Sherrill & Pyfer, 1985).
- Children with learning disabilities are weaker than children without learning disabilities on tasks of bilateral co-ordination (Haubenstricker, 1982).
- Many of them display visual and spatial motor difficulties and can thus be considered "clumsy" (Miyahara et al., 1995).
- They showed more overflow movement, had difficulty with visual-motor tasks, and were inferior to children without learning disabilities in spatial orientation and tasks requiring motor planning and sequencing of motor acts (Lazarus, 1990).

3.2.4. Physical disability

Physical disability implies the physical loss or degeneration of abilities to an individual due to congenital (prior to or during birth) or adventitious (traumatic or after birth) factors (Leitner & Leitner, 2004). Howe- Murphy and Charboneau (1987, as cited in Leitner & Leitner, 2004) stipulate the sources from which physical disability may stem:

- Chronic health-related conditions (e.g. diabetes, asthma and cystic fibrosis).
- Congenital malformations (e.g. heart defects and spina bifida).
- Muscular-skeletal system disorders (e.g. muscular dystrophy, arthritis, and scoliosis, which affect the ability to use muscles, joints, and skeletal structure).
- Nervous system impairments (e.g. cerebral palsy, stroke, multiple sclerosis, spina bifida, spinal cord injury, and epilepsy).

3.2.5. Physical disabilities encountered at the ELSEN School in Tshwane

3.2.5.1. Cerebral palsy

Cerebral Palsy is a non-progressive disabling condition of variable degrees. Cerebral Palsy causes variable impairment of the coordination, tone and strength of muscle action impacting on postures and movement. It is caused by abnormal development or damage of the brain during pregnancy, at birth or in infancy. It can also be caused by illness such as meningitis, encephalitis and HIV/Aids encephalopathy. This disability may be associated with perceptual deficits, visual and hearing problems, speech difficulties and epilepsy (Sunshine, 2005). Cerebral Palsy is classified in three different impairments according to the severity and distribution of the impairment:

a) Quadriplegia

Quadriplegia involves the impairment of the total body i.e. head, neck, trunk and all four limbs. Asymmetry may be the result of one side of the body being more severely involved (Sunshine, 2005).

b) Diplegia

Diplegia involves the impairment of the lower limbs. It may also be asymmetrical (Sunshine, 2005).

c) Hemiplegia

Hemiplegia involves the impairment of the upper and lower limbs and trunk on the same side.

Learners with Cerebral Palsy experience motor control problems usually due to spasticity, athetosis or ataxia. Cerebral spasticity is a state of increased muscle tone with increased reflexes. This results in uncoordinated, immature movements. It usually involves the flexor muscle groups of the arms and the extensors of the legs. Athetosis is characterized by involuntary writhing movements, which are

uncontrollable, irregular and jerky. This is due to damage to the basal ganglia. These movements often increase with emotion and stress. Ataxia is associated with intention tremor, incoordination and difficulty with balance and trunk control. Ataxia is a result of damage to the cerebellum (Sunshine, 2005).

3.2.5.2. Traumatic Brain Injury

This implies damage to the brain due to a head injury following trauma for example a car accident or surgery to remove tumours. Movement patterns and distribution of impairment is often atypical (Sunshine, 2005).

3.2.5.3. Progressive conditions

Progressive conditions often result in a steady reduction of physical functioning. These conditions include among others, Fredrich's Ataxia, brain tumours, Cerebral Atrophy, Muscular Dystrophy and Spinal Atrophy (Sunshine, 2005).

3.2.5.4. Injuries to the spinal cord

Injuries to the spinal cord imply full or partial paralysis below the level of injury. Spasticity, due to the lack of inhibition to the spinal reflex and the loss of sensation can also be present (Sunshine, 2005).

3.2.5.5. Medical conditions resulting in muscle weakness and reduced mobility

These conditions influence the learner's leisure participation due to the effect it has on the learner's muscles and mobility. These conditions include Polio, Guillian Barré, Neuropathies, Myopathies and Myositis (Sunshine, 2005). All of these conditions are defined in the Glossary p. 169.

3.2.5.6. Medical/Genetic conditions resulting in mobility problems

Other conditions resulting in physical difficulties due to low muscle tone are Osteogenesis Imperfecta (brittle bones that break easily resulting in slowed bone

growth and deformities); Juvenile Rheumatic Arthritis that results in joint pain and stiffness; and Genetic syndromes, such as Down's syndrome (Sunshine, 2005).

3.2.5.7. Orthopedic disabilities

“Orthopedic” relate to the correction of deformities of the musculoskeletal system. Orthopedic disabilities encountered at the school are amputations, amelias (congenital absence of a limb or part of a limb), congenital joint abnormalities and idiopathic scoliosis (Sunshine, 2005).

3.2.5.8. Other conditions

Other conditions encountered at the school which do not fall into the categories above are the following: Specific learning disabilities; Attention Deficit Disorder; Attention Deficit Hyperactivity Disorder, Epilepsy; Visual impairments; Hearing impairments; Speech impairments such as Apraxia and Dysarthria and Cardiac defects (Sunshine, 2005).

Leisure providers must take note that these disabilities might cause weakness of limbs, paralysis, and uncontrolled muscles. Modifications of equipment and rules might be required (Leitner & Leitner, 2004). In order for people with disabilities to experience freedom during leisure as many of their non-disabled friends do, accessible and attractive opportunities are required (Kelly, 1996).

3.3. Adapted physical education

Adapted physical education is defined as a program of physical activity designed for learners with disabilities (Seaman et al., 2003). Adapted physical education contributes to the physical and motor development of students with disabilities. It also contributes to the growth in social, language, emotional and cognitive domains. Adapted physical education considers the needs, interests and abilities of students in the program. The program includes appropriate modifications of the instruction, environment and activity. The program also includes activities for the development of

physical fitness; psychomotor functioning; fundamental motor patterns and the necessary skills and adaptations for participation in activities of daily living, aquatics, dance, individual and group sports and games, including lifetime, recreational, and competitive experiences. The aim of adapted physical education is to facilitate the student's participation with age-appropriate, typically developing peers and to provide access into the general physical education curriculum (Seaman et al., 2003).

In 1970 the term “adapted physical activity” was introduced in order to expand adapted physical education beyond the school setting. This was internationally accepted and considered as the umbrella term. Adapted activity is now defined by Sherrill & DePauw (1994, 1997, as cited in Seaman et al., 2003, p. 3) as:

“A cross-disciplinary theory and practice that attempts to identify and solve motor problems throughout the life span; develop and implement theories that support access to sport and active lifestyles; and develop cooperative home-school-community service delivery and empowerment systems”

Adapted physical activity contributes to the physical and motor development of people with disabilities. These services however did not always exist. People with disabilities have for the most part of history been excluded from society.

3.4. The history of leisure, recreation and sport for people with disabilities: An International perspective

Throughout history, leisure development for people with disabilities was dependant on the lifestyle of society and how they valued disability and illness. This section attempts to provide an overview of the historical development of leisure for people with disabilities from 5000 B.C. until current developments. Each era's lifestyle; leisure participation; their position towards the disabled and illness and their rehabilitation modalities, will be discussed.

3.4.1. Folk era (5000 B.C.-700 B.C.)

The folk era is characterized by a society with a nomadic lifestyle. Survival and protection was dependant on each individual in the group. Those with illnesses or disability, which could not contribute to the safety and survival of the group, were often left behind for the natural elements to take their toll. Leisure and recreation were woven into rituals of dance and music. Physical skills necessary for survival were taught through play. Natural remedies were used for rehabilitation. Natural minerals and warm water were utilized as remedies for aching muscles. Sores and wounds were treated with heat, herbs and natural remedies (Howe-Murphy & Charboneau, 1987).

3.4.2. Agrarian society (3000 B.C. - ± 1000 B.C.)

With the development of agricultural skills people settled for longer periods of time in specific areas. Survival wasn't the primary focus anymore and a shift in the cultural pattern was notable. A variety of new forms of art emerged, for instance the decorating of containers and cloths. New games were developed as pastimes. Holiness and health were indissoluble, that could be the reason why illness and disability were seen as punishment for sin. In these ancient times, different cultures used a variety of leisure activities for overall improvement of health. The Egyptians built temples for the ill where they could stroll in the lotus gardens and play musical instruments. Dance, concerts and symbolic worship were used as treatment (Austin & Crawford, 1996). The Chinese developed the unique art of porcelain ornaments and Cong Fu and Tai Chi were practiced for general health. Even today Yoga is practised that originated in the Hindu culture (Howe-Murphy & Charboneau, 1987).

3.4.3. The Greek and Roman society (1000 B.C. - A.D. 500)

This era was characterized by a striving to attain perfection of body, soul and mind. The Greeks moved away from the overriding religious way of thinking and sought to understand humans through reason. Prominent historical figures like Plato and Appollo made significant contributions in the field of health and rehabilitation. Temples were built to help people find balance between body, soul and spirit. An

ancient temple named Epidaurus, consisted of hospital quarters, a gymnasium, a library, theatre and a stadium (Howe-Murphy & Charboneau, 1987). Apollo, worshiped as the god of music, poetry and medicine, emphasized the relationship between health and recreation. The body was seen as the temple of the soul. Recreation was used to promote a healthy body and soul. Herodotus (480 B.C.) used gymnastics as rehabilitation in order to improve physical discomfort. Hippocrates made a huge contribution to the development of rehabilitations by stressing the individual treatment rather than the mass care of patients. Plato focused on the value of play and rituals in his “8th” book of laws in the fourth century B.C.” Unfortunately leisure and culture were only available for the free man. Slaves, women, the poor and possibly those with disabilities, could not partake in any activities. Mass gatherings with brutal activities for the enjoyment of the crowd were available for everyone. The public baths that were used for exercise, hydrotherapy and social interaction, were available to everyone. Although disease was considered as a result of natural causes, people with disabilities had very little value to the society. Plato proposed in his “Republic” on how to handle a malformed baby: they were to be left on a mountaintop as sacrifice (Howe-Murphy & Charboneau, 1987, p. 145).

3.4.4. Medieval (A.D. 900 - A.D.1400)

This was the era between the fall of the Roman Empire in the 400’s until the Renaissance in 1700. With the decline of the Roman Empire, Christianity dominated and ruled the Western civilization. Temporal and secular activities were abolished and replaced with sacred, spiritual activities. For example dance, festivals, music and games were replaced with prayer and meditation. Illness and disabilities were again viewed as supernatural. In this period of time the feudal lords bought people with disabilities for their own entertainment. The more severe the deformity, the greater the laughter they provoked from the audience. It is tragic that for the first time people with disabilities had economic value. The church took responsibility for the ill and disabled. Monasteries were built to provide custodial care and basic nutrition for the disabled and ill. Hospitals were built as well, but mainly for spiritual health (Howe-Murphy & Charboneau, 1987).

3.4.5. Renaissance (1300–1600)

The renaissance era is characterized by the revitalization of the arts, literature, architecture, sculpture, painting, music and drama. The written word led to knowledge distribution and growth in scientific medicine. Humanitarianism was the predominant perspective, as well as respect for personal freedom and knowledge.

Colonial America (1500- 1700)

Individualism was the focus of this era. Hard work and physical endurance were praised and ensured material success and spiritual worthiness. Those that could not work were merely tolerated and were mainly the responsibility of the family. As the population increased due to the attractiveness of the eastern, seaport towns, the need for public almshouses grew as well. The evolution concerning the rehabilitation and caring of people with disabilities is remarkable in this era. In 1662 the first house for the needy was established, providing basic food and shelter. In 1773 the first hospital for the mentally ill was established in Virginia (Howe-Murphy & Charboneau, 1987). Scientific discoveries, humanitarian efforts and the fear for mysterious illnesses influenced the establishment of more institutions for the mentally disturbed. The colonies gave special consideration to war veterans and seamen. Little evidence exists that opportunities for education, rehabilitation and other steps for advancement were available. Consequently the ideals for individual success probably lessen against the social policy recognizing an individual's right to public assistance (Howe-Murphy & Charboneau, 1987).

3.4.6. Industrialism and institutionalization (1800- 1900)

Industrialism is characteristic of this era with a lifestyle dominated by work and time. Time not spent at work was seen as discretion time used in order to sustain one's life and family. Leisure was relegating to any time left over from obligations. Each member of the family needed to work; supervision for people with disabilities was therefore not available. The need for institutions for people with disabilities increased. Institutions were also cheaper than subsidizing individuals with disabilities at home.

In this era people with mental illnesses were for the first time seen as having an illness and not a curse (Howe-Murphy & Charboneau, 1987).

3.4.7. Turn of the century

Industrialism caused increased poverty, labour unrest and overcrowding spawning social reform. Quality of life was a major concern, which led to the call for recreation pioneers. Social, educational and recreation programs were developed and delivered to immigrant workers, unwedded mothers, the poor, the ill and the elderly. However, it was only with the election of President Theodore Roosevelt, in the early years of the twentieth century, that the American government took responsibility for the social need. Legislation was enacted to provide vocational rehabilitation for all World War I veterans and at a later stage for the rest of the community as well. In 1889 the Cleveland rehabilitation centre was established in the United States of America. This centre was the first comprehensive rehabilitation centre. The Bureau of the handicapped of the New York City Charity Organization Society was established in 1908. This organization was the first to study the overall problems of people with disabilities. In the 1920's and 1930's many public schools started to offer specialized classes (Howe-Murphy & Charboneau, 1987).

3.4.8. First and Second World War

The war left a lot of veterans with disabilities. The American Red Cross developed a Division of Recreation in Hospitals to entertain and deliver recreation programmes for those wounded in war. In 1932 the Bill of Rights for the Handicapped was implemented which gave recreation for the disabled an important endorsement. During World War II the value of recreation and sport as an important aid in rehabilitation was increasingly recognized. In 1944 Sir Ludwig Guttman opened a spinal injuries centre at the Stoke Mandeville Hospital in Aylesbury, England. They used sport as a vital part of the rehabilitation process for people with disabilities and the next quotation speaks for itself:

“Rehabilitation sport evolved rather quickly to recreational sport and the next step of competitive sport was only a matter of some years.” (South African Sports Association of South Africa (SASAPD), 2005, p. 4)

In 1948, the Stoke Mandeville Games in England was founded and the first competition for wheelchair athletes was organized. In the 1950's people with disabilities formed sport organizations, competing on local, state, national and international level. One of these organizations was the International Stoke Mandeville Games Committee. As the sport participation of people with disabilities increased, barriers such as inaccessible facilities and discrimination were encountered. In 1945 the Veteran Administration established recreation services as part of their organizational framework. Hospital programmes, especially basketball for people in wheelchairs, spread across the country. In 1963 the Community Mental Health Act delivered a variety of services to the patients in the hospitals. A lot more attention was given to the prevention of mental illness and not only rehabilitation (Howe-Murphy & Charboneau 1987).

3.4.9. Era of consumers (1960-1970)

Human rights played an important role in this era. Women, the oppressed and those with disabilities demanded their needs and rights within society. They protested against the services which provided equal but separate access (Howe-Murphy & Charboneau, 1987). An “International Working Group Sport for Disabled” was set up to investigate the problems encountered by people with disabilities to participate in sport. The International Sport Organization for the Disabled (ISOD) was created as a result of the investigation. The aim of ISOD was to embrace all disabilities and to act as a co-ordinating committee. ISOD offered opportunities for those who could not affiliate to the International Stoke Mandeville Games Federation (ISMGF) such as the blind, amputees, cerebral palsied and paraplegics. Nevertheless, other international organizations for people with disabilities were founded. In 1978 the Cerebral Palsy International Sport and Recreation Association (CP-ISRA) for people with Cerebral Palsy was founded and in 1980 the International Blind Sports Association (IBSA) was founded.

