MAPPING THE LANGUAGE OF INTELLECTUAL DISABILITY

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by

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ABSTRACT

The terminology used to represent individuals with a lower than average intellectual capacity varies considerably amongst individuals, institutions, and countries. Some terms used in recent years are intellectual disability, mental retardation, mental handicap, and learning disability. The present study used the technique of multidimensional scaling (MDS) to map the constructs underlying the terminology used by professionals working in adapted physical activity. A questionnaire was developed to measure respondents' perceptions of the degree of similarity between pairs of terms used to describe the target population. The similarity matrix thus generated was used as the input for MDS that generated n-dimensional maps of the underlying constructs. The questionnaire was distributed, and responses collected, via the Internet and postal services. The survey participants were members of the International Federation for Adapted Physical Activity and guest reviewers and contributing authors for the Adapted Physical Activity Quarterly. The results indicated that there were significant differences between the terminology used in different English speaking countries. The construct maps presented by the MDS mapping are subject to several alternate interpretations. The interpretations discussed were (a) advocacy (self-named) terminology versus medical (clinically named) terminology, (b) visual stigmatization versus non-visual stigmatization, and (c) variations of terminology used in different countries. Implications for researchers and practitioners were also discussed.

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CHAPTER 1

INTRODUCTION TO THE STUDY

"Mentally disabled," "mentally handicapped," "mentally challenged," "mentally retarded," "developmentally delayed, disabled, impaired," and "individuals with an intellectual disability" are terms that have been used to describe individuals who have a lower than average intellectual capacity. This extensive list of labels has caused much confusion.

Terminology varies among individuals, institutions, and countries. Administrators and educators in medical and educational institutions, as well as advocacy groups for individuals with disabilities, have designed categories and used labels for many years. This influence of labels has been described by Trent (1994) as follows:

> Since it emerged as a social problem in the second quarter of the nineteenth century, educators, social reformers, physicians, psychologists, sociologists, and social workers have viewed mental retardation in diverse ways: as a disorder of the senses, a moral flaw, a medical disease, a mental deficiency, a menace to social fabric, and finally, as mental retardation. Constructed sometimes in the name of social control, these views have accompanied and reflected shifts in the social, political, and economic and cultural order...(p.143).

This investigation will analyze the array of labels that have classified individuals with a lower than average intellectual capacity. As various historical time frames are discussed,

the appropriate terminology from that era will be explained. Such terms as "jester," "fool," "idiot," and "imbecile" were once used in the same context as the labels that have become acceptable in today's society. Even though these terms may be offensive today, they genuinely reflected the attitude of the people and their thoughts toward mental retardation from each particular era. Trent (1994), explains "Behind these awkward new phrases, however, the gaze we turn on those we label mentally retarded continues to be informed by the long history of condescension, suspicion, and exclusion. That history is unavoidably manifest in the words we now find offensive. While contemporary phrases appear more benign, too often we use them to hide from the offense in ways the old terms did not permit"(p.156). Today we still apply labels but are perfecting our linguistic skills to reduce the negative connotations associated with various terms.

Search for the Question

"Label jars, not people" were the words displayed on the poster hanging above my desk during the summer of 1994 when I worked with the Gander Association for Community Living. I was hired as the Recreation Facilitator to complete a research project on the involvement of individuals with a developmental disability in existing recreational activities and sports programs in that area.

Quite often during that summer, I found myself pondering the phrase - label jars, not people. I questioned the language I used to describe an individual with a lower than average intellectual capacity. I continually asked myself such questions as "Am I using language that is offensive? What is the most appropriate terminology to use?" I deliberated over the

issue on numerous occasions.

Prior to the start of the position as Recreation Facilitator, I had limited experience working with individuals with a lower than average intellectual capacity. I had completed one year of the Physical Education Program at Memorial University of Newfoundland, which required the completion of an Adapted Physical Education course. While completing that course, it was highly recommended that each student volunteer with the Special Olympics or a similar organization. From that particular course and the associated volunteer experience with the Special Olympics, I realized that I wanted to dedicate my life to working with individuals with disabilities through sport and recreation. With much exuberance and excitement, I began my journey working in the field of Adapted Physical Activity with the Gander Association of Community Living.

To conclude my summer employment, I was required to write a report based upon my summer experience. As expected, I was baffled as to what terminology I should use to write the report. My confusion and anxiety escalated as I conducted research for the project. Essentially, each article produced by a different organization, profession, or country used different terminology to refer to the group of individuals that interested me. Throughout the summer, I also heard many different terms used by parents of children with disabilities, recreational workers, and my co-workers. Such terms as "mentally handicapped," "mentally retarded," "mentally challenged," and "mentally disabled" were among the most common. However, the term that was most commonly used at the office was "a person with a developmental disability". Until this point in time, I had not heard the use of this term in any

other environment but at the office. I could not recall reading it in journals and books, however, I felt this term was the least pejorative. From that point on, I used the term "individuals with a developmental disability," recognizing that they were people before their disability.

Upon completion of my summer employment, I continued with my Physical Education degree at Acadia University in Nova Scotia where I specialized in the area of Adapted Physical Education. From that point on, I was introduced to various individuals with disabilities through volunteer organizations, employment, and education. I was fortunate to have opportunities to work in the United States, Germany, and Canada. Through my experiences, I continuously questioned my use of appropriate terminology to address the group of individuals with whom I spent much of my time. It seemed that everywhere I went, and everyone with whom I spoke, felt a different term was most appropriate. Still, I was not convinced that all these individuals could be correct in their usage of terminology.

Evidently, my experiences working with individuals with a lower than average intellectual capacity, have lead to the research of this controversial topic. I believe that they deserve the time, effort, and commitment that this investigation requires.

Upon personal reflection of the terminology that I use, which was initiated by the onset of the research project, I realized the term "individuals with developmental disabilities" was insufficient. I felt that due to the clinical definition of "developmental disability", I was using the term inappropriately. When I used "developmental disability," I referred to people who have "mental retardation," not meaning to include those who have autism and epilepsy

as the formal definition suggests. After much contemplation and consideration, I have decided to use "individuals with intellectual disabilities" throughout this paper.

Statement of the Problem

Labeling

Language is a powerful and influential tool. It can reflect dignity and compassion as well as hatred and prejudice. Language can present an attitudinal barrier as easily as a physical disability can present a physical barrier. The change in the language used when referring to individuals with intellectual disabilities is not as important as the conditioning of attitudes that is reflected in the terminology used (Nagler, 1993).

People have an inherent need to classify and categorize various things. They classify according to job status, gender, ethnicity, social class, and (dis)abilities. People believe that names and language represent them personally and politically (Nagler, 1993).

The issue of naming or labeling has been recorded as early as in the Old Testament of the Bible. "According to the Old Testament, God's first act after saying 'Let there be light' was to call the light 'Day' and the darkness 'Night'. Moreover, God's first act after the creation of Adam was to bring every beast in the field so that Adam could give them names: and 'whatsoever Adam called every living creature, that was the name thereof' (Genesis 2:20)."(Nagler, 1993, p.15).

The struggle to derive the appropriate label for many groups has become the basis of controversy. In an effort to gain control over one's life, one first had to overcome the problem of labeling. "The resolution of this was not clear-cut. For some, the original

stigmas became the banner: Negroes and coloreds become Blacks. For others, only a completely new designation would suffice - "Ms" has caught on as a form of address..." (Nagler, 1993, p.15). Individuals with disabilities are experiencing the inequities of the labeling controversy. Anne Peters (1986) expresses her views concerning the labeling controversy in the following quote:

> Many of us active in the disability rights movement insist the terms we're called are not important; that they are secondary to what we are doing. Is this true? The point seems valid. After all, for too long the names we've been given have felt too much like labels. Many of us reject being called either "handicapped" or "disabled" – neither feels right to us – we don't consider ourselves to be the kind of person such a word conjures up in our mind. ...But most of us feel that we're "just persons." We don't like labels – any labels (p. 12).

As political and social views have changed within society, labels have also changed. As the reference term for individuals with intellectual disabilities becomes associated with that group, the term becomes derogatory due to the attitudinal barriers. The label cycle then continues. The various professionals - medical, educational, societal - invent new terminology that reduces the stigma of the old term.

To overcome the problem of labeling individuals with disabilities, it is important to recognize that all individuals possess positive attributes, personality differences, and a wide variety of emotions. When individuals with intellectual disabilities are treated with dignity

and respect, the terminology used to identify these individuals will reflect a positive attitude.

The Effects of Terminology on Physical Educators

Physical education, recreation, and sport are areas that enable individuals with disabilities to participate with other individuals who have similar interests. It provides an avenue for social, intellectual, and physical development. Physical education programs can maximize the potential for successful participation in community activities (Auxter, Pyfer, & Huettig, 1997; Sherrill, 1998). The behaviors and attitudes of professionals providing leisure services that include people with disabilities can affect the quality of life, self-concept, and degree of general acceptance of those individuals by others (Stewart, 1988).

Due to inclusion within the school systems and integration into community recreational programs, physical educators and recreation practitioners are experiencing an increase in the number of children and adults with disabilities within their programs (Auxter et al., 1997). Since physical educators and recreation practitioners are increasingly interacting with individuals with intellectual disabilities, it is necessary for them to use terminology that is both sensitive and positive (Dattilo, 1990).

The issue of labeling, once again comes to the forefront. The various academic backgrounds and employment experiences of practitioners may have influenced their use of different terms in reference to "individuals with intellectual disabilities". If the physical educator or recreation practitioner was influenced by medical personnel, then they may be more apt to use the term "mental retardation". If they had taken courses in special education while completing their physical education and recreation degrees, they may prefer the terms

"mentally challenged" or "mentally handicapped." Finally, if they volunteered with the Canadian Association for Community Living, they may prefer to use "individuals with developmental disabilities" and more recently "individuals with intellectual disabilities".

The state of confusion has become so intense that physical educators and recreation facilitators do not know what terminology is acceptable. The confusion with the usage of appropriate terminology has been exacerbated because many physical education and recreation practitioners have a variety of experiences that influence them to use different labels. Professionals in the field are apt to use the terminology that was relevant in the period in which each professional first learned about disabilities.

In the field of adapted physical activity, the precedent has been established that emphasizes the use of people-first terminology in professional writing. The leading professional journal in the field of adapted physical activity, Adapted Physical Activity Quarterly, follows the language guidelines as described in the American Psychological Association publication manual that suggests the use of people-first terminology. However, the terminology describing an individual with a lower than average intellectual capacity (i.e., mental retardation, intellectual disability), that follows the people-first terminology, is not mentioned.

