Attitudes, Values, and Beliefs of Personnel Serving Persons with Disabilities: A Research to Practice Challenge

by

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ABSTRACT

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This research is concerned with an important but largely unresearched aspect of services to persons with disabilities. Of specific concern are attitudes, values, and beliefs which are considered to serve as a prism through which individual helping professionals perceive and interpret experiences and, ultimately, through which all decision making and behaviour is filtered. A review of the related psychological and educational literature identified a diverse array of situation-specific themes concerning attitudes, values, and beliefs and helping professions in general. In addition, a number of common themes were identified that all helping professionals are required to address. Unfortunately, the literature is largely anecdotal in nature and almost devoid of empirical research into these themes and their impact upon helping professionals; particularly serving persons with disabilities.

Despite the limited discussion of research into these aspects of serving persons with disabilities, the literature review was useful in identifying eight themes or dimensions of attitudes, values, and beliefs that were speculated to be significant in serving persons with disabilities. In the absence of a dominant theoretical model and a solid research knowledge base, a largely exploratory study was designed to illuminate the significance of the specific elements or components of the eight dimensions of attitudes, values, and beliefs. In addition, it was hypothesized that the dimensions of attitudes, values, and beliefs are influenced by demographic variables.

The dimensions of attitudes, values, and beliefs that were examined are: attitudes towards disabled people, general self-efficacy, locus of control, task
specific self-efficacy, work values, self-concept, job satisfaction, and quality of life. The demographic factors that were hypothesized to impact these attitudes, values, and beliefs are: level of education, amount of work experience, size of population of employment community, and amount of direct supervision time. Level of effectiveness was identified as a fifth demographic variable, although the direction of the relationship between effectiveness and attitudes, values, and beliefs was not hypothesized.

The subjects consisted of 221 personnel and their supervisors drawn from 58 agencies serving persons with disabilities in the southern half of the province of Alberta who volunteered for participation in the study. Measures of the dimensions of attitudes, values, and beliefs were selected on the basis of psychometric data, independent supportive research, and construct validity. The instruments employed generated 83 sub-scale scores which were considered the dependent variables and were subjected to a factor analysis procedure to identify the principal component factors. The principal component factors were subjected to a series of one-way analysis of variance (ANOVA) to determine the significance of differences between the subjects at different levels of the demographic variables.

The factor analysis procedure identified the principal component factors of the various dimensions of attitudes, values, and beliefs. These results are useful for descriptive purposes, although a good deal of specificity is lost with this data reduction procedure. The results of the ANOVA procedures, in general, provided considerable support for the hypothesis that there is a relationship between each of the demographic variables and some aspects or elements of the dimensions of attitudes, values, and beliefs examined. There were significant differences between the subjects grouped according to levels of the demographic variables on most dimensions of attitudes, values, and beliefs, although the impact of the demographic variables is not universal to all dimensions and all factors. The
dimensions that appeared to be impacted the most by the demographic variables
were work values, job satisfaction, task specific self-efficacy, and effectiveness.
Self-concept, locus of control, attitudes towards disabled people, and general self-efficacy had fewer significant differences.

Given the exploratory nature and certain limitations in design, a number of recommendations for further research were identified.

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CHAPTER 1
INTRODUCTION

In all societies and cultures, there are individuals who experience circumstances and events that, depending upon factors such as intensity, duration, and constitutiual vulnerability; can result in some form of serious and long-lasting hardship for the individuals and their families. These circumstances and events can involve genetic inheritance, physical trauma, and/or various forms of deprivation. These situations can occur during the pre-natal, peri-natal, or the post-natal periods and can arrest, inhibit, or interfere with human development and capacity or competence in daily living. Individuals so impacted have been described and labelled in a variety of ways; with more recent examples including mental or physical "disability", "handicap", "delay" and "challenge" (Brown, 1988; Pennock, 1993).

Throughout the ages, the care and treatment of such individuals has developed and evolved through distinctive eras associated with the prevailing perceptions, descriptions, and labels in use at the time. During the period of the Greek and Roman empires, these individuals were considered to be possessed by demons or evil spirits and needed to be exorcised and/or "removed" from the society as a form of treatment. During the Dark Ages and the rise of Christianity, the individuals were seen from a more moral perspective, were seen as "God's children", and the families assumed a degree of responsibility. However, they were also a source of embarrassment to the family and consequently were kept hidden in cellars and attics away from the rest of the community (Davison & Neale, 1992; Thumlert, 1992).

The Industrial Revolution created the phenomenon of cities which attracted individuals and families with economic rewards and handicapped individuals were then seen to have an economic value and consequently were housed in congregate settings and restrained to walls where they could be
displayed for a fee and could be housed and fed as economically as possible. During the latter half of the Nineteenth Century, this age of "bedlam" and "asylums" was replaced by a more scientific (psychogenic) perception of the individuals as "unhealthy" and the inhumane conditions associated with physical restraint and congregate care were replaced by an emphasis on quality physical treatment and custodial care of the "patient". This form of treatment was subsequently replaced in the middle of the Twentieth Century by an awareness of the learning needs of such individuals and they were seen as "trainees" requiring some form of specialized education. In addition, this period included the disappearance of congregate care institutions. The specialized nature of their educational needs gave rise to education and housing in small, segregated groups of "special learners" and a recognition that the community was the best place for this special education to occur. These small segregated groups of special learners have recently been replaced by more integrated approaches whereby the individuals are perceived as "citizens" of the community who have the right to be educated, to live, and to work in community in the same manner as any other citizen. The special or unique nature of their needs has been replaced by perceptions and concern for rights and equality (Davison & Neale, 1992; Thumlert, 1992).

Throughout this evolution of care and treatment has also evolved an occupational group charged with the responsibility for planning and implementing appropriate services to such individuals. Not surprisingly, this occupational group has experienced the same transformations associated with the trends in perceptions of the individuals. Progressing from exorcists during the demonological era, to guards during the age of asylums, to nurses during the age of congregate custodial care, to trainers, rehabilitation practitioners, and special educators during the era of specialized community training, through to community service coordinators and brokers during the current age of rights and equality; these personnel have experienced changes in the roles and training expected and
required. Each era had its own particular focus and emphasis. Any training of personnel reflected the current focus and has become much more holistic in nature with each succeeding era. The current focus requires personnel to consider all aspects of human functioning and all aspects of the individual's life in order to optimize the chances for most effective and efficient services. Such a holistic approach is a complex process and is only effective to the degree that human functioning is understood (Thumlert, 1992).

In an effort to achieve a holistic understanding, psychologists for decades have been studying the physical, cognitive, psycho-motor, and affective domains of human functioning. While a complete understanding of the domains is a long way off, there is considerable knowledge of the functioning of each specific domain. The inter-relationships between the domains have also been studied with reasonable success. However, very limited progress towards a complete understanding of the inter-relationships among all the domains has been realized.

With respect to training of human service personnel, considerable interest and attention to some of these inter-relationships has been generated recently. Much of this attention has generated from and focused on the functioning of adults in the world of work (Benner, 1984; Schön, 1987). The work-related performance of employees has historically been seen as a combination or composite of knowledge, skills, and attitudes (Knowles, 1990).

Research into the cognitive and psycho-motor domains has contributed significantly to an understanding of the knowledge and competency base of employees (Baine, 1982). Research into the affective domain has provided some understanding of motivation and attitudes of employees (Blankstein, Pliner, & Polivy, 1980); however, it is safe to conclude that research into the practical aspects of the affective domain is significantly lagging in comparison to that of the psycho-motor and cognitive domains. In fact, it has been said that "thinking in
this area of psychology has shown more confusion than in most ... as evidenced by a multiplicity of ideas, many apparently contradictory theories, and a paucity of clean-cut hypotheses" (Peters, 1963, p. 435).

This research is concerned with this more ambiguous aspect of human functioning as it relates to personnel employed to provide services to individuals with mental and physical challenges. More specifically, it is concerned with the attitudes, values, and beliefs of these professionals and the inter-relationship of these variables with the knowledge (cognitive) and skills (psycho-motor) aspects of their performance.
CHAPTER 2
STATEMENT OF PROBLEM

Since theory or paradigm is dependent upon definition of concepts and constructs and is critical in determining the research direction and focus, the abstract nature of the concepts and constructs in the affective domain is limiting scientific pursuit in this area. Regardless of the limited and embryonic nature of practical research in this domain; it is apparent that the affective domain is concerned, in part, with the attitudes, beliefs, and values of the individual (Collins, 1983). It is further recognized that these aspects of human performance can significantly influence the other aspects of functioning; including thinking, motivation, and behaviour of employees (Rokeach, 1972). It has been further speculated that such variables can even influence the physical and emotional well-being of employees and is readily seen during periods of occupational or personal stress (Thomas, 1967).

Human service personnel (or helping professions) are one of the occupational groups most concerned with the inter-relationships between the domains. This occupational group is given the responsibility of helping people who are experiencing difficulties in meeting their basic needs. The individuals needing assistance experience considerable stress during their period of need and, at times, are in crisis (Thomas, 1967). Their success will be determined by factors other than simply knowledge, competence, and attitudes. Their spirit and compassion will contribute significantly to their survival. The helping professional will be of assistance. However, this help will not be as significant as the sense of self, the ideas about the future and the world around them, and the beliefs and assumptions that underlie these ideas. In short, the spirit of the individual client is at the core of effective coping and human service professionals need to be keenly aware of the importance of this phenomenon of human performance (Sarason, 1985; Schön, 1991).
The significance of the affective domain in effective coping during times of crisis is generally well recognized by helping professionals. What is only now being recognized is the significance of this domain as it relates to the performance of the helping professional! The helping professional is not immune to the stresses experienced by the client. In addition, economic factors, prejudices, and societal indifference significantly impact the helping professional (Sarason, 1985). Economic pressures have created occupational isolation and eroded the professional and collegial support to these professionals. The beliefs, attitudes, and values of the helping professional will significantly impact effectiveness in coping with or adapting to the stresses of human service (Bevis & Watson, 1989). Further evidence of the significance of attitudes, values, and beliefs of helping professionals is emanating from employers and supervisors. Evaluation of employees suggests that most trained professionals are roughly equivalent in terms of knowledge and skills (Thumlert, 1988). However, significant variation in attitudes, beliefs, and values has been reported and has been speculated to contribute to variations in ethical behaviour and effective practice (Thumlert & Charles, 1989).

This situation is a combination of the importance of the affective domain in influencing all aspects of individual thinking and behaviour, together with the stressors of human service, combined with occupational trends toward isolated work sites and the resultant reduction in supervision and concern for ethical practice. It illustrates the tremendous need for an understanding of the inter-relationships between the domains and a well-defined description of critical attitudes, values, and beliefs that influence effective practice. Unfortunately little is known about these aspects of human service. In particular, there is a paucity of scientific research that is directly related to personnel helping and serving individuals with various challenges. The need for solid scientific understanding of this domain and the inter-relationships of the domains as they relate to the practice of helping is clear. More specifically, what is needed is an articulation of
the most relevant and critical attitudes, values, and beliefs that are associated with effective practice. Such an articulation would contribute significantly to the education and training of such personnel, to the recruitment, orientation, supervision, and evaluation processes of employers; and, ultimately, positively impact the quality of life of clients and consumers being served.

Prior to a discussion of the design of this research project that addresses these needs, it is necessary to examine the literature as it relates to the area.
CHAPTER 3
REVIEW OF RELEVANT LITERATURE

The constructs of attitudes, values, and beliefs; effective helping and human service; and measurement and evaluation are psychological and educational in nature. As a consequence, this review has been generated through a search of the Psychological Literature (PSYCIT) and Educational Resources Information Centre (ERIC) data bases. The review was limited to literature from 1982 to the present and it may be possible that significant information has been missed as a result. However, given that most current research is based upon previous work, this limitation in publication years is considered to be minimal at most.

When the basic constructs are considered individually, the enormity of the literature is staggering. However, when the constructs are combined to include attitudes or values, helping relationships or professions, and measurement or evaluation; the literature is startlingly small. There have been very few attempts to discuss and study these constructs in combination as a single topic.

This review of the literature includes a review of the basic constructs in question, the trends in the literature on each construct, the role of perception in the development of the constructs, and measurement and research difficulties associated with these constructs.

Basic Concepts and Constructs

Prior to a discussion of the specific and core themes reflected in the literature, it is necessary to define or describe the basic concepts inherent in this project and the constructs into which these concepts are developed. Of fundamental concern are the constructs of helping relationships, attitudes, values,
and beliefs. Each of these will be examined in brief as a basis for clarity in meaning and terminology.

**Helping**

Helping is a difficult concept to define and has highly individualized meaning. However, helping can be generally described as a process that produces growth conditions and outcomes that are important (Brammer, 1988). The outcomes generally involve changes in behaviour and lifestyle; changes in thought or perception, awareness or insight; or relief from suffering. The process is described as a sequence of events and includes, in its most fundamental form, two phases; building a relationship and facilitating positive action (Brammer, 1988; Egan, 1986b). It includes at least two individuals and, as a result, there is also a relationship present during this process (Rogers, 1958; 1980).

In addition, it is recognized that helping is almost universal to all concerned people and is closely linked to friendship. It is true that there are specialists in helping; however, the process is fundamentally the same process found in all interpersonal relationships (Rogers, 1958). The specialization of the process has resulted in professionalization which has yielded special terminology, laws and customs, organizations, credentials, and codes of conduct. This specialization has often been regarded as counter-productive to helping and has raised agonizing issues for all concerned (Brammer, 1988; Corey, Corey, & Callanan, 1993).

Another of the fundamental elements of helping is the notion of self-determinism. It has long been recognized that the relationship must be voluntary and that the "helpee" defines the need, the help, and the outcome(s) and that the helping relationship requires an agreement between the individuals (Brammer, 1988; Rogers, 1958).
Finally, it should also be recognized that helping involves both science and art. In a scientific sense, helping becomes structured, ordered, and formal. However, the intuitive and feeling nature of helping is reflective of the artistic element and is now being recognized and given more credibility in the scientific community (Brammer, 1988). Certainly, this project is an example of an investigation into the more artistic components of helping.

This project is concerned with only one of the dimensions of helping in human service personnel. It has been noted earlier that much of the historical attention on these professionals has focused upon their knowledge and skills (Baine, 1982; Knowles, 1984). However, some of the recent literature suggests that the affective component of their performance is now being recognized as critical to effective helping and that, during times of stress, these affective variables become even more critical (Benner, 1984; Schön, 1991).

**Attitudes, Values, and Beliefs**

Specific components of the affective domain have been identified as particularly significant. The individual's attitudes, values, and beliefs are now considered to be at the heart of decision-making and action (Bevis & Watson, 1989; Sarason, 1985; Pennock, 1993). These attitudes, values, and beliefs are thought to exist as separate personal and professional constructs and influence virtually all decisioning. In addition, these separate attitudes, values, and beliefs are combined in an infinite variety of ways to comprise an individual's belief and value systems and sub-systems (Rokeach, 1972; Smithson, Amato, & Pearce, 1983).

The field of social psychology has studied attitudes, values, and beliefs extensively. Since these constructs are abstract, it is difficult to define and describe them in concrete, measurable terms. As a result, they exist as visions in
the minds of theorists and have been defined in a wide number of ways. Rokeach (1972) has described a number of different ways of envisioning attitudes, values, and beliefs. In essence, these constructs may be viewed as ideas and perceptions that vary along single central-peripheral dimensions; with more central dimensions being stronger and more resistant to change and having more impact or "repercussions" on peripheral components of the system of attitudes, values, and beliefs. This is referred to as the conceptual view.

An additional dimension of Rokeach's vision of these constructs involves the importance of the ideas or perceptions. Importance is defined in terms of connectedness to other ideas and perceptions. Thus; the more connectedness, the more central, and therefore the more importance. Further; Rokeach notes that the degree of consensus also influences connectedness and strength. The concept of consensus involves the presence of others and some form of communication process. This notion gives rise to the significance of social learning theory as one component of the developmental process and will be explored further in a subsequent section (Bandura, 1977b). Despite the commonality of these constructs, it is possible to envision them as distinctive constructs as well.

**Beliefs.**

This construct appears to be the fundamental or foundational "unit" of study. It clearly is the largest in number and represents the basis for the development of the other constructs. It may also be said that this construct is the simplest in nature (Braithwaite & Scott, 1991; Rokeach, 1972).

Beliefs are considered to consist of, very simply, "units of information" (or ideas) that the individual has been exposed to and which are accepted by the individual as correct or true. Beliefs are generated from simple propositions about relationships of the people, objects, or things and acceptance of such
propositions can occur without emotional attachments or concomitants. A single belief is a composition of ideas and perceptions of people, objects and events. The individual is capable of developing an infinite number of beliefs and beliefs can exist as single entities with little or no relationship to other beliefs or ideas (Braithwaite & Scott, 1991; Rokeach, 1972).

However, individual beliefs are generally organized into "systems" along certain common themes or elements. These belief systems are considered to be very significant in influencing the individual's perception or interpretation of new information and the acceptance of new beliefs. This interpretation and adoption of new beliefs is not subject to careful analysis and evaluation prior to formulation and acceptance as correct or true. Rather the individual appears to base acceptance on the identity and perceived credibility of the source of information about the person, object or event. The source of such information and ideas can be direct observation of events or the reports and interpretations of others. In fact, beliefs can be developed without the benefits of direct experience nor with any prior exposure to person, objects or events (Braithwaite & Scott, 1991; Rokeach, 1972).

This new information will be added to the belief system and will be employed when the conditions are appropriate. The individual is seldom conscious of all beliefs and beliefs systems when receiving and interpreting new information. In addition, a number of competing and conflicting beliefs can exist simultaneously without the individual being aware of such contradiction. At times, the individual is required to address such conflict; however, resolution is only absolutely necessary on some issues and only in certain situations. Further, such resolution is contextually driven and may simply involve adjustment of the relative strength of beliefs for a short period; thus enabling the individual to respond in the situation at that moment but not requiring a permanent change in beliefs (Braithwaite & Scott, 1991; Rokeach, 1972).
Also, beliefs can be of minimal or high strength and the degree of strength does not appear to be related to the degree of analysis and evaluation. The strength of the belief appears to be associated with the credibility of the source and belief systems structure, and the strength may have concomitant emotional characteristics that will affect manifestations and durability (Braithwaite & Scott, 1991; Rokeach, 1972).

An example of a belief relevant to persons with mental and physical handicaps concerns learning. Personnel serving this population are frequently exposed to a professor or workplace supervisor who makes the declarative statement that "all individuals are capable of learning ... given the appropriate environment and conditions based on individual needs". This statement becomes incorporated into the belief system about persons with mental and physical challenges. The strength of the belief is related to the credibility of the source of the statement; the trained and experienced "expert". In fact, such a belief continues or endures even in the face of evidence that shows, at least temporarily, that the client has not progressed in the acquisition of specific skills or has regressed or forgotten something which was performed satisfactorily previously. Despite this evidence of non-learning, personnel continue to believe that persons with such challenges are still capable of learning.

This belief about the potential to learn is added to other beliefs about persons with disabilities and influences the interpretation of new information. For example, such a belief about potential to learn will affect the interpretation of new information about a specialized teaching technique that is reported to be effective with certain learners. The new technique will be implemented in a variety or settings with individual learners with a variety of individual learning needs and will only be discarded if no success is realized or until a new and improved technique is discovered.
It is not difficult to accept such a general conceptualization of beliefs. The manifestations of beliefs present more difficulty. In general, beliefs exist as compositions of ideas and suppositions about relationships between people, things, and events and, as such, cannot be observed. This is not to say that the individual cannot demonstrate beliefs. The individual demonstrates beliefs through behaviour. It is possible to solicit statements about an individual’s beliefs about selected people, things, or events. Alternatively, an individual can be asked to rate or rank the degree of acceptance or agreement with a prepositional statement about people, things, or events. In addition, an individual can be the subject of open-ended observation where behavioural evidence of beliefs are recorded. Regardless of the specific mechanism for displaying beliefs, inference is required on the part of the observer. The individual’s beliefs must be inferred from statements solicited, from the ratings or ranking responses of the degree of agreement, or from the behaviour of the individual in a number of specific contexts. It is possible to structure these contexts to some degree, however, the validity of the inferences will be influenced by the individual’s awareness of the observer and the perception of the intent of the observer (Braithwaite & Scott, 1991; Rokeach, 1972).

Beliefs have traditionally been considered to be an affective construct because of the emotional or feeling aspects associated with the perceived credibility of the source of the information. However, the observation that beliefs consists of "ideas" that are at times organized into systems strongly suggests a cognitive component to the construct. In addition, the role of perception in determining the credibility of the source suggests that a belief is not an exclusively affective construct.
Values.

The construct of a value is also generally considered to be an affective construct; however, under scrutiny, it also consists of elements from the other domains.

Values appear to exist within the constellation of single beliefs and belief systems. Values are compositions of beliefs and ideation that represent "end states of existence". Stated in another way, values are made up of beliefs (or ideas) that have been accepted by the individual as true and are to be desired and pursued. These values are representations of beliefs that have a highly positive valence and they can be said to represent the ideal state. Consequently, they can be translated into goals and objectives and they are suggestive of modes of behaviour to be engaged in to achieve such states of existence (Braithwaite & Scott, 1991; Rokeach, 1972).

As in the previous example of the belief that all individuals are capable of learning, this belief can become incorporated into a value about services to people with mental and physical challenges. This belief is accepted and becomes "important" to the individual serving persons with challenges and, as such, learning becomes something to be desired and becomes a goal for both the person with challenges and for the individual planning and providing services. In fact, the strength of this value of learning can be evidenced in the statement (in policy and legislation, in fact) that all individuals have the "right" to an appropriate and effective education designed to meet individualized needs. The goal of learning can be translated into modes of behaviour for both the learner and the educator. Social competence, independent and inter-dependent living become the goals for the person with challenges. Effective and integrated community settings for education and rehabilitation become the goals for the helping personnel. The
goal of learning becomes more or less permanent or enduring and is relevant across all environments.

The importance of learning creates a level of motivation for both parties. Such values have a certain degree of permanence that is not evident in beliefs. Further values appear to be much less contextually sensitive and can be said to be relevant across virtually all situations or circumstances. While beliefs are considered true and are accepted by the individual, values have the added attribute of being "important". This notion of importance contributes to a motivational quality of values that is not evident in beliefs (Braithwaite & Scott, 1991; Rokeach, 1972).

With respect to organization of values, values are much fewer in number than beliefs. They are also much simpler in terms of description but not simpler in terms of complexity. Values are reflections of basic or fundamental elements of life and, as a result, are easy to identify and describe. They appear to be organized around certain themes or elements and generally reflect important and desirable elements of human existence.

However, the simplicity in labelling and description does not also translate into simplicity in manifestation. The individual is confronted with a fundamentally important and desirable element of life and must determine what and how to respond in order to achieve this ideal state of existence. The fundamental nature of the value suggests that it may be reflected in a vast array of situations and in a wide variety of ways. This vast array of situations and behavioural manifestations presents difficulties for the individual and for observers. The individual will experience uncertainty regarding the appropriateness and the effectiveness of the behavioural patterns displayed. There will be questions about whether the ideal state has been achieved and about consistency between behaviour and values. There will also be questions
about competing values and behavioural manifestations (Braithwaite & Scott, 1991; Rokeach, 1972).

With regards to independent observation, an observer could infer the existence of certain values based the behaviour of the individual in various situations and contexts, however, such inference is highly subjective and perceptual in nature. As with beliefs, the individual can also be asked to report or describe the system of values that have been developed or are in operation in any situation. The individual can also be asked to rate or rank responses to a series of life situations as an indication of the value system. Again, the best evidence for the existence and description of values is inferential in nature (Braithwaite & Scott, 1991; Rokeach, 1972).

Attitudes.

The third major construct under investigation is the notion of attitude. This construct has been studied much more extensively than beliefs or values. Social psychologists have been very active in the process of defining and describing attitudes and their impact on human functioning. However, as noted earlier, this investigative process has not focused upon the process of helping nor the rehabilitation process.