The four international organizations mentioned in the previous paragraph, ISOD, ISMGF, CP-ISRA and IBSA, experienced the need of co-ordinating the games. As a result of this need the International Co-ordinating Committee Sports for Disabled in the World (ICC) was created in 1982. In 1986 the Comité International Sports des Sourds (CISS) and the International Sports federation for Persons with Intellectual Disability (INAS-FID) joined the ICC, but the deaf still maintained their own organization. However the member nations were dissatisfied and demanded more national and regional representations in the organization. This led to the foundation of the International Paralympic Committee (IPC), a democratic organized institution, in 1989. Until today the IPC is the only international multi-disability sports organization in the world (SASAPD, 2005).

The Special Olympics provides opportunities for people with mental impairments to participate in sport competitions. The Special Olympics is the world's largest training and sports competition for the mentally retarded (Cipriano, 1980, as cited in Burke, 2000). Special Olympics are one of the programs developed by the Joseph P. Kennedy, Jr., Foundation who sought to develop programs that foster public awareness of mental retardation. The goal of the Special Olympics is to train the participants to compete in individual and team sports (Burke, 2000).

The International Special Olympics are held every 4 years. The first International Special Olympics was held in Chicago in 1968. There are 16 different sports conducted during the summer and winter phases of the games. The sports include track and field, pentathlon, frisbee, swimming, diving, bowling, floor hockey, poly hockey, volleyball, team basketball, cheerleading, run-dribble and shoot, cross-country, soccer, equestrian, race walking, figure skating, alpine skiing, Nordic skiing, and snowshoeing (Burke, 2000). The Special Olympics currently serves more than 2, 25 million persons with intellectual disabilities in more than 200 programs in more than 160 countries (Special Olympics International, 2007).

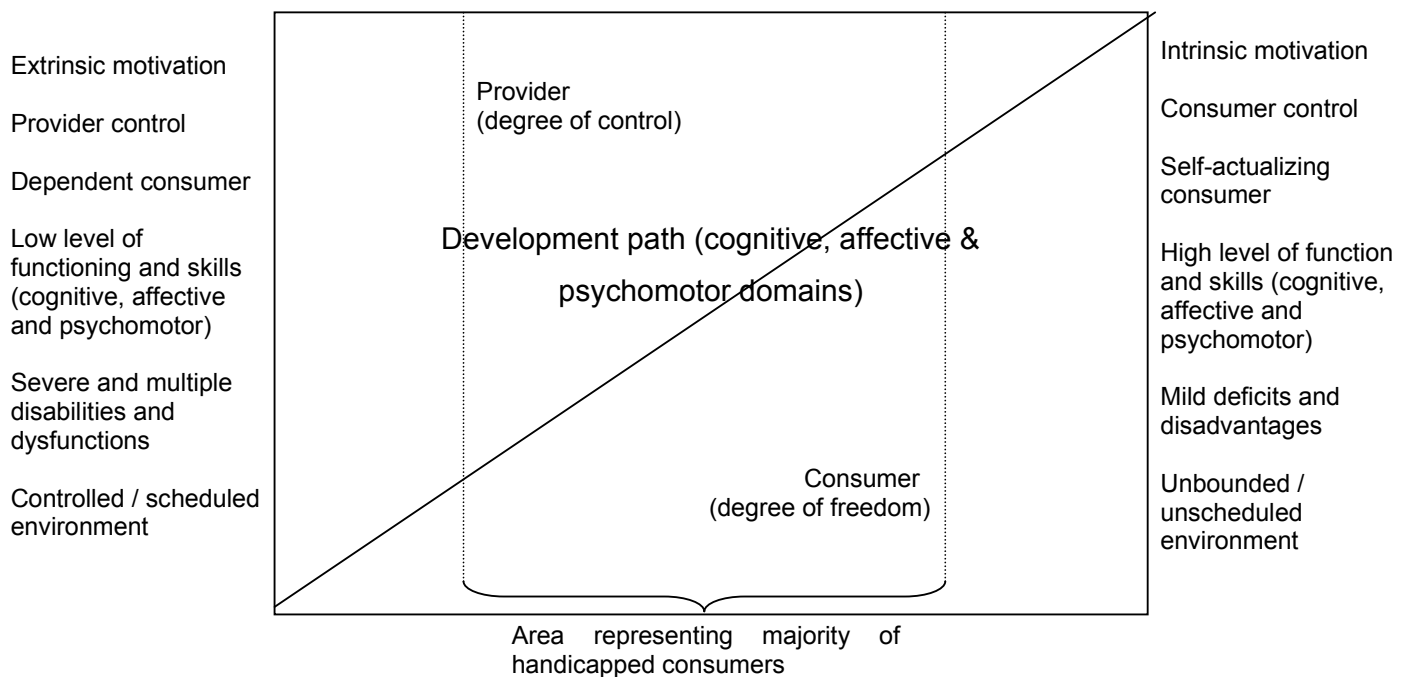
3.5. Leisure opportunities for people with disabilities

Internationally, three main leisure service areas exist for people with disabilities. These service areas supply opportunities according to the participant's level of ability.

The three service areas are 1) therapeutic recreation service where the participant is dependent on the therapist, 2) leisure education service where the educator facilitates the participant and 3) recreation service where the participant participates freely in the program provided. Ideally, the participant with a disability will progressively develop from therapeutic recreation (dependence), towards recreation participation (independence) where he/she can experience freedom. As noted in Chapter 2, when the participant experiences a sense of freedom during leisure participation, he/she will derive maximum benefit from leisure participation (Witt & Ellis, 1989).

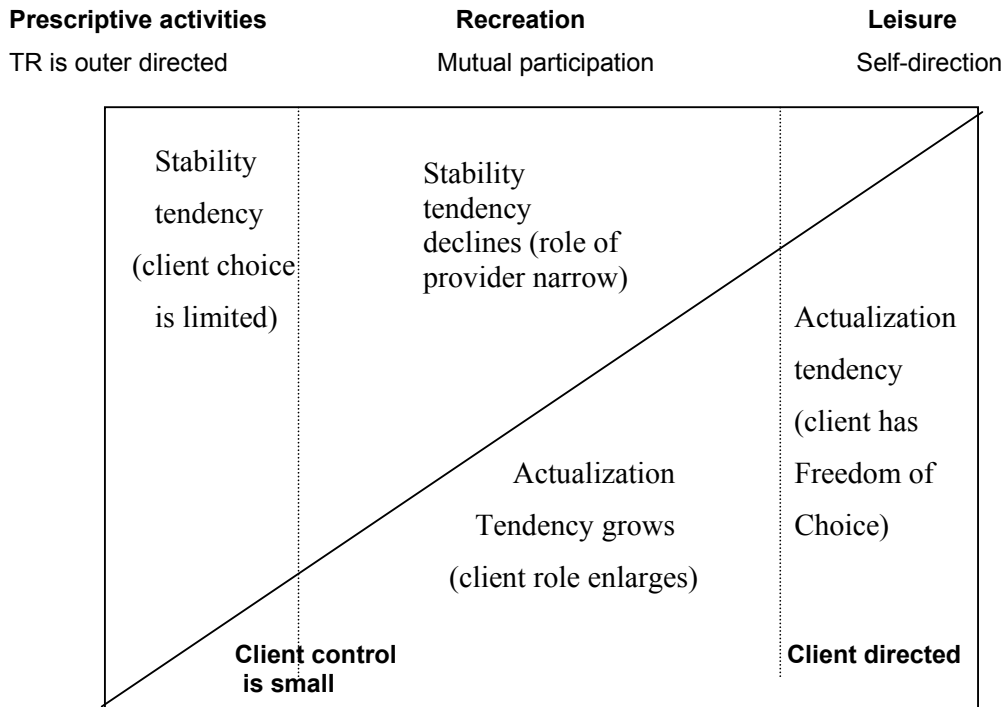
Different types of disabilities have different restrictions on participation. Benefits like increased personal fulfilment, well-being and self-esteem which are closely linked with leisure experiences are often denied to a lot of individuals with disabilities due to the restricted freedom they have (Prost, 1992). Therefore a spectrum of leisure services is available for people with disabilities to meet their functional needs. In order to fully understand the benefits of high levels of perceived freedom in leisure, the model for delivery of leisure services to the handicapped needs to be understood. This model proposed by Compton & Witt (1979, as cited in Witt & Ellis, 1989) is presented in Figure 3.1:

Figure 3.1: Model for delivery of leisure services to people with disabilities proposed by Compton & Witt (1979) as cited by Witt & Ellis (1989)



The model for delivery of leisure services (Fig 3.1) is similar to the therapeutic recreation continuum (Fig 3.2) proposed by Austin & Crawford (1996, as cited in Austin, 1999).

Figure 3.2 Therapeutic recreation continuum



In both models, the area within the rectangle represents the total degree of control which is present in the participant's environment. The degree of control is divided into two parts. The one part represents the control which is exercised by the provider. The other part represents the control experienced by the participant. The line which divides this area is called the "developmental path". This line represents the developmental path towards independence/control by the participant. Participants with high degrees or perceived freedom during leisure are represented by a point on the developmental path to the extreme right of the model. These participants are thought to have achieved an independent leisure lifestyle. They participate because they are intrinsically motivated and they are independent and self-regulated. The participant experiences a lot of benefits from leisure participation and it contributes to his/her overall life satisfaction and wellness (Witt & Ellis, 1998). The opposite end of the continuum represents participants who perceive little freedom during leisure

participation. They participate in leisure mostly because of external pressures and are dependant upon the therapist. Their participation can be prescribed and constrained (Edginton et al., 2006). According to Witt & Ellis (1989) it may be assumed that the individuals at this end of the model associate a sense of helplessness with leisure. As stated before, helplessness can lead to depression, apathy and expectation of failure in other realms of life (Witt & Ellis, 1989).

The participant can thus be allocated to one of three service areas according to the participant's functional ability. Each of the three service areas has certain roles and functions and is described in more detail by Witt & Ellis (1989).

3.5.1. Therapeutic recreation services

The therapeutic recreation service has a different role than the leisure education or recreation service. The therapeutic recreation facilitator's role is that of a clinician and therapist. The therapist mostly controls the intervention and the participant has limited control. The therapist's functions can be listed as follow:

- To diagnose individual leisure needs.
- To assess cognitive, affective and psychomotor function as a part of total leisure functioning.
- To describe and direct specific regimens for treatment.
- Treat specific behaviours, which serve as barriers to leisure functioning.
- Evaluate success of application of treatment.

Therapeutic recreation's purpose is to improve the functional abilities necessary for leisure involvement. As the participant's abilities increase, the participant will experience more freedom/independence.

3.5.2. Leisure education/facilitation

The leisure education specialist's role is to advise and to educate and facilitates the process as a counsellor, educator or enabler. The function of leisure education is to help the participant acquire the necessary knowledge and skill for leisure

participation. Responsibilities are shared between the specialist and the participant. The function of leisure education can be listed as follows:

- To assist in leisure decision-making.
- To facilitate the development of leisure values and attitudes.
- Assist in refinement of activity skills necessary to positively engage in leisure pursuits.
- To assist individuals in transfer of skills, knowledge, and values to involvement activity settings.
- To assist the individual in identifying and removing barriers to leisure fulfilment.

The education sector provides the leisure education service. The role of the school is therefore to educate the learner but also to enable the learner to participate independently. This leads us to the last service sector, namely the recreation service.

3.5.3. Recreation

The recreation service provides opportunities for learners who can participate independently. The top, right side of the diagram represents the opportunities available for people with disabilities to participate voluntarily. The role of the recreation specialist is to support and to provide a program. The participant can engage in organized opportunities, where the specialist is mainly a facilitator and supervisor. The functions of the recreation specialist can be listed as follow:

- To promote the leisure needs and rights of people with disabilities.
- To remove the ecological barriers to leisure fulfilment, e.g. architectural and economic.
- To advance the concepts of the positive and dynamic roles of people with disabilities in society.
- To provide opportunities and environments for participation in leisure in concert with expressed consumer interests (Witt & Ellis, 1989).

These three service areas give people with disabilities the opportunity to develop from dependant leisure participation (therapy) towards independent leisure participation (leisure, recreation and sport opportunities). People with disabilities who are able to participate independently have nationally and internationally a lot of

opportunities to participate in sport. For people with disabilities to develop to the point where they can participate independently, leisure education where they learn the acquired leisure related knowledge and skill is of vital importance. For the purpose of this study the focus will be on the physical education provision in schools as fundamental contributor. As Seaman et al., (2003, p. 2) comments: “Physical education teaches movement and helps prevent secondary conditions in individuals with a disability. The physical activity patterns developed in physical education and reinforced in the home and community will provide the basis for lifelong physically active lifestyles”.

3.6. Physical education opportunities for people with disabilities: Internationally

The number of people with disabilities in the world varies according to the legal definition of “disability” of each country. According to Charlton (1998) as documented by the International Council of Sport Science and Physical Education (ICSSPE) (Sherrill, 2004), 80% of all the people with disabilities live in Third World Countries. Charlton also cites that *Rehabilitation International* estimated that, by the year 2000, worldwide there would be 846 million persons (13% of the world’s population) with disabilities. The following section will provide information concerning the availability of physical education in different countries as identified by Sherrill (2004). These countries are representative of a majority of nations.

3.6.1. United States of America

Between 10% and 15% of individuals in the birth-to-22 age group have disabilities and could benefit from special education services. About 95% of all children with disabilities participate in inclusive, mainstream physical education classes. Physical education for children with disabilities depends thus on the quality and state requirements of the physical education classes for the children without disabilities. Unfortunately, physical education is not even required for young people without disabilities in most of the fifty states. This has a weakening result on the adaptive physical education services available in the general and separate settings. Furthermore, only those learners who are found to be disabled specifically in physical

education performance may require adapted physical education. Thus, when a child can reasonably successfully fit into the normal physical education class, the child is not considered disabled regardless of appearance or function (Sherrill, 2004).

The USA law support *least restrictive environment* physical education placements and services for learners with severe disabilities who previously received no physical education services. In reality, however, many learners are left in inclusive physical education classes where inclusion is physical but not social. Recently, more emphasis has been placed on making inclusion social as well as physical (Sherrill, 2004).

3.6.2. Europe

A survey, as part of the European Network in Adapted Physical Activity (THENAPA) project, was conducted attempting to assemble data on physical activity involvement in Europe. A questionnaire was distributed in 23 countries: Austria, Belgium, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Netherlands, Norway, Portugal, Poland, Romania, Slovakia, Spain, Sweden, and the United Kingdom. Students with disabilities in the reports were referred to as Special Needs Children (SEN). The survey focused on the involvement in inclusive physical education and sports rather than physical education and sports in any setting. Some of the precise statements of the reports follow:

- 1) Special Education Needs (SEN) children seem to be included in the school system, but not in the physical education lessons:
 - Austria: 30% of SEN are in inclusive physical education classes.
 - United Kingdom: 20% of the children with special education needs are included of which 40% in the inclusive system; but only about 6% in the physical education system.
 - Norway: Nearly all SEN children receive physical education in special schools.