This study is an attempt to map the terminology used to describe individuals with a lower than average intellectual capacity by professionals in the field of adapted physical activity. A questionnaire that compared eleven terms for individuals with a lower than average intellectual capacity that were obtained from an exhaustive literature review was

used to obtain the findings. The results were presented in the form of perceptual maps that provided visual details of the relationships of the terminology.

Assumptions

The assumptions of the study were as follows:

1. All participants completed the questionnaire honestly.
2. All participants followed instructions.
3. The sample is representative of the population.

Limitations

The limitations of the study were as follows:

1. The small sample size might not result in a true representation of the field.
2. The data collection process via the Internet was interrupted due to computer difficulties, resulting in the use of postal mail services for additional data collection.
3. The designed instrument relied on face validity.

Delimitations

1. The sample included only members of the International Federation of Adapted Physical Activity (IFAPA) and editorial board members and guest reviewers for Adapted Physical Activity Quarterly.
2. The method of data collection was restricted only to use of the Internet and postal mail services.

CHAPTER 2

REVIEW OF THE LITERATURE

The purpose of this study was to determine the relationship amongst terms used to describe an individual with a lower than average intellectual capacity by professionals in the field of adapted physical activity. The definitions of the terms used for individuals with an intellectual disability will be provided in the review of literature in a historical sequence. This will enable the reader to gain insight into how the terms have evolved over time. It will demonstrate how various professionals and time frames have influenced the use of terminology for those with an intellectual disability.

The review of literature will also present differing view points on the usage of appropriate terminology by professionals from various countries. The result of the investigation into the use of terminology will display the extent of this controversy. Many situations and examples will be presented to describe how the terms are currently used. These scenarios will enable the reader to better understand the terminology used by professionals in the field of adapted physical activity.

The review of literature in this chapter was organized under the following headings: (a) Inventing Individuals with an Intellectual Disability, (b) Influences of Terminology Used for Individuals with an Intellectual Disability, and (c) Multidimensional Scaling.

Inventing Individuals with an Intellectual Disability

Survival and Superstition

Survival and superstition were highly dominating practices between 3000 BC and

500 BC. Survival of the fittest was an ongoing theme at that time. Society believed that only those who could care for themselves and contribute to society were worthy of living. "This survival of the fittest concept permeated the early societies; for example, Indian and Oriental societies allowed the unfit to die to improve the "quality of the unit" (DePauw & Gavron, 1995, p. 16).

Superstition was a prominent mindset in ancient civilization. If an individual's behavior deviated from the norm, he or she was considered possessed with "good spirits" or "bad spirits." During this time, acts such as exorcism were practiced to release evil spirits from the body (Hewett & Forness, 1974; DePauw & Gavron, 1995).

Humanitarian Reform

Severe environmental conditions and brutal treatment toward children echoed the principle of the survival of the fittest during the Greek & Roman period between 500BC to 400AD. The Greek and Roman society emphasized the importance of strength and skill in individuals in preparation for wars. In this type of environment, individuals with disabilities were not given the opportunity to learn skills. This lack of learning led to the view that individuals with disabilities were useless (DePauw & Gavron, 1995).

Hippocrates and Plato influenced the field of study of individuals with mental illness in the late Greek and Roman period. "Hippocrates described mental illness as a disease of natural causes and not the result of possession by demons or the wrath of the gods. Plato advocated care, not exile, exorcism, or demonology, for those with mental impairments. For a brief period, care included physical activity or exercise, hydrotherapy, message, and

exposure to sunshine" (DePauw & Gavron, 1995, p.17).

The Onset of Judeo-Christian Influence

During the time of early Christianity (AD400 – 1500), pity was shown toward individuals with an intellectual disability. Individuals with disabilities were treated with care and compassion. The Apostle Paul wrote in a letter to the Thessalonians, "Now we exhort you, brethren, warn them that are unruly, comfort the feebleminded, be patient toward all men" (1Thessalonians 5:14) (Rosen, Clarke, & Kivitz, 1976).

During the Middle Ages, individuals with intellectual disabilities were often used as "fools" and "jesters" in theatrical productions such as those written by Shakespeare. "The religious influences of the period did much to foster acceptance, understanding, and humanitarian treatment of individuals with disabilities" (DePauw & Gavron, 1995, p.18). They were "regarded as "les enfants du Bon Dieu" (children of God), wandering about the streets of Europe, unmolested. Similar regard for the retarded was found in the Orient, among the American Indian, and in the writings of Confucius, Zoroaster, and the Koran."(Rosen et. al.,1976, p.13).

The Renaissance period revitalized areas such as humanity and education. Both observation and scientific inquiry were influenced throughout the Renaissance (Rosen et. al.,1976), and individuals were intrigued by those with an intellectual disability. Various professional areas felt that they were solely responsible for individuals with intellectual disabilities. This marked the onset of the development of various labels for individuals with an intellectual disability.

Each of the following terms for individuals with an intellectual disability is presented in the approximate chronological order.

Fool

During the reign of Edward I (1272 - 1307) in England, efforts were made to differentiate between intellectual disability and mental illness. This was the first time that the term fool was used. The distinction was made between the terms "born fool" and "lunatic."

> The purpose of this distinction in feudal times was to facilitate the disposal of property: thus, if a man were found by questioning to be a lunatic, the Crown took possession of his belongings only during the period of his illness; whereas, if a man were found to be an idiot, his property reverted permanently to the Crown, subject only to the obligation to provide for his own person and estate (Clarke & Clarke, 1974, p.14).

During the Shakespearean era, it was common to see individuals with an intellectual disability as a part of theatrical productions as the fool or jester. They would be used to entertain and make people laugh. A Shakespeare Glossary refers to a fool as a "born idiot, a 'natural fool'"(Onions, 1986). The Oxford English Dictionary (1989), states that a fool is "one who is deficient in, or destitute in, or destitute of reason or intellect; a weak-minded or idiotic person"(Simpson & Weiner, 1989). It continues to explain that the word has, in modern English, a much stronger sense than it had at an earlier period; "it has now an implication of insulting contempt which does not in the same degree belong to any of its

synonyms, or the derivative foolish"(Simpson & Weiner, 1989). The use of fool was recorded as early as 1540 in Shakespeare's Henry VIII (Simpson & Weiner, 1989).

Jester

The term jester was also used in the same era as the term fool. A jester is "a mimic, buffoon, or merry-andrew; any professed maker of amusement, especially one maintained in a prince's court or nobleman's household"(Simpson & Weiner, 1989). The relationship between the terms fool and jester was illustrated by Doran in "Court Fools" in 1858, "the jester was now a higher personage than the fool"(Simpson & Weiner, 1989).

Imbecile

The Oxford English Dictionary (1989) describes an imbecile as "mentally weak: of weak character or will through want of mental power; hence fatuous, stupid, idiotic"(Simpson & Weiner, 1989). A reference as to its first usage of 1549, is found in the Oxford English Dictionary (Simpson & Weiner, 1989).

Idiot

The term idiot, as found in the Oxford English Dictionary, refers to "a man of weak intellect maintained to afford amusement to others; a household or court fool; a professional fool or jester"(Simpson & Weiner, 1989). The term idiot "took on pathological connotation in the seventeenth century, was seen in the nineteenth century variously as a form of psychosis, or the result of alcoholism and degeneration, or as the most severe degree or defect, as well as being used as a generic term for all grades of defect"(Clarke & Clarke, 1974, p.16).

It was evident throughout the 18th and 19th century that various psychologists and medical personnel had different interpretations of the term "idiocy." The definitions of the terms at that time highly reflected their profession as well as their need for the terminology. The work of Jean Marc Itard in France with "The Wild Boy of Aveyron" (1801) had strongly affected the development of the professional field of working with individuals with an intellectual disability. Itard demonstrated that individuals with severe intellectual disabilities could be educated, leading to improved functioning. The impact of the training did not serve to be as great as Itard had hoped, therefore, he indirectly influenced the development of residential and training facilities by the end of the 19th century. "Itard's pioneering efforts at training this apparently retarded child aroused the interest of many professionals in training those with limited capacity" (Mesibov, 1978, p.18). "Itard is credited with developing an individualized and clinical (medical) methodology as well as an initial understanding of the value of the child-teacher relationship" (DePauw & Gavron, 1995, p. 19).

In the United States of America, Dr. Amariah Brigham was influenced by Itard's work and "called for an institution in New York State to train idiots"(Mesibov, 1978, p.18). This was influenced by the fact that 1600 idiots were found in the New York State census in 1845. In response to this situation Brigham wrote, as quoted in Mesibov (1978), "We are of the opinion that much may be done for their improvement and comfort, that many, instead of being a burden and expense to the community, may be so improved as to engage in useful employment and to support themselves; and also to participate in the enjoyments of society"(p.18).

In the 1850s, an American, Hervey Wilbur, who was influenced by Seguin's book, Traitement, designated categories for idiocy. The four types of idiocy were: (a) simulative idiocy, (b) higher-grade idiocy, (c) lower-grade idiocy, and (d) incurables.

In the United States of America's Idiots Act of 1886, "lunacy" and "idiocy" were distinguished. "Idiots and imbeciles from birth or from an early age would be placed in any registered hospital or institution for the care and training of such persons. In using the term imbecile, it indicated that a class of subnormals existed, less defective than the idiot. It also recognized that the idiot might be trained. Before long, the United States of America's Education Act of 1870 showed that there existed yet other groups, the 'educable imbecile and the feeble-minded'"(Clarke & Clarke, 1974, p.15).

The British Mental Deficiency Act of 1913 gives an account of the various grades of "mental deficiency" in England. "Its categories were to remain the legal terminology for nearly half a century. It classified defectives under four headings:

(A) Idiots - these were persons who were so deeply defective in mind from birth or from an early age as to be unable to guard themselves against common physical danger.

(B) Imbeciles - these were persons who, whilst not as defective as idiots, were still incapable of 'managing their own affairs'.

(C) Feeble-minded - these were persons who were not as defective as imbeciles but required 'care, supervision and control for their own protection or for the protection of others'.

(D) Moral Defectives - these were persons who 'from an early age display some permanent mental defect coupled with strong vicious or criminal propensities on which punishment has

had little or no effect" (Malin, Race, & Jones, 1980, p.13).

Feeble-Minded

Goddard (1912) commented , as cited in Mesibov (1978), on the influence that the population of feebleminded people were having on society, "For many generations we have recognized and pitied the idiot, of late we have recognized a higher type of defective, the moron, and discovered that he is a burden; that he is a menace to society and civilization; that he is responsible to a large degree for many, if not all, of our social problems" (p.19).

Mesibov (1978) provides the Davies' (1923) observation about the situation at the time:

> In short, the feebleminded quite truly reflect in their behavior the kind of environment in which they find themselves. In that way they are an index of social conditions. If the community finds large numbers of delinquent, socially menacing feebleminded in its midst, let it look at itself and ask: "What kind of community have we here, what kinds of neighbors, of homes, of recreation, etc.?" The trouble must be sought somewhere among the feebleminded (p.19).