Given the width and breadth of the theoretical and research initiatives, it is not surprising that there is considerable divergence with regard to definition and manifestation of attitude. However, within this diversity, there is a general commonality. For the purposes of this research, an attitude is conceptualized in the following manner. Attitudes appear to consist of beliefs in the sense that attitudes consist of ideas and perceptions of people, things, and events and are organized around specific people, things, or situations. However, an attitude is much more enduring and long-lasting and is relevant across situations and
contexts. To this point, it appears that attitudes and values have common elements or qualities in that they seem to be made up of beliefs, are more enduring than beliefs, and are organized around themes. Attitudes also include similar valence attributes associated with values. However, whereas values are exclusively oriented towards positive states of existence; attitudes have both positive or negative qualities and individuals can either be attracted to people, objects, or events or they can be repulsed. Attitudes also have some additional components that are not evident in either beliefs or values. Of specific importance is the existence of an element of predisposition to act in a certain way. It appears that the existence of an attitude predisposes action and that this predisposition can be described as a tendency to act in a consistent or prevailing manner in certain situations containing elements of the attitude in question. An attitude can thus be conceived as a combination of beliefs (ideas about people, things, or events that are accepted as true), values, (ideas about people, things, or events that are important and to be desired and pursued), and including unique bi-directional qualities and predispositions or tendencies to act in a consistent manner (Braithwaite & Scott, 1991; Rokeach, 1972).

The example of the belief that all people are capable of learning that became incorporated into value statements regarding the goal of individual learning and specific strategies or approaches can be extended to incorporate the distinctive elements of an attitude. Individuals who accept the belief and value the outcomes begin to develop predispositions to act in certain ways. In this case, it is common to see personnel who serve this population begin to assess and evaluate performance, to set learning goals and objectives, to design and implement training programs, and to re-assess and evaluate outcomes. They are positively attracted to these processes and will be uneasy when the outcomes do not match the expectations. They will be attracted to other personnel who engage in such practices and will be less inclined to associate with personnel who are not engaged in similar practices. It could be inferred that they have a positive
attitude toward learning and the concomitant strategies. Further, there may be a negative attitude toward those who do not subscribe to the same values and engage in similar practices.

The existence and nature of attitudes can be inferred from statements of individuals and from ratings and rankings of life circumstances. However, the existence of the component of a prevailing tendency to respond in a certain manner contributes to the validity of inferences based upon direct observation. While there are elements of inference remaining, the existence of behavioural patterns or tendencies of the concept of attitudes creates considerably more validity to these inferences. It is possible to reliably observe and report such consistencies of behaviour and to infer the existence and nature of an attitude (Braithwaite & Scott, 1991; Rokeach, 1972).

Again, it is not difficult to recognize the cognitive and perceptual elements of attitude in the composition and organization of ideas in the construct of an attitude. The affective elements of attitude are evident in the valuing and in the feelings and emotions associated with attraction and repulsion. However, this construct has the additional psycho-motor elements of tendencies to respond. This additional quality of attitude makes it the most complex and variable of the three constructs of concern in this research.

Integration of Basic Constructs.

The constructs of belief, value, and attitude have been described and conceptualized as separate entities. The complexity of the constructs is evidenced in the cognitive, perceptual, and behavioural elements of each construct that have been identified. The diversity of the constructs is seen in the range of organizational themes as well as fundamental nature of the constructs and the applicability to a huge array of diverse aspects of human existence. The
abstractness of the constructs is evidenced in that the manifestations of the constructs has been described as a largely inferential observation process. There is some promise for less inference associated with the construct of attitude because of the quality of predisposition to consistent action.

Although each construct has been conceived and described as separate a entity, it is apparent that the constructs are inter-connected and are not mutually exclusive of one another. In other words, it could be said that each construct consists of elements found in the others. More specifically, the constructs can be conceptualized as follows:

Beliefs, values, and attitudes comprise a system of ideas. Beliefs comprise the fundamental base of ideas that are accepted and considered true. Values represent that portion of beliefs that are considered to be important and to represent ideals and, therefore, to be desired. Values, thus, become the basis of motivation and guide action. Attitudes consist of ideas (or beliefs), which are both positively and negatively valued, and which predispose the individual to a consistency in responding to certain situations (Braithwaite & Scott, 1991; Rokeach, 1972).

This conceptualization is represented in figure 1.
This form of conceptualization has some additional elements. The constructs are organized along a number of central-peripheral dimensions; with the more central dimensions being stronger and more resistant to change. Further, importance of the beliefs, values, and attitudes is defined in terms of connectedness to other beliefs, values, and attitudes. The more important the dimension, the more connected and the more central it is. The degree of consensus also influences perception and importance. These additional aspects of the constructs are relevant to all three constructs (Braithwaite & Scott, 1991; Rokeach, 1972).

The three constructs can be envisioned as separate but interconnected constructs that are integrated into a system of beliefs, values, and attitudes that provides direction and motivation and dramatically influences decision-making and influences behaviour. Further, while these constructs have been discussed in a generic context and, as a consequence, are relevant to rehabilitation.
professionals as individuals; they are also highly relevant to the individual as a professional rehabilitation practitioner.

Dimensions of Beliefs, Values, and Attitudes.

This research is grounded in the theory that beliefs, values, and attitudes are constructs that have perceptual, cognitive, and affective elements that are organized around common themes into dimensions or systems. Originally these dimensions or systems were conceptualized as unitary dimensions that existed on a continuum from high to low with regards to the specific subject matter of the dimension. This is known as uni-dimensionality and was the basis of traditional attempts to measure and evaluate the individual's position on the dimension in question. Such a uni-dimensional conceptualization is depicted in figure 2.

Figure 2

<table>
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<tr>
<th>Tolerance of Homosexuality</th>
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<td>Low</td>
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Uni-dimensional System of Attitudes, Values, and Beliefs

This uni-dimensional conceptualization of specific themes or systems of beliefs, values, and attitudes dominated the theoretical and research literature until two or three decades ago. However, research into various dimensions raised a number of fundamental questions. Essentially the question that dominated was whether or not these specific themes were really single, unitary dimensions or
were they more complex systems of single beliefs, values, and attitudes that have been organized around a central theme. This approach suggests that a preferred conceptualization of various themes of beliefs, attitudes, and values is a multi-dimensional perspective.

A multi-dimensional perspective would suggest that each dimension is conceived as a "system" of integrated beliefs, values, and attitudes around a fundamental theme. Such systems would not exist along a single dimension but rather around a group of interrelated dimensions that revolve around a particular theme. Such a multi-dimensional conceptualization is illustrated in figure 3.

Figure 3

Tolerance of Homosexuality
(example only)

Multi-dimensional System of Attitudes, Values, and Beliefs
This multi-dimensional conceptualization of systems or themes of beliefs, values, and attitudes presents more difficulties for measurement and evaluation of specific themes, however, is considered to be more reflective of the complexity of these constructs.

More recent criticism of this conceptualization of themes or systems of beliefs, values, and attitudes has arisen in the last decade or so. One particular concern relates to the linear nature of the various component dimensions. The multi-dimensional nature of such constructs is not in question. The notion that the specific elements or themes that make up particular systems are not always considered to exist as single linear dimensions. It has been suggested that such a multi-dimensional construct is better conceptualized and represented as system of integrated circles. This perspective would better connote the notion that specific components are not organized along a single, step-wise progression of beliefs, values, and attitudes but rather a dynamic, fluid collection and interaction of specific experiences that are bounded by a particular theme but are not organized along specific pathways. Such dynamic multi-dimensional conceptualization is illustrated in figure 4.
The literature on attitudes, values, and beliefs of human service personnel contains a number of diverse situations or circumstances that are encountered by helping professionals that elicit or involve specific attitudes, values, or beliefs in
order for the professional to be effective and, in some circumstances, to survive personally or professionally. Although there is a very diverse range of situations reflected in the literature, it is possible to identify a number of situation-specific themes that recur throughout the literature.

In many cases, these unique circumstances are highly controversial and polarizing. Such issues frequently raise very fundamental questions which cause the professional to examine the roots of personal beliefs. In other circumstances, the issues create or fuel conflict. This conflict frequently causes fragmentation and schisms in the community and the professional is often in the uncomfortable position of being at the centre of the conflict between family, friends, colleagues, and/or employer. In other situations, the conflict is within the individual between personal and professional beliefs and values. This review will identify the major situation-specific themes and examine the impact on the helping professional.

**Multiculturalism.**

Perhaps the largest and most diverse of the these specific themes is concerned with issues in which culture is a critical variable. Much of the literature on cultural issues is directed toward helping professionals serving specific cultural or ethnic sub-groups. In general, the majority of these articles are concerned with situations where the client is culturally different from the helping professional. The basic premise is that the professional can not be effective in helping the culturally different client unless the professional understands the culture of the client (McKay, 1987). Many articles advocate strategies for becoming culturally sensitive and for the removal of cultural barriers (Lynch & Hanson, 1992; Perez, 1992).

In most cases, these strategies involve examination of the professional's attitudes and stereotypes of people of the specific culture of origin (McKendry,
Everett, Ramseur, & Carter, 1989; McManus, 1988; Weinstein, 1988). Helping professionals must confront their stereotypes and biases and question all aspects of practice. Not only are the professionals required to examine their beliefs, a very careful and detailed analysis of behaviour is also required. In many cases, racial stereotypes and racism are carefully disguised and only revealed in subtle behavioural analysis (Ham & Domokos, 1989).

Other articles advocate affirmative action in terms of employment of professionals of different cultural backgrounds as strategies for promoting effective helping (Richards-Govere, 1989; Wong, 1986) and involve changes at the systemic rather than individual professional level (McClain, 1990). However, even in this context, the individual is not immune from impact (Herring, 1989). Helping professionals will need to seriously examine their belief systems with respect to acceptance of legislated or mandated employee selection practices that consider ethnicity above competency (Brown & Shaugnesy, 1981). The professional's values and beliefs about oppression and intervention will certainly need to be examined.

Native Culture.

The cultural issue that dominates the Canadian literature is concerned with individuals of Native (or First Nations) origin. Helping professionals again need to examine their beliefs and values about racial stereotypes, however, the notion of original or indigenous peoples also needs to be addressed. It is clear that the native culture was different prior to the arrival of the dominant European culture and that disease and social problems were introduced to the indigenous culture. Helping professionals need to examine the degree of guilt and personal responsibility for these circumstances and to recognize these influences on their beliefs and attitudes. In addition, professionals must again examine their own attitudes toward legislated or mandated intervention strategies and social policy.
Further, the professional's attitudes towards the effectiveness of legal and judicial systems will need to be questioned. It is clear, that native issues raise serious and profound questions for the helping community.

**Abuse of Females.**

A variation of the issues of multiculturalism that is currently dominating the literature involves women as an oppressed sub-group. Feminist issues are surfacing in virtually all aspects of life in Western societies (Fiorentine, 1988) and the provision of human services and helping is no exception (Major, 1989). In one context, this issue is a specific circumstance only if the helping practice involves serving females who have or are currently experiencing traumatic or severe oppression. This is particularly evident in rape crises centres, women's shelters, and emergency response services where family violence and abuse is occurring. Both male and female helping professionals need to examine their own values and beliefs system around gender and family. In most cases, helping professionals are not seriously challenged by such confrontation of their values and beliefs when violence is present. However, there are some cultures where violence is a culturally approved family dynamic. This proves to be more challenging for such professionals. At times, the professional is caught between the desire to be culturally sensitive and the taboo of violence as a family practice. Resolution may be difficult, particularly if some form of institutional or systemic tolerance of the violence occurs (Costin & Schwarz, 1987).

**AIDS.**

In addition to issues of multiculturalism and gender, there is another specific circumstance that is challenging the attitude base of helping professionals, particularly health and community workers. The emergence of HIV and individuals with AIDS, both in and outside of hospitals, has raised enormous
challenges to human service personnel (Melton, 1991). Professionals are required to carefully assess their personal commitments and the interests of stakeholders as well as their own perceptions of the potential of bio-medical research (Melton, 1991). One of the most interesting issues that challenge the professional involves the limits of confidentiality regarding the existence and identity of an infected individual (Gray & Harding, 1988).

There is clear evidence of the need for accurate information for both helping professionals and the community as a whole (McDermott, 1990). Unfortunately, many attitudes and beliefs have been formulated without the benefit of such information and, as a result, there is considerable fear and resentment associated with this form of special circumstance. Clearly, fear is an emotion that interferes with the reception and acceptance of information (Cramer, 1989). Helping professionals are challenged by these needs for education and the fears, anxieties, and confusion in the community. Helping individuals must also question their acceptance, particularly in view of the high incidence of male homosexuality and intravenous drug abuse (Rudolph, 1988). The degree of acceptance and tolerance is affected by the degree of self-infliction associated with AIDS (Ladnay & Stern, 1990). In addition, there is a growing number of HIV positive individuals who are victims of the actions of others; specifically individuals infected through transfusion of tainted blood and heterosexual females (Rudolph, 1989). These individuals are perceived much differently than the individual infected through self-injurious behaviour (Cramer, 1989).

Despite this difference, helping professionals are required to seriously question their beliefs and attitudes towards health risks in everyday life, homosexuality, and drug abuse. Some of these issues do not raise difficult questions when others are concerned, however, become much more difficult when the professional’s family is impacted.
Aging and the Elderly.

Another special circumstance that causes helping professionals to examine their fundamental attitudes, values, and beliefs concerns the shifting age demographics and services to the elderly. Elderly individuals present a number of very interesting challenges to the helping professional. Of particular concern are the beliefs, values, and attitudes around the aging process, disabilities, and death and dying (Tobin, 1986). This form of specialized service also raises serious questions regarding the definition and markers associated with quality of life (Brown 1988). The individual professional must decide what constitutes acceptable quality of life. The individual must resolve the inevitability of aging and the concomitant increase in disabilities and dependence upon others (Kunkel, 1989).

The certainty of death and the loss of loved ones are integral elements of this form of helping. Personnel not only must resolve these questions and issues personally, they must also engage with family members who are experiencing such losses and the grief associated with loss (Feifel, 1982). Not only are personnel required to address such issues with respect to elderly clients and family, it is apparent that their attitudes, beliefs, and values toward their own fallibility must be examined in detail (Bernotavicz, 1985).

Another highly challenging issue associated with aging concerns individuals who are suffering with a terminal illness. Helping professionals serving the suffering individual and those serving the family members are confronted with questions regarding termination of the suffering through active or passive euthanasia. In most cases, all parties are consulted in the decision-making process, however, the helping professionals’ beliefs and values about life itself and quality of life clearly influence their thinking and actions. The degree to which these values and opinions should be shared with the patient and family is a major
Further, professionals frequently find themselves in seriously conflicting situations when family or other professionals’ values and decisions are inconsistent with their own values and beliefs in this area. Such conflict can become extremely debilitating if the values and beliefs are strongly held (Feifel, 1982; Kunkel, 1989).

The complexity of serving the elderly is further evidenced by the significance of the helping professional’s attitudes towards leisure time. Not only do the elderly need to adjust to an increase in leisure, the helping professional’s attitudes and values are of critical importance and some significant gender differences have been recognized (Henderson & Bialeschi, 1983).

Helping professionals must be able to define and identify the markers of quality of life from their own perspective. They must also recognize the degree to which the community is prepared to ensure acceptable levels of quality of life for the elderly. At times, there may be very significant differences between the community’s markers and those of the professional. In addition, at times, the family of the aging client may have substantially lower expectations for their aging family member than the professional and be unwilling to act in a manner deemed acceptable by the professional. The conflict arising from this type of discrepancy can be very debilitating to the professional unless resolved (Firman, 1983; Seccombe, 1987).

Suicide and Self-Injurious Behaviour.

The significance of the helping professional’s attitudes towards death and dying is also seen in another specific circumstance. Personnel who serve survivors of suicide and their families are seriously challenged by their own attitudes towards death and the value of life (Snipe, 1988). The dilemmas present include conflict between self-determinism, the right to life versus the right to die with
dignity, and questions about the rationality of the victim. Particularly distressing and challenging is the phenomenon of adolescent suicide. The professional's values and beliefs about the value of life face very fundamental questions when death is self-inflicted.

There is a wide range of additional self-inflicted injuries that also challenge the helping professional. In most cases, the helper is prepared to recognize the worth and dignity of the individual despite the self-inflicting nature of the situation. However, when the situation begins to be chronic, the professional's commitment to the helping process is seriously challenged. The most obvious of the self-injurious situations involve alcohol and chemical dependence and chronic gambling. Although the self-infliction aspect is less obvious, the circumstances presented by the female victim of spousal violence and abuse who repeatedly returns to the abuser seriously causes the professional to question personal and professional values about the quality of family life (Daley & Raskin, 1991).

**Child Abuse.**

Modern Western societies are experiencing a tremendous rise in another special circumstance that presents difficult challenges to human service personnel. The circumstance in question involves the physical and sexual abuse of children. The sanctity of childhood is almost universal and the helping professional is not immune to the revulsion that typically follows exposure to such violence (Grubman-Black, 1990). However, certain segments of the human service system are charged with the treatment of the offender. The professional is seriously challenged to see to the dignity and value in the individual who commits such offenses (Starr & Wolfe, 1991). Further, the individual professional is likely to experience major conflict between personal and professional value systems. This conflict can frequently spill over into the individual's family and social life as well (Bowen & Newlon, 1988). This conflict has been known to paralyze professional's
reaction to victims, the families, and to colleagues. In addition, clinical judgement has been impaired in many cases (Snyder & Newberger, 1986).

One particular variation of the circumstance of childhood sexual abuse that challenges the helping professional is incest. Despite sibling incest being the most common form, father-daughter incest is distressing to the helping community. The taboo associated with incest is virtually universal and strong negative, emotional reaction is natural. Never-the-less, certain helping professionals need to resolve their own reactions in order to institute a treatment process for the abuser. Such resolution is difficult for the professional who has high value for children and family (Kalichman, 1986).

A number of specialized circumstances that present fundamental challenges to the helping personal and professional beliefs, values, and attitudes have been identified and described briefly. Fundamental dilemmas and questions confronting the professional have been raised. While not all human service personnel encounter these specific situations, there is merit in examining them as a basis for understanding attitudes, values, and beliefs required of personnel who specialize in helping others. In addition to these rather unique circumstances, the literature also reveals a set of themes of attitudes, values, and beliefs that are common to all helping professionals. These "core" themes will be examined prior to an examination of those attitudes, values, and beliefs that are unique to personnel providing services to persons with disabilities.

Core Themes

These themes can be construed as common to virtually all human service personnel and all personnel are required to assimilate or accommodate the beliefs, values, and attitudes reflected in these themes. Consequently, they are
also relevant to personnel serving individuals with disabilities. Seven core themes are described below.

**Gender Issues and Sex Roles.**

One of the more recent and profound issues surfacing in the literature revolves around feminism and the roles played by females at home and at work. Some of these issues surfaced in the specialized circumstance of services to abused and assaulted females. However, gender issues are far more wide reaching than this specialized circumstance and all human service personnel are affected in some way and have been challenged by some of these feminist issues.

The oppression of females has cultural and institutional roots that pre-date recorded history. Sex- or gender-based roles have evolved and been perpetuated by virtually every formal and informal educational system. There is considerable evidence to show that such sex role typing occurs at a very early age and is certainly firmly established by the adolescent years (Clausen, 1991). Until recently, it has been very difficult for individual women to break down or step out of these roles and, as a result, women have been denied opportunity and been oppressed into these roles. There is considerable evidence that this form of oppression has had dramatic negative consequences on life satisfaction (Branholm & Fugel-Meyer, 1992). The sexual revolution, women's liberation, civil rights, and equity movements have only begun to raise awareness of this form of oppression. There is evolving considerable evidence for the blurring and blending of such roles and the process of change (Clarke, 1989; Fatkin, 1987; Fiorentine, 1988). There is considerable literature on the process of changing sex roles and the accommodations required by both sexes (Gorrell & Shaw, 1988; Swerdlow, 1989).

Human service personnel have been particularly sensitive to feminist issues because of their concern for the well being and enrichment of the lives of others
(Ben-Shem & Avi-Itzhak, 1991). Not only have helping professionals been required to confront oppression in the lives of their female clients, they have been required to carefully examine their workplace and the roles within it. Individual professionals have had to question their beliefs and attitudes toward sex roles. They have had to analyze their own behavior to determine the level of their own participation and culpability in gender-based forms of oppression (Lee, 1987).

In addition, this examination is not restricted to the individual professional’s helping practice; such analysis must involve examination of inter- and intra-gender working and supervisory relationships. Of particular note is the observation that females dominate the entry level helping professions, however, historically males have dominated the supervisory and management level positions in human services (Williams & McCullers, 1987). Significant variations of perceived competence of male and female managers have been noted in human service organizations (Ezell, 1980).

Work-place scrutiny has been heightened. However, there is considerable literature on the impact of feminist issues in the home of helping professionals as well. Strategies for managers for examining situational values at home and at work are seen as particularly useful (Chusmir & Parker, 1991). It is interesting to note the emergence of a recognition of the home as a factor in influencing work-related values (Seccombe, 1986). Also of interest is the age in which such values emerge. Gender differences regarding the career aspirations in youth have been recognized as contributing to variations in effectiveness of helping professionals (Cochrane & Giza, 1986).

There is a segment in the literature on gender-based issues and sex roles that challenges the home and professional life of many human service personnel. The influence of religion in determining sex roles is recognized and the conflict that arises when work-related variations in sex roles begin to conflict with the
religion-based sex roles (Neumann, 1989). A particularly stressful set of circumstances for some professionals that threatens the best of marriage relationships and frequently results in changes in work place and/or career (Carbone, 1991). This conflict is frequently seen as a basis for a number of mental health related problems, particularly depression, in families of human service personnel. It was noted that female spouses, irrespective of work roles, are generally required to restructure the family roles in light of this conflict and mental or physical health problems; regardless of who experiences the problem (Carbone, 1991).

An interesting variation of the basic theme of gender issues and sex roles in families of human service personnel involves dual careers. Gender differences in sex roles in dual career families were noted with women tending to report higher orientation to family than career. Both sexes report a high degree of marriage and career satisfaction when both spouses take an active interest in the other's career; however, women also identified spousal chore sharing, decision making, and financial support as contributing to marital satisfaction in dual career families (Ray, 1990). This is not a difficult situation; however, it is one that requires considerable insight and sensitivity on the part of both spouses.

Another gender-related issue that is confronting virtually all individuals in Western societies involves the termination of pregnancy. This issue is extremely complex and involves values and beliefs about life itself, family life, quality of life for children of unwilling parents, protection of the right to self-determination for women and for the fetus; and individual versus group rights (Begley, Hager, Glick, & Foote; 1993). The debate around such fundamental issues is causing very profound schisms within communities and threatens the political and social institutions that monitor and regulate life. These debates eventually involve issues of religion and meaning of life and, since personal values are at the foundation, it is inevitable that conflict arises. It is seriously challenging helping professionals
serving families as well as challenging the families of the helping professionals themselves (Woodward, Hager, & Foote; 1993).

It appears that gender issues affect the helping professional both professionally and personally and that considerable self-examination is required in order to address the issues of gender inequity.

**Physical Health and Wellness.**

Another of the core attitude, value, and belief themes that affects all helping professionals involves the connection between physical and emotional health. This theme is not nearly as well represented in the literature as the issues of gender, however, since it applies to all professionals; it is equally as encompassing.

It is well documented that human service personnel experience significantly high levels of stress and that failure to adequately cope results in burn out of one form or another. This is particularly evident in evaluation of the effect of mood on clinical judgement (Salovey, O'Leary, Stretton, Fishkin, & Drake, 1991). It appears that many of the more effective coping strategies involve maximizing physical health and well being of the professional (Hatfield, 1991). It is not hard to envision individual professionals recognizing the need for physical well being on a cognitive level. However, like most people, making the transition from cognition to behaviour is very complicated and not always easy (Mullen, 1988). One of the fundamental values that is challenged in this issue is the notion of "best practice". At times the individual's ideal of providing best practice is seriously compromised by less-than-adequate physical or emotional health. Some practitioners would argue that the professional is obligated to be as physically fit as possible and that fitness must become a major priority. However, such thinking is clearly compromised by a myriad of other realities in the daily life of helping
professionals. Obviously, there is a middle ground for most professionals, however, a commitment to both ideals is apparently important. The individual's attitudes appear to be of critical significance and it is apparent that motivation is a critical factor closely related to attitude (Rokeach, 1972).

The influence of physical exercise on helping professionals is seen in clarity of thinking, reduction of cognitive overload, and increased self-esteem. It appears that there are a number of physiological correlates of exercise that have demonstrable effects upon psychological conditions associated with change in attitude, affect, and motivation (Hatfield, 1991). The applications of this research to the physical and emotional well-being of the helping professional appear to be immense.