- Other countries: 7% of children with special education needs are included (not clear whether it refers to inclusive or any kind of physical education, as in special schools).
- 2) “School/educational legislation supporting inclusion has been introduced in all countries...these laws stress special education, and physical education seems to remain a “blank space” on the map” (Sherrill, 2004, p. 6).
- 3) Only Austria, Italy, Slovakia, Sweden and the United Kingdom have obligatory physical education lessons for special needs children. They do not participate however, because they are excused on the basis of exceptional situations. These excuses are not only a problem of SEN but of all children (Sherrill, 2004).
- 4) All the countries give SEN children the opportunity to choose and participate in the out-of-class sport system, which is besides regular physical education classes. These sports include swimming courses for beginners, outdoor activities, excursions and exercises during break. Unfortunately this rarely occurs (15 countries) due to reasons mentioned as regular sport not appropriate for SEN; teacher’s preparation, access, appropriate time and no interest in SEN.
- 5) School sport exists in almost all European countries (16). In some of these countries like Spain, Italy, and Lithuania, school sport is not compulsory. In Netherlands the school sport is only implemented in the upper half of the school. Greece and Norway are the only countries not having school sport. In The Czech Republic, France, Italy, and the United Kingdom the school sport is elitist, emphasising performance and less attention is given to recreation and leisure.
- 6) Austria, Bulgaria, Hungary, Ireland, Latvia, Lithuania, Portugal, Poland, and the United Kingdom (8 countries) don’t give the SEN students the possibility to be integrated into school sport. In 9 countries some initiatives concerning the integration can be found (Austria, Belgium, Czech Republic, Finland, Italy, Ireland, Sweden, France and Poland). In Denmark, France, Italy and the United Kingdom SEN students can be integrated into school sport at leisure or recreational level but not at competitive level. In Finland the SEN students may participate in local inter-school events only.

- 7) Evidently, the number of disabled persons participating in sport activities is not very significant, this might be due to reasons such as the numerous barriers (physical, social); lack of information on sport opportunities for the disabled; weak co-operation between structures and a shortage of adaptive physical activity professionals (Sherrill, 2004).

Young people with disabilities in Europe made a declaration on the European Day of Disabled People in 2006. They want to see real differences in the opportunities offered to equally participate, and therefore proposed the following initiatives:

- “Physical, sensory and cognitive access to cultural, leisure and sport infrastructure and activities.
- Support and encouragement of creativity of disabled people (creative expression in sport, art and culture).
- Right to participate in leisure activities (especially people with complex dependency needs are being refused entrance to some places).
- Ensure the possibility of organizing one’s own leisure time and to decide about the support one needs (Support services should foresee adequate support in accessing leisure, culture and sport activities).
- Inclusion of disabled participants into mainstream activities (Teachers and trainers should be trained to include all participants in their activities, for the benefit of the whole group) “(European Disability Forum Youth Committee, 2006).

3.6.3. Asia

Asia was and is active in hosting international sport events for people with disabilities, resulting in much positive change in this continent. This, however, has not always been the case. Prior to hosting international sport events, the basic human rights and social status for the disabled people had not been achieved in many countries in Asia and South Pacific region. The leaders at that time recognized the impact sports for persons with disabilities could have on nation-building and national policy for the welfare of the disabled. International events, mostly held in Europe, were difficult to attend due to insufficient funds and national support. The

leaders at that time persisted on their effort to organise an event which athletes of Asia and South Pacific could easily participate in. Through the effort of the founders, the Far East and South Pacific Games for the disabled (FESPIC Games) became a reality in 1975 (Kuala Lumpur 9th FESTIC Games, 2006). These games as well as the major international events are listed in Table 3.2:

Table 3.2: International sport events

CITY	EVENT	YEAR
Japan	International games for athletes with physical disabilities	1951
Tokyo	The 2 nd Paralympics (limited to wheelchair athletes with spinal cord injuries)	1964
Oita& Bppu, Japan	Far East and South Pacific Games for the disabled (FESPIC) Games	1975
Parramatta, Australia		1977
Sha Tin, Hong Kong		1982
Surakarta, Indonesia		1986
Kobe, Japan		1989
Beijing, China		1994
Bankok, Thailand		1999
Busan, Korea		2002
Japan (Nagano)	The 8 th Special Olympic Winter Games	2005
Future events		
Shangai	The 12 th Special Olympics World Summer Games	2007
Beijing	Summer Paralympics	2008

The future events listed above will be hosted by China. China is a country whose social status and general living conditions have remarkably improved for people with disabilities. This improvement is a result of a series of positive legislative and administrative actions and the work of disability organizations (Guozhong, 2006). China caters for people with disabilities in the public cultural facilities, such as

libraries, museums, art galleries, public parks, and sport venues. These facilities are open for people with disabilities and are expected to make reasonable accommodations. Some cities provide community-based cultural and recreation facilities for people with disabilities. Unfortunately due to a lack of accessible local transport, these facilities may be used infrequently (Guozhong, 2006).

3.6.4. Japan, Korea, Taiwan, and Mainland China

Research concerning adapted physical activities and sport for people with disabilities in Japan, Korea, Taiwan, and Mainland China done by Lin (2003, as cited in Sherrill, 2004), indicated the following:

- Japan and Korea have special sport facilities for persons with disabilities in hospitals. Rehabilitation sports instructors are employed in Japan and recreation therapists in Korea.
- In 1998, a total of 102 sport facilities served people with disabilities in Japan. According to Lin (2003), Japan is the most advanced in the field of medical treatment and rehabilitation sports in hospitals.
- In Mainland China, Taiwan, and Korea, people with disabilities primarily use sport facilities for the general public, although Korea does have some special facilities for rehabilitation in hospitals.
- In Mainland China and Taiwan, the specialists using sport in hospitals are mainly physicians, occupational therapists, and physiotherapists.
- All of the countries report some physical education in schools, taught by special education or physical education teachers.
- In Korea, in 1997, of the 106 departments of physical education, 42 offered courses in adapted physical education.
- More and more universities are offering training in adaptive physical education.

3.6.5. Taiwan

In 1992, a total of 75,526 children with disabilities were enrolled in some form of school (2.12% of the total number of students), with 7.7% receiving special education services. Among 1232 schools in Taiwan, 801 have special education classes but

only 5.9% have adapted physical education classes. Of all the disabled students, 55.1% participate in sport classes like other students, and 29.3% have their sport classes in groups of students with similar disabilities. Only 15.5% are not participating in these classes.

3.6.6. Hong Kong

In Hong Kong the cultural beliefs have a great influence on the perception citizens have on sport, recreation and children with disabilities. They believe that children with disability should live at home with their families and attend school specially designed for their particular disabilities (Sit, Linder & Sherrill, 2002, as cited in Sherrill, 2004). The parents believe that participation in physical activity is a waste of time and that it influences academic achievement negatively. These perceptions influence all children, not only the children with special education needs. Sit et al. (2002) reported, however, that 83% of her participants, who represented 10 special schools, participated in at least one sport during free time; 66% in at least two sports; 46% in at least three sports and 33% in more than three sports. Special education needs children with mental disabilities and visual impairments mostly used public playgrounds and parks rather than schools, private clubs or organized lessons (Sherrill, 2004).

3.6.7. Indonesia

Children with special education needs are concentrated in special schools in the provinces Jakarta, West Java, Central Java, East Java, and South Sulawesi. Some of the children are scattered throughout the other 25 provinces. Children with special education needs are not mentioned in the general education. The children receiving special education instructions are the hearing impaired (45%), visually impaired (30%), and mild intellectual impaired (13%). These children receive little attention from the physical education profession, and no description of physical education or adapted physical education instruction is given. However, leaders who have begun to understand the need started conducting adapted physical activity workshops for teachers (Sherrill, 2004).

3.6.8. Oceania (Australia, New Zealand, Pacific Islands)

Australia's philosophy regarding physical activity for persons with disabilities is 100% inclusive. All personnel are taught how to keep children included in mainstream activities. However, research from the Royal Melbourne Institute of Technology, Bundoora, in the state of Victoria, reports some of the dilemmas with inclusive education. Problems that need to be resolved are for example the limited time students with mild intellectual disabilities are able to stay engaged in physical education classes, compared with their non-disabled classmates (Sherrill, 2004).

3.6.9. Central and South America

The little that is known about adapted physical education and sport in this country is that Brazil supports the International Federation of Adapted Physical Activity (IFAPA). Brazil conducts several types of adapted physical education, personnel preparation and maintains an excellent website, SOBANA (Sherrill, 2004).

3.6.10. Africa

Africa attempts to provide sport programs for people with disabilities through training of leaders. This initiative is described by Sherrill (2004):

“In 2003, the University of Georgia in Athens, in collaboration with the International Paralympic Committee and the African Sport Federation of the Disabled (ASCOD), provided a 2-week academy for representatives of 15 African countries. This academy was the second phase of a 4-year collaboration project for the development of sports programs for youth with disabilities in Africa and the Middle East and is designed to promote peace and friendship through an educational initiative that identifies and trains emerging leaders from these regions” (p. 11).

3.7. Adapted physical education opportunities for people with disabilities: National

3.7.1. South Africa

A total of 2 657 714 people in South Africa are disabled (Statistics South Africa, 2002). A total of 23 679 learners, ranging from grade 1 to grade 12, are in schools for learners with special education needs in South Africa. This number excludes learners that are in stand-alone pre-primary, ELSEN and ABET centres, and public FET institutions (Statistics South Africa, 2004). According to the White Paper on an Integrated Disability Strategy (Office of the Deputy President of South Africa, 1997), it is estimated that almost 70% of children with disabilities of school-going age, are presently out of school. The environment in regular schools does not facilitate integration and the limited capacity of special schools, particularly in rural areas, excluded learners from these areas from education opportunities.

The scope of special education services in South Africa needs to be perceived in the context of the Apartheid Policy. During the period prior to 1994 (the apartheid era), special education services were provided in terms of race. The government expenditure on supporting service (school health, school guidance and counselling, and special education) amounted to 30% of the total budget for White children (constituting 9.7% of the total school enrolment). The remaining 70% had to be shared between the classified Africans (79.2%); Coloureds (8.7%) and Indians (2.4% of the total school enrolment) (National Education Policy Investigation into Education Support Services, 1992, as cited in Naicker, 2000).

As a result of these inequalities and the new democratic order in South Africa, ways to redress the historical imbalances were established. In 1996 the National Minister of Education appointed a National Commission for Special Education Needs and Training (NCSNET) and the National Committee for Education Support Services (NCESS). Both NCSNET and NCESS were to make recommendations on all aspects of special needs and support services in education and training in South Africa. The central thrust of the recommendation was to move away from a dual system of education to a single one (Naicker, 2000).

The following key strategies were made by the NCSNET and NCESS to achieve the vision:

- Transforming all aspects of the education system;
- Developing an integrated system of education and
- Infusing “special needs and support services” throughout the system.

In the interim, the nine provinces in South Africa are compelled through legislation to make sure there is no racial discrimination concerning the provision of special education services (Naicker, 2000).

In the light of the development of the provision of special education services, the physical education for learners with special educational needs is of great concern. The Office of the Deputy President articulates this concern in the White Paper on the Integrated National Disability Strategy (1997, p. 53):

“Sport at school level is critical for the development of physical qualities, as well as for the development of self-esteem, courage and endurance. It is therefore vital that sport at school level - both within ordinary and special schools — receive urgent attention.”

The United School Sport Association of South Africa (USSASA) is responsible for the development of the school sport structure. USSASA was formed in August 1993 in Johannesburg to unite the national single coded organizations for the various sports disciplines at school level under one umbrella. USSASA’s mission is:

“to establish a multi-coded school sport structure, which shall promote and organize recreational and competitive sport for all schools in the Republic of South Africa. This sport shall be provided and administered at all levels, from local to international, in such a way that it will:

- Reflect that school sport is an integral part of education.
- Promote the values of non-racial, non-sexist and a democratic society and thereby play a vital role in the process of nation building in a new South Africa.
- Give historically disadvantaged pupils equality of opportunity through development programmes, which cater for all levels of skills.

- Encourage the striving for excellence in sports achievement and administration” (USSASA, 2005, p. 1).

At national level USSASA is administered by a structure consisting of different committees. One of these committees is the representatives and members of the Association for Learners with Special Education Needs (LSEN) (USSASA, 2005).

The Council of USSASA-LSEN will consist of:

- The LSEN Executive Committee.
- Representatives from the seven disciplines.
- Representatives from the nine LSEN Provincial Committees.
- Technical Commissions for the codes of sport practiced by the seven disciplines.

The seven disciplines are:

- Industrial Schools
- Mild Mentally Handicapped (Special Schools)
- Neurally Handicapped Pupils
- Visually Impaired Pupils
- Deaf Pupils
- Physically Disabled Pupils
- Severely Mentally Handicapped.

(USSASA, 2005)

The ELSEN Provincial Committees also represent learners with disabilities in mainstream schools. USSASA-LSEN is responsible for the development of the school sport structure for learners with special education needs. The ELSEN School that formed part of the study had structured sport and recreation opportunities. These opportunities are examined below.

3.7.2. Sport and recreation opportunities available at the specified ELSEN School in Tshwane

The school had one sport/recreation period per week for one hour and two cultural periods of 40 minutes. There are no after school activities due to transportation

problems. Learners with identified talent stayed after school for additional practice. The school offered many sport and recreation opportunities and are listed in Table 3.3:

Table 3.3: List of activities available at the school

Summer sport	Winter sport
Athletics	Boccia
Basketball	Beanbag (aim and distance)
Cycling	"Matrolbal"
Cross training	Knee-Cricket
Squash	Special cricket
Rugby	Table tennis
Chess	Soccer
Tennis	
Netball	
Volley ball (Sitting volleyball)	
Art	
Dance	
Music	
Cooking	

As seen from the list of activities available at the specified school, many leisure and sport opportunities existed for learners with disabilities. Kelly (1996) argued that the realization of freedom requires opportunities that are accessible and attractive. The opportunities available and the manner, in which they are presented, are thoroughly discussed in the interview with the school's physiotherapist (See Appendix A, p. 158).

3.8. Conclusion

Leisure opportunities for people with disabilities were examined in this chapter. Historically, each era's lifestyle and their position towards the disabled determined

the leisure opportunities available for people with disabilities. It is only from the 1960's, with the expression of human rights, that the needs and rights of people with disabilities have been seriously considered.

Internationally, three main leisure service areas exist for people with disabilities. These service areas supply opportunities according to the participant's level of ability. The three service areas are 1) therapeutic recreation service, 2) leisure education service and 3) recreation service. These service areas facilitate people with disabilities to develop to the point where they can participate independently. Through leisure education learners with disabilities can learn the acquired leisure related knowledge and skill which will serve as basis for lifelong physically active lifestyles.

Nationally and internationally the availability of physical activity for learners can be summarized as follows:

- *United States of America*: About 95% of all children with disabilities participate in inclusive, mainstream physical education classes. Physical education for children with disabilities depend thus on the quality and state requirements of the physical education classes for the children without disabilities.
- *Europe*: Special education needs children (SEN) seems to be included in the school system, but not in the physical education lessons.
- *Asia*: All of the countries report some physical education in schools, taught by special education or physical education teachers. However, children in Indonesia receive little attention from the physical education profession, and no description of physical education or adapted physical education instruction is given. Fortunately adapted physical activity workshops for teachers have been conducted recently.
- *Australia*: Australia's philosophy regarding physical activity for persons with disabilities, is 100% inclusive. All personnel are taught how to keep children included in mainstream activities.
- *Central and South America*: Brazil supports the International Federation of Adapted Physical Activity.
- *Africa*: A 4-year collaboration project for the development of sports programs for youth with disabilities is held in Africa and the Middle East. This project is

designed to promote peace and friendship through an educational initiative that identifies and trains emerging leaders from these regions.