Mentally Defective

The Mental Deficiency Act of England (1927) stated "Mental defectiveness means a condition of arrested or incomplete development of mind existing before the age of 18 years, whether arising from inherent causes or induced by disease or injury." This included such causes of defect as encephalitis and meningitis which the definition of the 1913 Act had proscribed" (Malin, Race, & Jones, 1980, p.15).

The following are the definitions used in the Mental Deficiency Act of England (1927):

Idiots - were defined as persons with a mental age of not more than 35 months or, if a child, an IQ less than 25.

Imbeciles - were defined as persons with a mental age of between 36 and 83 months or, if a child, an IQ between 25 and 49.

Morons - were defined as persons with a mental age between 84 and 143 months inclusive, or if a child, an IQ between 54 and 74 (Malin, Race, & Jones, 1980, p.15).

Moron

The term "feeble-minded" was eventually replaced by the term "moron" in many places, especially Europe (Mesibov, 1978). The term "moron" was first recorded as being used in 1910 in the Journal of Psycho-Asthenics. This journal later became the Journal of Mental Deficiency which is presently the Journal of Mental Retardation. The Journal of Psycho-Asthenics (1910) stated, "The other (suggestion) is to call them (feeble-minded children) by the Greek word 'moron'. It is defined as the one who is lacking in intelligence, one who is deficient in judgement or sense"(Simpson & Weiner, 1989). The Oxford English Dictionary describes the term "moron" as "one of the highest feeble-minded; an adult person having a mental age of between eight and twelve" (Simpson & Weiner, 1989).

The terms "idiot", "imbecile," and "moron" were used until 1954 when the terms "mild subnormality", "moderate subnormality", and "severe subnormality" were recommended by the World Health Organization to describe degrees of mental retardation.

This classification system was replaced by the system which was proposed in the 1973 Manual of the American Association of Mental Deficiency (Mesibov, 1978).

Mental Retardation

Since 1950, seven official definitions have been endorsed by the American Association on Mental Retardation (AAMR) (formerly the American Association on Mental Deficiency). The current AAMR definition states:

> 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 (American Association on Mental Retardation, 1992).

Prior to 1992, the AAMR had a classification system in place that identified the level of mental retardation of each individual. These categories were mild, moderate, severe, and profound mental retardation. Each of these levels were keyed with an approximate IQ score based on the results of testing.

In 1992, the AAMR felt that classification systems based on IQ scores were demeaning to the individual with an intellectual disability. They recommended that individuals with intellectual disabilities should be classified according to how much support they require. The four levels that are based on support are: (a) intermittent, (b) limited, (c)

extensive, and (d) pervasive.

Mental Handicap

The term mental handicap seems to have been introduced into the label cycle by various nonmedical groups and parental groups in the late 1960's when more advocacy groups were becoming active in the field of intellectual disabilities. Malin, Race, and Jones (1980), discusses the impact in that the English government White Paper Better Services for the Mentally Handicapped had upon the terminology used at that time.

> The National Society for Mentally Handicapped Children, has spread the concept of mental handicap as a condition similar to other handicaps, that is, one which can and should be alleviated so that the person can lead as normal a life as possible given the basic handicap. The White Paper uses the term mental handicap 'in preference to any of the alternative terms because this helps to emphasize that our attitude should be the same as to other types of handicap', in other words as something of a statement of opinion about mental handicaps rather than a classification, which the White Paper does not attempt to provide (Malin, Race, & Jones, 1980, p.21).

In 1980, the World Health Organization (WHO) contributed to further contradictions concerning the definition of the term handicap. Rather than emphasizing the fact that the handicap is the actual disability, the International Classification of Impairments, Disabilities, and Handicaps of the World Health Organization (WHO) refers to handicap as the "resulting personal and social disadvantage." It continues to explain that " a handicap is a disadvantage

for an individual, resulting from an impairment or disability, that limits or prevents the fulfillment of a role that is normal (depending on age, sex, and social and cultural factors) for that individual." (WHO, 1980)

In relation to this definition of a handicap, it is important to understand WHO's definitions of the terms "impairment" and "disability." They are as follows:

"Impairment - in the context of health experience, an impairment is any loss or abnormality of psychological, physiological, or anatomical structure or function.

Disability - any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being." (WHO, 1980)

In conjunction with the World Health Organization's definitions, it is evident that other professionals have adhered to their way of thinking. Fryers (1984) explains that it is difficult to define the term "handicap." It is a term that is dependent on many factors and environments. Handicap is specific to each individual and the various disabilities that each individual has. Some of the factors that influence what "handicap" means to an individual with a disability are societal views (including the response and acceptance of issues relating to disabilities), economical issues, and attributes of services (extent, philosophy, style, and quality) (Fryers, 1984).

Developmental Disability

The Dictionary of Developmental Disabilities Terminology defines "developmental disability" as follows:

A condition in which a static encephalopathy (brain damage due to the lack of oxygen) or brain injury leads to a serious impairment or limitation of one or more functions controlled by the brain. The "injury" may be structurally programmed into the developing brain. All developmental disabilities bear a "family resemblance" because of their common grounding in brain pathology (origin). The onset of developmental disability must be during the developmental period – variously defined as birth to 12 or birth to 22 years of age. Federal legislation defines developmental disability as "a severe, chronic disability of a person 5 years or older, which is attributable to a mental or physical impairment or combination of mental or physical impairments; is manifested before the person attains age 22; is likely to continue indefinitely; results in substantial functional limitations in three or more areas of major life activity: 1) self-care, 2) receptive and expressive language, 3) learning, 4) mobility, 5) self-direction, 6) capacity for independent living, and 7) economic self-sufficiency; and reflects the person's need for a combination and sequence of special, interdisciplinary, or generic care, treatment, or other services that are of lifelong or extended duration and are individually planned and coordinated." The United States federal definition also states that developmental disability can also be applied to infants and young children from birth to 5, "who have substantial developmental delay or specific congenital or acquired conditions with a high probability of resulting in developmental disabilities if services are not provided." (Accardo & Whitman, 1996, p. 87).

Because the largest group of individuals with developmental disabilities have intellectual disabilities, the terms are often used interchangeably.

Intellectual Impairment

The term "intellectual impairment" has also been used as a term to dennote those with a lower than average intellectual capacity. It was used in 1984 by Fryers in the book The Epidemiology of Severe Intellectual Impairment - The Dynamics of Prevalence. The term "intellectual impairment" was not clearly defined; however, it stated, "although we may frequently have to use "mental handicap" or "mental retardation" in ordinary discourse, the current scientific terms of choice probably are "intellectual impairment" to describe the characteristic disorder or abnormality, and "learning disability," to describe the most characteristic limitation of activity" (Fryers, 1984, p.12).

Mentally Challenged, Differently Abled

According to The Oxford Dictionary of New Words (1991), "the word "abled" arose in the US; it has been used by the disabled to refer to the able-bodied since about the beginning of the eighties, and is now so used in the United Kingdom. The euphemistic phrases "differently abled," "otherly abled," and "uniquely abled" were coined in the mid-eighties, again in the US, as part of an attempt to find a more positive official term than "handicapped" (the official term in the US) or "disabled" (the preferred term in the US during the eighties). Another similarly euphemistic coinage intended to serve the same purpose was "challenged." "Differently abled" has enjoyed some success in the US, but all of the forms with a preceding adverb have come in for considerable criticism" (Tulloch, 1991,

p.1).

Intellectual Disability

The Active Living Alliance for Canadians with a Disability published a manual, Positive Images (1990). In this manual, the term "intellectual disability" was used as the preferred terminology for the terms "retarded" and "mentally retarded".

The Intellectual Disability Services Council from North Adelaide, South Australia describes an intellectual disability as the following:

> In the past, people with an intellectual disability have been labeled "retarded" or "mentally deficient". While everyone has varying talents or abilities, a person with an intellectual disability may show some or all of the following characteristics:
>
> - Difficulties with daily living in areas such as: self-care, the capacity for financial and independent living, expressing and understanding language, and the ability to acquire skills.
> - Learning difficulties in the infant and childhood stages.
> - The need for short-term and/or ongoing support services.
>
> Despite discoveries and developments in medical science and technology, we really know very little about the causes of intellectual disability. Only in 25% of cases are the causes known, and there are over 500 suspected diseases or conditions that have been identified. These fall into eight broad categories:

(1) Infections and intoxications - these can be before or after birth. An example of a before birth infection is Rubella (German Measles), Encephalitis can be an after birth infection. Lead poisoning is an example of a toxin.

(2) Physical damage to the brain during birth.

(3) Disorders of metabolism, growth or nutrition.

(4) Brain tumours.

(5) Diseases or conditions before birth that are unknown.

(6) Down's Syndrome, which is a genetic disorder.

(Intellectual Disability Services Council, 1998).

People First Terminology

The term and explanation of "people first terminology" was highlighted in the Journal of Rehabilitation (1985). Kailes (1985) explained the most suitable terminology to use when describing individuals with disabilities. The phrase a person with a disability "connotes that a person with a disability is first and foremost a person, with unspecified characteristics in addition to his or her disability" (p. 68). One of the first official uses of the "people first" terminology was on May 10, 1988, "when President Reagan signed Executive Order 12640 establishing the President's Committee on Employment of the Handicapped as the President's Committee on Employment of People with Disabilities" (Dattilo, 1990, p.67). The name change was enthusiastically received by individuals with disabilities who were working to improve the language concerning disability (Rag Time, 1989).

Other examples of the "people first" terminology in recent legislation of the United States are: Public law 99-457, the Individuals with Disabilities Education Act (IDEA), formerly known as the Education of the Handicapped Act and Public Law 101-336, the Americans with Disabilities Act (Dattilo, 1990). Also, the Publication Manual of the American Psychological Association (4th ed.) (1994) included a section in the guidelines to reduce bias in language that stated that the guiding principle when writing about individuals with disabilities is to use "people-first" terminology.

It is evident that terminology for individuals with intellectual disabilities has evolved throughout history. However, the issues that have influenced the various terms have remained static. The following section will present the varying perspectives that have influenced the use of terminology for individuals with an intellectual disability.

Influences of Terminology Used for Individuals with an Intellectual Disability

One possibility of what motivates the change in terminology for individuals with an intellectual disability can be based on the theory of social constructionism (Danforth & Navarro, 1998). It describes the nature of what is understood to be unbiased by a person's actions is more precisely constructed by the person's thoughts, words, and interactions (Berger & Luckmann, 1967; Bogdan & Taylor, 1994; Danforth & Navarro, 1998; Ferguson, Ferguson, & Taylor, 1992; Gergen, 1985, 1994). "Social constructionism emphasizes the centrality of language, thought, interaction, and culture in the making of human meaning in lived contexts. Those beliefs and understandings taken to be factual in conversation and

interaction are merely constructs that are granted privilege over alternative explanations" (Danforth & Navarro, 1998, p.31).