An unfortunate spin off of the physical fitness element of helping practice concerns attractiveness. There is evidence that physical appearance and attractiveness are critical helper variables that influence client perceptions about the effectiveness of the professional. This is particularly true with resistant clients (Miller & Wells, 1990; Ponzo, 1985). While it may be useful to be perceived as "attractive" in difficult cases, it is unfortunate that attractiveness is mistaken for effectiveness. It certainly raises questions about effective professionals who are not perceived as attractive and attractive professionals who begin to question the source of their competence. A most unfortunate circumstance particularly for those helpers with insecurities!

Technology.

Another of the attitudinal themes that is reflected in the literature involves the advancement of technology in the practice of helping. In most cases the technological advances discussed are increases in computerized client information storage and retrieval systems. The helping professional is required to develop
basic computer literacy and competence (at least familiarity) with specific word processing (Engel & McMurtry, 1987). Many proponents argue in favor of technology on the basis of ease and economy of transmission, storage, and retrieval. Many helping professionals are reported as accepting of the technology, however, there are large numbers of individuals who are resistive. In some cases, resistance is described simply as a function of the intimidation of computers and/or the fear of losing information (Nurius, 1990b). However, serious questions concerning confidentiality and security of information are also raised. It is possible to develop sophisticated security systems to protect the confidentiality of the information, however, no system is foolproof and this issue remains a major source of concern. It appears that the individual professional's beliefs and values about technology need to be examined before any meaningful computerized applications to practice are possible (Nurius, 1990a).

There are also uses of computer technology when marketing human services (Veeder, 1991). The concepts of marketing and sales have traditionally been foreign to human service personnel; however, economic realities are forcing changes and this is causing considerable conflict within the helping professional between the need to be removed from financial consideration when delivering service and the organizational economic needs for survival (Bynum, 1991). It appears that many professionals are able to rationalize the economic realities, however, whether this results in true valuing of economic practices is questionable (McClintock, 1990).

**Reluctant or Resistant Clients.**

Another of the core themes that is very prevalent in the literature involves helping individuals who are resistive. It appears that virtually all forms of helping encounter such individuals and the professional is confronted by issues of conflict between basic beliefs in self-determinism versus absence of informed consent and
protection of others. It also surfaces with clients who are aging, and for whom dignity and respect begin to conflict with achievement of goals and causes considerable conflict within the helping professional (Burr, 1985). It is apparent that professionals needs to examine their role in creating or perpetuating the power imbalances in the relationship. This requires an analysis of the helper's values and beliefs about life styles (Christy-Baker & Randolph, 1982). Further, many resistant clients display hostility and threats. It is obvious that professionals must examine their reaction to such expressions and this will require an analysis of beliefs about hostility and anger in everyday life (Amatea, 1988).

In addition to overt expressions of resistance and reluctance, many relationships are terminated prematurely. This is frequently seen as a variation of the resistant or reluctant client. It should be noted that the termination is premature in the judgement of the professional and may not reflect the thinking of the client. Regardless, the professional is confronted by serious questions when premature termination occurs. The role of the helping professional is critical in premature termination. Helping professionals must assess their role in the termination. There is considerable evidence supporting the critical nature of first impressions and similarity. It is suggested that the attitudes expressed by the helper are critical to continued helping relationships and that these need to be expressed during the first interview (Tyron, 1988). The helping professional is required to answer questions about the degree of self-disclosure during the first interview which is very challenging personally (Schneider, 1986; Tyron, 1988). How much personal information is disclosed in a professional relationship is a difficult question to answer, particularly in the face of hostility.

At times the helping professional is concerned with consultation to colleagues rather than direct service to clients. As with reluctant clients, many times colleagues are reluctant or resistant to consultation. Consulting professionals must examine their role in this reluctance. Self-disclosure of
attitudes, beliefs, and values is critical and the professional must examine this disclosure in detail prior to becoming an effective consultant (Randolph & Graun, 1988).

Resistant or reluctant clients or colleagues appear to be very challenging on a professional and personal level to the helping professional. If the resistance is accompanied by hostility or anger, the personal challenge and self analysis is intensified.

Value of Work and Work Ethic.

Another of the core themes that emerges from the literature concerns the value of work and expressions of work values. This theme is not as concrete and clearly defined as others. It appears that these issues involve the meaning of work, productivity, and job satisfaction. Many different terms are used to refer to such concepts, however, all seem to refer to the value or importance of work, the work "ideals" to be pursued, and expressions of the worthiness of work performed. These issues surface in direct service to clients as well as within the helping professional and the organization (Drummond & Stoddard, 1991).

It is possible to identify a number of work values and pursue the expression of these for both client and helper. Most of the dominant work values revolve around the Protestant work ethic and involve productivity, efficiency, and proficiency (Drummond & Stoddard, 1991). It is recognized that there are also many cultural variations of these work ethics or values (Savickas, 1991). The helper must examine and determine the relevant merit and worth of such work values on a personal basis.

One of the more scientific studies attempting to measure work values was conducted with school administrators. This study established reliability and
validity data for the work values scale that was used and identified gender differences and differences for varying levels of administration (Hales & Waggoner, 1984). Another study of Israeli college students provided support for the importance of work values in human services. Again a work values scale was used to measure differences between human services students and students in other career programs (Ben-Shem & Avi-Itzhak, 1991). These studies provide considerable support for the importance of this dimension and have merit in the approach to measurement employed.

There is also interesting literature on job satisfaction that contradicts the importance of work values. Patterson and O'Driscoll (1989) report that, despite the reported importance of work values in organizations and by individual professionals; job satisfaction seems to be more dependent upon extrinsic factors including money, rewards, and security. Variety, which might be considered more intrinsically rewarding, was also seen as a major factor in job satisfaction however (Patterson & O’Driscoll, 1989). An interesting variation of this particular aspect of indicators of work value was noted in graduating human service professionals. Graduates report much higher commitment to intrinsic indicators such as creativity and association with other professionals, although these seem to fade with experience (Ben-Shem & Avi-Itzhak, 1991). The importance or worthiness of money for helping professionals was also examined in the literature, although there are few studies of the significance and value of money in general reported in the literature. It appears that the value of money involves the individual professional's perceptions of money as good or bad, as necessary for meeting needs, and the degree of clarity of ideals for the future (Tang, 1988). These issues are very much a function of personal value systems and it is not surprising that extrinsic factors, such as money and security, become more critical than the intrinsic indicators, such as proficiency. The importance of congruence between individual and organizational commitments is also recognized as a major influence on job satisfaction (Mottaz, 1988). It is again not surprising since the organization
becomes the source of the more extrinsic indicators of work performance. Given
the significance of the extrinsic indicators of work value, it would seem of utmost
importance that individual professionals and supervisors would need to recognize
this in the supervision and evaluation process. A component that is not generally
present in most evaluation systems!

In addition to these fundamental work values and indicators of job
satisfaction, there are two additional work related phenomena that significantly
impact the helping professional. One involves the individual's locus of control. It
appears that locus of control affects a number of aspects of helping. Goal setting
(client and professional), reaction to stress and adversity, perseverance, and
rationality of beliefs are related to the individual's locus of control with an
internal locus being more beneficial in most instances. However, perfectionism
and its negative connotations for the imperfect world of helping was noted as an
important side effect of strong internal locus of control (Martin, 1991). The
significance of this theme for personnel serving persons with mental or physical
challenges is readily apparent.

The other important value reflected in the "work" of helping involves
helping as a scientific endeavour. In keeping with the Protestant work ethic,
science was seen as contributing to objectivity, efficiency, and accountability of
practice. However, emerging views of constructivism and qualitative research
have begun to provide an alternate view of scientific practice (Beutler & Bergan,
1991). Each individual professional is challenged by these conflicting views of
science and scientific practice and must articulate a personal position before
practice can be modified to fit the expectations. In addition, another perspective
on helping practice causing considerable conflict for the individual professional is
emerging. With the increased concern for efficiency and accountability has come
an anti-empathy trend in both clients and professionals. Despite the critical
nature of the empathetic attribute in helping, the individual is often forced to
devalue care and concern for the sake of efficacy (Hager, 1990). This raises serious and profound dilemmas for the professional which contribute heavily to job satisfaction and meaning and value of work.

**Changes in Life Style and Mid-Life.**

The essence of human service is change. It is the essential characteristic of practice and the professional is fundamentally charged with facilitating the phenomenon of change. However, it is well documented that there is a certain resistance to change in the status quo and without a recognition of the need or desirability of change, lasting change is not feasible (Cotherell, 1991a). It is safe to say that both client and professional are inextricably inter-connected to the change process and that the outcomes are critically influenced by each other's attitudes, values, and beliefs about life and changes to life style. As a consequence, it is imperative that the professional have a clear understanding of his/her values and beliefs about life.

As with work values, the traditional helping professional espoused traditional family and life values. However, traditional life styles are evolving and a vast array of alternative life styles and values are emerging. It is inevitable that the helping professional will encounter clients with non-traditional life styles. One of the alternative life styles that raises serious issues for some professionals involves homosexuality and homosexual couples as parents. The inevitability of encountering such alteration of life style forces the helping professional to resolve attitudes and beliefs about such life styles. The literature, however, reflects considerable variation in the degree of acceptance of homosexuality by human service personnel (Rudolph, 1988). Unfortunately, the literature suggests that a certain degree of like and dislike is attached to the acceptance which raises emotions and reduces objectivity in the resolution of the confusion and conflict. The variation within the profession is considered to be a function of confusion
and division of thought within the profession and among individual professionals. Further, it is suggested that much of the confusion is a result of mixed messages. Mixed messages about homosexuality result in conflict within professionals that revolve around role rigidity versus liberalism and certainly are connected to locus of control and change as discussed in the previous section (McQuoid, 1988; Rudolph, 1988).

Homosexual life styles are only one of a number of alternative life styles that helping professionals are apt to encounter. It is perhaps the single, most common alternative. However, there are others that present equally challenging issues. Freedom of speech and freedom of religion guarantee the visibility of a number of groups of individuals who advocate a number of different life styles. Perhaps one of the most challenging of these are white supremacists who advocate a form of racial bigotry that challenges the professional's belief in tolerance and acceptance of others which are in direct conflict with the client's views. The degree to which the professional could be effective with such clients is seriously questioned unless the helper was of similar thought ... the implications of which are almost too dangerous to consider! As discussed in the section of self-defeating behaviour, a number of other alternate life styles contain elements of self-injurious or self-defeating behaviour. Again, the professional is seriously challenged to resolve conflicts about attitudes and beliefs about acceptance and effectiveness of helping with such clients.

In addition to the challenges presented by clients presenting alternative life styles, the helping professional is frequently confronted by another form of change that is a component of all aspects of life. These changes occur as individuals pass from adolescence to adulthood and are often referred to as the rights of passage. This phenomenon has only recently received attention and its significance recognized. Although considered to be important, there does not appear to be the same degree of concern and challenge as there is with the next major change
event. Mid-life change has major implications for life style and beliefs and values for both client and professional. The degree to which these changes are seen as crises or as opportunities is critical to the future and the professional's personal value system has a major impact on the client. In addition, these changes as they occur in the professional, not only impact the individual and family, but also impact the clients. Again, of major concern are the individual's perceptions of the future and the ideal states to be pursued. The degree to which the professional is able to recognize, identify, and describe personal values; the greater the effectiveness of practice (Cotherell, 1991b).

Religion and Religiosity.

The literature on attitudes, values, and beliefs of helping professionals contains an enormous number of references to religion and religiosity of both client and professional. Hillowe (1986) defined religiosity as the degree to which an individual holds religious beliefs including the dimensions of spirituality, transformation, and adherence to religious tenets. Religiosity essentially refers to non-secular religious beliefs whereas religion is considered to be secular and organized in a formal, social structural nature (Kelly, 1989). Although unexpected, this observation is not surprising when the significance of personal beliefs and values in relation to life style, meaning of work, work ethic, change, and the impact on families of the feminist movement are considered.

The significance of the religiosity of the client and the professional is well recognized (Kelly, 1989). The significance and direction of the influence of religion is complex and confusing. Client religiosity can interfere with and inhibit change. Helping professionals are generally less optimistic, more insensitive, and more reluctant with clients who display a high degree of religiosity (Kelly, 1990). In general the greater religiosity, the more negative the judgements on prognosis for both the client and professional (Hillowe, 1986; Keating & Fretz 1990).
Religiosity is also viewed as helpful and facilitating in other clients. This is particularly true if the professional is adept at assessing and recognizing client religiosity (Kelly, 1989). It is possible for individual professionals to develop such skills, however, it is more difficult to alter one's beliefs about such clients (Olsen, 1987).

Not only can client religiosity be inhibiting or facilitating depending upon professional sensitivity, the religiosity of the professional also impacts the effectiveness of the helping process. Professional religiosity can facilitate sensitivity to client religiosity and promote effectiveness. Professional religiosity obviously positively influences help with clients who also display a high degree of religiosity (Kelly, 1990; Lewis & Lewis, 1985). The literature advocates clear perception of individual and client religiosity. Given the emotional nature of such fundamental values and the intolerance of opposing views; such clear perception and rationality is not always easy for the professional. At times professional tolerance is achievable, however, personal acceptance is less feasible. Regardless of the difficulties associated with this component of the professional's values and belief system, the critical nature of the theme is well documented.

### Effective Helping

The literature on attitudes, values, and beliefs of helping also contains an additional core theme. It is the subject of an enormous body of research and dialogue and is concerned with the elements of "effectiveness" in helping practice. This theme focuses upon helper characteristics as reflections of core attitudes, beliefs, and values. This theme evolved from the fundamental humanist perspective of inherent goodness and worth, concern for the individual, sense of self, feelings, and self-determinism (Brammer, 1988). The focus on the humanist perspective was modified somewhat during subsequent years to include an additional focus upon the behavioural indicators of helping (Carkhuff, 1969a,
1969b; Carkhuff & Berenson, 1967; Egan, 1986b). More recently, however, the focus of this theme has been modified to include the beliefs and values system of the helper as a determinant of effectiveness (Combs, 1982).

In this context, the construct of "characteristic" refers to the beliefs, values, attitudes, and behaviour of helping professionals. It could be said that the characteristics of effective helping behaviour reflect the helper's attitudes, values, and beliefs. These characteristics will be examined in some detail.

Characteristics or Attitudes.

It is commonly accepted that the quality and effectiveness of the helping relationship is a function, in part, of the client's perception of the attitudes and skills of the helper. Further, the degree of similarity between the client's personal beliefs and attitudes and those of the helper is considered critical (McKay, 1987). It is believed that effective helpers have an integrated personal and professional (sometimes referred to as scientific) personality. This integrated personality is reported to consist of a number of personal qualities (or characteristics) that reflect attitudes (Rogers, 1980).

It is important to recognize that the effectiveness of the relationship is influenced by the client's perception of the presence of these attributes rather than the actual behavioural display. It should be noted that there are personal and professional attributes associated with helping. In addition, there is not a fixed characteristic nor pattern of traits that constitute effective helping. There is, however, a group of common facilitating conditions associated with the personal and professional characteristics of effective helpers (Brammer, 1988).

On the personal side, the characteristics that appear to be facilitative are perceived attractiveness, friendliness, valued opinions, inspiration of trust, caring
about self and others, and sense of community (Rogers, 1980). In addition, the effective helping professional is seen as having a planned life with goals and perceived to be living according to the plan. Further, this individual re-examines life’s circumstances and sets new goals and re-vitalizes at times (Brammer, 1988).

The professional characteristics associated with effective helping include the use of self as an instrument, awareness of self and values systems, non-judgmental (or suspended judgement), awareness of cultural experiences, ability to analyze own feelings and resolve conflict, confusion, and power imbalance; and altruism with respect to goals and purpose of helping. In addition, the effective helper displays a strong sense of ethics and a knowledge of the limitations of responsibility for success and failure (Brammer, 1988). Rogers (1980) also identified a number of characteristics that are associated with the professional side of the helper. These are congruence or consistency and genuineness, unconditional positive regard, empathetic understanding, warmth and caring, openness, concreteness and specificity; and communication competence.

Perhaps the most fundamental characteristic of effective helping concerns the concept of empathy. Carkhuff and Truax have theorized and researched extensively the impact of this characteristic on the helping process and have repeatedly demonstrated its significance (Carkhuff, 1969a, 1969b; Carkhuff & Berenson, 1967).

Another of the most important ingredients of this discussion of helping characteristics is the notion of altruism. This has been referred to as the "helper's syndrome" and reflects the professional’s purpose or goals of helping. Included in such a notion are motivation and helping professionals’ expectations of outcome for themselves and these clearly influence behaviour. The degree of clarity and awareness of such expectations are critical variables in effectiveness (Tomscani, Fodor, & Konya, 1990).
These attitudes or characteristics have been the subject of much scientific study and a number of researchers have attempted to analyze the various descriptions of the characteristics to determine the most critical.

One approach to determine the most critical dimensions is to survey employers. The Hawaii State Board of Education provided a prototypical model of such an approach in analyzing various forms of helping. While much of the focus of this analysis is on knowledge and skills, there is some effort to identify attitudinal dimensions as well (Broadbent, 1987, 1988). This research is considered valuable as a model for evaluating employer perceptions of personnel despite the rather rudimentary attitudinal focus.

Huff (1981) has generated perhaps the most comprehensive analysis of the critical roles in helping and has identified five dimensions that are considered to be the most critical. Of primary concern are the effectiveness of the relationship and conformity to work ethic or standards. This research was based upon an examination of the attitudes and values of over 500 supervisors, helping personnel, and clients and is by far the most comprehensive sampling in the literature. The measurement instrument was developed specifically for this research, however, and may be suspect in terms of construct validity.

The results of all such studies have suggested that there is little support for any one characteristic to be critical. However, there is considerable support for the concept of a "unity of independent characteristics" (Egan, 1986; Patterson 1989). This composite characteristic is often referred to as flexibility and includes such characteristics as theoretical orientation, creativity, motivation, analytical ability, inner directedness, tolerance for ambiguity, and functional (or instrumental) interactive style (Hyman & Woog, 1989).
While these attributes are generally accepted by theorists and researchers, they also represent some potential for controversy. Recently, Combs (1986) has questioned the results of literally hundreds of research studies that support particular methods or skills as constituting effective helping. The concern expressed is that no particular method or skill appears to be associated with good or poor practice. The reason for this apparent contradiction between the research on specific methods and research into effectiveness is that in order for methods to be effective, they must fit a highly complex set of conditions. They must fit the conditions in which the helping occurs.

"... time and place constraints, and the nature of the problems explored, to say nothing of the infinite variety of attitudes, beliefs, and perceptions in either the helper or the client" (Combs, 1986, p. 52).

In order to address such complexity, the methods employed must be individual and personal. Hence, it is not surprising that attempts to replicate the effectiveness of any one approach often do not provide support.

Another concern expressed is the feasibility of displaying unconditional positive regard in the face of extreme forms of human depravity. Warmth and caring involves the emotions of the helper and the professional is often faced with questions about over- and under-caring and about the appropriate degree of emotion to display (Sarason, 1985). Openness also raises considerable questions for the professional about the appropriate and safe amount of self-revelation or disclosure to include in the relationship. The resolution of these conflicts and questions is not always easy, however, contributes to the formation of a well-defined sense of self which, as mentioned earlier, is an important variable in effectiveness (Avila & Combs, 1985).

It is possible to identify common attributes or characteristics that represent the attitudes associated with effective helping. These attitudes predispose the
professional to act or response in certain ways. These attributes also contain certain beliefs that are critical to effective helping relationships.

Beliefs.

Beliefs have been defined as suppositions about people, things, or events that are accepted and Combs (1982, 1986, & 1989) has articulated a set beliefs that are considered to represent the fundamental belief systems inherent in helping. This personal theory establishes the guidelines for selection of appropriate behaviour in specific situations. At times, it is possible to predict behaviour based upon knowledge of an individual's personal theory or belief system. Conversely, an individual's belief system can be inferred from analysis of that person's behaviour (Combs, 1986).

These beliefs are said to represent the professional's personal theory. This personal theory should be comprehensive, accurate, internally congruent, personally relevant, appropriate to the task of helping, and open to change (Combs, 1986). An effective helper's personal theory should include the following beliefs:

1. others are able
2. the individual is unique
3. the professional identifies with people rather than things
4. client sense of self and self-worth is critical
5. client is motivated by need
6. purpose is altruistic and freeing (Combs, 1986).

This personal theory essentially involves a perceptual process and results in the formulation of a set of beliefs that guide the professional's attitudes and action.
Values.

In addition to characteristics and beliefs, effective helping requires the development and awareness of the professional's personal values system. Values represent the professional's ideal state of existence and answer questions about meaning and purpose of life and worthiness. Goals are established on the basis of such values system (Brammer, Abrego, & Shostrom, 1993). The importance of these values and the significance of being aware of one's value systems has been established in the discussion of the various specific themes. This is especially significant since many such themes were controversial or conflicting in nature and that resolution of the conflict or confusion is dependent on clarification of values inherent in the specific situation. The dangers of stereotyping of values by group membership was seen in multiculturalism, sexism, and ageism (Avila, Combs, & Purkey, 1977; Brammer, Abrego, & Shostrom, 1993).

Much of the earlier literature on values and helping focused upon the process of helping clients resolve values issues. Worthington (1988) has reviewed various theories of values development and articulated a set of tasks associated with facilitating this resolution. It should be recognized that there is considerable controversy regarding the constructs inherent in values systems and the developmental theories associated. Included in such values systems are the ideas and perceptions of religion, philosophy, the ultimate meaning of life, morality, and faith. These concepts are highly personal and elicit emotion and, as a result, are important at the same time as being difficult to examine and discuss in many formal helping situations (Brammer, Abrego, & Shostrom, 1993).

In addition to the resolution of client values situations, the most recent literature has been concerned with the value system of the helping professional. Early descriptions of effective helping attempted to suggest that helping is value-free, however, the nature of human interaction makes this impossible (Combs,
1986; Corey, Corey, & Callanan, 1993; Sarason, 1985). Value issues pervade all aspects of helping and are inevitable. The scientific evaluation of outcomes also is affected by values issues. Conflicts between various aspects of the helping professional's values system are also inevitable. Further, there is likely to be very significant differences between the values system of the client and the professional. As a result, it is absolutely imperative that professionals analyze and recognize their personal values system and openly invite testing and evaluation of this system (Amundson, 1991; Beutler & Bergan, 1991).

The conclusion of the literature on values of effective helping is that awareness, openness, disclosure, and critique are essential elements required of the professional. To this point, this review of the literature has identified a number of situation-specific attitude, value, and belief themes. Not all helping professionals are required to address these issues in their professional practice; however, it is likely that virtually all professionals will encounter these issues in their personal and family life and, as such, they are important despite their lack of direct bearing on practice. In addition, a number of core themes that are common to all types of helping practice have been identified. All helping professionals are likely to be required to address these issues and to formulate sets or systems of attitudes, values, and beliefs around these core themes. There are also a number of issues and themes that relate to the provision of services to persons with mental and physical challenges that are fundamental to helping personnel.

Attitude, Value, and Belief Themes Unique to Services to Persons with Disabilities

In addition to the core themes discussed in the previous section, helping personnel serving persons with disabilities are required to address a number of
issues that are unique to this type of helping practice. The more challenging and profound will be described.

**Quality of Life.**

Perhaps the most profound and fundamental issue inherent in the provision of services to this client population is the notion of quality of life. For the most part, persons with disabilities are dependent upon others for many aspects and amenities of community life. As a result, such individuals are vulnerable and helping professionals are in a position to significantly influence the life style of these individuals. Such influence can, of course, be positive or negative and the potential for abuse and neglect is enormous. This circumstance seriously challenges the helping professional (Brown, 1988). It is necessary for the professional to ensure optimum self-determinism in the helping relationship. At times, the professional's values enter into the goal setting process. Further, at times, the goals established by the client are in conflict with the professional's values. Since it is impossible to avoid these situations, it is absolutely imperative for helping professionals to be aware of their value system and the indicators or markers of quality of life as defined by this personal values system (Brown, 1988).