- *South Africa:* Almost 70% of children with disabilities, of school-going age, are presently out of school. The environment in regular schools does not facilitate integration and the limited capacity of special schools, particularly in rural areas, excluded learners from these areas from education opportunities. As a result of the inequalities in the apartheid era the new democratic order in South Africa established ways to redress the historical imbalances. The goal is to move away from a dual system of education to a single one. The United School Sport Association of South Africa (USSASA) is responsible for the development of the school sport structure. USSASA-ELSEN will represent the learners with special education needs.

The wide variety of leisure services provided at the ELSEN School that formed part of the study were listed. The school is not situated in a rural area but is presented by different race groups. The school is a good example of how physical education can be adapted and applied in a school for learners with special education needs.

How the learners perceive these services and the benefits the learners derive from it is ultimately an indication of the effectiveness of the services. The learners' perceived freedom is measured through the LDB that was used as research instrument. The results of the questionnaire (Leisure Diagnostic Battery) are interpreted in the next Chapter.

CHAPTER 4

RESEARCH DESIGN, RESULTS AND INTERPRETATION

4.1. Introduction

Physical education for learners with special needs, both in South Africa and abroad, was examined in Chapter 3. The specific leisure services provided at the ELSEN School that formed part of the study were also listed in Chapter 3. In this chapter the level of these learners' leisure functioning is determined. The level of these learners' leisure functioning was determined in order to test the hypothesis of this study. The hypothesis is that the leisure functioning of learners with learning and physical disabilities does not contribute to an independent leisure lifestyle.

In order to measure the level of the learners' leisure functioning the short version (25 items) of the Standardized Leisure Diagnostic Battery (LDB), developed by Witt & Ellis (1989), was used as a research instrument. The LDB is a collection of instruments designed to enable the assessment of the leisure functioning for a wide range of handicapped and non-handicapped individuals. The LDB utilizes a state of mind approach (subjective view) to understand leisure (sport and recreation) functioning rather than a time and activity (objective view) approach. By viewing leisure from a state of mind perspective, a learner could have the required skills to participate, but still perceive him/herself as unable to fully enjoy and derive optimal benefits from recreation participation. Witt & Ellis (1989) argued that self-definitions of success (as opposed to objectively rated skills based on external standards) constitute a more reliable approach to remediation strategies. The LDB measures certain elements that contribute to leisure functioning. These elements are determined through the assessment of the learners':

- leisure competence;
- leisure control;
- needs satisfaction and
- the depth of involvement in their leisure activities.

The perceived **leisure competence scale**, consisting of 5 items in the LDB questionnaire, measured the degree to which the learner believes he/she is competent in leisure. The **perceived control scale**, consisting of 10 items in the LDB questionnaire, measured the learner's perceived freedom to control the process and outcomes of leisure endeavours. The **leisure needs scale**, consisting of 6 items in the LDB questionnaire, provided an indication to which extent recreation activities satisfy intrinsic needs and wants. The **depth of involvement in leisure scale**, consisting of 4 items in the LDB questionnaire, generated information of what feelings the learner have during his/her preferred activities. These scales are explained in more detail later in this Chapter.

Collectively, these elements are an indication of the learners' degree of freedom they perceive in their leisure experiences. Witt & Ellis (1989) stated that high levels of perceived freedom in leisure help individuals to increase their level of independence/freedom and thereby achieve an independent leisure lifestyle.

All items (25) of the shortened LDB were measured on a 3-point Likert scale where 1=do not agree; 2=do not know and 3= agree. The collective mean score (x) for the 25 items across the four scales, provides an indication of the learners' perceived freedom or functioning in leisure. As stated before, a participant is more likely to continue participation when the participant experiences a sense of freedom in his/her leisure pursuit.

The investigator translated the research instrument in Afrikaans due to the percentage of Afrikaans learners in the class. A pilot study was done with 3 disabled learners. Adaptations were made according to their abilities. The questionnaire was administered in controlled circumstances under the supervision of the investigator and one educator per class.

4.2. Demographic information

4.2.1. Size and response rate from the sample group

The respondents of the LDB questionnaire were in Grades 6, 7 and 8. In total 92 learners were approached to complete the questionnaire; 30 from grade 6, 27 from grade 7 and 35 from grade 8. All these learners were from a specified ELSEN school in the Tshwane area and had either a physical or learning disability. Of the 92 learners that were approached to complete the questionnaire, 35 (38%) completed it. The number of learners from the respective grades that completed the questionnaire is illustrated in Table 4.1:

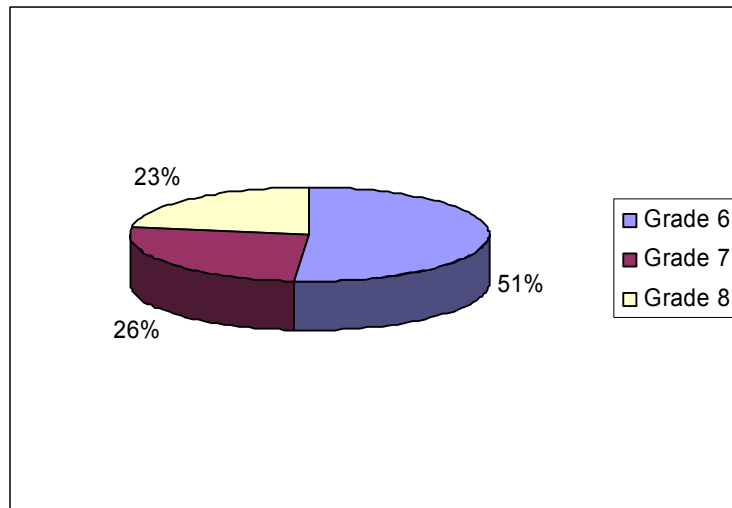
Table 4.1: Response rates from the different Grades

Grade	6	7	8	Total
Number of students approached	30	27	35	92
Number of students responded	18	9	8	35
Response rate	60%	33.33%	22.86%	38%

As indicated in the above table, the highest response rate was obtained from the grade 6 learners (60%). This was followed by the grade 7 learners (33,33%) and the lowest response rate was from the grade 8 learners (22,86%). The total response rate from the school's learners was 38%.

Figure 4.1 illustrates the account of the different grades represented in the sample. The grade 6 learners represented 51% of the sample group; the grade 7 learners 26% and the grade 8 learners 23%.

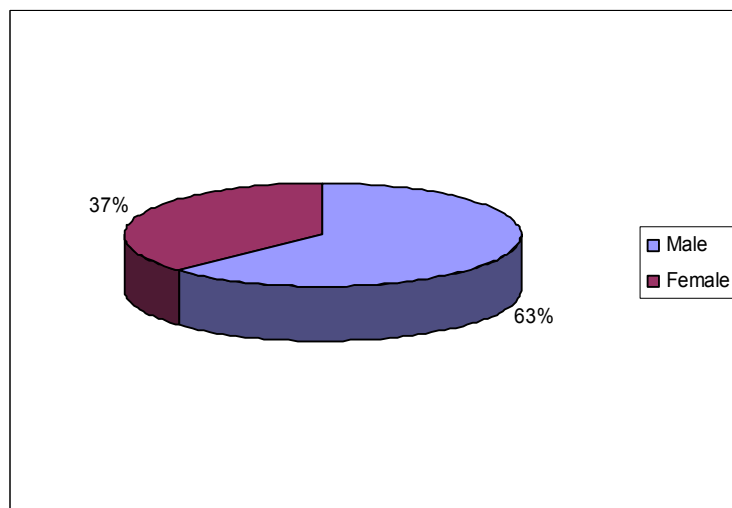
Figure 4.1: Account of the different grades represented in the sample



4.2.2. Gender of the sample group

The sample group consisted of 63% (n=22) male and 37% (n=13) female learners. Learners with physical disabilities consisted of 17.14% (n= 6) male learners and 20% (n=7) female learners. The learners with learning disabilities consisted of 45.71% (n=16) male learners and 17.14% (n=6) female learners. The gender demographics of the total sample group are illustrated in Figure 4.2.

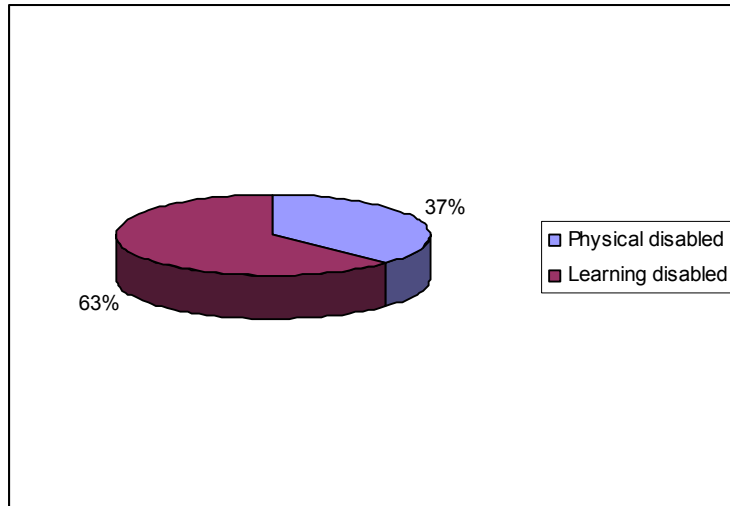
Figure 4.2: Gender represented in the sample group



4.2.3. Disability of the sample group

Learners with physical and learning disabilities were represented in the sample group. The learners with physical disabilities made up 37,14% (n=13) of the sample group and the learners with learning disabilities 62,86% (n=22).

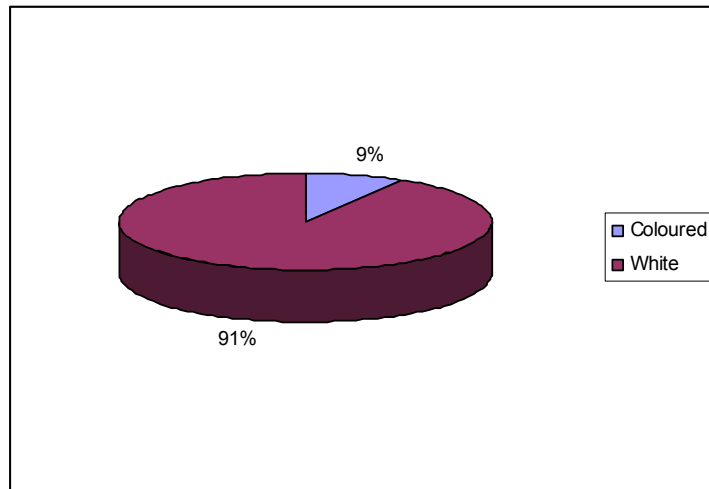
Figure 4.3: Different disabilities represented in the sample group



4.2.4. Race of the sample group

The sample group was represented by 9% (n=3) coloured learners and 91.43% (n=32) white learners. Respondents included in the sample were those learners present on the day of the evaluation with consent from parents or guardians.

Figure 4.4: Race represented in the sample group



4.2.5. Summary of the demographic profile

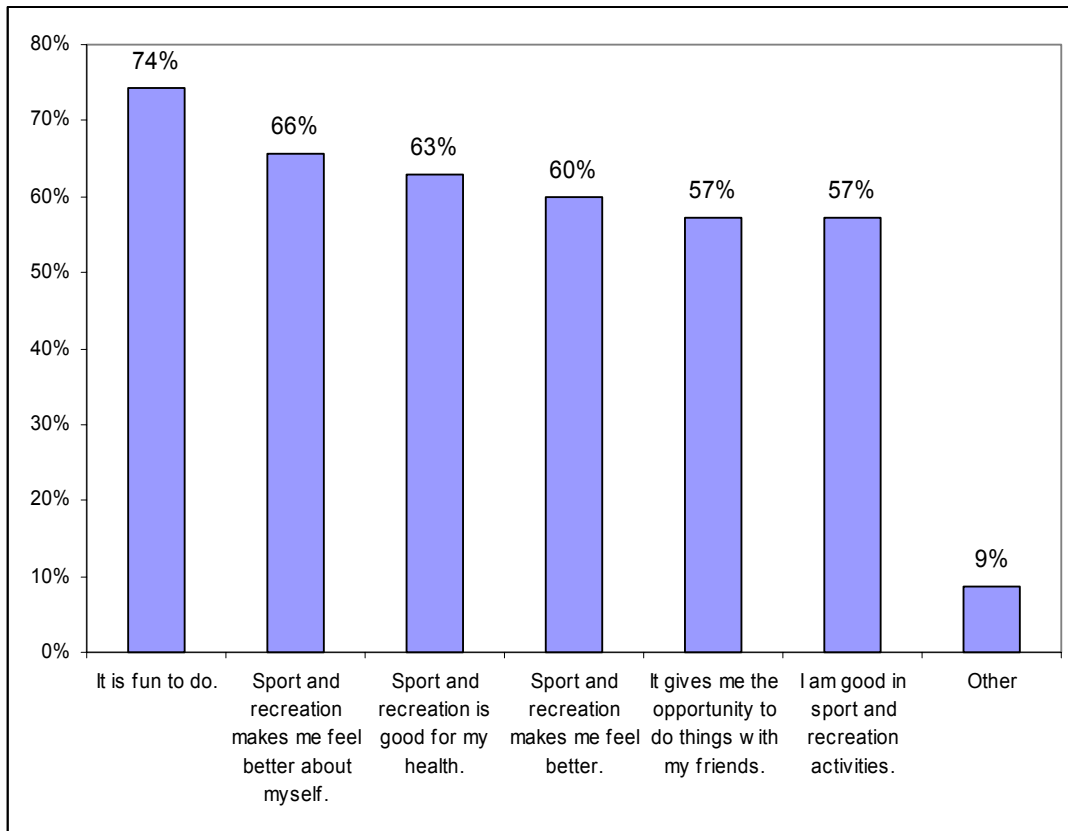
The demographic profile can be summarized as follows:

- A number of learners (n=57) did not participate in the study.
- The majority of the respondents (51%) were in grade 6.
- The majority of the respondents were male (63%).
- The majority of the learners had learning disability (62.86%).
- The majority of the learners were white (91.43%).