The social constructionism position on terminology that describes individuals with an intellectual disability declares that the maintenance of the diagnosis pertaining to these individuals greatly relies on the words and actions of professionals and nonprofessionals (Danforth & Navarro, 1998). As advances in theory and practice for individuals with intellectual disabilities are made, professional's beliefs of removing the negative stigmatized terminology is evident. However, the terminology is still describing the referent population. As the "new" word becomes associated with the disability, it is automatically associated with the negative connotations that were present with the previous term (Hastings,1994). Society associates the more recent terminology to the same phenomena and the social constructionism reoccurs resulting in a plethora of terminology describing individuals with an intellectual disability.

Sandieson (1998) illustrated five perspectives that influence the present use of the terminology. The first perspective of the use of terminology is functional. Terminology, in this case, is used as a standard identifier to assist individuals in various disciplines to understand the attributes of the intended population. The AAMR (AAMR, 1992) and the Diagnostic and Statistical Manual DSM-IV (American Psychiatric Association, 1994) have outlined the term mental retardation as described by the following attributes of low cognitive functioning, limitations with adaptive skills, and onset before age 18. Standardized terms

can be used to describe etiologies, interventions, and prognosis as well as advocate for social policy (Sandieson, 1998; Ysseldyke & Algozzine, 1990).

The second perspective concerning the use of terminology is based upon theoretical views concerning individuals with a lower than average intellectual capacity. There are two major aspects covered. The first being the developmental perspective where individuals with a lower than average intellectual capacity are progressing through the same developmental stages as individuals who do not have a lower than average intellectual capacity except at a slower rate. Individuals who agree with this perspective also identify that individuals with a lower than average intellectual capacity are not necessarily able to reach high levels of problem-solving capacity. The second aspect is the deficit perspective where individuals with a lower than average intellectual capacity are seen as always maintaining a lower than average intellectual capacity even when matched for Mental Age (Hodapp, 1990; Sandieson, 1998).

The third perspective provides concerns with the effects of labeling resulting in stigmatization. Issues concerning the effects of labels has been discussed and debated on numerous occasions. Some researchers believe that labels can have a negative effect on the self-concept of those that are being labeled (Eayers, Ellis, & Jones, 1993). As well, attitudes can be negatively influenced, therefore terminology used to depict individuals with a lower than average intellectual capacity should reflect the strengths and abilities of the individuals.

A study by Hastings, Sonuga-Barke, and Remington, (1993) used the approach of a semantic research technique in determining which terms used to describe individuals with an

intellectual disability contained a negative or positive connotation. College students completed a questionnaire stating the semantic meaning of recent terminology used in the United Kingdom labeling individuals with an intellectual disability (Hastings et al, 1993). The results showed that most of the labels used reflected a negative connotation. The recently adopted official term for the United Kingdom, learning disability, showed a more positive connotation than the older terms, mental subnormality and mental handicap. However, they were all considered to obtain negative overtones. The only term to receive a positive overall rating was the term exceptional (Hastings et al, 1993). Using a term that has a positive connotation such as the term exceptional does not guarantee that the term will not adapt to the negative societal views upon the realization of what the term is actually describing. (Hastings, 1994).

Some researchers believe that the terminology used can not be the sole factor that causes change in cultural attitudes (Goldfarb, 1990). Goldfarb (1990) believes that the main problem lies not with the label but with society's attitude that is reflected by the usage of any label that refers to an individual with an intellectual disability. "Names are labels that allow us to organize information. Some of these labels are offensive. Elimination or replacement of the offending label simply sends hatred and prejudice looking for a new home. Negative connotations travel very well" (Goldfarb, 1990, p. 122). The derivation of new names to describe an individual with an intellectual disability has resulted in a labeling cycle.

Others believe that attitude formation is highly affected by knowledge and experience (Ter Harr, 1993). Tyler (1990) discussed the importance of the proper usage of terminology

for individuals with a disability in text books such as business text books. Tyler (1990) conducted a study which dealt with the issue of "people first" language affecting the attitudes or perceptions of readers. The participants received either a survey that was written using "people first" language, neutral traditional language, or negative traditional language. The survey consisted of 15 statements that the participants were to respond either positively or negatively with the choice of the scale from "strongly agree" to "strongly disagree" or "don't know". The results indicated that there was no significant difference in the attitude that exemplified the choice of language used to describe individuals with disabilities. Tyler's (1990) study was based on the fact that there are no studies that demonstrated that "people first" language has a more positive effect on the public's attitude towards individuals with disabilities even though it is highly recommended by organizations that provide services for individuals with disabilities (Tyler, 1990). Even though Tyler's findings indicated that the usage of "people first" terminology was no more effective than other language usage for individuals with an intellectual disability, Tyler still feels strongly about the promotion of "people first" terminology.

The editor-in-chief for the journal, "Palaestra", David Beaver, commented on the usage of people-first terminology. He believed that many of the professionals in the field of Adapted Physical Activity have continually demonstrated their respect for individuals with an intellectual disability. The editorial changes that have been made in the journals, "Adapted Physical Activity Quarterly" and "Palaestra" has exemplified the usage of the "people-first" terminology. He continues to discuss the issue of "people-first" terminology

not being adopted by various organizations that provide sports and recreational activities for individuals with disabilities. Such organizations are: American Athletic Association of the Deaf, U.S. Association for Blind Athletes, Cerebral Palsy Athletic Association, and the Dwarf Athletic Association of America. Beaver explained in his editorial remarks:

> While the goal of person-first terminology is laudatory, our arrows should be pointed at improving the popular press' verbiage such as the continued reference to individuals with spinal cord injury being wheelchair *bound*. It would seem to this editor that when one's heart is in the right place, one can not be prejudicial; each article, each situation, each organizational name must be evaluated within its own context rather than insisting upon wholesale conformity to person-first terminology at all costs (Beaver, 1993, p.4).

There is evidence in the literature that demonstrates the difficulties of professionals using insensitive terminology when working with individuals with disabilities on a daily basis. Hadley and Brodwin (1988) described the incorrect and insensitive terms used to describe individuals with disabilities by the rehabilitation profession. It is evident that many rehabilitation counselors are not aware of the terminology they use when referring to an individual with a disability. According to Hadley and Brodwin (1988) usage of stereotypical and devaluing terminology results in an embarrassment for the field of rehabilitation counselling. Because counseling is a profession that requires professionals to communicate effectively, lapses in appropriate terminology when referring to individuals with disabilities should not be condoned.

Hadley and Brodwin (1988) presented four principles (precision, objectivity, perspective, and portrayal) to determine appropriateness of language when referring to individuals with disabilities. The authors concluded that because counselors are in contact with individuals with disabilities on a regular basis, counselors should be aware of how to address individuals with disabilities without offending these individuals (Hadley & Brodwin, 1988).

The fourth perspective, the inclusion philosophy, has influenced the non-categorical approach to labeling. This perspective reflects the beliefs that all individuals have strengths that should be emphasized as opposed to emphasizing the individual's disability (Stainbach, Stainbach, & Forest, 1989). The terms used in the non-categorical approach describe a range of attributes.

The fifth perspective pertains to the varying usage of terminology in different geographical regions. One example of the variations of terminology usage is the difference in meaning of the term learning disability when used in North America as opposed to in England. In England, "learning disability" is the official term that describes individuals with a lower than average intellectual capacity. In North America, the term "learning disability" refers to individuals who have such impairments as dyslexia and the sort.

Fernald (1995) looked at the various usage of terminology for individuals with an intellectual disability. The author sent letters to organizations that serve individuals with intellectual disabilities in five English speaking countries asking what term they preferred to use when referring to individuals with an intellectual disability. The list of terms from which

they chose was developmental disability, learning difficulty, mental handicap, or mental retardation, or the usage of such terms as the "people first language".(Fernald, 1995).

The results indicated that the term preferred by the majority of the organizations in three of the four countries was the "people first terminology". The term mental retardation was only used by a high percentage in the United States, perhaps because the Guidelines for Reporting and Writing about People with Disabilities (1993), states that it is acceptable to use the term . The term developmental disability was rated quite highly by both the United States and Australia. "Intellectual disability was used by all organizations in Australia and by two organizations in Ireland....Intellectual disability is not used in the United States but holds much promise as a cross culturally effective term."(Fernald, 1995, p.102). Intellectual disability does not appear to have negative connotations (Fernald, 1995).

The confusion of terminology used for individuals with intellectual disabilities stemmed from the earlier use of various terms by different countries for the term intellectual disability. Bachelard (1931) explained the variation between the terms used in America, Britain, and Australia. The term "moron" was used in America at the same time the term "feebleminded" was used in Britain. When the term "feebleminded" was used in America, it had the same meaning of the terms "ament" and "mental defective" in Australia. Finally, the Australian term "high-grade feebleminded" was another term for the American "moron" (Bachelard, 1931).

The use of terminology that describes an individual with an intellectual disability has been an issue for many years. It is evident that the use of various terminology to describe the

same phenomena remains a problem. The research conducted has indicated that there is a need to adopt a common term that describes individuals with an intellectual disability.

The term "intellectual disability" has been indicated as a term that is not derogatory. It is also a term that is used effectively internationally. The American Association on Mental Retardation has recently announced that the term "intellectual disability" will be the term that will be used in the future (AAMR Newsletter, March 1999).

Multidimensional Scaling

Multidimensional scaling (MDS) is a method that is used in behavioral and social sciences to investigate introspective evaluations of pairs of similar entities. MDS generates perceptual maps that represent the distances between pairs of similar objects in a low dimensional multidimensional space (Borg & Groenen, 1997). MDS begins with the production of a matrix that consists of pairs of similarities. This matrix is used to create the space where the items can be displayed as vectors, based on the assessment of the items.

There is a multitude of MDS variations that use slightly varied algorithms and functions. Historical accounts and explanations of MDS have been presented by Kruskal & Wish, 1978, de Leeuw & Heiser, 1982, Wish & Carroll, 1982; & Young, 1985. The initial development of MDS was for metric data and was developed in the 1930s. MDS for nonmetric data was later developed (Kaski, 1997).

Nonmetric multidimensional scaling builds a metric configuration based upon the nonmetric information that was obtained from the set of points in the Euclidean space. This perceptual map reveals the relationship between the set of objects.

MDS is used to determine (a) the number of factors or dimensions necessary to account for the inter-relationships, and (b) coordinates of each object on each dimension from which a spatial representation of the n objects can be constructed. Shepard and Kruskal's technique of multidimensional scaling is to calculate the formation of the points to establish the goodness of fit.