**Devaluation of Client Population.**

As discussed in the section on services to the elderly, there are a number of circumstances where expectations for quality of life held by the community and family are significantly lower than that of human service personnel. Persons with mental and physical disabilities, chronic psychiatric disorders, chronic offenders, and the homeless are additional examples of devalued or marginalized persons for whom the community has shown a lack of concern (Bihm & Leonard, 1992; Brown, 1988; Schröder, 1981; Wolford, 1986). The negative impact of this discrepancy between family and community concern for quality of life and that of
the helping professional has risen dramatically as a result of the global economic
crisis that is restricting governments’ abilities to meet the needs of these groups of
devolved people (Yuker & Block, 1986). As a result, not only does the helping
professional experience conflict with family and community expectations; it is
likely that the professional will experience the conflict between expectations
arising out of impact of diminished resources of the employer or funding source
(Racino, 1991). This represents a circumstance that presents an enormous
challenge for the professional to address and resolve this discrepancy. At times
the professional is required to compromise expectations; while at other times, the
professional must assume a very active advocacy role within the employing
organization or system (Ammentorp, Gossett, & Poe, 1991; McNeely, Feyerherm,
& Johnson, 1986).

In addition, it is apparent that there is a wide range of attitudes that this
client population can elicit in helping personnel. Depending upon perception,
these attitudes can be positive or negative and it is critical for personnel to hold
positive attitudes (Yuker, Block, & Younng, 1970). It is possible for helping
personnel to hold some negative attitudes towards certain aspects of the client
population and still be effective in most circumstances (Hagler, Vargo, & Semple,
1987). The critical element in this scenario is that the individual helping
professional possesses a well-defined and clear awareness of the situations and
circumstances where the less-than-optimum attitudes are relevant. It appears,
therefore, that helping professionals are not required to be universally positive in
all aspects of serving all challenged populations. It is imperative that the
individual professional is aware-of-self to the degree that negative attitudes do
exist and the circumstances these attitudes are in effect. The potential for harm
that this circumstance presents suggests that this awareness of self is of utmost
importance.
De-institutionalization.

There is another major specialized circumstance that presents serious challenges and dilemmas for the helping professional. This circumstance involves persons with mental handicaps and persons with chronic mental illness who have been institutionalized for treatment for a period of time and who have been or soon will be placed in a community setting as a result of the de-institutionalization process (Cummins & Dunt, 1990). This process has grown as a result of the serious negative consequences of congregate care and treatment of such persons and the desire to keep such individuals living within their own community. Unfortunately, many such communities do not possess resources to provide care and treatment (Jancko & Lee, 1988). The result is that the individuals or their families are left to their own devices which causes a tremendous rise in stress and concern for safety and quality of life. The helping professional is once again caught in a dilemma between two poor choices for treatment setting (classic avoidance-avoidance conflict) and frequently is powerless to make meaningful improvements (Rutman, 1981). The de-institutionalization process presents dilemmas that question the very foundations of the professional's treatment and intervention practice and is particularly challenging when the professional is committed to minimizing stress and anxiety in the lives of the client and the treatment of choice appears to be creating more stress and concern than relief.

Technological Advances in Rehabilitation.

There has also been considerable advancement in computer applications in the field of rehabilitation of the disabled. Assessment practices, environmental control, and synthesised speech and language are notable advances (Nurius, 1990a). There does not appear to be resistance to these types of technological change within the helping professions since it results in improved competence and less dependence upon others. The same is not true when it relates to assessment
results and to the practice of the helping professional. It appears that human service personnel are very favourably disposed to human contact and less disposed to technology. There is evidence to show that professionals whose pre-service training involved the use of technology are much more accepting of the computer technology (Nurius, 1990a; Nurius, 1988; Poulin & Walter, 1990). In addition, the degree of consultation between technological consultants and helping professionals prior to implementation of technology appears to a major factor influencing changes in attitude and acceptance (Nurius, 1990a).

Self-Abusive Clients.

Another situation inherent in serving persons with disabilities involves mutilation and self-abuse by clients, particularly children with severe emotional or behavioural disturbances. The helping professional is frequently severely conflicted by such circumstance and the conflict can be extremely anguishing. There are a number of aversive behavioural intervention strategies that have proven to be effective with such injurious behaviour. However, the aversive nature of the intervention prevents the implementation of such strategies and, as a consequence, the client continues to self-abuse. The professional is faced with the classic approach-avoidance dilemma and frequently must rely on others for resolution (Thomas, 1967).

The attitudinal and values themes discussed in this section do not represent an extensive and detailed analysis of issues and themes facing the helping professional specializing in work with persons with disabilities. However, when added to the issues that are common or core to all types of helping practice, a fairly comprehensive description of attitudes, values, and beliefs is reflected.
The Role of Perception and Problems of Definition and Research on Attitudes, Values, and Beliefs in Helping Practice

The literature on attitudes, characteristics, beliefs, and values of effective helping has been described and examined. It is apparent that in an effort to become effective, all helping professionals need be aware of their own personal attitudes, values, and beliefs systems. They need to have a clear and well understood awareness of self. Further, they must be able to define these constructs in terms of their own action.

Problem of Definition.

The basic constructs under scrutiny are abstractions and open to personal interpretation. Not only does perception influence how the individual professional views and interprets the experiences of life, perception also influences how the individual develops operational definitions of the constructs (Combs, 1986). The helping process involves some form of action or response on the part of the helper and some form of personalized behavioural definition is inescapable.

This personalization of belief and value systems and operational definitions has contributed to a significant void in the number of scientific studies on attitudes, values, and beliefs of effective helping in the literature. As a consequence of the role of perception on attitude, values, and beliefs development; it is not surprising that there is considerable divergence when it comes to developing commonly-accepted operational definitions for these important constructs in helping practice. This may be seen as a serious drawback to the provision of effective practice. This may also simply be a reflection on the reliance of science upon objective and operationally defined constructs. In fact, Combs (1989) suggests that this role of perception creates one of the strengths of helping professionals. This role of perception enables the helper to generate
highly individualized and situationally relevant forms of helping behaviour. It is suggested that it is this aspect of helping that enables the practitioner to become more than a technician.

**Measurement and Evaluation.**

There are a variety of approaches used to measure and evaluate attitudes, values, and beliefs. Certain techniques or approaches have been developed to measure specific elements of these constructs. Unfortunately, much of the measurement technology is not directed to specific categories of attitude, beliefs, and values. Overlapping methodology is the case (Anastasi, 1988). For example, scales to measure specific attitudes may be very similar to those used to measure beliefs. Despite this element of confusion, there are a number of discrete approaches to measurement and evaluation and these are briefly reviewed in this section.

The process of conducting quantitative research in the area of attitudes, values, and beliefs of helping professionals is particularly concerned with operational or behavioural definitions associated with effectiveness and with measurement of these operations. Traditional quantitative research methodology places a premium on reliability. Quantitative research results need to repeat or replicate over time, with different observers, and in a number of similar situations in order for the researchers to have confidence in the results. One of the major approaches to achieving reliability has been to strive for observable and measurable definitions of the phenomenon under study (Keeves, 1993). In this case with respect to human service, the focus has been on operational definitions of behaviour. As noted, this is somewhat inconsistent or questionable with the constructs of attitude, values, and beliefs.
Krathwohl, Bloom, and Masia (1964) have generated a taxonomy and classification of affective objectives for use in educational settings that are concerned with these constructs in the affective domain. Their system includes five dimensions or elements of affect:

1. interests
2. attitudes
3. appreciations
4. values
5. emotional sets.

Further, they suggest that individuals develop these elements or dimensions through a continuum of receiving, responding, valuing, organizing, and internalizing or "characterizing" activities and that it is possible to establish affective objectives according to these elements and activities. Accordingly, these affective objectives can be measured and evaluated (Krathwohl, Bloom, & Masia; 1964). This appears to be a variation of the cognitive/behavioural approach, however, does provide direction for curriculum planning and evaluation in this more abstract domain.

There is considerable support for such an approach in the literature. Essentially the approaches of Carkhuff, Truax, Brammer, and Egan are models of this type of planning and evaluation. In addition to these theorists and educators in the area of helping relationships, the area of physical education has also addressed affective objectives and measurement. Marsh (1964) and Weise (1982a, 1982b) have produced excellent reviews of affective objectives and measurement approaches for use by physical education teachers. Their suggestions make use of simple assessment techniques rather than the more complex procedures discussed in the subsequent section. These affective behavioural or operational definition techniques appear to present some flaws or questions with regards to validity; however, they represent the major initiatives in this area and are considered to be important first steps.
In both individual professional and program evaluation, an historical emphasis on behavioural definitions and objectives has resulted in assessment and evaluation procedures that have focused on these behavioural targets. The evaluation was observable and measurable and, as a consequence, was relatively objective, reliable, and valid (Avila, Combs, & Purkey, 1977; Thomas, 1967). However, questions of validity are raised. Do these observations of behaviour actually measure attitudes, values, or beliefs? Do such measurement approaches have construct validity?

In addition to the behavioural approaches to measurement and evaluation, the literature on measurement of affective constructs includes a number of other techniques. There are alterations of physiological states associated with changes in emotion, values, and attitudes. Some research on emotions has attempted to use measurement of these changes as an indication of changes in attitude (Blankstein, Pliner, & Polivy, 1980). There are no descriptions of these approaches being used in research on attitudes, values, and beliefs in helping (Lewis & Rosenblum, 1978).

Recent changes in public education have focused upon affective objectives and there are some examples of emerging trends in evaluation associated with these changes. Durksen and McCord (1989) have produced a social studies curriculum guide for use in Alberta junior high schools with suggestions for the evaluation of the affective objectives of "citizenship". These suggestions include the following:

1. evaluation must include an examination of underlying values
2. evaluation needs to include all aspects of learning and performance
3. evaluation needs to be continuous
4. evaluation should be a co-operative process
5. evaluation should include a variety of techniques
6. evaluation should be informal.
While these suggestions are aimed at evaluation in public schools, they represent the limited discussion of initial efforts at evaluation of such abstract dimensions.

**Self-Reporting.**

One of the major categories of additional measurement procedures involves various forms of self-reporting techniques. Purkey (1970) suggests that it may be possible to measure attitudes and values through techniques that require the subject to report perceptions of changes within the individual and to also report the personal interpretations of these changes. This form of self-report measurement addresses the perceptual nature of these constructs and appears to have merit. There are several variations to such self reporting discussed in the literature (Doebler & Martin, 1983). Subjects can be asked to compare attitudes or feelings towards subjects by rating the degree of acceptance or rejection of the statement. This technique is the essence of the Likert scaling technique and has considerable quantitative scientific support. A variation of the self-report approach that is the cornerstone of the emerging qualitative approaches to research makes use of asking open-ended questions. The subjects are asked to provide their interpretation and rationale of selected topics and issues. The responses of the subjects are interpreted as reflective of their values, attitudes, and beliefs (Doebler & Martin, 1983). This approach has merit in qualitative approaches to research, however, it suffers from the usual sources of error when included in quantitative research.

Another interesting variation in self-reporting techniques is described by Wiese (1982a). She suggests the use of projective techniques to elicit the subject's attitudes and values in response to the Thematic Apperception Test, in particular. However, she notes that any pictorial representation of scenes that display
situations where relevant attitudes or values are likely to be in operation can be useful.

**Attitude and Values Scales.**

Another technique employed to measure attitudes and values involves the use of rating scales. One variation of this approach involves a technique known as semantic differential where pairs of polar opposite adjectives that reflect a concept or issue are listed and the subject is asked to assign a number that reflects his/her position on the scale between the two adjectives (Doebler & Martin, 1983). There is considerable use of this technique in research on a wide range of attitudes and values; however, no research on attitudes and values and helping practice with this technique was located in the literature.

The Q-sort technique is also used to measure and evaluate attitudinal and values constructs, with particular relevance for measuring self-concept. This technique requires the subject to sort cards with statements or traits into piles which represent "most characteristic" to "least characteristic" of him/herself. This type of reporting yields ipsative rather than normative data and reflects the subject's perceptions of self rather than any comparison to others (Anastasi, 1988). This technique appears to have merit in measurement of attitudes and values.

Another variation involves the use of a "Best Liked/Least Liked" scale. It is described by Slotnick (1982) and is likely known by other terminology as well. It simply involves asking open ended questions and then asking the subject to make a final position statement on an issue. Such a technique is considered to be high adaptable and applicable to a wide variety of issues and themes and generates perceptual (qualitative) responses as well as quantitative responses.
Another approach to measurement and evaluation that has been employed in numerous research studies involves the development of uni- and multi-dimensional attitude and values scales. Uni-dimensional scales involve the development of a number of statements reflective of a particular attitude or value to be studied. The subject is asked to rate his sentiment toward the statements according to three-, five-, or seven-point scales. The degree to which these responses reflect the subject's true attitudes and values is frequently questioned. Uni-dimensional scales are particularly susceptible to "faking" responses of the subject since the attitude or value in question is easily recognized. Hagler, Vargo, & Semple (1987) report the problems of this nature with attitudes scales measuring attitudes toward the disabled. The construct validity of such scales is also questioned; however, some scales are subjected to critical analysis and validation by independent reviewers in an effort to eliminate statement that have obvious flaws or questionable relationship to the attitude or value in question (Doebler & Martin, 1983).

Multi-dimensional scales attempt to measure the subject's attitudes and values on several dimensions with one list of statements about the different dimensions in question. Richards & Davison (1986) describe this technique and their attempts to measure religious (theistic and non-theistic) values of counselors. Their conclusions are that multi-dimensional scaling has merit in this type of research and that the effects of subject "faking" can be minimized. It is possible to write one statement that is reflective of the subject's attitudes and values on two or more issues. Davenport (1992) also reports using multi-dimensional scaling to measure the construct of "love". Her scale made use of three scales in which one scale made use of statements from which one could deductively assume love and two scales where the statements were more inductive or creating of the dynamics of love. Although this scale was purported to be useful to counselors in gaining an understanding of their clients' perceptions of this construct, the author did not discuss any implications for an understanding of the helping practitioner
(Davenport, 1992). Although neither of these two research articles discuss the optimum length of scale nor the optimum number of dimensions to be measured, this approach does appear to have merit and provides optimism for research in this domain.

**Role of Perception and the Use of Inference.**

An affective behavioural or operational approach would not be adequate in a more perceptual approach to research that emphasizes divergence, innovation, interpretation, and the creation of personal meaning. The assessment and evaluation practices in values-oriented research would need to include the use of inference. The evaluation procedures might still focus on behaviour and language, however, such observations would be used to make inferential judgement about attitudes, values, and beliefs. Although such inferential judgements may lack scientific objectivity and reliability, they can be informative. Such inferential judgements can, with rigor and practice, become more reliable and predictive (Combs, 1991).

Further, the use of critical incidents could become more widespread and valued in evaluation. The subject's reactions or interpretations of such events can be very revealing of values, attitudes, and beliefs. In addition to inferential judgement and critical incidents, the subject as a source of evaluative information can also be utilized. Such self-reporting is open to considerable error, however, it can be added to other assessment data and strengthen the results (Combs, 1991).

The assessment and evaluation process in a perceptual approach to research on attitudes, values, and beliefs also needs to become more perceptual and interpretative in nature. These approaches will be crude and less accurate, objective, and reliable than traditional approaches. It has been noted that assessment and evaluation in values-oriented education does not need to be as
accurate as the more quantitative scientific research design and statistical approaches have been. In fact, there is considerable merit in involving the learner in the evaluation process. Insight can be achieved by the learner through such participation (Combs, 1991).

Clearly, such changes begin to impinge upon the emerging methods of action research and constructivist theory (Borg & Gall, 1989). Although much can be said for these approaches, it is not necessary to engage in such thorough and comprehensive analysis in order to achieve beneficial results from the evaluation phase of education.

Despite the increased error associated with the evaluation methods being advocated, there is considerable potential for a stronger and more complete education and evaluation processes if such changes are implemented.

This review of the measurement and evaluation literature has identified a number of possible measurement approaches. Many have raised serious questions regarding the validity of the results. The behavioural or operational definition approach resulted in considerable research, although many researchers have failed to replicate much of this research and the validity of this form of measurement has been questioned (Combs, 1986). Attitude and values scaling has shown considerable promise in the measurement of attitudes in many aspects of life. Unfortunately, there are limited applications to the measurement of the affective components to effective helping. The qualitative approaches to research have provided some promise for the recognition of the perceptual and personalized aspects of the constructs of attitudes and values. It would appear that well-designed research attempts in the future would do well to make use of quantitative and qualitative methodologies as well behavioural or operational definitions of particular affective constructs.
Critical Themes or Dimensions

In summary, this review of the literature has identified a number of situationally specific attitude, values, and beliefs themes that must be addressed by helping professionals providing specialized or unique forms of human service. Despite the observation that not all professionals are required to address these specific issues, it is suggested that since these issues are also impacting the personal lives of all professionals. There is merit in all helping professionals being able to identify and describe their fundamental beliefs, values, and attitudes in the specific themes. As a consequence, there is considerable support for the significance of the dimension of awareness of self.

The review also identified a number of core attitude, values, and belief themes. These themes are central to all forms of helping practice and could be considered as the "essence" of helping practice. A number of these core themes were considered critical to effective helping practice. The themes or dimensions of locus of control, work values and work ethic, job satisfaction, and awareness of self were identified as critical. The significance of these dimensions is reflected in the research by Hales and Waggoner (1984) with school administrators and by Drummond and Stoddard (1991). The study of Israeli human services students also reflects this significance (Ben-Shem & Avi-Itzhak, 1991). These studies also provide the most scientific and quantitative approaches to measurement.

The observation that helping practice involves, in essence, the process of change gives rise to the significance of the dimensions of locus of control and perceptions of efficacy. These are considered to be especially significant for the practice of rehabilitation since there is considerable attention on change and outcomes. Martin (1991) provides the best description of a study involving the measurement of locus of control and its relationship to behaviour. While this research was conducted with clients rather than helping professionals, the
measurement technique and the relationship between locus of control and outcome behaviour are well established.

In addition, the analysis of the literature on attitudes, beliefs, and values with personnel serving persons with mental and physical challenges identified a number of specific themes unique to this form of helping. Helping professionals' perceptions of their effectiveness (helper efficacy), attitudes towards devalued populations, and quality of life for the client and self were considered to be particularly critical (Brown, 1988; Hagler, Vargo, & Semple, 1987).

Given the paucity of scientific study of these attitudinal themes and dimensions with helping professions, these particular dimensions have been selected as a focus for this research.

**Conceptualization of Critical Dimensions**

In order to design research that would illuminate these critical dimensions, it is important to describe these dimensions in more detail. Such description is critical for the purposes of definition and for measurement. As discussed previously, there is considerable controversy.

**Attitudes Toward Persons with Disabilities.**

This construct is, perhaps, the quintessential construct in the provision of services to persons with disabilities. It is the most global and holistic of the constructs. Its holistic and global nature results in diverse behavioural manifestation and a lack of precision measurement. Closer analysis suggests that, although it is foundational to subsequent thinking, feeling, and action in helping practice; it is not the sole critical dimension.
It is clear that values and attitudes attached to persons with disabilities are a significant factor in influencing the provisions that society makes for such individuals and that such values and attitudes are generally based upon the notion of difference rather than similarity and that such a focus results in devaluation and deficiency perceptions (Anderson & Antonak, 1992; Brown, et al., 1989). Helping personnel are subject to the same influences as the general society. The individual's position on the multi-dimensional continuum of beliefs, values, and attitudes will significantly influence the quality of help provided. This particularly true if the position is less than positive or optimal.

Despite the essential and foundational nature of this dimension for influencing helping practice, the presence of an optimally positive perspective does not guarantee effective helping practice. Such a positive perspective is necessary as a starting point and an absence will seriously impede or limit effective practice. The corollary is not true. The presence of an optimally positive valuing and attitude does not guarantee effective practice (Anderson & Antonak, 1992; Brown, et al., 1989).

With respect to conceptualization of these values and attitudes, the provision of services to persons with disabilities is, to some extent, based upon the observation that individuals do not live in isolation from one another. As a consequence, helping practice needs to reflect the expectations on individuals that come with living and working in groups (Brown, et al., 1989). One of the major implications of social living is that no individual is independent from others. Interdependence and effective interpersonal relationships are based upon beliefs and values about citizenship and the rights and responsibilities of individuals and groups. As such, these beliefs and values are not unique to serving persons with disabilities. They become critical when one of the parties is not traditionally valued by society as a whole and, to a greater or lesser extent, is devalued as a member of a minority group and as an individual. The devaluation of such
individuals is even more significant if the individuals are perceived as "sub-human organisms" (or less-than-complete) (Brown, et al., 1989; Minnes, 1989; Yuker, et al., 1970).

The beliefs, values, and attitudes necessary for developing effective helping relationships with persons with disabilities are grounded in humanism and egalitarianism and; as such, involve acceptance, positive regard, and basic human rights inherent in democratic societies.

Analysis of these value-based concepts indicates an orientation and emphasis on the humanness of the client and the group living aspects of modern life. This orientation is, in some contexts, known as humanistic helping (Combs, 1982). Closer inspection of these concepts raises concern about their measurability and their achievability. This concern appears to be valid. However, they are perhaps misnamed. Perhaps they are better considered as goals which are generally conceived of as broader and more global than behavioural manifestations and hence do not have the degree of precision usually associated with behavioural manifestations.

Such a humanistic orientation and its focus on good citizenship includes a vast range of affective or values-oriented behaviours. Such a conceptualization suggests single, separate behavioural entities and frequently treats them as though they are mutually exclusive of each other. The manifestation of beliefs, values, and attitudes towards persons with disabilities is not considered to be such a simple aggregation of discrete single behavioural entities. A more representative conceptualization would suggest that such attitudes, values, and beliefs can be manifested in the degree to which individuals express the following multi-dimensional attributes of behaviour toward persons with disabilities:
1. honest  
2. fair/just  
3. tolerant  
4. forgiving  
5. loyal  
6. committed to democratic ideas  
7. open-minded  
8. think critically  
9. appreciative  
10. intellectually curious  
11. creative  
12. co-operative  
13. accepting  
14. industrious  
15. attentive  
16. develop a sense of self worth  
17. accept responsibility/consequence for one's action  
18. respectful of the opinions of others  
19. develop a positive and realistic attitude about oneself  
20. develop attitudes of respect, tolerance, and understanding towards individuals, groups, and cultures in one's community (local, regional, national, and global)  
21. appreciate the rights and responsibilities of citizenship in a democracy  
22. develop an attitude of responsibility toward environment and community (Durksen & McCord, 1989).

While this list of values and attitudes about helping is certainly far from the concrete, measurable world of behavioural observation and measurement; it does appear to be more specific than the goals that were suggested by Combs. It represents a direction and an emphasis for helping practitioners and, as such, can be considered the manifestations of the beliefs, values, and attitudes inherent in effective helping practice with persons with disabilities.

With regards to manifestations of less than optimal attitudes towards persons with disabilities, the following attributes are considered to be reflective are:
1. view of the individual as sub-human organism
2. view of the individual as a "child" or "child-like"
3. not speaking directly to the individual
4. over-protecting or denying the dignity of risk
5. denying the right to self-determination
6. not involving the individual in decision-making
7. referring to the individual in terms of the clinical condition rather than by name
8. expressions or sympathy and regret rather than empathy
9. allowing periods of neglect to occur
10. denying access to community life and the use collective transport
11. perpetuating of stereotypical humour or beliefs (Brown, 1988).

It is apparent that there is considerable room for divergence and variation in interpretation and definition of such elements and, consequently, behavioural manifestations will be diverse and judgements will be inferential and subjective in nature.

Given the perceptual and inferential nature of behavioural manifestations of these beliefs, values, and attitudes; measurement of their existence or positions on multi-dimensional continua is somewhat suspect in terms of psychometric validity. Despite these concerns, there are several measures of such beliefs, values, and attitudes towards persons with disabilities that have been used in previous research.

**Locus of Control.**

Another dimension of beliefs, values, and attitudes that is considered to be critical to serving persons with disabilities is locus of control. Since services to persons with disabilities involves some form of growth and development, beliefs and attitudes about ability to control or influence outcomes is of critical importance (Horowitz, 1968).
Locus of control refers to assumed internal states that explain why certain people actively, resiliently, and willingly try to deal with difficult circumstances, while others succumb to a range of negative emotions (Lefcourt, 1991). There has been considerable research interest in this dimension and a number of variations on the basic theme have been advanced. Perception of control, personal causation, personal competence, helplessness, and self-efficacy have been advanced as different constructs with distinctive definition. It is apparent that there is considerable overlap between these constructs and locus of control (Weiner, Heckhausen, Meyer, & Cook, 1971, Rotter, 1975).