4.2.6. Current leisure profile of the learners at the School

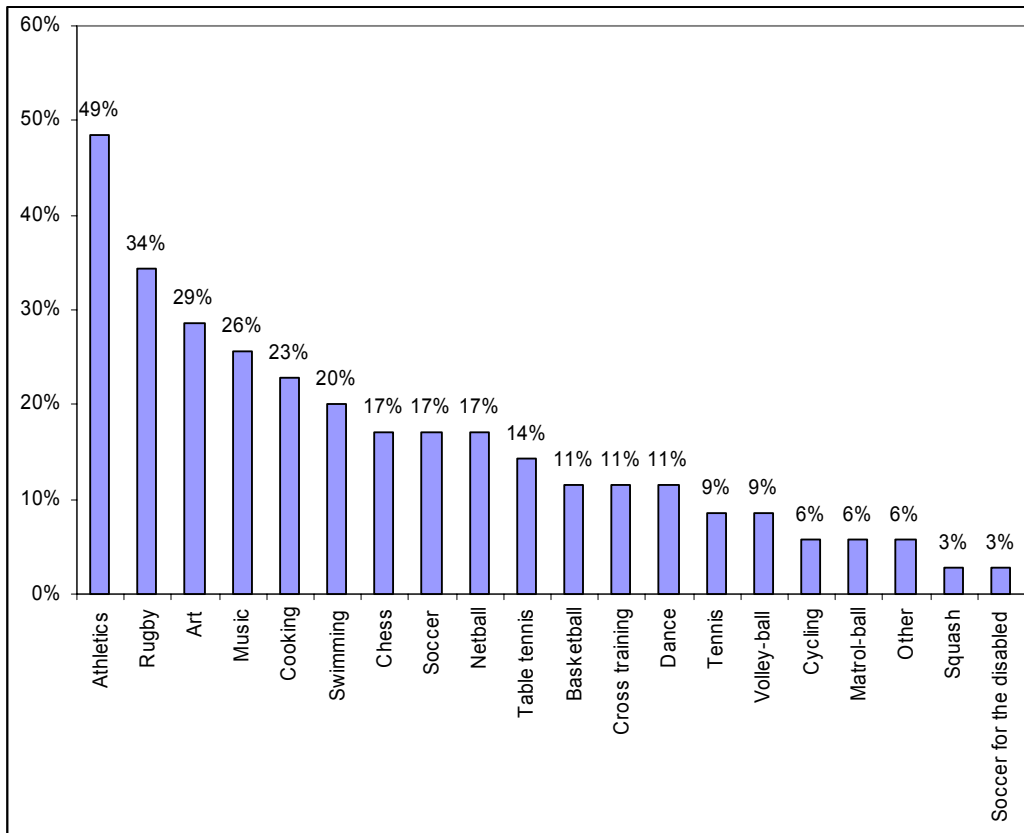
An overwhelming 91% of the learners in the sample indicated that they were willing to participate in recreation activities in their spare time. Figure 4.5, p 117 indicates that the primary reasons the learners are willing to participate in leisure (sport and recreation) are enjoyment (74%); improving one's self-concept (66%); health benefits (63%); psychological benefits (60%); socialization (57%) and the believe that he/she is competent to participate (57%). Only a few learners indicated that their willingness to participate was due to other reasons (9%).

Figure 4.5: Reasons for leisure participation



It is clear that the learners are willing to participate in leisure activities. Figure 4.6, p. 118 is however an indication of the learners' actual participation in various activities available at the specific school. It is notable that the results indicate a discrepancy between the learners' willingness to participate in leisure activities and actual participation. The highest participation was scored in athletics (49%) and the lowest in squash (3%) and soccer (3%).

Figure 4.6: Participation rates in various activities



A multitude reasons can exist for the discrepancy between the learners' willingness to participate and their actual participation. The main objective of this study was however to determine to what degree the learners' perceived freedom in leisure their actual participation influenced.

What follows is an analysis of the perceived freedom of the learners with learning and physical disabilities during their leisure participation. The analysis of these findings will be an indication to what degree the learners' leisure functioning (perceived freedom) their participation influences. The analysis specifically includes an examination of the four components of the LDB.

4.3. Results and interpretation

The 25 items of the shortened LDB are measured on a 3-point Likert scale where 'agree' is allocated 3 points, 'do not know' is allocated 2 points and 'disagree' is allocated 1 point. The collective mean score (\bar{x}) for the 25 items across the four scales provides an indication of the learners' perceived freedom or functioning in leisure.

The average score for each item of the LDB is indicated in Table 4.2, p119: Statistical interpretation of the LDB Questionnaire. This average is calculated as the sum of the values allocated to the three possible answers for each item (agree, do not know, disagree) and divided by the number of students that answered the relevant item. For example, the average of 2.35 for the first item (*'I know many recreation activities that are fun to do'*) is calculated as $(60 + 12 + 8) / 34$. The 60 represents the 20 learners that answered 'agreed' and for which 3 points were allocated to each. The 12 represents the 6 learners that answered 'do not know' and for which 2 points were allocated to each. The 8 represents the 8 learners that answered 'disagree' and for which 1 point were allocated to each.

Specific items of the LDB were grouped together and represent the four specific scales that measure leisure functioning of the learners. These scales are the leisure competence scale; the perceived leisure control scale; the perceived leisure needs scale; and the depth of involvement scale.

The collective sum of the mean scores of the four scales indicates the degree of freedom the learners with learning and physical disabilities perceive during their leisure experiences. The degree of freedom that the learners perceive during their leisure experiences is an indication of their motivation to participate in leisure activities.

The data gathered in order to measure the learners' degree of freedom experienced during leisure activities is disclosed in Table 4.3., p. 124. This table discloses the total data gathered from all learners and does not differentiate between learners with

physical disabilities and learning disabilities. Such differentiation is disclosed in Tables 4.4 - 4.7, p. 126-133.

Table 4.2: Statistical interpretation of the LDB Questionnaire.

Question	Agree	Do not	Disagree	Total	Number of students answered	Average
	(x3)	know (x2)	(x1)			
Perceived leisure competence						
I know many recreation activities that are fun to do.	60	12	8	80	34	2.35
My recreation activities help me feel important.	90	8	0	98	34	2.88
Sometimes during a recreation activity I get the feeling that I can do almost anything.	69	18	2	89	34	2.62
I can do things to improve the skills of people I do recreation activities with.	66	18	3	87	34	2.56
I have the skills to do recreation activities in which I want to participate.	42	22	9	73	34	2.15
Collective Score						12.56 (out of 15)

Question	Agree	Do not	Disagree	Total	Number of students answered	Average
	(x3)	know (x2)	(x1)			
Perceived leisure control						
It is easy for me to choose a recreation activity in which to participate.	72	12	4	88	34	2.59
I can do things during recreation activities that will make other people like me.	51	20	6	77	33	2.33
My recreation activities enable me to know other people.	75	8	4	87	33	2.64
I can make a recreation activity as enjoyable as I want it to be.	57	22	4	83	34	2.44
I can do things during a recreation activity that will enable everyone to have more fun.	75	18	0	93	34	2.74
I usually decide with whom I do recreation activities.	57	24	3	84	34	2.47
I am good at recreation activities I do with other people.	78	12	2	92	34	2.71

I am able to be creative during my recreation activities.	57	28	1	86	34	2.53
I am good at almost all the activities I do.	51	22	7	80	35	2.29
I can make other people have fun during recreation activities.	66	18	2	86	33	2.61
Collective Score						25.35 (out of 30)
Question	Agree (x3)	Do not know (x2)	Disagree (x1)	Total	Number of students answered	Average
Perceived leisure needs						
During my recreation activities there are often moments when I feel really involved in what I am doing	72	16	2	90	34	2.65
I can usually persuade people to do recreation activities with me even if they do not want to.	54	14	8	76	33	2.30
I can make almost any activity fun for me to do.	78	10	3	91	34	2.68
I participate in recreation activities, which help me to make new friends.	60	20	3	83	33	2.52
I can make good	60	24	2	86	34	2.53

things happen when I do recreation activities.						
When participating in recreation activities there are times when I really feel in control of what I am doing.	75	16	1	92	34	2.71
Collective Score						15.39 (out of 18)
Question	Agree (x3)	Do not know (x2)	Disagree (x1)	Total	Number of students answered	Average
Depth of involvement						
I can do things to make other people enjoy doing activities with me.	27	10	0	37	14	2.64
When I feel restless, doing recreation helps me calm down.	66	10	7	83	34	2.44
Sometimes when I do recreation activities, I get excited about what I am doing.	69	18	1	88	33	2.67
I usually have a good time when I do recreation activities.	75	14	2	91	34	2.68
Collective Score						10.43 (out of 12)

The collective mean score of the four different scales indicates the learners' perceived freedom during their leisure experiences. The degree of perceived

freedom the learners experience is an indication of their leisure functioning and is disclosed in Table 4.3:

Table 4.3: Perceived freedom of the learners

Perceived freedom elements	
Perceived Leisure Competence	12.56
Perceived Leisure Control	25.35
Perceived Leisure Needs	15.39
Depth of involvement	10.43
Perceived Freedom (collective mean score)	85% [(63.73) / 0.75]

4.3.1. Perceived freedom in leisure scale

The collective score of the four components (perceived leisure competence, control, needs, and depth of involvement scale) of the leisure functioning scale reflects the degree to which the learners with learning- and physical disabilities perceive freedom in leisure (Witt & Ellis, 1989) and consequently move towards an independent leisure lifestyle. The collective score of 63.73 was calculated as $12.56 + 25.35 + 15.39 + 10.43$. The 12.56 represents the sum of the score of the items that forms part of the perceived leisure competence scale (and represents a score out of 15). The 25.35 represents the sum of the score of the items that forms part of the perceived leisure control scale (and represents a score out of 30). The 15.39 represents the sum of the score of the items that forms part of the perceived leisure needs scale (and represents a score out of 18). The 10.43 represents the sum of the score of the items that forms part of the depth of involvement scale (and represents a score out of 12). The learners that participated in the study therefore scored in total 63.73 out of 75 representing a leisure functioning score of 85%.

The total scores of each of the four components of the leisure functioning scale, specifically differentiating between learners with physical disabilities and those with learning disabilities, are considered in detail below.

The sample group was represented by 62.86% (n=22) of learners with learning disabilities and 37.14% (n=13) of learners with physical disabilities. It is apparent from table 4.4 - 4.7, p. 126-133 that little difference exists between the levels of freedom the different disability groups perceive during their leisure participation.

Learners with learning disabilities scored higher ($x = 63.99$) than the learners with physical disabilities ($x = 63.2$), suggesting an 85.32% ($63.99/75$) leisure functioning of learners with learning disabilities and an 84.27% ($63.2/75$) leisure functioning of learners with physical disabilities.

4.3.1.1. Perceived leisure competence scale

The perceived leisure competence scale, consisting of 5 items in the LDB questionnaire, measures the degree to which an individual believes he/she is competent in leisure. Perceived competence is the perception the individual holds about his/her ability to determine what happens in the course of an activity and to avoid failure. An individual who believes he/she can control the outcome of leisure participation because of his/her abilities will feel freer to participate in leisure activities. Witt & Ellis (1989) stated that according to Harter (1979), the four domains of competence that are included are: cognitive competence, physical competence, social competence and general competence. The results from the learners' responses are indicated in Table 4.4:

Table 4.4: Leisure competence scale

Perceived leisure competence questions	Physical disabled	Learning disabled	Weighted Average
I know many recreation activities that are fun to do.	2.42	2.32	2.35
My recreation activities help me feel important.	2.83	2.91	2.88
Sometimes during a recreation activity I get the feeling that I can do almost anything.	2.69	2.57	2.62
I can do things to improve the skills of people I do recreation activities with.	2.58	2.55	2.56
I have the skills to do recreation activities in which I want to participate.	2.17	2.14	2.15
Collective score	12.69 (out of 15) (84.6%)	12.49 (out of 15) (83.27%)	12.56 (out of 15) (83.73%)

The five questions measuring the perceived competence of the learners indicate that 84% (12.56/15) of them believe that they are competent in leisure and will thus feel freer to participate. Little difference exists between the physical-and learning disabled learners' feeling of competence. Some of the questions are discussed separately.

The learners scored lower (2.35) on the question "*I know many activities that are fun to do*" than on most of the other questions. This is of particular interest considering the data displayed in Figure 4.5, p. The learners indicated that the number one reason they want to participate is because leisure activities are fun to do. Even though the score is relatively high (2.35/0.03 indicating 78%) this can still be

improved through leisure education where the learners can gain knowledge concerning available activities.

The second question indicates that recreation activities contribute to the majority of learners' feeling of importance (2.88) (cognitive competence). It can be assumed that the recreation activities can help the learners to develop their self-esteem. According to Corbin (2002), perception of competence equals self-esteem and positive physical self-esteem relates positively to lifelong physical activity and possessing an active identity. The high score obtained from the leisure competence scale indicates thus the competent feeling the learners have which will contribute to lifelong physical activity. Eighty seven percent (2.62) of the learners felt competent in doing almost anything (general competence) and 85% (2.56) of the learners felt that they could improve their friends' competence (social competence). Only 78% (2.35) of the learners are knowledgeable concerning recreation activities (cognitive competence).

It is clear from Table 4.4, p. 126 that 72% (2.15) of the learners believe that they have the necessary skills to participate. There is a discrepancy between the learners' physical competence (skills) and general competence (doing almost anything) which is respectively 72% and 87%. This can be an indication that their skills, even though they are already high, can still improve even more to feel more competent and consequently more motivated to participate.

The learners with physical disabilities scored slightly higher (84.6%) on the *leisure competence* scale than the learners with learning disabilities (83.27%). Leitner & Leitner (2004) suggested the modifications of equipment and rules for learners with physical disabilities who might experience weakness of limbs, paralysis, and uncontrolled muscles. The high score on the leisure competence scale can thus be a reflection of the value of the adapted leisure activities at the school, as mentioned by Sunshine (2006). Another reason for the high score on the leisure competence scale can be due to the different sizes of the different disability groups. The sample group of the learners with physical disabilities (n=13) was smaller than the group of learners with learning disabilities (n=22).

4.3.1.2. Perceived leisure control scale

The perceived leisure control scale, consisting of 10 items in the LDB questionnaire, measures the individual's perceived freedom to control the process and outcomes of leisure endeavours. The control that the learner perceives to have may be a result of being competent in the task or of being persuasive, crafty, or of functioning in an environment where the learner is allowed and encouraged to make choices (Witt & Ellis, 1989).

Table 4.5: Leisure control scale

Perceived leisure control questions	Physical disabled	Learning disabled	Weighted Average
It is easy for me to choose a recreation activity in which to participate.	2.58	2.59	2.59
I can do things during recreation activities that will make other people like me.	2.27	2.36	2.33
My recreation activities enable me to know other people.	2.64	2.64	2.64
I can make a recreation activity as enjoyable as I want it to be.	2.25	2.55	2.44
I can do things during a recreation activity that will enable everyone to have more fun.	2.83	2.68	2.74
I usually decide with whom I do recreation activities.	2.42	2.50	2.47
I am good at recreation activities I do with other people.	2.67	2.73	2.71
I am able to be creative during my	2.33	2.64	2.53

recreation activities.			
I am good at almost all the activities I do.	2.31	2.27	2.29
I can make other people have fun during recreation activities.	2.73	2.55	2.61
Collective score	25.03 (out of 30) 83.4%	25.51 (out of 30) 85%	25.35 (out of 30) 84.5%

It is apparent from Table 4.5 that the learners' perceived freedom to control the process and outcomes of their leisure endeavours were high with the collective score of 85% (25.35/30). Ninety percent (2.71/0.03) of learners indicated that they were good at activities they do with other people, however only 76% (2.29/0.03) believed that they were good at almost all the activities they do. This could be an indication that the learners believe they have more control over their leisure experiences when they are amongst other people. The lower percentage of learners (76%) that indicated that they were good in almost all the activities they do, correlates with the lower percentage of learners (72%) feeling competent in their leisure skills in the leisure competence scale (p. 126). It is clear that the learners' skills need to be developed in order to perceive more freedom to control their leisure experiences.