When observing the values in the matrix, if objects are similar, the similarity measures or correlation-like proximities have large values, if the objects are different, the values will then be small. The opposite occurs in distance-like proximities or dissimilarity measures. If the dissimilarity measure have large values, the pairs are different. If the dissimilarity measures have small values, they are similar.

MDS displays the interrelationships among the objects reducing it to a matrix of proximity measure. The proximity measures are then presented in a perceptual map. The benefit of this procedure is that it enables the researcher to gain an understanding of the object's relationships as well as determine the original dimensions of the data.

"There are two main purposes for the use of multidimensional scaling: (a) to determine a pattern or structure that may otherwise remain unseen in a matrix of empirical data, and (b) to represent the structure in a structure in a visible form, a geometrical model or picture. The objects under study are represented by points in the geometrical model in such a way that the significant features of the data associated with these objects are revealed in the spatial relations among the points. The points may be allowed to assume positions in

any number of dimensions from one-dimensional up to n-1-dimensional space" (Korell, 1976, p.55).

CHAPTER 3

METHOD

The purpose of this study was to determine the similarities and differences amongst terms used to describe an individual with a lower than average intellectual capacity amongst professionals in the field of adapted physical activity. The methods from the study are described in this chapter. The chapter is divided into four sections: (a) Pilot study, (b) Participants, (c) Instruments, and (d) Procedures.

Pilot Study

The initial step in this investigation was a pilot study. Relevant literature was reviewed to select the terminology to be investigated. A questionnaire was developed that compared pairs of terms that describe individuals with intellectual disabilities. The similarity or dissimilarity of the terms were indicated on a 10 point similarity scale on which the participant could identify his/her perception of the likeness of the terms.

The investigator then collected data using the pilot questionnaire. The questionnaire was completed by an adapted physical education class of 30 students at Memorial University of Newfoundland. The students identified difficulties in the wording of the questionnaire, which was subsequently modified to incorporate suggested changes. Collected data were then analyzed following the procedures described in the remainder of this chapter.

Participants

Participants were professionals (24 males and 44 females) in the field of adapted physical activity from Canada, United States of America, England, and Australia aged 22 to

73 years. Members of the International Federation for Adapted Physical Activity (IFAPA) and editorial board members and guest reviewers for Adapted Physical Activity Quarterly were sent questionnaires (see Appendix A) via the Internet or postal mail services.

The names, postal addresses, and email addresses of the editorial board members and guest reviewers were obtained from the editor of the Adapted Physical Activity Quarterly. The names, postal addresses, and email addresses of the members of IFAPA were obtained from a membership list that was published in Adapted Physical Activity Quarterly.

There were 134 letters sent via email explaining the research and how the recipient could obtain access to the world wide web site to complete the questionnaire and submit it via the Internet. Due to the low response rate from the Internet questionnaire, the cover letter and questionnaire was sent to the intended recipients via postal mail services.

The participants consisted mainly of individuals who were working in the field of adapted physical activity, teaching adapted physical education courses at the higher education level, conducting research in adapted physical activity, or were representatives from an agency whose priority was to meet the needs of individuals with disabilities through physical education, recreation, or sport. The level of education of the participants ranged from individuals with a Bachelor's degree to those with a Doctorate Degree.

The participants were stratified based upon the country in which they lived. The largest percentage of IFAPA members were from the United States and the number of questionnaires sent to the United States reflected this.

The number of participants in the study was largely dependent on the number of members in the International Federation of Adapted Physical Activity and the membership was highly representative of professionals in the field of adapted physical activity.

Instrumentation

The instrument used was self-designed. The questionnaire compared eleven terms for individuals with a lower than average intellectual capacity that were obtained from an exhaustive literature review. The terms compared were mentally handicapped, mentally retarded, intellectually impaired, developmental disability, mentally challenged, mentally disabled, differently abled, learning disabled, intellectual disability, developmentally delayed, and "people first" terminology. The terms chosen were terms used to describe the clinical term of mental retardation as defined by the American Association on Mental Retardation (1994). The term "learning difficulties" and "cognitive impairment" were considered and rejected because literature using these terms did not directly relate to people with a lower than average intellectual capacity (Sandieson, 1998).

The design of the questionnaire consisted of the eleven terms being compared to each other. There were five pairs of terms that were replicated throughout the questionnaire to test the instrument's reliability. Therefore, the total number of comparisons on the questionnaire was sixty. A 10-point rating scale was used to measure the items on the instrument. The scale ranged from 'similar meaning' to 'different meaning' and was used to record the degree to which respondents believed the terms were similar or different in meaning.

The reliability of the questionnaire was determined through internal-consistency. Internal consistency is "an estimate of the reliability that represents the consistency of scores within the test" (Thomas & Nelson, 1996, p.225). A statistical correlation of the replicated questions was completed. The Spearman Rho Correlation Test was used to determine the correlation between each of the repeated questions. The correlation coefficient of .356 was found for questions 3 and 28. The correlation coefficient of .728 was found for questions 6 and 57. The correlation coefficient of .546 was found for questions 19 and 40. The correlation coefficient of .783 was found for questions 23 and 58. The correlation coefficient of .732 was found for questions 32 and 60. The overall reliability of the questionnaire was .629. Each correlation was significant at the .01 level (two-tailed).

Other information obtained from the questionnaire was, the country in which the participant presently lived and worked, gender, age, how many years the participant worked in the field of adapted physical activity and related areas, and the type of disability area with which the participant was mostly engaged.

Procedure

A cover letter (see Appendix B) was sent with the questionnaire. The cover letter explained the controversy with terminology leading to the research that was being conducted, why the individual was contacted to participate in the research, and how to complete the questionnaire. Directions were also given as to what the respondee should do with the questionnaire upon completion.

The cover letter and the questionnaire were sent initially to members of the International Federation of Adapted Physical Activity, Adapted Physical Activity Quarterly editors, and guest reviewers, via the Internet. The cover letter was emailed to the participant and the address of the questionnaire on the World Wide Web was given. The World Wide Web questionnaire was designed using the program Microsoft Front Page. The World Wide Web questionnaire was identical to the copy used for Postal mail purposes. It contained directions for the questionnaire as well as the terms to be compared. The similarity scale was present in the form of 10 consecutive boxes. The participant's choice of similarity or dissimilarity response to the terms could be indicated by placing the cursor over the box of choice and then click, with the left button on the mouse to designate the response. The questionnaire on the Internet had a button that read "submit questionnaire." Upon pressing the button, the questionnaire was instantly sent to the researcher's email account. To ensure that only designated recipients completed the electronic questionnaire, a password was given to the participant via the cover letter. The investigator only used questionnaires that displayed the password. There were several difficulties with the computer systems used and therefore, the return rate was low. The cover letter and questionnaire were then sent via postal mail services. A postage paid envelope was provided for the questionnaires that were sent to American participants. Due to the nature of the postal services, it was not possible to place the equivalence of the international postage on the return envelopes sent outside of North America.

The researcher followed up by faxing the cover letter and the questionnaire to ten individuals who were located in England and Australia. The researcher asked if the individual could forward the questionnaire to other faculty members involved in the field of adapted physical activity to increase the number of respondents from each country.

CHAPTER 4

RESULTS

The findings of this investigation are presented in this chapter under the following headings: (a) Data Analysis, (b) Response Information from Canada, (c) Response Information from the United States of America, (d) Response Information from England, and (e) Response Information from Australia. The results of each country's findings will be reported in both a table and map form. The perceptual maps show the position of each term used to describe an individual with a lower than average intellectual capacity. Terms possessing similar attributes are found in proximity on the map. The perceptual maps are presented in 2-dimensions by observing the horizontal and the vertical axes.

Data Analysis

Upon receipt of the data, the data were entered on a computerized spreadsheet. The numbers of each question were entered horizontally and the number of participants was entered vertically on the spreadsheet. The data were entered in each cell. The mean response for each terminology comparison was then calculated. A matrix was then designed that contained a vertical and horizontal list of the terminology used in the study. As each term was compared, the corresponding mean of the question from the questionnaire was entered in the matrix. The matrix was completed providing the mean of the respondents for each term comparison (see Table 1).

The data obtained from the matrix were analyzed using the multidimensional scaling technique of the Statistical Package for Social Sciences (SPSS) computer program (SPSS

8.0, 1997). It is a technique that shows the similarity (or dissimilarity) among pairs of objects as distances between low-dimensional points in multidimensional space (Borg & Groenen, 1997).

The data were observed and explored visually with the aid of perceptual maps that were produced by the computer program. The perceptual maps displayed the relationship among the various terms used when referring to individuals with a lower than average intellectual capacity. The greater the similarity between terms, the smaller the corresponding distance on the map between the terms (Borg & Groenen, 1997).

It is the responsibility of the investigator to interpret the n-dimensional maps produced by the MDS program. A key component of the interpretation is the identification of the underlying structure of the map. Thus, an MDS output map, for example Figure 1, might provide the following map. The map itself is unlabeled but one interpretation of Axis A is that the underlying construct is cost of the vehicle. While the underlying construct for B might well be vehicle speed. Now, while there is no guarantee that these underlying constructs are correct, they are consistent with our knowledge and therefore are useful to us. It is possible that the mapping could also make sense when different underlying constructs are postulated.