This dimension is conceptualized as referring to beliefs about the future and the individual's ability to control or influence future events and outcomes. The construct is a generalized expectation pertaining to the connection between personal characteristics and/or actions and outcomes (Bandura, 1989; Lefcourt, 1991).

Some people believe that outcomes are a function of their actions and characteristics and they are more apt to exert themselves when challenged or engaged in important tasks. Others do not recognize the connection between action and outcomes and they believe that the outcomes are a function of luck or knowing the right people. These beliefs are considered to exist on a continuum. On one end of the continuum is an internal locus of control whereby the individual believes that the power to influence outcomes resides within the individual. The other end of the continuum, the external locus of control, consists of beliefs that the future is influenced by factors external to the individual and that the future is controlled or influenced by others and by fate or destiny (Bandura, 1989; Lefcourt, 1991).

These beliefs about influence or control over future events are somewhat fluid and will shift along the continuum according to specific situations and
circumstances. They are also considered to be fundamental to the individual's personality and, as a consequence, they are resilient and will emerge as a major factor in determining behaviour, particularly in stressful or demanding situations (Bandura, 1989; Lefcourt, 1991).

These beliefs about influencing future events are manifested through particular behaviour patterns. The individual with an internal locus of control will tend to display the following behaviours and traits:

1. an optimistic outlook,
2. perceive or interpret events in a positive light (or at least focus on the positive elements of a situation),
3. assume a leadership role in a group,
4. be more analytical and creative in problem solving situations,
5. articulate goals and objectives in achievable terms and identify barriers requiring attention,
6. display an enthusiasm for difficult tasks,
7. persevere difficult tasks,

The individual with an external locus of control will tend to display the following:

1. minimal enthusiasm for difficult tasks
2. less creativity and less risk-taking
3. seek clarification and understanding on matters of personal expectations and responsibility and will be less tolerant of ambiguity
4. seek group consensus before engaging in action
5. attribute non-success to the actions of others or to fate or chance
6. seek supervision and feedback from others (including supervisor or leader) during performance of tasks or roles
7. rely on previous approaches to problems
8. assume a passive role in problem solving activity
9. react to non-success in a passive and resigned manner and rely on others for direction (Bandura, 1989; Lefcourt, 1991).
In addition to these behavioural indicators, there are a number of measurement scales that have been used to determine the direction of the locus of control and are considered valid measures for research purposes.

**Self-concept.**

The highly personal nature of attitudes, values, and beliefs gives rise to another fundamental construct in this proposed research. The notions of "self" and an awareness of self appear to be at the core of attitudes, values, and beliefs.

Self is defined as a composition of ideas relating to a construct that is described as one's identity. The construct of identity consists of a number of ideas (beliefs) about the relationships between other people, places, and objects and the individual. In essence, these ideas (or beliefs) about these relationships define the distinctiveness or uniqueness of the individual which defines the individual's identity. Hence the self consists of beliefs about the distinctiveness of the individual which is considered to be the individual's identity (Avila & Combs, 1985; Combs, 1982).

It is apparent that an individual's awareness of self grows with experience and maturation. This awareness of self is reflected in the individual's self-concept. The self-concept is composed of the individual's awareness of self and reflects the degree to which an individual is aware of the distinctive attributes of the identity. It is important to recognize that these perceptions and beliefs about self vary in clarity, precision, and importance. Self-concept is not a "thing" but rather an organization of ideas and beliefs and it is not exclusively the collective of our physical self. It also reflects or includes items or things that are cherished. It also extends to groups of which the individual is a member (Combs, 1982).
Further, the self-concept becomes the frame of reference or prism through which objects and events are viewed. It becomes the individual's personal centre of the universe and, because of the perceptual role, it determines behaviour. The self-concept selectively influences perceptions of new experiences and the new experiences that are assimilated and accommodated are those that are congruent with the self-concept. The perceptual role of the self-concept not only influences the interpretation of new information but it mediates subsequent experiences and behaviour. It is considered to have a circular effect (Combs, 1982).

The observation that ideas or beliefs about the relationship between the individual and other peoples, places, and objects reflects the inter-relationship of beliefs and self. Further, the notion of the self-concept being organized around important dimensions suggests that values have a critical role in shaping the self-concept. Hence, the construct of self is at the heart of any helping process and the beliefs, values, and attitudes inherent in the process (Combs, 1986; Roid & Fitts, 1991).

Awareness of self and self-concept were originally conceptualized as single constructs with one dimension, i.e. the self (Bracken, 1992). More recent conceptualizations suggest that these constructs are composites of a number of different dimensions. The self is now seen as consisting of an array of beliefs and ideas about the identity or distinctiveness of the individual that are organized into certain dimensions. The self is now considered to consist of ideas about, for example, the individual's physical appearance; as one dimension; actions or behaviour, as another dimension; and feelings, as another dimension. Various theorists advocate differing numbers and compositions of dimensions. The key notion is that the self is now viewed as a multi-dimensional concept rather than a single entity phenomenon (Avila & Combs, 1985; Combs, 1982).
The dimensions of self that are commonly accepted as the foundation of self are social, competence, affect, physical, academic, and family. Although there is variation in opinion as to which dimensions are of greater importance, these six dimensions are the most widely accepted (Bracken, 1992). Not all researchers cite all six dimensions and some further sub-divide these dimensions into more specific dimensions.

Another aspect of the self-concept construct that is an issue for researchers and theorists is the perceived hierarchical structure. This perception views a general self-concept at the apex of a tiered structure with the various inter-related dimensions forming a second foundational tier. Such a hierarchical structure makes sense intuitively and is considered similar to the intelligence conceptualizations of Thurstone and Spearman (Bracken, 1992).

Another issue related to the self and self-concept concerns the perspective from which the individual develops an awareness of self. One perspective views the self as developing from the perspective of how others react and reflect back to the individual. This is known as the "looking glass self" (Bracken, 1992). The process includes a reciprocal component since not only is the individual influenced by interactions with others but so are others influenced by the individual. This interactionist perspective is contrasted with the view that the self develops through an internal process of introspection and analysis.

Related to the issue of intra- versus extra-individual development is the issue of standards used to make judgements about self. The question is whether the self is based upon absolute, ipsative, comparative, or ideal standards. The more popular position is that ideal standards are used to make comparisons and that the magnitude of the difference between the real self and the ideal reflects an index of adjustment (Bracken, 1992). It is likely that individuals develop their ideal self based upon observations, the spoken and modelled expectations of
others, and their perceptions of their accomplishments compared to the accomplishments of others who are perceived as worthy (Bracken, 1992; Egan, 1986).

In addition, there is another issue related to self-concept. This issue is concerned with the historical cognitive-behavioural debate. The cognitive view suggests that awareness of self consists of an elaborate cognitive "self system" that includes a self-concept, self-actualization, self-control, self-confidence, self-esteem, self-regulation, self-reward, and self-schematas (Harter, 1983). This view is widely accepted and, from this perspective, the self is viewed as the essence of the individual and is the sensing, feeling, monitoring, and regulating part of the individual (Bracken, 1992; Harter, 1983).

The behavioural perspective denies the existence of the self and focuses on behaviour. Skinner posited that the individual's behaviour evolves from:

1. variation and selection due to biological evolution
2. operant conditioning and imitation
3. cultural evolution

From this behavioural perspective, the self is best described as a pattern of behaviour that is sufficiently unique to an individual to be identified with that individual. Hence people's self-concepts are inferred from unique behavioural patterns. Individuals make descriptive and evaluative personal statements that reflect their past behaviours and predict their future behaviours (Bracken, 1992).

In conclusion, it appears that there is no one accepted definition for the constructs of self and self-concept. It would further appear that more research into the organization, the multi-faceted nature, the hierarchical nature, the stability, the development, and the evaluative basis is needed before any clearly accepted developmental or educational approaches will evolve (Bracken, 1992).
Despite the obvious lack of a universally accepted conceptual and developmental model, a multi-dimensional model does have promise. Bracken (1992) has proposed the following conceptualization that is based upon six facets or dimensions that are organized around a general self-concept and assumes an automatic evaluative process that grows out of environmental-behavioural interaction. It is conceptualized in figure 5 following:

Figure 5

Multi-dimensional Self-concept Scale
This model appears to be a promising aggregate of the current theoretical positions and addresses most of the fundamental issues. A multi-dimensional measurement scale has been developed to reflect this conceptualization and it appears to address most of the fundamental issues and questions (Bracken, 1992). Although this scale is developed for use with children, it is reasonable to assume that it may provide some direction for work with adults (Roid & Fitts, 1991).

**Self-efficacy.**

Self-efficacy has been proposed as a unifying mechanism underlying all behaviour change. Bandura's (1977a) seminal description of the construct has prompted considerable discussion and research. The earlier research efforts were directed towards a uni-dimensional construct, however, much of the subsequent literature focused upon self-efficacy as a multi-dimensional construct (Sherer, 1990; Sherer, Maddux, Mercadante, Prentice-Dunn, Jacobs, & Rogers, 1982). Interestingly enough, there is a resurgence of interest in the uni-dimensional aspects of self-efficacy (Shelton, 1990; Sherer, 1990).

The notion of self-efficacy refers to an individual's judgements of capabilities to perform given actions. It is sometimes referred to as personal expectancy and obviously has a major impact on motivation. It is theorized that this self-efficacy can influence behavioural instigation, direction, effort, and persistence (Bandura, 1977a). It has been defined as people's judgements of their capabilities to organize and execute courses of action required to attain designated types of performances (Bandura, 1989). It also appears to influence generalization and transfer and it has been applied to a diverse spectrum of human endeavour; including academic and career achievement, social skills, smoking cessation, pain tolerance, athletic performance, assertiveness, coping with fear, recovery from illness, and sales performance (Bandura, 1989).
Bandura hypothesized that people who have a low sense of self-efficacy for accomplishing a task will tend to avoid the task and those who believe they are capable will participate readily. They will also work harder and longer when they encounter difficulty than those who doubt their capabilities (Schunk, 1991). The theory postulates that people acquire information to appraise efficacy from their accomplishments, vicarious (observational) experience, forms of persuasion, and physiological indices (Bandura, 1989). Success raises perceptions of self-efficacy while failure lowers it. However, once a strong sense of self-efficacy is established, failure does not have much adverse impact. In addition to personal sources of information about self-efficacy, individuals acquire information from others. Peers are an important source. Observation of successful peers positively influences self-efficacy although such observation is less powerful than personal experience. Persuasive comments and positive feedback are impactful, however, temporary in nature. Physiological indices (sweating, heart rate) also significantly influence efficacy and such signals are interpreted as anxiety and a lack of competence (Bandura, 1989).

This information does not influence self-efficacy directly. There appears to a cognitive appraisal that must occur. This appraisal needs to account for additional factors such as perceived task difficulty, amount of effort expended, amount of external assistance received, number and pattern of failures and successes, perceived similarity to models, and persuader identity (Bandura, 1989). In addition to being dependent upon this cognitive appraisal that includes a variety of additional factors, there are a number of other variables that influence behaviour. The skills, expectations, and value of outcomes will also influence perceptions of efficacy and behavioural outcomes (Schunk, 1991).

This construct has a significant impact on the helping practice of persons serving persons with disabilities. It is clearly related to locus of control and influences motivation. Self-efficacy is also related to perceived control, outcome
expectations, perceived value of outcomes, attributions, and self-concept. It also is clearly related to objectives and goals which have been discussed as a function of personal values. In addition, self-efficacy clearly has a perceptual component which is the root of the individual's belief system. Not surprisingly, self-efficacy is considered to be a central and critical component of the system of beliefs, values, and attitudes of helping professionals and is seen as having a major impact upon practices. The interconnectedness with other constructs is a major reason for including the other dimensions of beliefs, values, and attitudes in this research as a means of strengthening the results from single dimensions as well providing support the significant of self-efficacy as an important variable in effective practice.

The observation of the interconnectedness with other important dimensions raises the issue of whether it is a general or uni-dimensional construct or a multi-dimensional construct. The re-emergence of interest in a uni-dimensional aspect is based upon the work of Shelton who postulates that a general self-efficacy influences specific behaviours. Success attributed to the self augments both specific and general self-efficacy while failure has the same but opposite impact. Her position is that self-efficacy exists on a continuum from general to very specific and that it is both a uni-dimensional and a multi-dimensional construct. General self-efficacy appears to be related to a personality characteristic that influences specific behaviours but is distinct from specific expectations for specific behaviours (Shelton, 1990; Sherer, 1990).

Further evidence for the existence of both a uni-dimensional and a multi-dimensional conceptualization comes from task specific, multi-dimensional focused research. In this approach, perceptions of self-efficacy generated across a wide and diverse range of tasks will attest to the task specific or multi-dimensional aspects. The composite of these perceptions across tasks will also give rise to an indication of a general or uni-dimensional component (Rooney & Osipow, 1992).
For the purposes of this research, general self-efficacy is recognized. Self-efficacy is generally manifested through self-report statements or responses on questionnaires or interviews. Much of the research is based upon correlations of these types of manifestations and with subsequent performance. It is possible to infer self-efficacy from observation of behavioural patterns. However, such inferences are easily attributable to other similar and related constructs such as self-concept, self-esteem, locus of control, etc. It is also possible to develop a combined approach to the study of a general self-efficacy. Generalized self-efficacy is manifested through a diverse range of specific behaviours and general behavioural patterns. The behavioural patterns associated with a high sense of self-efficacy are:

1. perseverance with difficult tasks
2. confidence in the outcomes of specific tasks
3. willingness to undertake tasks
4. ability to establish and pursue long-range goals
5. self-initiating or self-starting goal pursuit
6. extroverted approach to social situations
7. calmness during periods of challenge
8. self-reliant or independent approach to work and leisure
9. assertiveness in social situations and relationships
10. frequent use of exhortative encouragement to colleagues
11. tend to set global, vague, and open-ended goals
12. high self-esteem
13. high academic achievement
14. orientation to self and internal locus of control
15. willingness to act or speak in a manner that does not conform

The behavioural manifestations of low self-efficacy are:

1. insecurity about abilities
2. uncertainty the immediate future
3. inability to concentrate and persevere on difficult tasks
4. reluctance to tackle new tasks
5. avoidance or reluctance to engage in independent work
6. shyness or uneasiness in social situations
7. more fearful of specific objects and situations
8. dependence upon others
9. focus upon the "how to" aspects of a task rather than the function or purpose of a task
10. difficulty holding jobs
11. attribution of outcomes to chance or fate (external locus of control)
12. tendency to respond in socially desirable manner
13. frequent indecision and inability to respond quickly

There are a number of instruments designed to measure general self-efficacy and task specific self-efficacy which are considered acceptable for research purposes.

**Quality of Life.**

Quality of life, although impossible to define to everyone's satisfaction, is a concept that elicits strong interest in almost all citizens. Most people have a strong interest in their own quality of life and an active interest in the life quality of others. Helping professionals are no exception and, in fact, may possibly be the epitome of such concern and active interest (Andrews, 1986).

The terms used to describe life quality differ. "Well-being", "happiness", "mental health", "adaptive functioning", and "affect balance" are some common examples. These terms are not synonymous, however, each has a link to important components or aspects of quality of life. Much of the theorizing and research into quality of life is directed toward specific nationality, ethnic, or demographic sub-groups and, as such, is applied to broad populations. In addition, there are time-related components to quality of life and age has an important bearing. Further, there are social and psychological dynamics to quality of life which result in an awareness of the significance of personal perceptual components of this construct (Andrews, 1986). This discussion of quality of life
focuses upon the components of quality of life as they relate to two specific subgroups: persons with disabilities across major age groups and helping professionals as adult practitioners with families and/or aspirations for family life. This may be a serious complication for the research design, however, it is not considered significant for the purposes of conceptualization and manifestation of this dimension of the systems of beliefs, values, and attitudes of helping professionals serving persons with disabilities.

Quality of life and helping has traditionally been associated with justification or refusal of different forms of medical treatment (Goodinson & Singleton, 1989) and has only recently been applied to the provision of services to persons with disabilities (Brown, 1988). This construct is perhaps the most recent and most critical issue affecting persons with disabilities and those who provide helping service. Not only will perceptions of quality of life influence decisions that are made that directly influence individuals, these perceptions will also affect the development and the shape of services to persons with disabilities in the future. As a result of the newness the concept, it is not surprising that there are unresolved quality of life issues.

It should be noted that this construct has significant implications for all parties. Individuals with disabilities and their families need to be given the opportunity to make decisions based upon perceptions of quality of life. In addition, the helping professional’s decisions about helping practice will be impacted by perceptions of quality of life of persons with disabilities. What is frequently overlooked is the importance of the helping professionals’ perceptions of quality of life for themselves. These personal perceptions of quality of life will also significantly impact the decisions made in the context of helping individuals with disabilities. To this end, the perceptions of quality of life have a major impact upon the lives of persons with disabilities from a variety of perspectives (Brown, 1988).
In addition to the importance of this concept, this concept is extremely broad and comprehensive in nature and concerns an enormous diversity of aspects of living and working in society. As a consequence, there are a large number of diverse and ambiguous variables associated with any attempt to measure this dimension (Brown, 1988). This concept can be considered, as perhaps, the penultimate of multi-dimensionality. In a sense this construct expresses itself idiosyncratically for each individual. However, it is safe to say there are also elements common among all individuals. Quality of life can, therefore, be considered to represent a combination of common and idiosyncratic qualities that make it unique to individuals. In this sense, it is very similar to the construct of self-concept.

Quality of life of persons with disabilities and helping practice relates to improvement across the life span and is affected by deterioration in health and skill or performance. It is reflective of more than physical well-being and behavioural performance. It has an internal processing component and is concerned with personal fulfilment and self-actualization. These attributes make attempts to quantify and measure more complex (Brown, 1988).

Quality of life is also situationally influenced, with variations in different communities and across cultures, particularly from developed to undeveloped countries. Economics, local attitudes, political climate, and professional caring and competence will have a major impact upon perceptions of quality of life for persons with disabilities (Brown, 1988). It should also be noted that quality of life is not solely determined by the perceptions, caring, and competence of the professional service provider. Those that surround individual persons with disabilities are far more critical than the professional. This social network significantly impacts future prospects, standards of living, and the quality of interpersonal relationships. As a consequence, quality of life reflects virtually all aspects of the individual's life.
There are also developmental age issues related to perceptions of quality of life. The ability to improve and to control one's environment are important aspects of life that progress with age. As a consequence, perhaps one of the most significant components or aspects of quality of life is adaptation or ability to adapt to the demands of daily living (Andrews, 1986; Brown, et al., 1989). Improvement and control in daily living are, not surprisingly, related to other dimensions of beliefs, values, and attitudes under scrutiny; such as locus of control and self-efficacy. Although each of these dimensions have been conceptualized as different from each other, the interrelatedness of these constructs or dimensions is evident.

Quality of life, as conceptualized as a holistic concept, is exemplified by an analysis of day-to-day living. It involves an examination of daily events and individual perceptions of these events. An independent analysis of activities of daily living raises numerous ethical and legal questions which will not be examined in this discussion. However, it could be said that quality of life represents the individual's perceptions of all aspects of daily living. The historical view of persons with disabilities has been one that neglected to recognize or disregarded the individual's perceptions of quality of life. More recent points of view have recognized the importance of these personal perceptions (Brown, et al., 1989).

The observation that quality of life is based upon some form of personal analysis of daily living events clearly indicates that it is directly related to the individual's value system. It connotes that quality of life reflects ways in which the individual wishes to live. It is possible to identify several different major ways to live (Braithwaite & Scott, 1991). These have been identified as follows:

1. Appreciate and preserve the best that man (sic) has attained.
2. Cultivate independence and self knowledge.
3. Show sympathetic concern for others.
4. Experience festivity and sensuous enjoyment.
5. Act and enjoy life through group participation.
6. Master threatening forces by constant practical work.
7. Admit diversity and accept something from all ways of life.
8. Enjoy the simple, easily attainable pleasures.
9. Wait in quiet receptivity for joy and peace.
10. Control the self and holds firm to high ideals.
11. Meditate on the inner life.
12. Use the body's energy in daring and adventurous deeds.
13. Let oneself be used by the great cosmic purposes (Dempsey & Dukes, 1966).

The individual's philosophical, religious, and ethical systems of beliefs and values are considered to be reflected in this and similar such lists of "ways to live" and can be considered to be reflective of the individual's perceptions of the bases of quality of life. Such philosophical and esoteric statements do not lend themselves to reliable quantification and measurement. It has been necessary to examine these in more detail in order to achieve a degree of utility to such analysis and research.

Quality of life appears to be an additive construct in the sense that it is a composite (or sum) of one's satisfaction (perceptions) with a wide range of specific domains of daily living. Income, housing, occupation, leisure, family, and education are some of the more commonly expressed domains. Much research has focused on social indicators of these domains for various sub-groups of individuals (Andrews, 1986; Brown, et al., 1989). There is another important aspect of quality of life that complicates the construct and that is the difference between one's current perceived situation and one's level of aspiration in various domains.

This difference is sometimes referred to as the "gap theory" of quality of life and is the subject of considerable research (Andrews, 1986). In essence, there appears to be a clear relationship between age and gap with an increase in age.
effecting a closing of the gap or difference between perception of current situation and level of aspiration. This is apparently particularly true when there is a stability of sub-group membership and relationships with significant others. This observation suggests that aspirations adapt to situations rather than the individual becoming significantly more able (Andrews, 1986). This adaptation of aspiration seems particularly relevant to individuals with disabilities since there are frequently limits (real and artificial) that reduce the ability to adjust and adapt to the demands of daily living and, hence, the level of attainment in various domains (Andrews, 1986; Brown, et al., 1989).

Quality of life, as it relates specifically to persons with disabilities, has been conceptualized from three somewhat different perspectives:

1. social indicators; including health, social welfare, friendships, standard of living, education, public safety, housing, and leisure
2. psychological indicators; specifically subjective reactions to life experiences and include such concepts as relations with others, social and community activities, personal development and fulfilment, satisfaction and happiness, and well-being
3. goodness of fit; which focuses upon the unmet needs and the resources available to meet such needs (Schalock, Keith, Hoffman, & Karan, 1989).

This latter conceptualization suggests that the better the fit between the individual and the environment, the higher the quality of life. It conceptualises quality of life as an outcome of human service and helping practice and reflects an emerging view of persons with disabilities as individuals who have not been provided with adequate resources rather than persons with an inherent deficiency or limitation. This perspective suggests that it is the environment that is limiting the individual rather than the disability (Schalock, et al., 1989). Such a sociological perspective has a major impact on shaping attitudes and services and, perhaps, will emerge as the dominant perspective on quality of life. It certainly
shifts the focus away from the disability and on to the society as a major influence on the quality of life.

Despite the differing perspectives on quality of life, there is considerable agreement on the holistic and the multidimensional aspects of the construct. In order to assess or evaluate these dimensions it is necessary to describe the manifestations of the holistic and the specific dimensions or domains of quality of life.

The global life quality or holistic quality of life is described as the composite of the conditions or domains of life that are necessary for independent functioning and that the individual perceives as having attained and has been frequently referred to as the person’s sense of well-being, satisfaction/dissatisfaction with life, and as happiness/unhappiness in all domains of specific life activity (Goodinson & Singleton, 1989). It is, in essence, an overall evaluation of the subjective experience of life and is manifested by the individual’s response to questions or prompts. There does not appear to be any specific behavioural manifestations to this global or holistic component that are not part of the manifestations of specific domains or components of quality of life (Brown, 1988).

With regards to the specific domains, the categorization of social and psychological indicators are as useful as any other conceptual approach. The psychological (or psycho-social) indicators can be described as:

1. stress
2. control over one’s life
3. control others have over one’s life
4. social support
5. perceived performance in daily living and personal life
6. depression (dissatisfaction)
7. anxiety
8. enjoyment of life (positive affect)
9. emotional upsets (negative affect)
10. success (cognitive evaluation)

The manifestations of stress include being susceptible to illness, depression, and anxiety, low self-confidence, and dissatisfaction. Control involves beliefs about who or what determines outcomes and the degree to which individuals perceive internal or personal control versus external or other control is reflected in statements about the future and personal responsibility. The similarity with the dimension of locus of control is obvious. Social support refers to the extent to which individuals perceive their significant others to be expressing positive regard, affection, and encouragement and validation. These perceptions of social support are generally prompted by a variety of crisis events and are manifested by personal statements rather than specific behaviours. Performance refers to perceptions of the individual's success in fulfilling life roles. These life roles include work and personal or home life and they involve some form of observation and evaluation; with or without supporting statements from the individual. Individuals who perceive successful performance will also report a sense of competence and well-being while those who have perceptions of a lack of success will display a feeling of incompetence and a diminished sense of well-being (Abbey & Andrews, 1986).