Ninety one percent (2.74/0.03) of the learners indicated that they can do things during a recreation activity that will enable everyone to have more fun. Furthermore, 86% (2.50/0.03) of the learners indicated that it was easy for them to choose a recreation activity in which to participate. It is found that choice is central to autonomy, and autonomy is central to lifetime physical activity adherence (Corbin & Whitehead, 1991 and Whitehead, 1993 & 1994, as cited in Corbin, 2002). The learners' ability to exercise some choice in their leisure activities may thus have a positive effect on their participation adherence.

The analysis of the control scale indicates that the learners experience high levels of control in most areas. The lowest score (2.29) indicates that the learners do not feel

so competent in all the activities they do. They do, however, experience some sort of control due to the choices they can make concerning leisure participation. The degree of choice the learners at the school have is explained in the interview with the school's physiotherapist:

“The activities available at the school are limited due to financial and practical reasons. From these available activities the learners can exercise some choice. They can often choose between two available alternatives. For the winter activities the learners with learning disabilities can choose between soccer and table tennis and the more severe disabled learners can choose between Boccia and Beanbag throw. The therapists will ask in an informal way in what activities they would like to participate. The therapists will then use their discretion whether it will be physically possible for the learner to participate in that specific activity or not. Sometimes they will allow the learner to do the activity in order to see for himself/herself that he/she is not physically able to do the activity. A lot of the learners do not know what all the options are because of limited exposure to other extramural activities. Parents with the financial means will expose their children to more options from which they may choose, for example, horseback riding” (Sunshine, 2006).

The learners with learning disabilities feel slightly more in *control* than the learners with physical disabilities. This can be ascribed to the fact that the learners with learning disabilities have a greater choice concerning their leisure participation than the learners with physical disabilities (Sunshine, 2006). The school has a policy that the learners with cerebral palsy are obligated to participate due to their abnormal muscle tone. The learners with learning disabilities are more difficult to motivate, and therefore left to participate in something else if they really don't want to participate (Sunshine, 2006).

4.3.1.3. Leisure needs scale

The leisure needs scale, consisting of 6 items in the LDB questionnaire, provides an indication to which extent recreation activities satisfy intrinsic needs and wants. The specific needs included in the scale are the need for catharsis, relaxation, compensation, gregariousness, novelty, arousal and a need for creative expression.

The individual, who can satisfy these needs through leisure participation, feels a sense of freedom in leisure and derive optimal benefit from leisure.

Table 4.6: Leisure needs scale

Perceived leisure needs questions	Physical disabled	Learning disabled	Weighted Average
During my recreation activities there are often moments when I feel really involved in what I am doing	2.75	2.59	2.65
I can usually persuade people to do recreation activities with me even if they do not want to.	2.36	2.27	2.30
I can make almost any activity fun for me to do.	2.83	2.59	2.68
I participate in recreation activities, which help me to make new friends.	2.42	2.57	2.52
I can make good things happen when I do recreation activities.	2.33	2.64	2.53
When participating in recreation activities there are times when I really feel in control of what I am doing.	2.58	2.77	2.71
Collective score	15.27 (out of 18) 84.83%	15.43 (out of 18) 85.72%	15.39 (Out of 18) 85.5%

It is clear from Table 4.6 that the learners scored a high percentage of 86% (15.39/0.18) on the leisure needs scale. This indicates that the leisure opportunities at the school satisfied the learners' intrinsic needs to a great extent. Each question in Table 4.6 measured the level of satisfaction of the different needs. The need for fun (2.68), control (2.71) and involvement (2.65) were most satisfied while the need to be

able to influence friends to participate was lower (2.30). This indication correlates with the leisure control scale, where only 82% (2.47) indicated that they could decide with whom they want to participate.

The learners with learning disabilities scored higher than the learners with physical disabilities on the leisure need scale. This indicates that the intrinsic needs and wants of the learners with learning disabilities are more satisfied than the learners with physical disabilities.

4.3.1.4. Depth of involvement in leisure scale

The depth of involvement in leisure scale, consisting of 4 items in the LDB questionnaire, generates information of what feelings an individual have during his/her preferred activities. Items for this scale indicates the extend to which individuals achieve “flow” or become absorbed in the activity and are characterized by the merging of action and awareness, centring of attention, an altered perception of time, and feelings of power and control when they are involved in the activity (Witt & Ellis, 1989).

Table 4.7: Depth of involvement in leisure scale

Depth of involvement questions	Physical disabled	Learning disabled	Weighted Average
I can do things to make other people enjoy doing activities with me.	2.40	2.78	2.64
When I feel restless, doing recreation helps me calm down.	2.50	2.41	2.44
Sometimes when I do recreation activities, I get excited about what I am doing.	2.73	2.64	2.67
I usually have a good time when I do recreation activities.	2.58	2.73	2.68

Collective score	10.21 (out of 12) 85.1%	10.56 (out of 12) 88%	10.43 (Out of 12) 86.9%
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It is apparent from Table 4.7 that the leisure opportunities at the school gave the learners the opportunities to be absorbed in what they do with a collective score of 10.43/0.12 (87%). The highest score obtained (2.68/0.03) was from the question that asked whether the learners have a good time during their sport and recreation participation. Eighty one percent (2.44/0.03) of the learners felt that recreation help them calm down when they feel restless. This slightly lower indication can be due to the fact that only 14 learners from the 35 respondents completed this question.

The learners with learning disabilities scored higher than the learners with physical disabilities on the depth of involvement scale. This indicates that the learners with learning disabilities become more absorbed in their leisure activities than the learners with physical disabilities.

4.3.1.5. Leisure functioning: Total score

Collectively the sum of the above scores of the four components (perceived leisure competence, control, needs, and depth of involvement scale) of the leisure functioning scale reflects the degree to which the learners with learning- and physical disabilities perceive freedom in leisure (Witt & Ellis, 1989). It is apparent that the learners perceived high levels of freedom during their leisure participation (63.73/75). High levels of freedom in leisure, in other words, increased level of freedom/independence, are reflected in an independent leisure lifestyle (Witt & Ellis, 1989).

Minimal differences exist between the leisure functioning of the learners with learning and physical disabilities. Both of the disability groups' scores indicate a high leisure functioning and imply that the physical education at the specified school have thus the ability to foster independent leisure lifestyles. In Chapter 3: Figure 3.1, the model

of leisure services available for learners with disabilities were explained. The high leisure functioning of the learners at the school allocates the learners at the right end of the model. This end of the model represents learners who are intrinsic motivated; have high levels of control; are self-actualizing consumers; have high levels of functioning and skills; have mild deficits and disadvantages and have unbounded environments (Witt & Ellis, 1989).

Considering the impact that learning-and physical disabilities can have on learners' motor skills, the findings of this study are of significant value. In Chapter 3 these difficulties were explained. Learning and physical disabilities can have an influence on learner's motor skills. Learners with learning disabilities can have for example motor problems; weaker bilateral co-ordination; visual and spatial motor difficulties; more overflow movement; difficulty with visual-motor tasks; inferior spatial orientation and tasks requiring motor planning and sequencing of motor acts (Longhurst, Coetsee & Bressan, 2004). Learners with physical disabilities might experience weakness of limbs, paralysis, and uncontrolled muscles (Leitner & Leitner, 2004). The results of the learners leisure functioning are thus praiseworthy considering the above mentioned difficulties the learners may experience.

4.3.2. Summary of the learners' leisure functioning

- The learners with learning and physical disabilities had an 85% (63.73/75) leisure functioning.
- The different components contributing to the high level of freedom the learners experience, were the depth of involvement with the highest score of 86.92% (10.43/12), leisure need satisfaction with 85.50% (15.39/18), then leisure control with 84.50% (25.35/30) and leisure competence with the lowest score of 83.73% (12.56/15).
- The learners with learning disabilities had a slightly higher leisure functioning 85.32 (63.99/75) than the learners with physical disabilities 84.27% (63.2/75).

4.4. Conclusion

The physical activity patterns developed through physical education in schools and reinforced in the home and community, can provide the basis for lifelong physically active lifestyles (Seaman et al., 2003). The education sector is fully aware of this, and therefore proposed in the National Curriculum Statement (2002) that lifelong participation in physical activities promoting fitness needs to be encouraged (National Department of Education, 2002).

It is important that people with disabilities derive maximum benefit from their sport and recreation involvement to ensure continued participation. According to Witt & Ellis (1989) individuals derive maximum benefits from their sport and recreation activity involvement when they perceive freedom during these activities. To achieve perceived freedom, the following conditions must be met:

- 1) An individual perceiving himself as competent in a number of leisure activities;
- 2) Being able to control the process of leisure participation and the outcomes;
- 3) Participating in leisure activities more out of intrinsic desire than out of extrinsic reward expectations (Witt & Ellis, 1989).

The LDB was used to determine the learners' levels of perceived freedom through the measurement of the conditions listed above. The results indicated that the grade 6-8 learners at the specified school have a high level of leisure functioning. The learners with learning and physical disabilities thus perceive their leisure at the school as an area of freedom. This should have given an indication that the learners are motivated to participate and henceforth would contribute to the development of lifelong participation. Unfortunately the results in figure 4.6, p.118 indicate that a discrepancy between the willingness to participate and actual participation exists. The highest participation rate is recorded in athletics (49%) and the lowest participation rate is recorded in squash (3%) and soccer (3%).

The learners' levels of leisure functioning indicates that the reason for the lack of participation must be due to other factors than the learners' perceived freedom. Suggestions for further research on other factors that might influence the learners' participation rates are stipulated in chapter 5.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

The integration of people with disabilities into mainstream society is gaining national and international attention. Leisure and sport are regarded as one of the vital components in the integration of people with disabilities into society. One of South Africa's priorities concerning people with disabilities is therefore the development of sport activities in both mainstream and special facilities (Office of the Deputy President of South Africa, 1997). For the purpose of this study sport is used in the context of recreation sport where pleasure, exercise and social interaction are the main purposes for participation.

It is assumed that one of the aims when developing sport and leisure programs for individuals with disabilities would, be continued participation and the promotion of an independent leisure lifestyle. It is important that disabled people derive maximum benefit from their sport and recreation involvement to ensure continued participation. According to Witt & Ellis (1989) individuals derive maximum benefits from their sport and recreation activity involvement when they perceive freedom during these activities. To achieve freedom, and thus optimal leisure functioning, the following conditions must be met:

- An individual perceiving himself as competent in a number of leisure activities;
- Being able to control the process of leisure participation and the outcomes;
- Participating in leisure activities more out of intrinsic desire than out of extrinsic reward expectations (Witt & Ellis, 1989).

“Perceived freedom” is the central indicator of leisure functioning (Witt & Ellis, 1989). The Leisure Diagnostic Battery (LDB) was used as a research instrument designed to enable the assessment of the leisure functioning for a wide range of handicapped and non-handicapped individuals. One of the ELSEN (Education for Learners with Special Education Needs) schools in Tshwane was selected as research area. The

rationale behind the selection of the school as research area is motivated in the statement made by Seaman et al, (2003):

“The physical activity patterns developed in physical education in schools and reinforced in the home and community will provide the basis for lifelong physically active lifestyles”(p. 2).

The education sector is fully aware of this, and therefore proposed in the National Curriculum Statement (2002), that lifelong participation in physical activities promoting fitness needs to be encouraged (National Department of Education, 2002).

The hypothesis formulated in chapter 1 reads as follows: ***The leisure functioning of learners with learning and physical disabilities does not contribute to an independent leisure lifestyle.*** In order to test the hypothesis of the study, the elements influencing leisure functioning were measured. The primary objectives of the study were therefore to determine the:

- leisure competency of the learners;
- leisure control of the learners;
- needs satisfactory and
- the depth of involvement in their leisure activities as elements of leisure functioning.

The secondary objectives of the study were to gain information concerning motivation of participation and leisure opportunities available for learners with special needs. The secondary objectives of the study were therefore:

- To facilitate research on the value of leisure as well as the factors motivating leisure participation and how it correlates with leisure functioning (Explained in chapter 2).
- To analyze the leisure opportunities available for learners with special needs, nationally and internationally (Explained in chapter 3).
- To assess the leisure functioning of the learners with learning and physical disabilities at one of the ELSEN (Education for Learners with Special Education Needs) Schools in Tshwane (Explained in chapter 4).

- To determine areas in which improvement of current leisure functioning is needed in order to obtain optimal benefits from the learners' leisure experiences (Explained in chapter 5).

In the preceding chapters of this study, relevant theories relating to what motivate people to participate and what hinder participation, were presented. The elements influencing leisure functioning (leisure competence; control; need satisfaction and depth of involvement) corresponded with the motivational forces underlying leisure participation in the motivational theories proposed by several researchers (Bauman & Pratt, 1998; Janis & Mann, 1977; McLerory, Bibeau, Steckler, & Glanz, 1988 & Sallis et al., 1989, as cited in Marcus & Forsyth, 2003). This correlation validates the research methodology of this study of measuring the learners' leisure functioning in order to determine their motivation to participate independently.

The numerous constraints people with disabilities might experience to participate in leisure activities were presented (Henderson, 1999; Messent et al., 1998 & Penistin, 1998). It was therefore assumed that a number of people with disabilities do not experience the necessary freedom to participation and therefore are not highly motivated to participate. Given the importance of continued, independent leisure participation for the efficient development of leisure activities and facilities for people with disabilities, assessment of their leisure functioning (perceived freedom) becomes essential.

Realization of freedom also requires opportunities that are accessible and attractive (Kelly, 1996). The leisure opportunities available for learners with disabilities, internationally and specifically in the specified school, were discussed.

The level of the learners' leisure functioning was determined, testing the study's hypothesis and answering the research questions posed in chapter 1. General conclusions and recommendations will be presented in this chapter based on obtained results.

5.2. Conclusions

5.2.1. Determinants of leisure participation

Leisure can have physiological; psychological; intellectual and social benefits. It is important to note that, for the most part, people with disabilities can gain similar benefits from physical activity and the accrued physical fitness as people without disabilities (Seaman, 1999). Researchers show that people with disabilities have even more reason to participate (Messent, Cookes & Long, 1998). When the importance of an active leisure lifestyle is realized, ways need to be found to initiate and sustain it.

The leisure service industry must understand human behaviour and the factors influencing motivation towards participation to ensure continued participation. In chapter 2 the theories presented by Marcus & Forsyth (2003) explained the motivational forces underlying leisure participation. These theories were identified as the Learning theory; Decision-making theory; Behavioural choice theory; Social cognitive theory; the Ecological model and the Relapse prevention model. The central concept to almost all the above theories was that participation would likely occur when the perceived benefits of participation outweigh the perceived costs and barriers. The benefits of leisure participation can be summarized as follow:

- Physiological benefits: Leisure and especially leisure activities that involve physical activities are beneficial to the cardiovascular and musculoskeletal system. Leisure activities can also contribute to an increased lifespan.
- Psychological benefits: Leisure activities enhance psychological well being and personal satisfaction.
- Intellectual benefits: Leisure participation influence work efficiency and can improve learning ability.
- Social benefits: Leisure programmes have the ability to influence individuals as well as communities on a social level.

These perceived benefits needs to outweigh the perceived costs and constraints in order to influence participation. According to Witt & Ellis (1989) to derive maximum

benefits from leisure involvement, participants need to perceive freedom during these activities.

According to the results of this study, the learners experience high levels of freedom during their leisure participation. The learners derive thus maximum benefits from their leisure participation and should therefore be highly motivated to participate.

A discrepancy between the learners' level of motivation to participate and the actual participation, do however exist. The reason for this may be that the costs or barriers concerning leisure participation outweigh the benefits.