Table 1

Mean Similarity Scores for the Terminology Compared
10 point scale (1 = similar, 10 = dissimilar)

	MH	MR	II	DD	MC	DA	MD	LD	ID	PF	DL
MH		4.20	5.01	2.15	3.01	7.18	3.85	6.12	4.54	3.28	3.78
MR			3.51	7.07	4.40	6.62	4.37	7.67	4.28	7.32	4.39
II				6.31	4.04	7.28	4.33	6.15	3.21	7.10	5.00
DD					6.18	6.75	5.85	6.98	6.10	7.25	7.81
MC						5.04	4.22	6.84	4.36	7.23	2.00
DA							6.56	7.33	7.22	6.53	3.58
MD								2.98	4.30	5.49	7.03
LD									9.15	3.42	6.69
ID										8.61	2.15
PF											6.36
DL											

Terminology Abbreviations for Table:

MH = Mental Handicap
MR = Mental Retardation
II = Intellectual Impairment
DD = Developmental Disability
MC = Mentally Challenged
DA = Differently Abled
MD = Mental Disability
LD = Learning Disability
ID = Intellectual Disability
PF = People First Terminology
DL = Developmental Delay

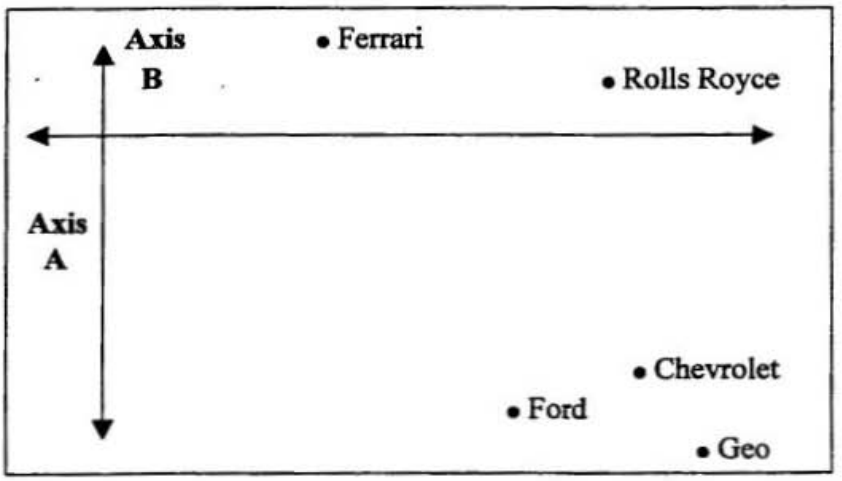

Figure 1

Example of an MDS Output Map

Response Information from Canada

The results of the Multidimensional Scaling analysis are plotted in the perceptual map in Figure 2. The maps display the following information: intellectual impairment and intellectual disability are in close proximity; mental disability and mentally challenged are in close proximity; mental handicap, mental retardation, and developmental disability are located within the same quadrant displaying similarities; people first and differently abled are in close proximity but not closely related to the previously mentioned terminology; finally, the terms learning disability and developmental delay are not in close proximity with any other term.

The data containing the means of the responses for terminology used in Canada to describe individuals with a lower than average intellectual capacity are displayed in Table 2. The information on this table assists with gaining knowledge of the placements of the terminology on the perceptual maps after being analyzed by the Multidimensional Scaling technique. The means, in conjunction with the perceptual maps, reveal the similarities amongst the terminology investigated.

The table indicated that the pairs of terms considered most similar were intellectual disability and intellectual impairment followed by mentally challenged and mental handicap. The pairs of terms that were most dissimilar were learning disability and mental retardation, mental disability and differently abled, and people first terminology and mental disability.

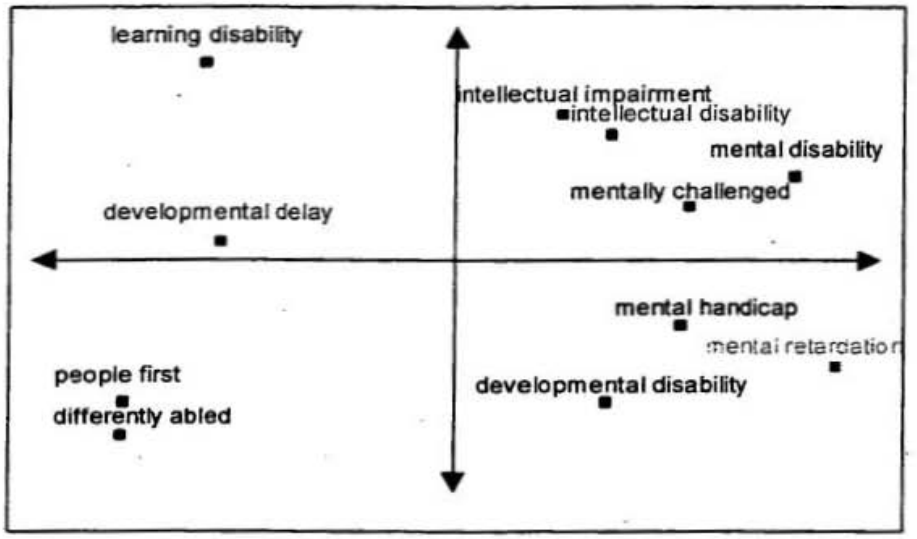

Figure 2

Perceptual Map from Canada

Table 2

Mean Similarity Scores for the Terminology used in Canada
10 point scale (1 = Similar, 10 = Dissimilar)

	MH	MR	II	DD	MC	DA	MD	LD	ID	PF	DL
MH		4.67	5.30	4.78	4.46	6.03	4.06	6.06	5.68	5.75	5.37
MR			5.62	5.66	5.33	6.03	5.34	6.87	5.21	6.03	6.25
II				6.31	4.54	5.93	5.06	5.53	3.93	5.87	5.18
DD					5.33	5.68	5.28	5.87	5.72	6.00	5.21
MC						6.06	4.54	5.56	5.25	5.93	5.90
DA							6.53	5.84	6.34	5.78	5.78
MD								5.87	5.12	6.37	5.59
LD									5.18	6.09	5.78
ID										5.84	5.37
PF											5.74
DL											

Terminology Abbreviations for Table:

MH = Mental Handicap
MR = Mental Retardation
II = Intellectual Impairment
DD = Developmental Disability
MC = Mentally Challenged
DA = Differently Abled
MD = Mental Disability
LD = Learning Disability
ID = Intellectual Disability
PF = People First Terminology
DL = Developmental Delay

Response Information from the United States

The results of the Multidimensional Scaling analysis for the United States of America are plotted in the perceptual map in Figure 3. The following terms are found to be located within a cluster on the perceptual map, representing similarities between the terminology: developmental disability, mental retardation, mentally challenged, mental handicap, developmental delay, intellectual disability, mental disability, and intellectual impairment. The terms differently abled, people first, and learning disability are not in close proximity with any other term.

The table containing the data of the comparisons between means of the terminology used in the United States is presented in Table 3. The pairs of terms considered most similar were mental retardation and mental handicap, intellectual impairment and mental handicap, and mentally challenged and mental handicap. The pairs of terms that were most dissimilar were people first and mental retardation, people first and mental handicap, and learning disability and mental disability.

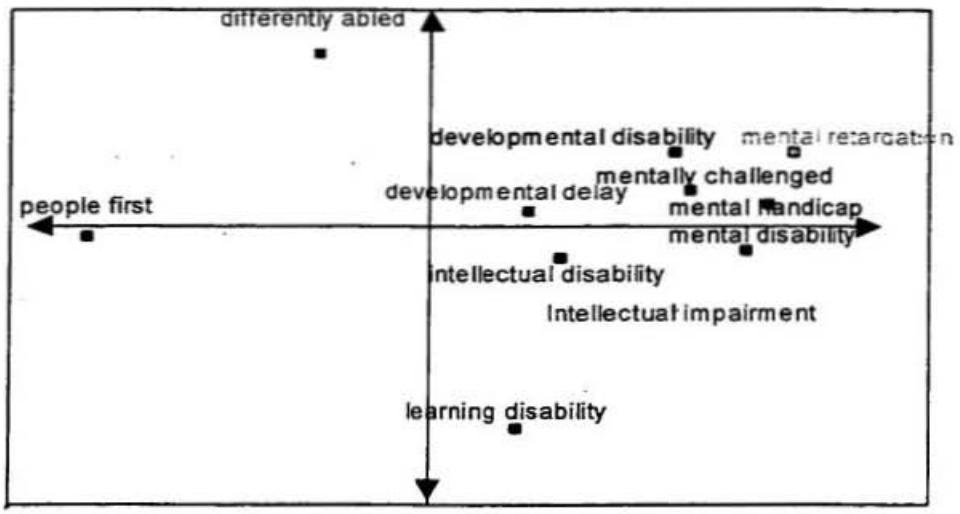

Figure 3

Perceptual Map from the United States of America

Table 3

Mean Similarity Scores for Terminology used in the US
10 point scale (1 = Similar, 10 = Dissimilar)

	MH	MR	II	DD	MC	DA	MD	LD	ID	PF	DL
MH		2.12	2.83	5.46	2.93	3.73	8.17	8.26	3.93	8.72	6.25
MR			3.70	5.62	3.03	3.60	7.03	8.50	3.70	9.03	6.63
II				6.13	3.12	3.96	8.63	6.93	2.74	8.44	6.90
DD					6.64	6.35	7.83	8.31	6.70	8.60	4.46
MC						3.50	7.96	8.20	3.20	8.51	5.82
DA							8.56	8.13	3.44	8.62	6.43
MD								8.76	8.03	7.48	7.32
LD									6.93	8.66	7.90
ID										7.37	7.00
PF											7.53
DL											

Terminology Abbreviations for Table:

MH = Mental Handicap
MR = Mental Retardation
II = Intellectual Impairment
DD = Developmental Disability
MC = Mentally Challenged
DA = Differently Abled
MD = Mental Disability
LD = Learning Disability
ID = Intellectual Disability
PF = People First Terminology
DL = Developmental Delay

Response Information from England

The results from the Multidimensional Scaling analysis of the terminology are plotted in a perceptual map in Figure 4. The following terms are plotted on the same point, or closely overlapping one of the points: learning disability, mental retardation, intellectual disability, intellectual impairment, developmental delay, and mental disability. The terms mental handicap and developmental disability are in close proximity with the previously mentioned terms. However, the terms mentally challenged, people first, and differently abled appear to be dissimilar due to their distinguished places on the outer points of the map.

The means for each of the terminology comparisons for England are presented in Table 4. The pairs of terms considered most similar were mental retardation and mental handicap, intellectual impairment and mental handicap, intellectual impairment and mental retardation, differently abled and mental handicap, differently abled and mental retardation, intellectual disability and mental handicap, intellectual disability and mental retardation, intellectual disability and intellectual impairment, intellectual disability and developmental disability, and intellectual disability and differently abled. The least similar set of terms were developmental disability and mental handicap and mental disability and mental handicap.