The social indicators of quality of life are more concrete and easily described. They include:

1. material well-being; which refers to which includes income, ability to acquire basic necessities, noise, maintenance, and density of housing
2. physical well-being; which refers to activities that protect and promote health and the seeking of help when appropriate
3. personal growth; which refers to satisfaction with personal characteristics, expression of emotions, interpersonal communication, problem solving, and future goals
4. marital relations (if applicable); which refers to communications with spouse conflict resolution, sexual relations, mutual support, sharing, and co-operation
5. parent-child relations (if applicable); which refers to expressions of emotions towards children, communication, involvement with children, and discipline
6. altruistic behaviour; which refers to helping of others, donations, charity, and volunteerism
7. political behaviour; which refers to interest and activity in civic affairs and issues
8. work behaviour; which involves interest and challenge in occupation, stability, co-operation, reputation, and support
9. occupational relations; which refers to relations and communications with colleagues and supervisors and problem solving behaviour
10. job satisfiers; which refers to perceptions of the adequacy of pay and benefits, involvement in work, promotion or advancement, and training opportunities
11. creative/aesthetic behaviour; which refers to interest and involvement in cultural activities, such as plays, movies, museums, etc.
12. sports activity; which refers to awareness, interest, and involvement in sports events
13. vacation behaviour; which refers to engaging in planned, varied, and relaxing vacations (Abbey & Andrews, 1986; Evans & Cope, 1989).

With regards to measurement and evaluation of quality of life, questionnaires and interviews are the primary techniques. Demographic data can also be interpreted and quality of life inferred from such data. Observational rating scales are also frequently used as a technique for providing independent support for questionnaire, interview, and demographic sources.

**Job Satisfaction.**

Another of the dimensions of beliefs, values, and attitudes that appears to be critical to effective helping practice is job satisfaction. Job satisfaction is a complex construct. It is defined as a positive emotional state resulting from the appraisal of one's job or job experiences. It is considered an affective response to job or task experiences and environments (Locke, 1976). It is further suggested
that satisfaction includes perceptions of organizational commitment which include beliefs about the organization's goals and values, a willingness to exert considerable effort on behalf of the organization, and a strong desire to remain a member of the organization (Glisson & Durick, 1988).

The literature on job satisfaction is rich and varied and it has traditionally been examined from three major perspectives:

1. characteristics of the tasks performed
2. characteristics of the organizations
3. characteristics of the workers.

Job satisfaction has been typically been researched from one of these three perspectives. Current theory suggests that job satisfaction is not a uni-dimensional construct and, consequently, a multi-dimensional perspective is suggested (Glisson & Durick, 1988).

Job satisfaction is a product of a huge number of influences on individual personnel in any work environment. The individual's beliefs, values, and attitudes represent one of the major influences on job satisfaction. The relationship between beliefs, values, and attitudes and job satisfaction is not uni-directional. The relationship is reciprocal in the sense that job satisfaction is influenced by beliefs, values, and attitudes and job satisfaction influences beliefs, values, and attitudes which in turn influence perceptions, cognitive structures, and behaviour of employees (Butler & Fhrlich, 1991).

Some of the other important influences or dimensions of job satisfaction are occupational position, supervision, supervisor ratings, perceptions of the work environment, organizational climate, and job performance or achievement (Branholm & Fugl-Meyer, 1992; Drummond & Stoddard, 1991).
Occupational position is asserted to influence behaviour through attributes such as level of professional training, credentials, and specific job responsibilities as well as hierarchical and professional status. Personal characteristics and credentials are considered to be critical to organizational recruitment and entry. Beliefs, values, and attitudes are more critical to behaviour and job performance after entry (Butler & Ehrlich, 1991). Another of the more salient influences on job satisfaction is the function of position in the organization. Job functions that are more central to the organizational purpose (line positions) are generally considered to be more satisfying than those that are administrative or support in nature (staff positions) (Branholm & Fugl-Meyer, 1992).

Job satisfaction is a goal that often has a high priority with helping professionals and is a function of the fit between the individual's vocational needs and values and the reinforcers in the work environment (Dawis, 1984). These values influence goal commitment on the job and motivate individuals workers. Such goals are both intrinsic and extrinsic to the work (Super, 1968). Super suggests that these values are related to interests but differ in that they are the qualities sought rather than the activities or objects that embody them.

The relationship between job satisfaction and beliefs, values, and attitudes is complex. The strength of this interrelationship is obvious. Inclusion of the dimension of job satisfaction as one of the dimensions of beliefs, values, and attitudes of helping professionals in this research is an attempt to elaborate this interrelationship.

With respect to manifestations of job satisfaction, the conceptualization of job satisfaction as a position along a single continuum from happy/satisfied to unhappy/dissatisfied would suggest a certain set of discrete behaviours at each end and fairly reliable observations. Positions along the continuum, other than at the ends, would not produce such consistent and evident behaviours and highly
reliable observations. Unfortunately, there is little replicated research to support this hypothesis (Portigal, 1976).

Given that job satisfaction is multi-dimensional, it is likely that there are constellations of manifestations that are related to job satisfaction that would provide an indication of the degree of job satisfaction experienced by workers. Such a multi-dimensional conceptualization leads to several relevant dimensions. Some of the more commonly expressed dimensions are:

1. utilization of abilities
2. achievement and accomplishment
3. acceptable level of activity
4. advancement
5. authority
6. consistency of policies and practice
7. compensation
8. relations with co-workers
9. creativity
10. independence
11. moral values
12. recognition
13. responsibility
14. security
15. altruism or social service
16. social status
17. supervision and human relations
18. supervision and technical competence
19. variety

Individuals who were satisfied with their job would reply positively to questions about these aspects or reinforcing properties of their jobs. Individuals with a high level of job satisfaction would generate a good deal of personal identity from their job, would express a commitment to the job and the organization, and would express an enthusiasm and perseverance for challenging tasks (Weiss, D. J., Dawis, R. V., England, G. W., & Lofquist, L. H., 1967). Satisfied workers would also express a lack of confusion about their job
responsibilities, the opportunity to use a variety of abilities in order to complete their jobs, and the significance of their jobs (Glisson & Durick, 1988).

Workers who were dissatisfied with their job would respond negatively. A general level of dissatisfaction would be manifested by high levels of self-examination, expressed desire to change jobs, and high levels of criticizing and complaining (Weiss, et al., 1967). Of particular concern are the supervision and leadership within the organization and a focus on the extrinsic reinforcers of work such as compensation, recognition, and status (Glisson & Durick, 1988). The dissatisfied worker will seek to change the circumstances of the job that give rise to dissatisfaction, will modify personal goals or expectations, and may even resort to dysfunctional reactions such as inner- or outer-directed violence. The nature of the response to the dissatisfaction is a "concern" to both the individual and the employer (Portigal, 1976).

One final comment regarding job dissatisfaction is warranted. As a result of the dissatisfied worker's tendency to change the job circumstances, to modify goals and expectations, or to display dysfunctional reactions; job dissatisfaction is not usually a long-long lasting phenomenon. This aspect has contributed to difficulties in developing measures of job satisfaction that focus on worker qualities or variables and has also contributed to the limited replicability of much research. Of interest, however, is that job satisfaction is much longer lasting which has probably contributed to the research that has focused upon attributes of the job and organization that contribute to satisfaction. It seems that much more is known about the satisfied worker than the dissatisfied worker (Glisson & Durick, 1988).

Despite some of the limitations of research into the manifestations of job satisfaction, there are a few instruments that have been well documented in research to date.
Work Values.

This construct refers to the beliefs an individual has about the value of work. It includes a number of specific dimensions of beliefs and values and is multi-dimensional in nature. Since it refers to the values of work, it leads very directly to attitudes and behaviour inherent in the work environment and is concerned with those aspects of work that are rewarding and fulfilling. As such, work values are, perhaps, the elements of job satisfaction. It is not accurate to say that job satisfaction is only related to work values, however, it is safe to conclude that work values are the roots of one’s job satisfaction (Fenner & Hales, 1985).

Such work values are the basis for much career and personal decision-making. Careers are chosen on the basis of perceptions of what is good about an occupation. These values become the basis for establishing priorities for working and personal life. Work values appear to develop early in life and continue to be modified by experience in the world of work until adulthood. The development and refinement of work values is considered to be primarily a process of narrowing (Fenner & Hales, 1985). As with many other values, the development and refinement is not a conscious process but rather one of modification and prioritizing along specific dimensions or themes related to life roles (Super, 1968).

The importance of work values for personal development and satisfaction with life is seen when the parallel between work values and sex roles is considered. Just as sex roles influence almost every aspect of life so do work values (Savickas, 1991).

These dimensions or themes of work values can be very global and comprehensive in nature. They also can be analyzed and broken down into very specific elements of the world of work. This notion of general and specific work
values makes them highly individualized and personalized. Their relevance for both work and career decisions and for personal decision-making makes them very critical for both career and personal life (Super, 1968). It is possible to classify these work values into two main sub-groups; intrinsic or extrinsic. This conceptualization is the basis for differentiating work and personal values systems. Intrinsic work values are related directly to the work being performed. Extrinsic values are related to the consequences of work (Fenner & Hales, 1985; Super, 1968). It is also possible to sub-divide extrinsic values into two types; reward values such as money and security and situated values (or conditions of work), such as independence and relationships (Fenner & Hales, 1985).

In addition to these very broad categories, there are a number of other categories that have emerged. Of particular note are the Protestant work ethic, the centrality of work, and work involvement. Although these constructs are common in the literature, there are major problems in operationalization and measurement and their utility for research purposes has been questioned (Paterson & O'Driscoll, 1989).

A number of specific dimensions of work values have been articulated by various researchers and theorists. There is a very diverse range of behavioural manifestations for each dimension. As noted earlier, each individual develops a behavioural repertoire based upon these work values and, as a result, the manifestations are highly individualized. It is possible to describe some general behavioural patterns associated with each dimension. The most commonly articulated are:

1. altruism; an expressed desire to help others
2. aesthetic; make life more beautiful for self and others
3. creativity; a desire to discover, develop, or design new things
4. intellectual stimulation; a desire for things that provide opportunity for independent thinking and learning how and why they work
5. achievement; desire for work that gives one a feeling of accomplishment in doing a job well
6. independence; a desire for work that allows one to work alone and at one's own pace
7. prestige; a desire for work that is perceived by others as important and valuable
8. management; an interest in work that enables one to plan and lay out work for others
9. economic returns/money; a desire for work that provides good monetary compensation and purchasing power
10. security; a desire for work that provides certainty during difficult times
11. surroundings; a concern for the physical environment in which work is performed
12. supervisory relations; a interest in work that is performed under the supervision of others who are fair and compatible
13. associates; a concern for compatible relations with others
14. way of life; a desire for work that permits the individual to live in a desired way and to be the kind of person the individual chooses to be
15. variety; concern for the opportunity to work in a variety jobs or roles
16. object orientation; an interest in the tools and materials required for work and in production or outcomes
17. ideas/data orientation; an interest in facts and data or ideas and is usually associated closely with interest and concern for communication of one form or another (Drummond & Stoddard, 1991; Fenner & Hales, 1985; Joyce, 1987; Super, 1968).

There is a very diverse range of behavioural manifestations for each dimension. As noted earlier, each individual develops a behavioural repertoire based upon these work values and, as a result, the manifestations are highly individualized. It is difficult to articulate specific manifestations of these work values, other than the global descriptions noted. Self-report techniques are the only measurement techniques that have a degree of validity (Ben-Shem & Avi-Itzhak, 1991).

This review of the literature has described the basic constructs and identified situation-specific and common themes of attitudes, values, and beliefs
relevant to helping practice. It has also described the fundamental attitudes, values, and beliefs inherent in effective helping. Additional attitudes, values, and beliefs unique to serving persons with disabilities have been identified and conceptualized. It is now possible to describe the design of the investigation of these dimensions of attitudes, values, and beliefs, and to confirm or disconfirm the impact of education, work experience, geographic location, and amount of supervision.
Despite the huge array of research into attitudes, values, and beliefs; it is evident that there is very little empirical study of these dimensions of helping practice as they apply to providing services to persons with disabilities. A few reports of single dimensional research in this area have identified a number of potentially critical dimensions of this form of helping. Unfortunately, there does not appear to be a theoretical or conceptual model that has driven these isolated pieces of research and which could be tested or built upon in this study. As a consequence, this research is primarily exploratory in nature. It is based upon the identification of a number of potentially significant dimensions of attitudes, values, and beliefs that have been suggested as critical to effective helping practice. The study is designed to investigate the significance of these dimensions on effective helping practice. Further, it is hypothesized that these dimensions of attitudes, values, and beliefs are somehow impacted by certain demographic variables. However, the direction and nature of such effect is not evident in the theoretical and research literature. It is within the context of a lack of a prevalent theoretical model that this study has been designed. The specific elements of the research methodology are described as follows.

Hypothesis and Research Questions

One of the conclusions emerging from the review of the literature is that a multi-faceted approach to research on attitudes, values, and beliefs of effective helping professionals would be desirable. A complete and comprehensive measurement and evaluation approach would make use of employer and supervisor perceptions of effectiveness. Physiological measures of personnel in different phases and aspects of helping practice would be used. Extensive and detailed self reporting during different phases would be employed. A wide range
of reporting techniques would be used and highly specialized measurement scales
would be developed and field tested. However, time and money constraints
inhibit the design of research projects and this is the case with this study. As a
consequence, this proposal is designed to investigate these dimensions of helping
practice from one specific perspective and approach.

The historical approaches investigating the affective aspects of helping
practice have focused upon the operational definitions of personal characteristics
of effective helpers and behavioural observations of helping professionals to
record the amount of effective helping being displayed (Brammer, 1988; Carkhuff
and Berenson, 1967; Egan, 1989). However, Combs (1986) has questioned the
validity of such a measurement technique.

This research proposed to address these dimensions of attitudes, values,
and beliefs from a different perspective. The measurement strategy employed
made use of different self-reporting techniques and focused on the helping
professionals' perceptions of their attitudes, values, and beliefs. Uni- or multi-
dimensional scaling was employed to develop quantifiable measures of these
attitude dimensions and these measures would be examined in relation to
supervisor ratings of effectiveness.

The analysis of the literature on the attitudinal, values, and belief themes
of effective helpers suggests a number of critical dimensions. All have significant
impact on the professional and the practice of helping. However, there are some
that appear to be more critical or more comprehensive than others. When
considering helping professionals who are specifically planning and implementing
services to people with mental or physical challenges, the following dimensions of
attitudes, beliefs, and values are of particular significance:
1. locus of control
2. self efficacy
3. work values and work ethic
4. awareness of self (detail of self-concept)
5. quality of life for client and self and family
6. job satisfaction
7. attitudes towards disabled people
8. task specific self efficacy

The abstract and perceptual nature of the constructs of attitude, value, and beliefs presents major measurement and evaluation problems. Each dimension has been the subject of some form of measurement and evaluation in other research, although there are very few attempts to measure and evaluate these dimensions as they relate to effective helping practice. Existing measurement strategies were used as models for measures of attitude dimensions related to helping practice.

In addition to determining the relationships between these specific attitude dimensions and effective practice, the relationships between these dimensions and a number of other important variables was examined. The existence or absence of training is considered to be an important variable and has been hypothesized as significant in influencing the skills and knowledge of personnel. There is no evidence of research into the impact of different levels of training on attitudes, values, and beliefs. In addition, the amount of experience is also considered to be an important variable in determining effectiveness and its relation to skills and knowledge has been documented. Again, there is no evidence of attempts to examine experience with attitude, values, and beliefs.

Further, in some regions of North America there is considerable concern regarding the availability of effective helping professionals. Problems are particularly evident in rural regions (Thumlert, 1988; Thumlert & Charles, 1989). It has been speculated that personnel who chose to reside and work in urban
areas have systems of attitudes, values, and beliefs that are different from those who work and reside in rural areas. In a somewhat related matter, the amount of supervision time is also considered to be an important variable influencing knowledge and skills of helping professionals. However, there is no evidence of research into its impact on attitudes, values, and beliefs.

Data on the demographic variables of level of education or training, amount of experience, geographic employment setting, and amount of time spent with supervisor was examined in relation to self- and supervisor effectiveness ratings and responses on measures of the eight critical dimensions of attitudes, values, and beliefs.

It is speculated that the dimensions identified above are the most critical and discriminating in determining the effectiveness of helping professionals. This research proposal is designed to test this hypothesis and to answer the following questions:

1. Do these attitudinal dimensions correlate with high and minimal effectiveness?
2. Are there differences between trained and untrained staff in terms of these dimensions?
3. Are there differences between personnel with different levels of training on these dimensions?
4. Are there differences between experienced and inexperienced staff in terms of these dimensions?
5. Are there differences in personnel employed in urban and rural settings on these dimensions?
6. Are there differences between personnel employed in large organizations and small organizations on these dimensions?
7. Are there differences between employee perceptions of effectiveness and efficacy and supervisor perceptions?

Although preliminary and exploratory nature, the research is designed to examine the relationships between critical dimensions of attitudes, beliefs, and values and other specific employment/demographic variables that are believed to
have an impact upon such attitudes, beliefs, and values. It is important to recognize that, given the definitional and measurement problems associated with research in this area, the complex inter-relationships between these variables, and the embryonic nature of research into this aspect of helping practice; directional hypotheses regarding these relationships are not feasible. As a consequence, it is important to recognize that the study was designed to illuminate these relationships rather than to test the validity of theoretical models that would explain them.

Purposes and Objectives

In this study, eight specific dimensions or systems of attitudes, values, or beliefs of personnel serving persons with disabilities were examined in relationship to self- and supervisor-perceived levels of effectiveness, training, experience, geographic location of employment setting, and amount of direct supervision time. The subjects' responses to a variety of attitude and values measures were examined in relation to ratings of effectiveness in order to determine which, if any, of the eight dimensions discriminate between highly effective and minimally effective personnel. In addition, the responses were examined in relation to levels of education, amount of work experience, amount of supervision time, and rural versus urban employment setting.

This research had the promise of illuminating several important dimensions of effective helping with persons with mental and physical challenges. Eight affective dimensions had been hypothesized as critical to effective helping and this research was designed with the purpose of establishing the importance or relevance of these dimensions. Further, it was hypothesized that these dimensions are influenced by perceptions of effectiveness, amount or level of education or training, amount of relevant work experience, amount of supervision time, and the demographic setting of the employment.
It was expected that the results will provide information relevant to:

1. curriculum design and instruction in college and university training in human service career preparation programs
2. human service employee recruitment practices
3. employee orientation programs
4. performance appraisal practices
5. employee supervision practices.

In addition to these general uses and purposes of the research, there were two specific objectives of the research. These were to:

1. generate critical attitudes and values dimensions of effective personnel serving persons with mental and physical challenges
2. determine if any of the dimensions are influenced by experience, training, size of employing organization, demographic setting, or perceptions of effectiveness

Subjects and Sampling Procedure

The subjects of the study were individuals employed to provide care and rehabilitative services to persons with mental and physical challenges. The subjects were identified and selected through a process of soliciting cooperation under the auspices of the Alberta Association of Rehabilitation Centres. This is an umbrella organization in the Province of Alberta representing private for-profit organizations, non-profit societies, and government agencies providing services to children and adults with mental and physical disabilities. This umbrella organization solicited cooperation and participation from member agencies through a series of meetings, letters, and other communiques with senior personnel in the organizations. Managers and supervisors of cooperating agencies and organizations were approached to identify the names of interested employees and the scheduling of meetings to introduce the study, its purposes, and the process to be employed in the study.
All 65 agencies and organizations located in the southern half of the province were approached. The geographic region was limited to the southern half of the province for reasons of economy of time and money. These organizations employed approximately 850 full-time equivalent personnel. Fifty-eight of the organizations agreed to provide meeting time during work hours for access to interested personnel. A series of information meetings yielded a volunteer subject pool of 231 full-time employees. The subjects who agreed to participate were asked to complete a "Statement of Consent" (see Appendix B).

In ten cases, subjects were unable to complete all of the measures of attitudes, values, and beliefs. In most cases, the reason for lack of completion was simply oversight on the part of the subject; i.e. omitting one page of the measurement devices. In three cases, the subjects simply did not have enough time to complete the measures and there was no opportunity for the researcher to return. As a consequence, the total number of subjects with complete matched sets of data was 221.

In addition to the 221 volunteer employee subjects, the supervisors who completed ratings of employee effectiveness are considered as subjects. There were 85 supervisor subjects; however, no attempt to measure their attitudes, values, and beliefs was made.

Thirty-seven (17%) of the subjects were male and 183 (83%) of the subjects were female. The gender ratio in the subject pool in all organizations is highly skewed in favor of females (Thumlert, 1988). This presents major problems in attempting to develop matched gender subject pools and raises serious questions about the sampling of male subjects. As a consequence, no attempt was made to control for gender.
In addition, the age distribution of the agencies is somewhat skewed; with a preponderance of the subjects being between the ages of 20 and 25 and substantially lower numbers in each of the five year age categories beyond. In this study, the subjects ranged in age from 20 to 63 years. The mean age was 34.6 years, however the modal age was 24 years and the median was 31 years. This skewness in the age distribution is related to a number of variables including the gender ratio, turn-over rates, and career longevity (Thumlert, 1988). As a result of this skewness in the age distribution of the subject pool, matched sampling on the basis of age raises serious questions about the randomness of the sample at the older age ranges. Consequently, no direct attempt to control for age was made. However, it should be noted that the natural age variations associated with level of training and experience will be reflected in the results.

The distribution of the educational level of the subjects was as follows:

Table 1

<table>
<thead>
<tr>
<th>Distribution of Educational Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Less than high school</td>
</tr>
<tr>
<td>High school diploma</td>
</tr>
<tr>
<td>Some college or university</td>
</tr>
<tr>
<td>College diploma</td>
</tr>
<tr>
<td>University degree</td>
</tr>
<tr>
<td>Missing</td>
</tr>
</tbody>
</table>
In terms of the full-time (or full-time equivalent) relevant work experience of the subjects, there was a definite skew towards greater amounts of experience. Full-time or full-time equivalent was defined arbitrarily as 35 hours per week. This direction is reflected in the Table 2.

Table 2

<table>
<thead>
<tr>
<th>Distribution of Work Experience</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than three months</td>
<td>8</td>
<td>3.6%</td>
</tr>
<tr>
<td>Between three months and one year</td>
<td>13</td>
<td>5.5%</td>
</tr>
<tr>
<td>More than one year but less than three</td>
<td>44</td>
<td>19.9%</td>
</tr>
<tr>
<td>More than three but less than six</td>
<td>51</td>
<td>23.1%</td>
</tr>
<tr>
<td>More than six years</td>
<td>105</td>
<td>47.5%</td>
</tr>
</tbody>
</table>

Unlike the distribution of subjects on levels of work experience, the geographic location of the subjects' place of employment was distributed fairly evenly as illustrated in the following table:

Table 3

<table>
<thead>
<tr>
<th>Distribution of Population of Employment Community</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater than 500,000</td>
<td>64</td>
<td>29%</td>
</tr>
<tr>
<td>Between 50,000 and 500,000</td>
<td>63</td>
<td>28.5%</td>
</tr>
<tr>
<td>Between 10,000 and 50,000</td>
<td>33</td>
<td>14.9%</td>
</tr>
<tr>
<td>Between 3,000 and 10,000</td>
<td>40</td>
<td>18.1%</td>
</tr>
<tr>
<td>Less than 3,000</td>
<td>21</td>
<td>9.5%</td>
</tr>
</tbody>
</table>
With respect to time spent with supervisor, the distribution of the subjects was skewed towards minimal levels of time per week. This trend is reflected in the following table:

Table 4

<table>
<thead>
<tr>
<th>Distribution of Amount of Supervision Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
<tr>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>Less than 5 minutes per week</td>
</tr>
<tr>
<td>Between 5 and 15 minutes per week</td>
</tr>
<tr>
<td>Between 15 and 30 minutes per week</td>
</tr>
<tr>
<td>More than 30 minutes per week</td>
</tr>
</tbody>
</table>

Research Methodology and Instrumentation

The research methodology involved administering measures of attitudes, values, and beliefs of the subjects on eight affective dimensions. The instrumentation consisted of a multi-formatted measurement process that included one uni-dimensional and seven multi-dimensional scales.