5.2.2. Constraints hindering leisure participation

Leisure constraints were also examined to determine factors that might hinder leisure participation. The three main constraints (structural, interpersonal and intrapersonal constraint) hindering participation were discussed in Chapter 2. Intrapersonal constraints, which are the most powerful predictors of commitments to participation, had also components similar to leisure functioning. These components are perceived competence; perceived autonomy; performance pressure; task involvement and perceived playfulness-leisureliness. This indicated that the termination of the learner's leisure functioning an indication of their individual psychological states is which influence motivation. The learners with physical and learning disabilities indicated high levels of leisure functioning, thus indicated low levels of intrapersonal constraints.

It can therefore be assumed that the learners experience other means of constraints than intrapersonal constraints. An in depth analyses of the learners structural and interpersonal constraints are thus necessary. Torkildsen (1999) listed some of the structural factors influencing participation. He refers to it as opportunity factors like available resources; type and quality of facilities; awareness; perception of opportunities; recreation services; distribution of facilities; access and location; choice of activity; transport; costs involved; management; policy and support; marketing; programming; organization and leadership; social accessibility and political policies.

Opportunities to participate in leisure activities do exist at the school. The structured one hour per week sport/recreation period and the two cultural periods per week support participation and make it available and accessible. Unfortunately no after school activities exist due to lack of transportation (Sunshine, 2006). This might be seen as a constraint, but enough opportunities during school time do exist.

Interpersonal constraints imply interpersonal interaction. It may be a main barrier to participation if the participant can't find a partner to do the activity with, or have social fears concerning participation. Henderson (1999) reported that particular conditions resulting in inactivity in people with disabilities are social fears, social stigma and the lack of social support. In a school for learners with special education needs, it is assumed that social fears and stigma are lower than in integrated schools.

Social support of recreation partners or friends and professionals, who understand the disabled participant's abilities, can greatly contribute to the participation in physical activities (Henderson, 1999). The importance of social support as motivation is confirmed by the school's physiotherapist. She noted that when the teacher or the coach is motivated and enthusiastic, the learners are also more motivated. When the parents are involved and interested in their child's performance, the child is also much more motivated to participate (Sunshine, 2006).

In Chapter 2 it was concluded that perceived freedom during leisure participation is vital for meaningful and continued participation. According to Kelly (1996) realization of freedom requires opportunities that are accessible and attractive.

5.2.3. Leisure opportunities

The leisure opportunities available for people with disabilities were examined. Historically, each era's lifestyle and their position towards the disabled determined the leisure opportunities available for people with disabilities. It is only from the 1960's, with the expression of human rights, that the needs and rights of people with disabilities were seriously considered.

Internationally, three main leisure service areas exist for people with disabilities. These service areas supply opportunities according to the participant's level of ability. The three service areas are 1) therapeutic recreation service, 2) leisure education service and 3) recreation service. These service areas facilitate people with disabilities to develop to the point where they can participate independently. Leisure education gives learners with disabilities the opportunity to learn the acquired leisure related knowledge and skill which will serve as basis for lifelong physically active lifestyles (Seaman et al., 2003).

Internationally the availability of physical activity for learners with disabilities differs from State to State. In the United States and Australia learners with disabilities participate in mainstream, inclusive physical education classes. Europe and Asia fluctuate from some to no physical education classes for learners with disabilities. Adapted physical activity workshops for teachers have however been conducted recently in Asia and Africa.

Nationally the education system is busy with transformation as a result of the inequalities of the previous regime. All the provinces in South Africa compelled through legislation to make sure there is no racial discrimination concerning the provision of special education services (Naicker, 2000). The United School Sport Association of South Africa (USSASA) is responsible for the development of the school sport structure. USSASA-ELSEN represents the learners with special education needs.

The wide variety of leisure services provided at the ELSEN School that formed part of the study was listed. The school is not situated in a rural area but is presented by different race groups. The school is a good example of how physical education can be adapted and applied in a school for learners with special education needs. How these learners experience the services at the school was determined through the Leisure Diagnostic Battery.

5.2.4. Leisure functioning of the learners at the ELSSEN School

The collective sum of the scores of the four components (perceived leisure competence, control, needs, and depth of involvement scale) of the leisure functioning scale reflects the degree to which the learners perceive freedom in their leisure experiences at the school (Witt & Ellis, 1989). A collective score of 63.73/75 suggests an 85% leisure functioning of the learners with learning and physical disabilities. This indicates that the learners experience high levels of freedom during their leisure activities at the school. According to Witt & Ellis (1989) high levels of freedom in leisure help individuals to increase their level of independence/freedom and thereby achieve an independent leisure lifestyle.

The different scales contributing to the high level of freedom is examined separately hereunder.

5.2.4.1. Perceived competence

Perceived competence is the perception the individual holds about his/her ability to determine what happens in the course of an activity and to avoid failure. An individual who believes he/she can control the outcome of leisure participation because of his/her abilities will feel freer to participate in leisure activities. The perceived competence scale indicated that 84% (12.56/15) of the learners believe that they are competent in leisure and will thus feel freer to participate. The learners with physical disabilities scored slightly higher (12.69) than the learners with learning disabilities (12.49) on the competence scale. The high percentage of perceived competence can be due to the fact that the school modifies the activities to help the learners with specific disabilities to succeed in the activities, but still be compatible with other schools to make competitions possible (Sunshine 2006). Only 71,67% (2.15/3) of the learners believe however that they have the necessary skill to participate. The learners' physical competence thus needs more development.

The theoretical frame of reference in the study explained the relation between perceived competence and leisure participation. The social cognitive theory, as one of the motivational theories, centres on self-efficiency and confidence. People's perception that they can perform successfully increases the likelihood that they will engage in that behaviour. Self-efficiency is related to physical activity behaviour (Sallis *et al.*, 1989 in Marcus & Forsyth, 2003); therefore it is important to evaluate and improve a client's self-efficiency for the targeted activity.

The competence motivational theory supports the social cognitive theory by stating that an athlete's perception of control, together with self-worth and competence influence motivation (Weinberg & Gould, 2003). Goslin, Steyn & Singh, (2000) confirmed this by stating that continued participation will increase when the subjective feelings of success and personal competence improve. The results indicated that the learners at the school feel competent in their leisure activities and thus increases the likelihood of participation.

5.4.4.2. Perceived control

The perceived leisure control scale measures the individual's perceived freedom to control the process and outcomes of leisure endeavours. The learners at the school scored a high rate of 85% (25.35/30) on the leisure control scale. The learners with learning disabilities scored higher (25.51) than the learners with physical disabilities (25.03). This could be due to the fact that the learners with learning disabilities have the choice whether they want to participate or not. The learners with physical disabilities had limited choice whether they wanted to participate or not (Sunshine 2006).

Corbin (2002) noted that intrinsic motivation indicates that choice is central to autonomy, and autonomy is central to lifetime physical activity adherence. The learners exercised some choice from the available activities at the school. They often chose between two available alternatives (Sunshine 2006). This opportunity to exercise some choice has thus a positive effect on the learners' participation adherence.

5.4.4.3. Perceived need satisfaction

The perceived needs scale, provides an indication to which extent recreation activities satisfy intrinsic needs and wants. It is clear that the learners scored high (15.39/18) on the leisure needs scale indicating an 85% needs satisfaction. The learners with physical disabilities had a lower score (15.27) than the learners with learning disabilities (15.43), but still indicated a high score on the leisure needs scale.

This indicates that the leisure opportunities at the school satisfied the learners' intrinsic needs to a great extent. According to Torkildson (1999), needs is the cause of motivation rather than the motivation itself. It is therefore important to understand the needs of learners with disabilities to ensure effective planning of leisure services and facilities. Torkildson (1999) describes effective leisure services as one that provides the right opportunities at the right time, in the right place, based on the needs of the people it is intended to serve. Figure 4.5, p. 117 in Chapter 4 indicated that the need for fun (89%), control (90%) and involvement (88%) were most satisfied while the need to be able to influence friends to participate had the lowest score (77%). This indication compares with the leisure control scale, where only 82% indicated that they could decide with whom they wanted to participate. Although these rates are an indication of high need satisfaction, these are the areas that can still be improved.

5.4.4.4. Depth of involvement

The depth of involvement scale generates information of what feelings an individual have during his/her preferred activities. It is apparent that the leisure opportunities at the school give the learners the opportunities to be absorbed in what they do with a collective score of 87% (10.43/12). The learners with learning disabilities felt more absorbed in what they do (10.56) than the learners with physical disabilities (10.21).

5.4.4.5. Testing the hypothesis

The hypothesis formulated in chapter 1 reads as follows: ***Leisure functioning of learners with learning and physical disabilities does not contribute to an independent leisure lifestyle.***

From the preceding conclusion, it can therefore be stated that the formulated hypothesis is rejected. Leisure functioning of learners was high and should contribute to an independent leisure lifestyle. The learners with learning and physical disabilities, perceived their leisure at the school as an area of freedom.

This should have given an indication that the learners were motivated to participate and henceforth would contribute to the development of independent participation. Unfortunately the results in Figure 4.6, p. 118 indicated that a discrepancy exists between the willingness to participate and actual participation.

The learners' level of leisure functioning indicated that the reason for the lack of participation may be due to other factors than the learners' perceived freedom. In the interview with the schools' physiotherapist the following conditions were mentioned as motivation to participate:

1. *The teacher*: When the teacher or the coach is motivated and enthusiastic, the learners are also more motivated.
2. *Achievement*: Learners who excel in their sport and recreation are motivated to participate.
3. *Parents*: When the parents are involved and interested in their child's performance, the child is much more motivated to participate.
4. *Competition*: Competing against other schools motivate the learners to practise. (Sunshine, 2006).

The following factors were mentioned as less motivating factors:

1. *The teacher*: When the teacher is half-hearted, the learners are also less motivated.

2. *Failure*: Especially if the learner was not born with the disability and he/she can remember his/her abilities before the disability occurred. Sometimes the learners don't understand the rules of the game, which results in failure of performing in the game.
3. *Self-consciousness*: Learners with disabilities often feel self-conscious of their disability, especially between learners without disabilities. (Sunshine, 2006)

Many of the motivational forces listed above are external motivators. When the learner feels that factors are out of his/her control, his/her motivation decreases (Weinberg & Gould, 2003). This is evident of the self-degenerative pattern explained in the Attribution Theory in Chapter 2, p. 69. The self-degenerative pattern attributes success to external and unstable causes and failures to internal and stable causes. Learners operating in the self-serving pattern, however, attribute success to personal abilities and failure to something other than the lack of ability. The self-serving pattern increases thus motivation. It is therefore recommended that the learners will be taught how to develop a self-serving pattern, attributing success to personal abilities and failure to something other than the lack of ability.

5.5. Recommendations

One of the secondary objectives of this study was to determine areas in which improvement of current leisure functioning is needed in order to obtain optimal benefits from their leisure experiences. As it has been concluded, the learners have high leisure functioning, being thus motivated to participate. This is reflected in the 91% of the learners who indicated that they are willing to participate in leisure activities. The highest participation rate was recorded in athletics (49%) and the lowest participation rate was recorded in squash (3%) and soccer (3%). Constraints do exist given the low scope of actual participation.

The result of the study indicated an 85% leisure functioning of the learners with physical and learning disabilities. The learners perceive thus freedom in their leisure experiences which indicate that they derive maximum benefit from it. The following

recommendation is however proposed to increase the element of leisure functioning rated less than the other elements:

- The learners recorded an 85% rate on the perceived competence scale. Only 71,67% (2.15/3) of the learners believed however that they had the necessary skill to participate. The learners' physical competence thus needs more development. Opportunities for the learners to develop competency should be facilitated and should emphasis skill development. The learning theory acknowledges that when developing new, complex behaviour, it is crucial to start with small steps and then progress slowly toward the desired result (Marcus & Forsyth, 2003).

5.6. Shortcomings and errors

The following limitations should be noted:

- 1) In the research process, two learners made an error with one question that started on the bottom of the one page and continued to the next page. This possibly indicated that they did not understand the question and therefore answered it incorrectly.
- 2) Errors in six answers were noted. Most of these errors came from learners who gave two answers for one question. A total of eight answers could thus not be used in the data capturing process.

5.7. Future research

- 1) Due to the discrepancy between the learners' willingness to participate and actual participation, constraints hindering participation need to be determined. It was concluded that the intrapersonal, interpersonal and structural constraints are not likely reasons for the lack of participation. It is suggested that other possible constraints be identified. The Barriers to Leisure Involvement Scale (Witt & Ellis, 1989) can be used as a research instrument to measure the following types of constraints:

- Communication and social skills;
- Decision-making and lack of desire;
- Time and monetary constraints and
- Accessibility.

2) This study determined the needs of the learners at the school. Assessment of a broader base of learners with disabilities would be recommended for further planning. Such an approach, together with the information obtained from this study can provide the following, as stated by Torkildson (1999):

- “Provide an increase in individual and community input and involvement in planning and decision making;
- provide the planner with a better understanding of the community and individuals within it;
- provide information as to the activities in which people are involved, the activities in which they would like to be involved and how these can be planned and provided for within an overall leisure delivery system;
- provide supportive facts and ideas on which to base decisions in the planning process” (p. 113).

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APPENDIX A

INTERVIEW WITH THE PHYSIOTHERAPIST AT THE SPECIFIED ELSEN SCHOOL IN TSHWANE.

Question 1

What type of disabilities does this school encounter?

Answer: The majority of learners have a learning disability. Approximately $\frac{1}{3}$ of the learners have physical disabilities. Most of the physical disabled learners have Cerebral palsy. The rest consists of traumatic brain injury; progressive conditions; injuries to the spinal cord; medical conditions resulting in muscle weakness and reduced mobility; medical/genetic conditions resulting in mobility problems; orthopedic disabilities and other conditions.

Question 2

How does the school define learning and physical disability? Is this definition used as criteria to justify placement in the school?

Answer: The school has no specific definition other than the standardized definitions on learning and physical disabilities. The school will accommodate any learner with a physical disability where the disability impedes learning. Learners with physical disabilities, but normal brain function, will be accommodated at the school but because emphasis is laid on inclusion (White Paper 6, 2001), the learner will be advised to attend a normal school.

Question 3

What is the scope of the sport and recreation activities at the school?

Answer: The school has one sport/recreation period per week for one hour in duration and two cultural periods of 40 minutes in duration. There are no after school

activities due to transportation problems of the learners. The learners with identified talent will stay after school for additional practice.

List of activities available at the school:

Summer sport	Winter sport
Athletics	Boccia
Basketball	Beanbag (aim and distance)
Cycling	“Matrolbal”
Cross training	Knee-Cricket
Squash	Special cricket
Rugby	Table tennis
Chess	Soccer
Tennis	
Netball	
Volley-ball (Sitting volleyball)	
Art	
Dance	
Music	
Cooking	

Question 4

What is the school's policy regarding sport and recreation?

Answer: (No written policy was available).

The physiotherapists in particular, believe that sport and recreation is part of their life skills and that they need the stimulation. They have a policy that the learners with cerebral palsy are obligated to participate due to their abnormal muscle tone. The learners with learning disabilities are more difficult to motivate, and therefore left to participate in something else if they really don't want to participate. Part of their policy is that there must be one sport/recreation period in a week for one hour in duration, and two culture periods of 40 minutes in duration.

Question 5

What motivate and what demotivate the learners to participate in sport and recreation?

Answer:

Motivating factors:

The teacher: When the teacher or the coach is motivated and enthusiastic, the learners are also more motivated.