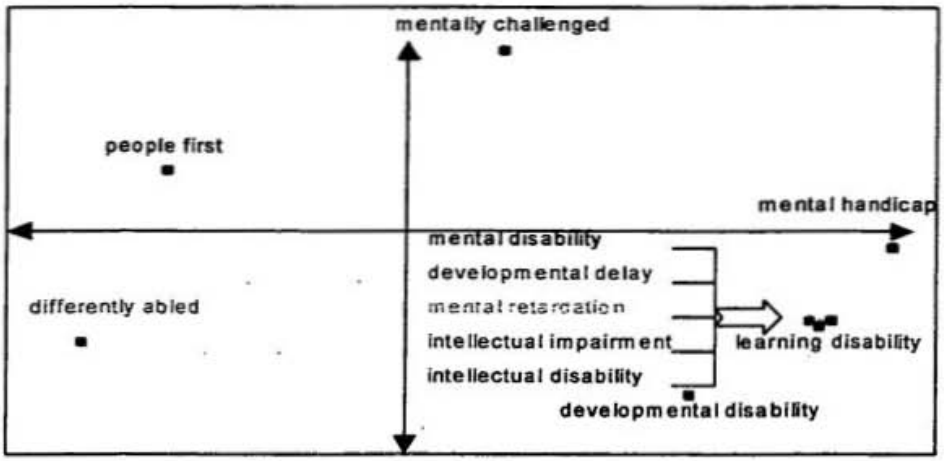

Figure 4

Perceptual Map from England

Table 4

Mean Similarity Scores for Terminology used in England
10 point scale (1 = Similar, 10 = Dissimilar)

	MH	MR	II	DD	MC	DA	MD	LD	ID	PF	DL
MH		2.00	2.00	10.00	9.00	2.00	10.00	5.00	2.00	9.00	3.00
MR			2.00	5.00	9.00	2.00	9.00	5.00	2.00	9.00	4.00
II				5.00	9.00	5.00	9.00	6.00	2.00	9.00	4.00
DD					9.00	6.00	9.00	3.00	2.00	9.00	4.00
MC						9.00	9.00	9.00	9.00	9.00	9.00
DA							9.00	5.00	2.00	9.00	5.00
MD								9.00	9.00	9.00	9.00
LD									6.00	9.00	6.00
ID										9.00	5.00
PF											9.00
DL											

Terminology Abbreviations for Table:

MH = Mental Handicap
MR = Mental Retardation
II = Intellectual Impairment
DD = Developmental Disability
MC = Mentally Challenged
DA = Differently Abled
MD = Mental Disability
LD = Learning Disability
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DL = Developmental Delay

Response Information from Australia

The results of the Multidimensional Scaling analysis for terminology used in Australia are presented in Figure 5. The terms mental handicap and mental retardation appear to be in close proximity due to the overlapping of the plots. The terms mental disability, intellectual disability, intellectual impairment, developmental delay, and developmental disability are in close proximity. The terms mentally challenged, learning disability, differently abled, and people first are located in a distance from the each of the other terms.

The data from the means of the comparisons of the Australian terminology are presented in Table 5. The pair of terms considered most similar was intellectual disability and mental retardation. The pairs of terms considered the least similar were mental disability and mental handicap followed by learning disability and mental retardation, intellectual disability and learning disability, and people first terminology and learning disability.

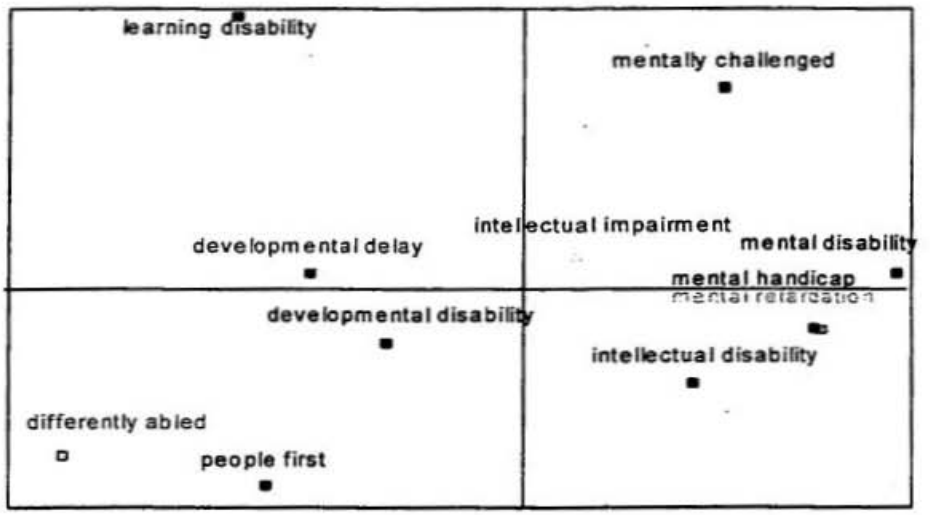

Figure 5

Perceptual Map from Australia

Table 5

Mean Similarity Scores for Terminology used in Australia
10 point scale (1 = Similar, 10 = Dissimilar)

	MH	MR	II	DD	MC	DA	MD	LD	ID	PF	DL
MH		1.33	2.33	4.33	5.00	3.33	9.00	8.33	1.33	7.00	6.00
MR			1.66	5.66	6.33	2.00	8.00	8.66	1.00	7.00	6.33
II				6.33	6.33	3.33	7.66	5.00	2.00	6.66	6.33
DD					7.66	6.66	6.66	7.33	5.66	6.66	3.33
MC						6.33	7.66	6.00	4.33	8.00	7.66
DA							8.00	8.00	4.33	8.00	7.00
MD								8.33	7.66	4.66	6.66
LD									8.66	8.66	4.66
ID										6.66	6.33
PF											6.66
DL											

Terminology Abbreviations for Table:

MH = Mental Handicap
MR = Mental Retardation
II = Intellectual Impairment
DD = Developmental Disability
MC = Mentally Challenged
DA = Differently Abled
MD = Mental Disability
LD = Learning Disability
ID = Intellectual Disability
PF = People First Terminology
DL = Developmental Delay

Response Information from all Countries Combined

The results of the Multidimensional Scaling analysis for terminology used in all of the countries combined are presented in Figure 6. The terms developmental delay, developmental disability, mental retardation, mental handicap, mentally challenged, and mental disability are in close proximity. The terms intellectual disability and intellectual impairment are in close proximity on the map, however they are not placed close to the previously mentioned terms. The terms learning disability, differently abled, and people first are located in a distance from the each of the other terms.

The data from the combined means of the comparisons of all the countries' terminology are presented in Table 6. The pairs of terms considered most similar were mental retardation and mental handicap and intellectual disability and intellectual impairment. The pairs of terms considered the most dissimilar were mental retardation and learning disability followed by people first as it compares to each of the other terms and differently abled as it compares to each of the other terms.

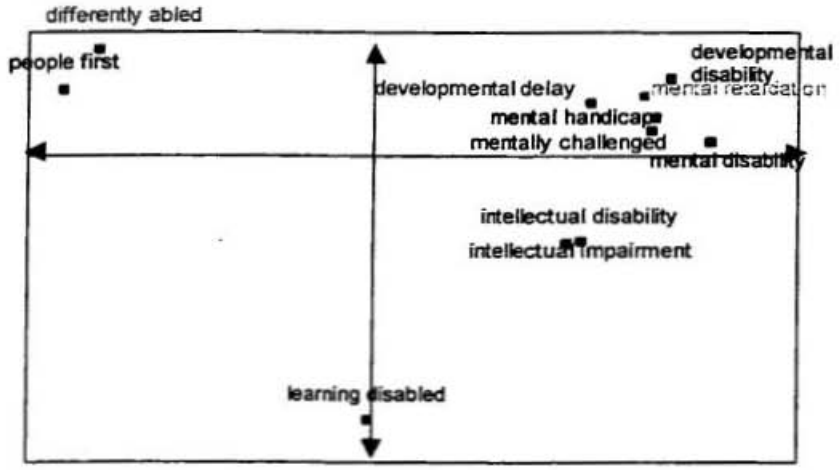

Figure 6

Perceptual Map from Countries Combined

Table 6

Mean Similarity Scores for Terminology used in all of the Countries Combined
10 point scale (1 = Similar, 10 = Dissimilar)

	MH	MR	II	DD	MC	DA	MD	LD	ID	PF	DL
MH		3.29	4.01	5.15	3.01	7.18	3.85	7.17	4.64	7.18	5.78
MR			4.51	6.07	4.40	6.62	4.37	7.66	4.28	7.48	6.39
II				6.21	4.04	7.28	4.33	6.15	3.27	7.10	6.00
DD					6.08	6.75	5.85	6.98	6.10	7.25	4.81
MC						7.04	4.22	6.84	4.36	7.23	6.00
DA							7.56	7.33	7.22	6.53	6.58
MD								6.98	4.30	7.49	6.03
LD									6.15	7.42	6.69
ID										6.61	6.15
PF											6.66
DL											

Terminology Abbreviations for Table:

MH = Mental Handicap
MR = Mental Retardation
II = Intellectual Impairment
DD = Developmental Disability
MC = Mentally Challenged
DA = Differently Abled
MD = Mental Disability
LD = Learning Disability
ID = Intellectual Disability
PF = People First Terminology
DL = Developmental Delay

CHAPTER 5

DISCUSSION

The confusion concerning the use of descriptive terminology for individuals with an intellectual disability is evident in the results of this study. The results of the multidimensional scaling of the terminology varied among the perceptual maps from Canada, the United States, England, and Australia. The variation in the arrangement of the terminology indicated that the terminology is perceived differently in the countries represented by the responses. The purpose of this research was to provide insight into the terminology used for individuals with an intellectual disability.

Based on the literature and the patterns of the terminology on the perceptual maps, three underlying issues were explored. The results from each country's perceptual map will be described according to the following underlying perceptual issues: (a) Advocacy (self-named) Terminology versus Medical (clinically named) Terminology, (b) Visual Stigmatization versus Non-Visual Stigmatization, and (c) Variations of Terminology Used in Different Countries.

Advocacy Terminology versus Medical Terminology

Professionals and nonprofessionals have socially constructed the emphasis, thoughts, and cultural biases that relate to individuals with intellectual disabilities. It is evident that the maintenance of the diagnosis pertaining to those individuals greatly relies on the words and actions of professionals and nonprofessionals (Danforth & Navarro, 1998). As theory and practices evolve for individuals with intellectual disabilities, the terminology has also

evolved. The label cycle attempts to remove any visual stigmatization that is attached to the referent population. However, the fact remains that as the "new" terminology evolves, its own negative connotations are then present as they previously were (Hastings, 1994). The plethora of terminology is a result of the ever changing social constructionism that occurs to describe individuals with an intellectual disability. By observing the horizontal layout of the perceptual maps, one can see that the terminology displayed is on a continuum from terminology that is self-determined by advocacy agencies to that determined by medical groups.

All of the maps from the various countries provide evidence of self-named terminology to clinically named terminology on the horizontal continuum (from left to right). The horizontal continuum, on each of the maps, begin with either "people first" or "differently abled."

The terminology continuum in each of the countries, with slight variations, continues with the terms that use "development" as the descriptors for the presented disability or delay. The term "developmental disability" was used as an umbrella term for such disabilities as: mental retardation, cerebral palsy, and epilepsy in its' initial uses (Baroff, 1991). The term is often used interchangeably with the term "mental retardation" because the largest group of individuals with "developmental disabilities" have "mental retardation." The placement of the terminology "developmental delay and disability" in the center of the continuum, displays the influence of the combination of both advocacy agencies and medical groups that have influenced the use of the terminology.

The terms including the descriptor "intellect" have been preferred by the Active Living Alliance for Canadians with a Disability as described in the manual Positive Images (1990). The Active Living Alliance for Canadians with a Disability consists of an alliance of numerous agencies – advocacy, educational, and medical, all of whom work toward enabling individuals with disabilities to access active living. In Australia, the term "intellectual disability" is recommended by the Intellectual Disability Services Council that consist of numerous individuals representing various agencies.