In order to maximize the validity of the measurement instruments, existing scales were selected for use. The criteria used to make selection decisions were:

1. extensive psychometric data published by the scale authors
2. extensive (more than 20) clinical and/or research applications by the authors
3. extensive (more than 10 published) research applications by independent researchers.
The psychometric and research literature was reviewed and a minimum of three potential instruments for each dimension were identified and critiqued. A committee of research and measurement experts selected the eight scales for use in the study. The instruments selected are listed in Table 5.

Table 5

<table>
<thead>
<tr>
<th>Instrumentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension</td>
</tr>
<tr>
<td>1. Locus of control</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>2. Self-efficacy</td>
</tr>
<tr>
<td>3. Task specific self-efficacy</td>
</tr>
<tr>
<td>4. Attitudes towards disabled persons</td>
</tr>
<tr>
<td>5. Work values</td>
</tr>
<tr>
<td>8. Quality of life</td>
</tr>
</tbody>
</table>

Items concerning identification and demographic information were combined with four of the shorter (30 to 60 items) instruments to create one composite instrument. The dimensions measured by the shorter instruments that were included in the composite instrument were locus of control, self-efficacy, task specific self-efficacy, and attitudes towards disabled persons. This composite scale contained 134 response items. The remaining instruments were administered as individual scales. The work values, self-concept, and job satisfaction scales consisted of 100 items each. The quality of life instrument consisted of 192 items.
The number of responses required from each subject was 642 scale responses plus 17 identification and demographic responses for a grand total of 659 responses.

In addition to these instruments administered to the employee subjects, the supervisors of the subjects were asked to complete a task specific effectiveness rating scale that was identical to the 45 item task specific self-efficacy scale completed by the subjects.

The attitudes towards disabled persons (ATDP) instrument is a uni-dimensional scale that generates one score. The remaining instruments are multi-dimensional and yield several sub-scales scores. In addition to the uni-dimensional ATDP scale score, the composite scale includes three sub-scales of locus of control, two self-efficacy sub-scale scores, and six task specific self-efficacy sub-scale scores. The work values scales generates 20 sub-scale scores. The self-concept scale includes 16 sub-scale scores and the job satisfaction scale includes 21. There are 15 sub-scale scores included in the quality of life measure. In total, the 642 responses on the eight dimensions of attitudes, values, and beliefs measured by these instruments generated 83 sub-scale scores. In essence, the responses of the subjects on these instruments are grouped into 83 categories and can be considered to be the dependent variables in this research.

Since existing scales were selected for use in the study for reasons of validity, there are different numbers of items contained in each sub-scale score and different rating scales. Hence, across-scale comparisons of the raw sub-scale scores is meaningless. Although such direct comparison and testing is not involved in this study, the sub-scale score totals were converted to standard scores to allow for ease of discussion.

The measurement tools were field tested in a pilot study with a sample of eight employees from two agencies in the Victoria region in November, 1993.
Subject recruitment, introduction, consent, and instructional strategies were tested during the pilot study. Electronic scoring and data analysis procedures were also tested and refined.

The data collection process occurred during the months of April, May, and June, 1994 and consisted of the following steps:

1. letter and telephone canvass of all organization managers and supervisors soliciting co-operation
2. identification of interested personnel and scheduling of introductory meetings in each locale
3. decision of interested personnel to participate and signing of consent forms
4. administration of attitude, values, and beliefs scales
5. administration of effectiveness rating scale to supervisors
6. electronic scoring of subject responses

All steps of the data collection process were conducted by the researcher. The scales were administered to subjects in their place of employment during work hours. In most instances, the subjects were seen in small groups of four and five. There were some situations that allowed for groups of 10 or 12 while, in other situations, the subjects were seen individually or in groups of two. The subjects completed the scales at their own pace. Completion of the scales required between two and two and a half hours depending upon reading speed.

Data Analysis Procedures

The data set for each subject consisted of 659 responses from the subjects plus 45 responses from the supervisor of each subject. There were 221 subjects. The responses of the subjects were electronically scored and 83 sub-scale scores were calculated for each subject.
Although no between sub-scale analyses were considered; for ease of discussion, the data was transformed into standard scores. In this analysis, the various sub-scale scores on each dimension of attitudes, values, and beliefs were considered to be dependent variables. The demographic variables with different grouping levels were considered to be the independent variables. Since all subjects were selected from the volunteer subject pool and since each subject completed each of the instruments, there are no repeated measures. Hence the data is considered statistically independent or orthogonal.

The data were analyzed using SPSS for Windows Release 6.0 (Norusis, 1993).

Basic descriptive statistics were generated in order to profile the attitudes, values, and beliefs of the subjects at different levels of the independent variables. This profile illustrated the central tendencies, the variability, and the direction (or skew) of the subjects' attitudes, values, and beliefs and enabled general statements or description of the subjects' systems of attitudes, values, and beliefs.

The instruments generated 83 sub-scale scores along the eight dimensions of attitudes, values, and beliefs. This 83 variable data set was considered to be too large for any meaningful statistical analysis and interpretation. As a consequence, a data reduction procedure was implemented.

A factor analysis (FA) with varimax rotation was used to reduce the number of dependent variables down to a more manageable number that would allow for testing of the effects of the various independent variables. This procedure also was used in order to confirm or disconfirm the relationships of the sub-scale variables to one another. An Eigen value of 1 was selected as the criterion for determining the number and composition of the principal component factors.
Once the data were reduced to the principal component factors, it was possible to test the hypotheses that attitudes, values, and beliefs are influenced by the independent variables of education, experience, geographic location, supervisor time, and effectiveness.

This principal components data were subjected to a series of One-Way Analyses of Variance (ANOVA) to test the differences between the means of the subjects at different levels of each independent variable. A separate ANOVA was conducted for each independent variable. The "a priori" (or planned) comparisons consisted of comparing the scores on each principal components factor of one dimension with the means for the subjects at each level of the independent variable. In addition a multiple comparison procedure was used to determine where the significant differences were located. This post hoc (unplanned) test of significance differences between the means was conducted in order to examine all possible comparisons between the principal component factor scores and the different levels of the independent variables. This procedure allowed for the identification or description of the specific significant difference detected by the omnibus F ratio. Scheffé's test is considered to be the most conservative of the post hoc procedures (Norusis, 1993) and was selected for use on this basis.

It should be noted that the decision to conduct a series of one-way ANOVAs with post-hoc multiple comparisons with Scheffé's test created a situation where there is an increased likelihood of chance differences appearing to be significant. This situation creates the possibility of Type I errors occurring and is a factor of the large number of omnibus Fs and multiple post-hoc comparisons. Caution is warranted in interpretation, as a result.
CHAPTER 5
RESULTS

As noted in the previous discussion, the data analysis consisted of two separate phases. The initial phase involved factor analysis of the dependent variables. The second phase involved analysis of variance of the means of the subjects grouped according to different levels of the five independent variables to determine the significance of differences on the eight dimensions of attitudes, values, and beliefs measured.

One factor analysis of all 83 dependent variables would yield principal component factors that would confirm or support the validity of the instruments. Such an analysis would be heavily influenced by the degree of commonality or overlap between the instruments. It would also tend to disregard some of the variables that were suggested in the literature as significant. As a result, a series of factor analyses of the sub-scale scores on each dimension was conducted. This series of separate factor analyses accomplished the goal of reducing the number of dependent variables to a more manageable number and still recognized the significance of the dimensions or variables suggested in the literature. Once the principal component factors were identified by the factor analysis procedure, the differences between the means of the subjects grouped according to the levels on the independent variables could be tested using the one-way ANOVA procedure.

Attitudes Towards Disabled Persons

This dimension of the subjects’ attitudes, values, and beliefs was measured by the ATDP instrument which is a uni-dimensional scale and yields only one factor score. Hence, no data reduction procedure was needed for this dimension.
Self-efficacy

The General Self-Efficacy Scale used to measure self-efficacy yields two sub-scale or factor scores. It was also considered not necessary to reduce the number of variables on this dimension, and no factor analysis was conducted on these data.

Factor Analysis of Locus of Control

The instrument used to measure this dimension of attitudes, values, and beliefs yields three sub-scale scores or factors. A factor analysis was conducted to determine the principal factor. The Chance score accounts for 53.7% of the variance and is the only score contained in the principal components analysis; i.e. the only score with an Eigen value over 1. Further rotation of this initial solution is not possible. Since varimax rotation was not possible, it was decided to include the scores on all three sub-scale scores of this dimension in the analysis of variance.

Factor Analysis of Task Specific Self-efficacy

The instrument used to measure this dimension yields six sub-scale score or variables. These data were subjected to factor analysis with varimax rotation to identify the principal component factors. This data analysis (see Table 6 in Appendix A) indicated that there are two principal components. One consists of the scores on human relations, advocacy, service planning, and communication. The second consists of personal care and teaching. The first factor is clearly related to interpersonal interaction between clients and personnel while the second seems to be more concerned with some forms of physical interaction between clients of service providers. Together, the two factors account for 64.5% of the variance.
**Factor Analysis of Work Values**

The instrument used to measure this dimension was the Values Inventory of the Canadian Work Importance Survey which yields 20 sub-scale scores or factors. The factor analysis with varimax rotation resulted in the identification of five principal component factors. One consisted of autonomy, life style, creativity, variety, risk, and authority. The composition of this principal factor would suggest that the working conditions are most important to personnel. The second consisted of advancement, prestige, economic conditions, and achievement and suggests that rewards are also of significant importance to these workers. The composition of the third factor appears to reflect elements of the meaningfulness of the work and include, altruism, ability utilization, personal development, and achievement. The fourth principal factor involves the social elements of work and include social relations, cultural identification, social integration, and social working conditions. The final factor identified appears to concern the physical aspects of the work and includes creativity, physical prowess, and physical activity (see Table 7 in Appendix A). Together these principal factors account for 67% of the variance.

**Factor Analysis of Self-concept**

The Tennessee Self-Concept Scale was employed to measure aspects of the subjects' self-concept and produced 15 sub-scale scores or factors and one self-criticism variable. The results of the factor analysis with varimax rotation of this data are summarized in Table 8 in Appendix A.

Four principal factors were identified. The first consists of aspects of physical behaviour, physical identification, physical satisfaction, social identification, social satisfaction, personal identification, and personal satisfaction. This factor appears to reflect the importance of the "external" aspects of physical,
personal, and social aspects of self. The second factor consists of personal satisfaction, moral satisfaction, moral behaviour, family behaviour, and family satisfaction. These components could be said to be reflective of "internal" elements of self. The third and fourth factors are much narrower in scope. The third consists of social, family, and moral identification; which suggest the significance of the identification of self in these terms. The fourth is concerned with moral identification and self-criticism and suggests the relative importance of judgements of self based upon morality. Together these factors account for 61.2% of the variance of this measure of self-concept.

Factor Analysis of Job Satisfaction

The Minnesota Satisfaction Questionnaire was used to measure this dimension of the subjects' attitudes, values, and beliefs. The instrument yielded 20 sub-scale scores or factors plus one general satisfaction score. The results of the factor analysis of this data are summarized in Table 9 in Appendix A.

This analysis identified four principal component factors. The first consists of 11 elements: creativity, variety, independence, responsibility, activity, authority, ability utilization, achievement, moral value, social service, and general satisfaction. Given the scope of this component factor, it is difficult to identify a general theme represented in these factors. The components appear to represent the diversity of the rewards found in this type of work and, perhaps, reflect the work more than the values of the workers. The second factor includes general satisfaction, human and technical competence of the supervisor, recognition, and policies and practices of the organization. These factors seem to reflect the significance of the supervision and recognition within the organization. The third factor appears to reflect the significance of value of the work. It includes moral value, achievement, social service, working conditions, and relations with co-workers. The fourth factor includes compensation, security, and advancement and
seems to reflect the "external" or extrinsic elements of job satisfaction. These principal factors account for 72.3% of the variance associated with this measure of job satisfaction.

Factor Analysis of Quality of Life

The instrument employed to measure this dimension of attitudes, values, and beliefs was the Quality of Life Questionnaire which produced 15 sub-scale scores or factors. The factor analysis of these data identified five principal factors and is summarized in Table 10 in Appendix A.

The first factor consisted of occupational relations, job satisfaction, and job characteristics and clearly represented work aspects of quality of life. The remaining principal factors are also narrow in focus and as a result, the identification of a common theme is relatively simple. The second factor concerns the family and the importance of health, vacations, extra-familial relations, and material well-being. The third factor includes creativity, personal growth, sports, and extra-marriage relations. This factor seems to focus upon the individual aspects of quality of life. The fourth factor consists of altruism and extra-marriage relations and appears to focus with concern for others beyond family. The fifth factor consists of parent-child relations and political behaviour and appears to focus on the importance of being successful in group dynamics and process.

These five principal factors collectively account for 59.6% of the variance associated with this instrument.

Factor Analysis of Supervisor Ratings of Effectiveness

This instrument is identical to the measure of task specific self-efficacy, although the subject completing the scale is the supervisor of workers in the
setting. Strictly speaking, a factor analysis of these data was not necessary since the instrumentation is identical. However, similar results with a different set of subjects would confirm the factor analysis of the instrument used to measure task specific self-efficacy. The results of the factor analysis with varimax rotation of this data are summarized in Table 11 in Appendix A.

The results of this data analysis are very similar to results of the task specific self-efficacy factor analysis which confirms the factor analysis of the task specific self-efficacy results. The similar results also confirm the stability or reliability of the instrument.

The factor analysis phase of the data analysis had the effect of reducing the total number of dependent variables from 83 to 26. Twenty-six dependent variables are still considered to be too many if global analysis is desired. Since the examination of specific dimensions of attitudes, values, and beliefs is of primary importance in this study, global analysis is not of concern. More critical, is the impact of the various independent variables upon each dimension of attitudes, values, and beliefs. The subsequent data analysis was concerned with examining the impact of each independent demographic variable on the principal component factors of each dimension independently.

**Analysis of Variance**

The limiting of subsequent data analysis to examinations of each dimension independently had the effect of reducing the number of variables to be examined at any one time. Five principal variables for the work values and quality of life dimensions were examined. Four principal component variables of the self-concept and job satisfaction dimensions were examined. The locus of control dimension included three variables and the task specific self-efficacy dimension and the general self-efficacy dimension each include two variables. The attitudes
toward disabled persons dimension consisted of only one variable. The number of dependent variables included in such independent analysis was considered appropriate for ease of interpretation of results and was consistent with the exploratory nature and objectives of the study.

**Analysis of Variance of Level of Education**

A series of eight one-way analyses of variance (ANOVAS) was conducted to test the differences between the means of subjects grouped on five levels of education.

The analysis of the impact of level of education on attitudes towards disabled persons indicated that there were no significant differences between the groups on this dimension of attitudes, values, and beliefs.

In terms of general self-efficacy, there was a significant difference between the groups of different levels of education. Those subjects with lower levels of education (less than high school graduation and high school diploma) were significantly lower in their beliefs about their general self-efficacy or ability to influence outcomes. There were no differences between the groups on social self-efficacy (see Table 12 in Appendix A).

Further, there were no significant differences between the groups on locus of control. Education does not appear to affect the subject's beliefs about their ability to influence the future in terms of locus of control.

Level of education does appear to impact the subjects' beliefs about their task specific self-efficacy. Specifically, the subjects with less than high school and with high school graduation have significantly lower beliefs about their abilities to develop effective individual service plans for their clients. In fact, those with less
than high school considered themselves to be significantly less capable than those with high school graduation (see Table 13 in Appendix A).

Level of education does appear to impact beliefs about abilities to communicate. Subjects with less than high school perceived themselves to be less effective than those with college and university education. Further, there were significant differences in perceptions between subjects with university and those at lower levels of education (see Table 14 in Appendix A).

In terms of work values, level of education appears to influence one principal factor. The physical elements of work are less highly valued by the subjects with a university degree than those subjects with lower levels of education (see Table 15 in Appendix A).

The level of education also appears to influence the self-identity aspect of self-concept with significant differences noted between those with a university degree and those with no high school, some college, and a college diploma (see Table 16 in Appendix A).

There also appeared to be an influence on the value of work aspects of job satisfaction. There was a significant difference between the subjects with a college diploma and those with a high school diploma (see Table 17 in Appendix A).

In terms of level of education, it is apparent that some factors on all of the dimensions of attitudes, values, and beliefs are influenced to some degree.
Analysis of Variance of Work Experience

The responses of the subjects grouped according to levels of work experience were also subjected to a series of eight ANOVAs. The results of these analyses indicated that amount of work experience influenced some aspects of most dimensions of attitudes, values, and beliefs.

One of the specific dimensions that appears to be influenced by the amount of work experience is attitudes towards disabled persons. Those subjects with more than six years experience were significantly more positive than those with less than three months experience and those with between one and three years experience (see Table 18 in Appendix A).

Another dimension of attitudes, values, and beliefs that appears to be influenced by amount of work experience is the interpersonal interactions aspects of task specific self-efficacy. There was a significant difference between subjects with between three months and one year and those with between one and three years and those with more than six years experience. The workers with higher levels of experience believed themselves to be more effective at the interpersonal interactions of their work (see Table 19 in Appendix A).

There were two components of the work values dimensions that appeared to be influenced by work experience. On the factor concerned with external working conditions, subjects with some college and university experience valued these aspects of their work more than those with a university degree (see Table 20 in Appendix A). The second aspect of work values that appears to be influenced by work experience is physical elements of work. Those subjects with between three months and one year were significantly more valuing of these aspects than were those with more than six years (see Table 21 in Appendix A).
Another dimension of attitudes, values, and beliefs that appears to be influenced by amount of work experience is the self-identity aspects of self-concept. Subjects with between one and three years experience were significantly more concerned with identity than were those with more than six years experience (see Table 22 in Appendix A).

The final dimension that appears to be influenced by amount of work experience is the work skills and intrinsic reward aspects of job satisfaction. Subjects with three months to one year and between one and three years experience were significantly more oriented to these elements of work than were those with more than six years of experience (see Table 23 in Appendix A).

**Analysis of Variance of Population Levels**

The size of the population centre of residence and employment appears to have a mixed impact on the dimensions of attitudes, values, and beliefs. Most aspects did not have significant differences between groups. There were, however, a few dimensions where there were significant differences between the groups of subjects.

One of the dimensions where there was a significant difference was the internal aspect of locus of control. Specifically, there was a significant difference between subjects who lived and worked in communities with populations between 10,000 and 15,000 and those of more than 500,000, and those of between 50,000 and 500,000. Those who lived and worked in the smaller communities were significantly lower in terms of the beliefs about the future being controlled by powerful others (see Table 24 in Appendix A).

With regards to work values, the size of the community population did not affect most aspects. There were no significant differences between the groups on
three of the five principal factors. There was a significant difference between the groups on the factor concerned with external working conditions. Specifically, subjects from cities of more than 500,000 were significantly more interested in social relations, social integration, cultural identification, and working conditions than subjects living and working in centres of between 50,000 and 500,000 and those in settings of between 3,000 and 10,000 (see Table 25 in Appendix A). In addition, subjects living and working in settings of more than 500,000 were significantly different in terms of the physical aspects of work. These subjects were less interested in physical activities, physical prowess, and variety than subjects from the other population levels (see Table 26 in Appendix A).

There were no significant differences between the groups of subjects in terms of aspects of self-concept. It appears that attitudes, values, and beliefs about self-concept are not affected by size of residential communities.

The picture is considerably different when it comes to attitudes, values, and beliefs about job satisfaction. There were significant differences between the groups on three out of the four principal component factors of job satisfaction. In fact, the same trend was noted on the fourth factor, although the differences were not significant with Scheffé's procedure. In terms of the aspects of general satisfaction, the human and technical elements of supervision and recognition, there were significant differences between subjects employed in communities of less than 3,000 and those employed in centres of over 500,000. It appears that subjects in smaller communities value these elements of work more than workers from larger centres (see Table 27 in Appendix A).

There was also a significant difference between subjects employed in cities over 500,000 compared to communities of less than 3,000 in terms of the social value of work. Workers in the large urban centres appear to be more oriented
toward achievement, moral values, social service, and social status than their counterparts in centres of less than 10,000 (see Table 28 in Appendix A).

There were also significant differences between subjects in terms of the extrinsic aspects of job satisfaction. Subjects from the urban centres over 500,000 were significantly more oriented toward compensation, security, and advancement than the subjects from centres of less than 10,000 (see Table 29 in Appendix A).

With respect to the impact of size of community; it appears that, in general, this variable does not have a major impact on attitudes, values, and beliefs of workers serving people with disabilities. However, it is safe to say that the variable does have an impact on some dimensions. Specifically, there appear to be differences between workers in large urban centres and those in smaller centres in terms of general satisfaction, recognition, human and technical elements of supervision, and the social aspects of satisfaction including compensation, security, and advancement.

The dimension of quality of life did not appear to be impacted by the size of the community population. There were no significant differences between the groups of subjects at any population level on any of the principal components of quality of life.

Analysis of Variance of Time with Supervisor

The amount of time spent with the supervisor was speculated to have an impact upon the worker's attitudes, values, and beliefs. The analysis of variance of this data resulted in no significant differences between the groups with differing levels of supervisor time on all aspects of the eight dimensions of attitudes, values, and beliefs; except one. The aspect of job satisfaction that is concerned with achievement, recognition, policies and practices of the organization, and the
human and technical qualities of the supervisor is significantly different between workers who receive less than five minutes per week than those who receive between five and fifteen minutes and those who receive more than thirty minutes per week (see Table 30 in Appendix A). In general, it appears that the amount of time spent with the supervisor does not have a major impact upon attitudes, values, and beliefs; except in one aspect of job satisfaction.

Analysis of Variance and Effectiveness

One of the fundamental premises associated with this research is that attitudes, values, and beliefs influence the behaviour of workers in rehabilitation work. More specifically, it is suggested that the effectiveness of the workers' helping behaviour is impacted by the various dimensions of attitudes, values, and beliefs. The analysis of variance of the responses of the subjects grouped according to levels of effectiveness supports this hypothesis to some degree; however, there were no significant differences between the groups on most principal component factors of the eight dimensions of attitudes, values, and beliefs.

There were no significant differences between the subjects grouped according to levels of effectiveness on attitudes towards disabled persons, self-efficacy, locus of control, and task specific self-efficacy.

On the work values dimension, there was a significant difference between the groups on the factor concerned with values around the physical activities, physical prowess, and variety associated with this work. The difference was between the subjects rated as inadequate and those rated as minimally effective. The ineffective workers were considerably more oriented toward physical activity, physical prowess, and variety. There were no other significant work values differences (see Table 31 in Appendix A).
In terms of self-concept, there was a similar result. There were no significant differences between the groups on the principal component factors of self-concept, except one. There was a significant difference between the moderately effective and the minimally effective workers in terms of self-criticism and moral identification. The minimally effective workers were more self-critical and less satisfied with their moral identification than were the marginally effective workers (see Table 32 in Appendix A).

As with the analysis of variance of the self-concept principal component factors, there was only one principal component factor of job satisfaction that produced a significant difference between the groups. The factor associated with social reward elements of this work had a significant difference between the highly effective and the marginally and minimally effective workers. The highly effective workers were less satisfied in general and specifically were less satisfied with the technical and human aspects of supervision, recognition, and policies and practices of the work organization (see Table 33 in Appendix A). There were no other significant differences between the groups in terms of attitudes and values about job satisfaction.

The trend in the analysis of variance of the quality of life principal component factors was the same as in the other dimensions. There were no significant differences between the groups except for one factor. The factor concerned with health and family factors had a significant difference between the ineffective and minimally and marginally effective subjects. The ineffective workers were significantly more valuing of these aspects of life than the subjects rated as minimally and marginally effective (see Table 34 in Appendix A).
Summary

As noted in the discussion of the data collection and instrumentation, the data generated consisted of 83 variables or sub-scale scores along eight dimensions of attitudes, values, and beliefs that are considered fundamental to serving persons with disabilities. Also identified were five independent variables that were hypothesized to have an impact upon the dimensions of attitudes, values, and beliefs. Because of the embryonic level of research into the basic constructs as they relate to helping and serving persons with disabilities, it was not possible to hypothesize on the direction and extent of the impact on these dimensions of attitudes, values, and beliefs.