Achievement: Learners that excel in their sport and recreation are motivated to participate.

Parents: When the parents are involved and interested in their child's performance, the child is much more motivated to participate.

Competition: Competing against other schools motivate the learners to practise.

Demotivating factors:

The teacher: When the teacher is half-hearted, the learners are also demotivated.

Failure: Especially if the learner was not born with the disability and he/she can remember his/her abilities before the disability occurred. Sometimes the learners don't understand the rules of the game, which results in failure of performing in the game.

Self-consciousness: Learners with disabilities often feel self-consciousness of their disability, especially between learners without disabilities.

Question 6

What are the benefits of participation in sport and recreation for the learners with disabilities?

Answer: The exercise is very important for their health. Through sport and recreation they learn how to think strategically, how to take turns and how to develop good sportsmanship, only to name a few.

Question 7

How are the activities structured and adapted in order to: 1) meet their needs and 2) enable them to exercise a degree of control through the available activities they can choose from?

Answer:

1) All the activities are modified in order to:

Help the learners with specific disabilities to succeed in the activities, but still be compatible with other schools to make competitions possible.

2) The activities available at the school are limited due to financial and practical reasons. From these available activities the learners can exercise some choice. They can often choose between two available alternatives. For the winter activities the learners with learning disabilities can choose between soccer and table tennis and the more severe disabled learners can choose between Boccia and Beanbag throw. The therapists will ask in an informal way in what activities they would like to participate. The therapist will then use his/her discretion whether it will be physically possible for the learner to participate in that specific activity or not. Sometimes they will allow the learner to do the activity in order to see for himself/herself that he/she is not physically able to do the activity. A lot of the learners do not know what all the options are because of limited exposure to other extra-mural activities. Parents with the financial means will expose their children to more options from which they may choose for example horseback riding.

Question 8

What are the sport and recreation opportunities available for people with disabilities in South Africa?

Answer:

There is a lot of opportunities available for people with disabilities in South Africa. The ultimate goal is to give people the opportunity to participate in the Paralympic Games. A lot of activities available for people with disabilities is however not part of the games participating in at the Paralympic Games. Some of these activities include golf; wheelchair tennis; swimming; athletics; cycling; power lifting; disability dance;

table tennis; basketball; wheelchair rugby and goalball. The South African Games gives the opportunity for everyone to participate, not only the elite athletes.

A lot of opportunities for people with disabilities is available, but not always reachable due to the financial implications. A lot of the people with disabilities need personal assistance to participate in an activity. This has great financial implications, due to the costs of personal assistance.

Question 9

What alterations can be made in order for the learners to obtain optimal benefits from their sport and recreation experiences?

Answer: Financial and human resources will open the doors for more opportunities. More finances will make the upgrading of facilities possible, which will result in better participation e.g. learners playing tennis on a netball court which is confusing due to the court layout. There is a lot of helpful equipment for example 3-wheel bicycles for the learners with cerebral palsy, but it is very expensive.

APPENDIX B

QUESTIONNAIRE

This questionnaire deals with how you feel about your recreation experiences. Recreation experiences include participation in activities such as reading, hobbies, crafts, social activities, music, sport etc.

Please do not write your name anywhere.

Please answer all questions to the best of your ability.

Indicate your answer by making an **X** in the appropriate block.

1. Are you:

Male	
Female	

2. How old are you?

	Years
--	-------

3. Highest school grade completed

--

4. Would you like to participate in recreation activities in your spare time?

YES	
NO	

If you answered YES in question 4, go to question 5 and ignore question 6. If you answered NO in question 4, go to question 6 and ignore question 5.

5. Please indicate reasons for your answer in question 4 if you answered Yes:

It is fun to do.	
Sport and recreation makes me feel better about myself.	
It gives me the opportunity to do things with my friends.	
Sport and recreation is good for my health.	
I am good at sport and recreation activities.	
Sport and recreation makes me feel better.	
Other:	

6. Please indicate reasons for your answer in question 4 if you answered No:

I do not like to participate in sport and recreation activities- it's not fun.	
I am not good at sport and recreation activities.	
I do not have friends to do sport and recreation activities with.	
My physical disability prevents me from participating.	
I do not know where or how to participate in sport and recreation activities.	
I do not feel like doing sport and recreation activities.	
I do not have the time.	
I do not have the money.	
Other reasons:	

7. What activities are you currently doing at school? Please list all the activities you are doing.

Athletics		Table tennis	
Basketball		Tennis	
Cycling		Netball	
Cross training		Volley-ball	
Squash		"Matrol-ball"	
Rugby		Art	
Chess		Dance	
Soccer		Music	
Soccer for the disabled		Cooking	
Swimming		Other activities:	

8. What other activities would you like to do? Please list the activities:

.....

.....

.....

.....

.....

9. Do you think recreation activities can improve your life?

YES	
NO	

10. Why do you say so?

.....

.....

.....

.....

.....

11. Please read the following statements and mark the response that best reflects your feelings.

STATEMENT	AGREE	DON'T KNOW	DISAGREE
My recreation activities help me feel important.			
I know many recreation activities that are fun to do.			
I can do things to improve the skills of people I do recreation activities with.			
I have the skills to do recreation activities in which I want to participate.			
Sometimes during a recreation activity I get the feeling that I can do almost anything.			
It is easy for me to choose a recreation activity in which to participate.			
I can do things during recreation activities that will make other people like me.			
My recreation activities enable me to know other people.			
I can make a recreation activity as enjoyable as I want it to be.			
I can do things during a recreation activity that will enable everyone to have more fun.			
I usually decide with whom I do recreation activities.			
I am good at recreation activities I do with other people.			
I am able to be creative during my recreation activities.			
I am good at almost all the activities I do.			
I can make other people have fun			

during recreation activities.			
During my recreation activities there are often moments when I feel really involved			
STATEMENT	AGREE	DON'T KNOW	DISAGREE
in what I am doing			
I can usually persuade people to do recreation activities with me even if they do not want to.			
I can make almost any activity fun for me to do.			
I participate in recreation activities, which help me to make new friends.			
I can make good things happen when I do recreation activities.			
When participating in recreation activities there are times when I really feel in control of what I am doing.			
I can do things to make other people enjoy doing activities with me.			
When I feel restless, doing recreation helps me calm down.			
Sometimes when I do recreation activities, I get excited about what I am doing.			
I usually have a good time when I do recreation activities.			

APPENDIX C

INFORMED CONSENT: RESEARCH QUESTIONNAIRE ON THE LEISURE FUNCTIONING OF THE LEARNERS WITH LEARNING DISABILITY AT THE NEW HOPE SCHOOL IN THE TSHWANE AREA.

I (please print full names), in my capacity as parent/guardian of(please print full names of learner), a learner at the New Hope School, agree that my child may take part in the research undertaken by Mrs Junita de Swardt as part of a Masters degree in the Department of Biokinetics, Sport and Leisure Sciences at the University of Pretoria.

I agree that my child may complete the Leisure Diagnostic Battery- a questionnaire assessing the leisure functioning of handicapped and non-handicapped individuals. I understand that participating in this research will involve providing information about:

- some aspects of my child's sport and recreation activities;
- information regarding the New Hope School's services and facilities;
- information regarding sport and recreation opportunities provided at the New Hope School;
- my child's feelings and/or attitudes towards the sport and recreation activities and services provided at the New Hope School.

I also understand that:

- completing the questionnaire will take about 40 to 60 minutes and will be completed at a time and place that is convenient for the school;
- my child is under no obligation to participate in the study;
- specific answers and comments will be kept confidential and my child's name will appear nowhere on the completed questionnaire;
- my child's anonymity will be protected at all times;
- my child's name will not be identified in any report or presentation, which may arise from the study;

- that while my child or the school may not benefit directly from the study, the information gained may assist to improve and understand the leisure (sport and recreation) services at the New Hope School;
- the study is undertaken to obtain a Masters Degree in Human Movement Sciences at the University of Pretoria;
- that a summary of the findings of the study will be sent to the New Hope School and that the school may upon request obtain a copy of the dissertation in full.

I understand what completing the questionnaire involves and hereby give informed agreement for my child to participate.

Signature

Date

If you have any questions or concerns about this study, please contact the researchers:

Principle Researcher
Mrs Junita de Swardt
Tel: 083 597 1429

Supervisor
Dr. J.G.U. Van Wyk
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Tel: 012 420 6045

GLOSSARY

Aphasia

Defect or loss of the power of expression by speech, writing, or signs, or of comprehending spoken or written language, due to injury or disease of the brain.

Arthritis

Arthritis is the inflammation of joints.

Asthma

Asthma is a condition marked by recurrent attacks of paroxysmal dyspnea, with wheezing due to spasmodic contraction of the bronchi.

Autism

Autistic thinking is the preoccupation with inner thoughts, daydreams, fantasies, delusions, and hallucinations; egocentric, subjective thinking lacking objectivity and connection with reality. The self often predominates to the total exclusion of that which is not self.

Cerebral Palsy

Cerebral Palsy is any of a group of persisting, nonprogressive motor disorders appearing in young children and resulting from brain damage caused by birth trauma or intrauterine pathology.

Clubfoot

A clubfoot is a congenitally deformed foot.

Cystic fibroses

Cystic fibroses is a generalized, autosomal recessive disorder of infants, children and young adults, in which there is widespread dysfunction of the exocrine glands; characterized by signs of chronic pulmonary disease, pancreatic deficiency, abnormally high levels of electrolytes in the sweat, and occasionally by biliary cirrhosis.

Down syndrome

Down syndrome is a chromosome disorder characterized by a small, anteroposteriorly flattened skull, short, flat-bridge nose, epicanthal fold, short phalanges, widened spaces between the first and second digits of hands and feet, and moderate to severe mental retardation, with Alzheimer's disease developing in the fourth or fifth decade. The chromosomal aberration is trisomy of chromosome 21 associated with late maternal age.

Diabetes

Diabetes is a general term referring to disorder characterized by excessive urine excretion.

Encephalitis

Encephalitis is inflammation of the brain.

Epilepsy

Any of a group of syndromes characterized by paroxysmal transient disturbances of the brain function that may be manifested as episodic impairments or loss of consciousness, abnormal motor phenomena, psychic or sensory disturbances, or perturbation of the automatic nervous system.

Fetal alcohol syndrome

Fetal alcohol syndrome is a syndrome of altered prenatal growth and morphogenesis occurring in infants born of woman who were chronically alcoholic during pregnancy.

Fragile X-syndrome

An X-linked syndrome associated with fragile site on the long arm of the X-chromosome at q27.3, associated with mental retardation, enlarged testes, high forehead, big jaw, and long ears in most males and mental retardation in many heterozygous females

Friedreich's ataxia

Friedreich's ataxia is an autosomal recessive disease, usually beginning in childhood or youth, with sclerosis of the dorsal and lateral columns of the spinal cord. It is attended by ataxia, speech impairment, lateral curvature of the spinal column, and

peculiar swaying and irregular movements, with paralysis of the muscles, especially of the lower extremities, and a high-arched foot.

Guillian Barré polyneuritis

Guillian Barré polyneuritis is a rapidly progressive ascending motor neuron paralysis of unknown etiology, frequently following an enteric or respiratory infection. An autoimmune mechanism following viral infection has been postulated. It begins with paresthesias of the feet, followed by flaccid paralysis and weakness of the legs, ascending to the arms, trunk, and face and is attended by slight fever, bulbar palsy, absent or lessened tendon reflexes, and an increase in the protein of the cerebrospinal fluid without corresponding increase in cells.

Hemophilia

Hemophilia is determined by a mutant gene near the telomere of the long arm of the X chromosome (Xq). It is characterized by subcutaneous and intramuscular hemorrhages; bleeding from the mouth, gums, lips and tongue; hematuria; and hemarthroses.

Idiopathic scoliosis

Idiopathic scoliosis is an appreciable lateral deviation in the normally straight vertical line of the spine due to unknown causes.

Leukemia

Leukemia is a progressive malignant disease of the blood-forming organs, characterized by distorted proliferation and development of leukocytes and their precursors in the blood and bone marrow.

Meningitis

Meningitis is the inflammation of the meninges (the three membranes that envelop the brain and spinal cord), usually by either a bacterium or a virus.

Mental retardation

It is a mental disorder characterized by significantly subaverage general intellectual functioning associated with impairments in adaptive behaviour and manifested during the developmental period. It can be classified as mild (IQ 50-70); moderate (IQ 35-

50); severe (IQ 20-35); profound (IQ below 20) and borderline mental retardation (IQ 70-85) which refer to a very mild form with only slight impairments in adaptive behaviour.

Myelination

Myelination is the act of furnishing with or taking on myelin. Myelin is the substance of the cell membrane of Schwann's cells that coils to form the myelin sheath; it has a high proportion of lipid to protein and serves as an electrical insulator.

Muscular dystrophy

It is a group of genetic degenerative myopathies characterized by weakness and atrophy of muscle without involvement of the nervous system.

Multiple sclerosis

Multiple sclerosis is a disease in which there are foci of demyelination of various sizes throughout the white matter of the central nervous system, sometimes extending into the gray matter. Typically the symptoms of lesions of the white matter are weakness, incoordination, paresthesias, speech disturbances, and visual complaints. The course of the disease are usually prolonged, so that the term multiple also refers to remissions and relapses that occur over a period of many years.

Myopathy

Myopathy is any disease of a muscle.

Myositis

Myositis is inflammation of a voluntary muscle.

Nephritis

Nephritis is the inflammation of the kidney.

Neuropathy

Neuropathy is a functional disturbance or pathological change in the peripheral nervous system.

Orthopedic

Orthopedic relate to the correction of deformities of the musculoskeletal system.

Poliomyelitis

Poliomyelitis is an acute infectious disease occurring sporadically or in epidemics and caused by a virus, usually a poliovirus but occasionally a coxsackievirus or echovirus. It is characterized clinically by fever, soar throat, headache, and vomiting, often with stiffness of the neck and back. In the minor illness, these may be the only symptoms. In the major illness it is characterized by involvement of the central nervous system, stiff neck, pleocytosis in the spinal fluid, and perhaps paralysis. There may be subsequent atrophy of groups of muscles, ending in contraction and permanent deformity. It is also called polio.

Rheumatic fever

Rheumatic fever is a febrile disease occurring as a delayed sequela of infections with group A beta-hemolytic streptococci and characterized by multiple focal inflammatory lesions of the connective tissue structures, especially of the heart, blood vessels, and joints, and by the presence of Aschoff bodies in the myocardium and skin.

Sickle cell anemia

It is a hereditary, genetically determined hemolytic anemia (when the equilibrium between blood loss and blood production is disturbed), one of the hemoglobinopathies.

Schizophrenia

Schizophrenia is a mental disorder or heterogeneous group of disorders comprising most major psychotic disorders and characterized by disturbances in form and content of thought, mood, sense of self and relationship to the external world, and behaviour.

Spina bifida

Spina bifida is a developmental anomaly characterized by defective closure of the bony encasement of the spinal cord, through which the cord and meninges may or may not stick out.

Stroke

A stroke is a sudden and severe attack.

Spinal muscular atrophy

It is a progressive degenerative disease of the motor cells of the spinal cord.

Tuberculosis

Tuberculosis is any of the infectious diseases of man and animals caused by species of *Mycobacterium* and characterized by the formation of tubercles and caseous necrosis in the tissue. Any organ may be affected, although in man the lung is the major seat of the disease and the usual portal through which the infection reaches other organs.

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