The terms using the descriptors "mental" are displayed at end of the spectrum that portrays those that are medically named. The term "mental retardation" is a clinically derived term whose definition was designed by the American Association on Mental Retardation (AAMR). The most recent definition was developed in 1992. Seven official definitions have been endorsed by the AAMR since 1950. Recently, the Committee on Terminology and Classification has announced that the term "intellectual disability" will be used in the near future (AAMR Newsletter, March 1999).

It is necessary that professionals involved in the medical field and the advocacy agencies for individuals with disabilities join forces to determine a term that will meet the needs of all professionals involved. As Sandieson (1998) exemplified in the perspectives that influence the present use of the terminology, the functionality of the terminology is important. Terminology, as a functional entity, is used as a standard identifier to assist individuals in various disciplines to understand the attributes of the referent population. Therefore, the terminology used by medical and advocacy organizations should meet the

needs of all individuals involved. Based upon the literature, groups representing the medical professionals (AAMR Newsletter, 1999) as well as advocacy organizations (Active Living Alliance for Canadians with a Disability, 1990; Intellectual Disability Services Council, 1998) have moved toward the use of the descriptor "intellectual" to describe the disability of an individual with a lower than average intellectual capacity. This commonality of usage of the terminology may be the beginning of determining a term that fulfills the needs of all involved.

Visual Stigmatization versus Non-Visual Stigmatization

Issues related to stigmatization that result from labeling have been discussed on numerous occasions. Researchers have found that labels can negatively effect the self-concept of individuals who are being labeled (Eayers, Ellis, & Jones, 1993). Other researchers have found that various attitudes have been expressed as a result of being exposed to different labels for individuals with disabilities (Siperstein, Budoff, & Bak, 1980). Therefore, it is necessary to use terminology that reflects the strengths and abilities of the individual with a lower than average intellectual capacity.

By observing the terminology on the perceptual maps on a vertical axis, the terms follow a general pattern (from top to bottom). The terms that are placed close to the top of the map are terms that generally do not conjure up a negative visual stigmatization upon hearing the term. As the axis is followed, the continuum begins to display terms that can be perceived to have an attached stigma. At the mid-point of each continuum, the terminology has returned to having less of a visual stigmatization. The mid-point of the lower quadrants

again display the terminology that has attached visual stigmatizations. Finally, the lower end of the continuum display terms that do not have a visual stigmatization attached.

The terminology that appear to have less visual stigmas are "learning disability," "differently abled," and "people first." The terms that fall in the gradually increasing areas of having visual stigmas attached are the terms that have "developmental" and "intellect" as the descriptors for the disability, delay, or impairment. The terms that are placed in the areas that depict negative stigmas are the terms that are described by the descriptor "mental." Hastings et al. (1993) found that the newly adopted English term "learning disability" showed a more positive connotation than the older terms, "mental subnormality" and "mental handicap." However, all terms used in that study were considered to have negative overtones except the term "exceptional." Using a term that has a positive connotation such as the term "exceptional" does not guarantee that the term will not adapt to the negative societal views upon their realization of what the term is actually describing (Hastings, 1994).

Variations of Terminology Used in Different Countries

Bachelard (1931) described the variations of terminology used in America, Britain, and Australia. The term "moron" was used in America at the same time the term "feebleminded" was used in Britain. When the term "feebleminded" was used in America, it had the same meaning of the terms "ament" and "mental defective" in Australia. Finally, the Australian term "high-grade feebleminded" was another term for the American "moron." It is evident from this literature that the terminology used in different countries has been an issue for many years.

The perceptual maps from Canada, the United States, and Australia indicated that the term "learning disability" was not in close proximity with any of the other terms. However, the perceptual map from England projected the term "learning disability" as a term that is closely related with several others such as "mental retardation." In England, "learning disability" is the official term that describes individuals with a lower than average intellectual capacity. In North America, the term "learning disability" refers to individuals who have such impairments as dyslexia. Fernald (1995) found that usage of "people first" language was preferred in three of the four countries over the terms "developmental disability," "learning difficulty," "mental handicap," or "mental retardation."

CONCLUSION

The issue of labeling individuals with disabilities is cyclical in nature. As societal issues such as politics and social views change, the terminology used to describe individuals with intellectual disabilities changes. Such professions as medicine, education, and social advocacy continually invent new terminology that reduces the stigma of the old term. To overcome the problem of labeling individuals with disabilities, it is pertinent to recognize that all individuals possess positive attributes, personality differences, and a wide variety of emotions. When individuals with intellectual disabilities are treated with dignity and respect, the terminology used to identify these individuals will reflect a positive attitude. The goal for the field of adapted physical education should be to adopt a term that emphasizes an individual's strengths and that recognizes each as an individual before his or her disability.

The use of acceptable terminology is an evolving process. It is necessary that

researchers and practitioners in the field of adapted physical activity understand the differences in the usage of terms around the world. The behaviors and attitudes of professionals providing leisure services that include people with disabilities can affect the quality of life, self-concept, and degree of general acceptance of those individuals by others (Stewart, 1988). Therefore, adapted physical educators' increased interaction with individuals with intellectual disabilities presents a necessity that researchers and practitioners within the field should use terminology that is both positive and sensitive.

The information gained from this research provides professionals with an awareness of terminology preferences for each country that will assist with clarification while conducting research. It is evident that a global consensus on terminology used to describe individuals with intellectual disabilities is needed for both the researcher and the practitioner in the field of adapted physical activity.

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APPENDIX A

Questionnaire

Mapping the Language of Intellectual Disability

Listed below are pairs of words. Each of the words has recently been used to describe those individuals whose intellectual capacity is below normal.

Look at each pair of words, and indicate how similar you think they are to each other by marking the box which best reflects your opinion. There are no right or wrong answers.

Please mark the appropriate box indicating the country in which you live.

- **Canada** • **United States of America** • **United Kingdom** • **Australia**
- **Other** _____

Please complete the following information:

- Male • Female __Age

		Similar Meaning									Different Meaning
1 Mentally Handicapped	Developmentally Disabled	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
2 Mentally Retarded	Mentally Challenged	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
3 Intellectually Impaired	Mentally Disabled	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
4 Mentally Handicapped	Differently Abled	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
5 Developmentally Disabled	Learning Disabled	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
6 Mentally Retarded	Developmentally Delayed	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
7 Intellectual Disability	Mentally Disabled	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
8 "People-First" Terminology	Differently Abled	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
9 Mentally Handicapped	Intellectually Impaired	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
10 Mentally Challenged	Mentally Disabled	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑

		Similar Meaning									Different Meaning
11 Intellectually Impaired	Mentally Challenged	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
12 Mentally Handicapped	Developmentally Delayed	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
13 Developmental Disability	"People-First" Terminology	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
14 Intellectual Disability	Intellectually Impaired	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
15 Learning Disabled	Differently Abled	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
16 Developmental Disability	Mentally Challenged	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
17 Developmentally Delayed	Mentally Disabled	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
18 Intellectually Impaired	Differently Abled	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
19 Mentally Handicapped	Mentally Challenged	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
20 Developmental Disability	Intellectual Disability	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
21 Learning Disabled	Mentally Challenged	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
22 Mentally Disabled	Differently Abled	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
23 Mentally Retarded	"People-First" Terminology	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
24 Developmentally Delayed	Intellectually Impaired	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
25 Mentally Handicapped	Mentally Retarded	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
26 Intellectual Disability	Mentally Retarded	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
27 Developmental Delay	"People-First" Terminology	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
28 Mentally Disabled	Intellectually Impaired	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
29 Developmentally Delayed	Mentally Challenged	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
30 Mentally Retarded	Differently Abled	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑

		Similar Meaning									Different Meaning
31 Mentally Handicapped	Mentally Disabled	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
32 Intellectual Disability	Differently Abled	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
33 "People-First" Terminology	Mentally Disabled	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
34 Intellectually Impaired	Learning Disabled	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
35 Mentally Handicapped	Intellectual Disability	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
36 Developmental Disability	Developmentally Delayed	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
37 Intellectual Disability	"People-First" Terminology	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
38 Mentally Retarded	Intellectually Impaired	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
39 Developmentally Delayed	Learning Disabled	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
40 Mentally Challenged	Mentally Handicapped	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
41 Developmental Disability	Mentally Disabled	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
42 Developmentally Delayed	Differently Abled	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
43 Intellectual Disability	Mentally Challenged	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
44 Mentally Retarded	Mentally Disabled	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
45 "People-First" Terminology	Learning Disabled	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
46 Intellectual Disability	Developmentally Delayed	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
47 Developmental Disability	Mentally Retarded	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
48 Learning Disabled	Mentally Disabled	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
49 "People-First" Terminology	Intellectually Impaired	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑
50 Mentally Retarded	Learning Disabled	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑

51 Developmental Disability	Differently Abled	❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑
52 "People-First" Terminology	Mentally Challenged	❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑
53 Mentally Handicapped	"People-First" Terminology	❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑
54 Intellectual Disability	Learning Disabled	❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑
55 Developmental Disability	Intellectually Impaired	❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑

56 Mentally Handicapped	Learning Disabled	❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑
57 Developmentally Delayed	Mentally Retarded	❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑
58 "People-First" Terminology	Mentally Retarded	❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑
59 Mentally Challenged	Differently Abled	❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑
60 Differently Abled	Intellectual Disability	❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑ ❑

Thank you for your help.

APPENDIX B

Cover Letter

September 10, 1998

James Wiseman
160 Sullivan Avenue
Gander, Newfoundland
A1V 1S5

Dear James Wiseman,

The controversy concerning the appropriate usage of terminology for individuals with a lower than average intellectual capacity is clearly an issue in the field of Physical Education and Recreation. Educators and facilitators within our profession use various terms when referring to these individuals. In an attempt to better understand the current use of this terminology, a project is being undertaken to map, using multi-dimensional scaling, those words and terms that are in common use.

Members of the International Federation of Adapted Physical Activity; editors, guest reviewers, and contributing authors for the Adapted Physical Activity Quarterly are invited to participate in the study. Due to your involvement in the field of Adapted Physical Activity, your input would be greatly appreciated.

The questionnaire is attached with the appropriate instructions. The questionnaire contains sixty sets of terms used to identify individuals whose intellectual capacity is below average. Each of the terms has recently been used to identify this population. Please return the questionnaire in the enclosed postage paid envelope.
If you have any questions or concerns, you may contact Roxanne Wiseman, Project Coordinator, by email: rox10@gte.net . Thank you for your time in assisting with the research.

Sincerely,

Roxanne Wiseman

Project Coordinator