It would have been possible to conduct tests of the means of the subjects groups according to levels of the five independent variables for all 83 dependent variables, but such an analysis would have been unwieldy, excessively detailed, and difficult to comprehend due to the mass of detail. As a consequence, a factor analysis was conducted on the sub-scale score variables on each dimension.

In summary, the results of the data analysis procedures employed indicate that each dimension of attitudes, values, and beliefs has clearly identifiable groups of variables that correlate with each other to form principal component factors. These principal component factors were subjected to one-way analysis of variance procedures to determine whether or not the independent demographic variables had any impact upon these principal component variables. For the most part, the independent variables did not appear to have an enormous impact on the attitudes, values, and beliefs of the subjects since there were relatively few significant differences between the groups of subjects grouped according to levels on the independent variables. Despite the general trend toward no significant differences, there were significant differences between the groups on at least one
factor of most of the dimensions of attitudes, values, and beliefs. The results of the ANOVAs are summarized in Table 35.

These results are interpreted in the following discussion, and recommendations for further research are suggested.
Table 35

Summary of Significant Differences on Dimensions of Attitudes, Values, and Beliefs

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Education</th>
<th>Work Experience</th>
<th>Population Size</th>
<th>Supervision Time</th>
<th>Effectiveness</th>
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<tbody>
<tr>
<td>1. Attitudes towards disabled persons</td>
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<td>2. Self-efficacy</td>
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<td>. General</td>
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<td>3. Locus of control</td>
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<td>. Chance</td>
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<td>4. Task specific self-efficacy</td>
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<td>5. Work values</td>
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<td>. External working conditions</td>
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<td>. Rewards</td>
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<td>6. Self-concept</td>
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<td>. Family and moral identification</td>
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<td>. Self-identity</td>
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<td>. Moral self</td>
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<td>7. Job satisfaction</td>
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<td>. Work skills and intrinsic rewards</td>
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<td>. Supervision and recognition</td>
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<td>. Social values of work</td>
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<td>. Extrinsic rewards</td>
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<td>8. Quality of life</td>
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<td>. Work</td>
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<td>. Health and family</td>
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<td>. Individual/personal</td>
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CHAPTER 6
DISCUSSION

The results of this study provide some illumination and confirmation of certain elements of the dimensions of attitudes, values, and beliefs that are relevant to rehabilitation work with persons with disabilities. Given the preliminary and exploratory nature of the research, there is a danger in over-interpreting the results or assigning significance beyond which the results suggest. As a consequence, this discussion is limited to those specific results where significant differences were observed.

Confirmation of Instrumentation and Representativeness

In general, the results were very much as expected. The attitudes towards disabled persons, self-efficacy, and locus of control factors aligned themselves fairly independently. In those dimensions where inter-relatedness was expected, the principal component factors were composed of sub-scale variables from the work values, job satisfaction, and quality of life dimensions.

As discussed in the previous chapter, in order to maximize attention to the dimensions of attitudes, values, and beliefs that emerged in the review of the literature, it was decided to factor analyze the variables associated with each dimension independently. This series of factor analyses produced confirmatory results in the sense that it illustrated the interdependence of the sub-scale score variables in each dimension. Further, the interdependence or interrelatedness of the dimensions of job satisfaction, work values, and the work-related aspects of the quality of life dimension was confirmed. This is not surprising since the instruments used to measure these dimensions of attitudes, values, and beliefs were based upon the Super model of vocational motivation and reward (Super, 1980, 1981; Super & Nevill, 1984).
The results of the factor analysis of locus of control and self-efficacy were also as expected. Since these dimensions have been conceptualized as two and three dimensional constructs, it is reasonable to expect that one of the sub-scale variables would emerge as a principal component factor. With respect to the task specific self-efficacy dimension, the two principal component factors aligned themselves as would be expected. Human relations, advocacy service planning, and communication can be conceived as "social" components of the tasks related to this type of work. Personal care and teaching, although also social in nature, have specific instrumental or behavioural elements and it is reasonable to expect that these would emerge as the second of two principal component factors (Rooney & Osipow, 1992).

The factor analysis of the work values variables also produced principal component factors that could be easily conceptualized. In most cases, each principal component was composed of variables that had an easily recognizable common theme that united the specific sub-scale variables.

The same could be said of the factor analysis of the self-concept variables. However, the unifying theme of the primary factor was less easily identified. The factor consisted of physical identification, physical behaviour, physical satisfaction, social identification, social satisfaction, and personal satisfaction identification. A factor consisting of social, physical, and personal elements as well as satisfaction, identification, and behaviour is difficult to conceptualize and, hence, somewhat challenging in terms of interpretation. It is, perhaps, safe to conclude that this primary factor of self-concept is a pervasive and comprehensive aspect of self-concept that probably represents the range and diversity of the individual's beliefs about self. For the purposes of discussion, it has been labelled "external personal self".
The remaining three principal factors of self-concept are much narrower in scope and easier to conceptualize. The second principal component factor refers to the elements of family and morality in terms of behaviour and satisfaction and appears to represent those aspects of self that include references to others or the "social self". Another of the self-concept principal components appears to represent the ideas of self that derive from identification of "family and morality". The remaining factor consists of self-criticism and moral identification and suggests that moral identification is closely related to the degree of self-criticism.

The factor analysis of the job satisfaction variables presents a similar pattern of interpretation. The primary factor consists of eleven sub-scale variables that are difficult to conceptualize into a single construct. Again, a reasonable conclusion would be that this factor represents the scope or breadth of one's values and beliefs about the reinforcing qualities of serving persons with disabilities. The remaining three factors align themselves into easily identifiable constructs. One clearly represents the rewarding social elements of supervision, recognition, and organizational policies and practices. Another factor is concerned with achievement, moral value, social service working conditions, and relations with co-workers. Although not quite as easily identified, it can be concluded that this factor is concerned with the altruistic value of the work performed. The final factor is clearly related to extrinsic rewards such as compensation, security, and advancement. Again, those factors are closely aligned with the Super model (Macnab, Fitzsimmons, & Casserly, 1992; Super, 1980; Super & Nevill, 1984; & Weiss, et al., 1967), and the results can be considered confirmatory of the model and the instruments, and the subjects as being representative of the general population.

These results are considered confirmatory of the validity of the instrumentation, which is an important aspect of the study. Perhaps more critically, the factor analysis also accomplished the objective of reducing the
number of dependent variables to a more manageable number. (See Table 36 in Appendix A).

**Impact of the Independent Variables Upon Specific Dimensions of Attitudes, Values, and Beliefs**

The reduction of the 83 dependent variables through the use of factor analysis was successful and produced reasonably predictable and confirmatory results. This allowed for more easily managed and discussed results in terms of testing for significant differences between the means of subjects and different levels of the five independent variables.

It should be noted that this data reduction also resulted in a substantial loss in terms of detail and specificity regarding the impact of the independent variables. With the data being reduced into principal factors comprised of subscale variables grouped according to the degree of inter-correlations, the impact of the principal factors on the dimensions is generalized and, therefore, less pronounced. As a result, there are fewer significant differences between the groups. This effect was also compounded by the adoption of the Scheffé post-hoc procedure. This procedure was adopted to locate or identify the specific significant differences and is considered the most conservative of the post-hoc procedures (Norusis, 1993). The effect of adopting such a conservative test of significance is a reduction in the number of differences considered to be significant, but an increase in the confidence of the conclusions regarding the significance of the differences. In many cases, the omnibus F was significant at alpha <.05; however, no significant differences between the groups were identified when the Scheffé procedure was applied. As noted in the results discussion, only those differences considered significant with the Scheffé procedure were reported.
In general, the impact of the various independent demographic variables was not as pronounced as anticipated. Despite fewer significant differences than might be expected, those differences that were significant serve to confirm that the independent variables do, in fact, impact the attitudes, values, and beliefs of the workers in significant ways. Considering the data reduction procedure employed, the conservative post-hoc testing, and the existence of some significant differences for all independent variables on most dimensions of attitudes, values and beliefs; it is safe to conclude that the various independent variables do influence the attitudes, values, and beliefs of workers in this field.

While considerable specificity is lost, it is still possible to describe the impacts of the demographic variables on these dimensions in some detail.

**Level of Education**

The education level of the worker appears to generally have a fairly significant impact upon attitudes, values, and beliefs.

It was reasonable to expect that attitudes towards disabled people would be impacted by education levels, since education is presumed to enhance acceptance and tolerance. The fact that there were no significant differences suggests that education does not affect these attitudes. This surprising conclusion is consistent with the findings of the authors of the instrument (Yuker & Block, 1986) and the work of Vargo and Semple (1984) in assessing attitudes towards disabled persons in various helping professions.

Level of education also impacts general self-efficacy, as evidenced by the significant differences between those with less than high school and those with a high school diploma. This result is consistent with expectations, although it is less pronounced than expected at the upper levels of education. One might have
expected that as level of career education increases, so would beliefs about one's efficacy. The results did not support such a suggestion. This could be explained by the speculation that beliefs about one's efficacy are lower at the lower level of education but are not significantly higher at higher levels of career education.

Beliefs about a worker's ability to control or influence the future as measured by the locus of control instrument do not appear to be affected by level of education. One conclusion could be that education does not impact these beliefs. However, considering that there were no significant differences on any of the independent variables on this dimension of attitudes, values, and beliefs, another conclusion is plausible. It may be that this particular instrument is not sensitive enough to detect differences in responses between subjects at different levels of education and there is some support for this conclusion in the literature (Lefcourt, 1991; Levenson, 1981).

As expected, level of education appears to influence beliefs about task specific self-efficacy. Some of the tasks associated with serving persons with disabilities are related to specific education and training and are not likely to be acquired incidentally. Of specific note is the ability to design effective individualized service, communication, and instructional programs and advocacy competence. Not surprisingly, subjects at lower levels of education displayed considerably lower beliefs about their efficacy in these areas. As with general self-efficacy, the differences in these aspects of task specific self-efficacy are significant at lower levels of education but not at the higher levels. The same rationale that explains the differences in self-efficacy at various levels of education likely applies as an explanation in terms of task specific self-efficacy. Individuals at lower levels of education have lower expectations about their efficacy on specific tasks while individuals with higher levels of education believe that they are more effective on specific tasks associated with serving persons with disabilities. There is one further observation that bears noting. It is observed
that there were no significant differences between the groups in terms of teaching self-efficacy. In other words, despite teaching appearing to consist of specific skills that are generally acquired through advanced levels of education and training, the subjects did not display significant differences in beliefs about their teaching efficacy across levels of education. While there was a trend in the means in the expected direction, the differences were not significant. No explanation is readily apparent.

**Amount of Work Experience**

As with level of education, the amount of work experience appeared to influence several dimensions of attitudes, values, and beliefs. Attitudes towards disabled persons, interpersonal interactions aspects of task specific self-efficacy, external working conditions, and physical elements of work values, self-identity aspects of self-concept, and work skills and intrinsic reward aspects of job satisfaction were specifically influenced.

The fact that there were no significant differences in terms of self-efficacy is somewhat surprising, since it is logical to expect that experience would give rise to beliefs regarding competence. On the other hand, since there was only one significant difference on the demographic variables, it may be safe to conclude that self-efficacy is not influenced by such variables. Of course, an alternate explanation could be that the instrument is not sensitive enough to detect variations on the basis of work experience. Further specific research is warranted.

Amount of work experience appears to influence the workers' beliefs about their effectiveness in interpersonal interactions. This is reasonable since more experience with clients and more familiarity with role expectations would produce a degree of comfort that less experienced workers would not enjoy, and this would be most evident in the personalized interactions between staff and clients.
In terms of work values, experience appears to influence two aspects; external working conditions and physical elements. The less experienced workers appear to value these aspects more highly than experienced workers. It is suggested that these aspects are the most easily mastered and are, therefore, important to workers of minimal experience. Workers with greater experience are likely to be challenged and concerned with the more demanding social and extrinsic aspects of their work.

This explanation also appears to be relevant to the influence of experience on the work skills and intrinsic elements of job satisfaction. Again, inexperienced workers are more oriented towards these aspects of job satisfaction for, likely, the same reasons as noted above. This similarity is considered to be further confirmation of the inter-correlations between work values and job satisfaction and the validity of instruments employed.

Level of Population

Another question posed by this research involved the impact of the size of community in which the subject lived and worked. No specific direction of the impact was hypothesized. As with education level, it appears that size of community does have an impact upon attitudes, beliefs, and values. There were relatively few significant differences between the groups at various levels of population. However, the fact that there were some significant differences noted suggests that population has some bearing on attitudes, values, and beliefs of workers.

Locus of control was one dimension affected by population. It appears that subjects living and working in middle-sized communities (3,000-10,000) had fewer beliefs that their future was controlled by powerful others than did those from larger communities. This particular result is somewhat difficult to explain in the
absence of other research that examines locus of control and population. However, it could be argued that individuals in smaller communities believe that they can more easily communicate their wants and needs to others who are in a position to assist and that they can more easily locate ways and means to meet their needs. Hence, they believe that they can influence the systems in which they operate, whereas individuals from the larger urban centres believe they have lesser influence on the larger system of which they are a part.

Work values do not appear to be significantly impacted by population except for two notable exceptions. Workers from the large urban centres (more than 500,000) were significantly more valuing of the social elements of work; including social relations, social integration, cultural identification, and working conditions. Perhaps in larger urban centres there is greater threat to these aspects of work than in smaller settings, and hence, the subjects value them more. It could also be argued that workers from large urban settings have less of a sense of community and rely more on the work setting to serve this function. This research does not provide any support for either explanation and further research is warranted in this regard.

The second aspect of work values that was significantly different was also noted in subjects from the large urban centres. These subjects were significantly less interested in the physical aspects of work. It would appear that urban workers are less oriented to physical activity, physical prowess, and variety. In the absence of previous research, it is difficult to explain this result. It could be argued that urban centres, because of the numbers of inhabitants, create a premium upon social skills and relations. Hence, the inhabitants value these components of their employment since work is a major aspect of life in the urban community. Alternately, subjects from smaller communities may have much easier access to others in the community and, therefore, social skills and relations are not quite as critical in such communities.
Given the apparent influence of population on locus of control and work values, it is logical to expect population to affect self-concept, since it is reasonable to expect that beliefs about one's ability to influence future events would form a significant part of one's self-concept. Surprisingly, the literature on locus of control does not support this conclusion. The results of this analysis are consistent with the locus of control literature since there were no significant differences between the subjects from different population levels on any of the self-concept factors. One conclusion might be that self-concept is not impacted by population. However, there is another conclusion that is supported, to some degree, in the literature. The literature on self-concept measurement is notorious for its examples of failure-to-replicate research that illustrate changes to self-concept. It has been suggested that either self-concept is a rather stable, static construct or that the measures of self-concept are unreliable or insensitive to variations (Roid & Fitts, 1991). The second explanation could, in fact, be the case in this study.

Unlike self-concept, job satisfaction is a dimension of attitudes, values, and beliefs that appears to be affected by population. As noted, in the discussion of work values and population, the subjects from the large urban centres (over 500,000) appeared to value the social elements of work. The same subjects were significantly more satisfied by the human and technical aspects of supervision and social recognition than subjects from communities of less than 3,000.

Further, the subjects from the large centres are significantly more satisfied by the achievement, moral value, social service, and social status elements of work. This is consistent with the trend found in work values. A third aspect of job satisfaction that was significantly influenced by population was compensation, security, and advancement. It could be concluded that subjects from the smaller population centres were less satisfied with these aspects. However, it is possibly more reasonable to conclude that these elements are more critical in the larger
centres where organizations may attend more closely to these elements of work. This conclusion would be based upon the notion that compensation, security, and advancement are well established and more stable in smaller communities while in larger communities there is more opportunity for mobility and, hence, such elements become more important.

The results of the analysis of quality of life and population indicated that population did not appear to influence the workers’ belief in what constitutes quality of life. This result is consistent with the notion that quality of life is a fairly stable, fundamental construct that varies little across personal situations (Evans & Cope, 1989).

**Supervision Time**

The amount of time spent with the work supervisor was another independent variable that was speculated to have an impact upon the worker’s attitudes, values, and beliefs. While there was no previous research in this type of work to suggest this relationship, it appeared to be a reasonable position. However, the results of the data analysis of this independent variable did not support this hypothesis. There was only one aspect of job satisfaction where there was a significant difference between the groups at different levels of time with supervisor. The subjects who spent less than five minutes per week were significantly less satisfied with beliefs about achievement, recognition, organizational policies and practices, and supervision than workers who received more supervisory time. This result is understandable since the supervisor is a primary source of reference about achievement, recognition, organizational policies and practices, and primary elements of supervision. The finding is consistent with the Super theory (Super, 1970; 1980) and with the authors of the measurement instrument (Weiss, et al.; 1967).
The absence of more confirmatory results is of greater importance. If supervision time is critical to these elements of job satisfaction that are closely related to supervisory time, why aren't more aspects of job satisfaction impacted by supervision? Closer inspection of the data suggests that, in general, workers spend a very limited amount of time with their supervisor. As noted in Table 4, 81.4% of the subjects spend less than 15 minutes per week with their supervisor. This would appear to suggest that the workers have limited opportunities to discuss client, organizational, and personal issues. It could be concluded that supervision time does not influence attitudes, values, and beliefs because the amount of supervision time is so minimal.

Further, the present research does not address issues about the nature and quality of supervision. It may be that amount of supervision time is not the critical variable but, rather, nature and quality of supervision is what is important. It would appear that further research in this regard is warranted.

Effectiveness

The analysis of the relationship between worker effectiveness and the various dimensions of attitudes, values, and beliefs yielded some very interesting results. Since the direction of the relationship between attitudes, values, and beliefs was unclear, it was premature to hypothesize about whether effectiveness influenced attitudes, values, and beliefs or whether the reverse occurs. This research was designed to simply investigate whether a relationship existed rather than describe the nature of the relationship.

In general, there were few significant differences between the subjects grouped on levels of effectiveness on the various dimensions of attitudes, values, and beliefs. The only significant differences between the subjects at different levels of effectiveness were in terms of work values associated with physical
aspects of work, self-concept as it relates to self-criticism and moral identification, job satisfaction in terms of social rewards, and quality of life in terms of health and family issues. The fact that there were some differences suggests that the basis for speculation has some validity but requires considerably more detailed study before directional hypotheses can be evaluated.

In addition, some of the more interesting results consist of situations where there were no significant differences between the subjects at various levels of effectiveness. Of particular note is that there were no significant differences between the subjects in terms of attitudes towards disabled persons. One explanation could be that no differences exist and this may be the case since all subjects may have fairly consistent positive attitudes towards their clients. Considering that there are few significant differences on this dimension, a second potential conclusion arises.

The instrument employed has been found to be sensitive and discriminative in research with occupational therapy students (Vargo & Semple, 1984) and police, lawyers, and mental health professionals (Yuker, 1966). It has also been criticized for its insensitivity and fakeability (Vargo, Vargo & Semple, 1981; Yuker & Block, 1986). Much of this concern has been attributed to the unidimensionality of the instrument. As a consequence, the lack of significant differences between subjects at different levels of effectiveness in terms of attitudes towards disabled people could be attributed to a lack of sensitivity in the instrument to detect variations in attitudes towards disabled people. It would seem that this particular issue requires more attention and further research before sound conclusions are possible.

Another somewhat surprising result, where there were no significant differences between the groups, involved task specific self-efficacy. It would seem reasonable to expect that beliefs about one's efficacy in terms of the tasks
associated with work would be impacted by the worker's rating of effectiveness. The results did not support this speculation. The fact that the omnibus F was significant, yet Scheffe's post-hoc procedure did not identify significant difference, suggests that there is a trend in the direction of this premise. Again, the instrumentation employed may not be sensitive enough to measure variations on these dimensions.

Further, it could be that the nature of the relationships between the ratings of effectiveness and task specific self-efficacy is sufficiently complex and interrelated so as to make it difficult for all but the most extreme differences to be considered significant.

Support for the notion of the complex interrelationships between effectiveness and task specific self-efficacy is found in the results of the analysis of the differences on the job satisfaction dimension. Only one significant difference was identified. Highly effective workers had significantly lower general satisfaction and were less satisfied with recognition, supervision, and organizational policies and practices. Logic would suggest the reverse. This paradox suggests the complexity of the relationships between attitudes, values, and beliefs and effectiveness.

The elements of work values that concern physical activities, physical prowess, and variety also displayed a significant difference between the groups. Less effective workers were more oriented toward these aspects of the work than the more effective workers. The result is fairly reasonable if one accepts the assumption that physical activities are less complex, easier, and require less skill and training. Less effective workers would be more oriented to such aspects of the work, whereas more effective workers would be interested and challenged by the more complex technical and social aspects of serving persons with disabilities.
It could also be argued that less effective workers were oriented to these elements of work because of greater probability of success.

The results of the analysis of effectiveness and job satisfaction were similar to those of the analysis of work values. The highly effective workers were significantly less positive in terms of general satisfaction and social rewards associated with this work. This might be considered surprising since it was speculated that more effective workers would value and be challenged by the social and technical aspects of this work. While this may be valid, it is also possible that effective workers believe that their efforts are not recognized by the supervisors and the organization. Hence, they value the challenge but are dissatisfied with the recognition of their efforts.

Quality of life also presented a similar pattern, with all but one factor appearing to be unrelated to effectiveness. Specifically, the factor consisting of occupational relations, job satisfaction, and job characteristics appeared to be related to effectiveness. The minimally effective workers were significantly more oriented towards these aspects of their lives than the more effective workers. Hence, it appears that the more effective workers valued other, more challenging, aspects of the work while the less effective workers believed these elements of work to be important.

It should be noted that the pattern or trend in these results is logical and predictable to some degree. However, the large number of no significant differences, given the interrelationship between the dimensions, is suggestive of the complexity of the relationship between effectiveness and attitudes, values, and beliefs. It could, of course, simply be suggestive of a weak relationship and will require further more specific research to produce more definitive conclusions.
One final comment regarding the relationship between effectiveness and attitudes, values, and beliefs is needed. It is safe to conclude that there is some relationship here and that more research is needed in order to arrive at more detailed descriptions and conclusions. However, inspection of the distribution of subjects in each level of effectiveness raises concern. Only three out of 221 (1.4%) of the subjects were rated as inadequate. Only 15 (6.8%) were minimally effective. There were 118 (53.4%) subjects rated as highly effective. The research methodology failed to control for equal numbers of subjects at each level of effectiveness. This is defensible as it relates to an attempt to obtain a sample that represents the total population of workers serving persons with disabilities, it raises serious questions regarding the conclusions associated with differences between levels of effectiveness. Although such differences in sample size at each level do not completely invalidate the study's results, caution is paramount. Further research is an absolute necessity before more definitive statements and conclusions are possible.

In summary, the results of the analysis of variance of the independent variables suggested evidence of significant impact on most dimensions of attitudes, values, and beliefs. Despite the observation that there were relatively few significant differences between the groups, the existence of at least one or two significant differences on each independent and dependent variable is suggestive of the validity of the basic premises. It is recognized that the number of significant differences is reduced as a result of limiting the analysis to only those factors derived from a factor analysis of each dimension and inspection of the detailed analysis of variance of all 83 sub-scale variables suggests considerably greater numbers of significant differences. However, a consideration of such comprehensive and detailed analysis would be cumbersome and beyond the limits of this discussion.
The results of the data analysis have been discussed in terms of the
relationships between the dimensions of attitudes, values, and beliefs and the five
independent variables. What is now needed is an examination of the results in
terms of recommendations for further research. As noted in the discussion of the
research design and objectives, it is envisioned that the results will be of interest
to post-secondary education in human service personnel preparation programs and
employment practices in organizations serving persons with disabilities. Given the
exploratory nature of the research, further research is necessary before these
results will have direct implications for education and employment practices.

Summary and Recommendations

The study was designed as an exploratory venture into an aspect of helping
practice that has historically been neglected or avoided. The study generated
sufficient evidence to support the general significance of attitudes, values, and
beliefs of personnel serving persons with disabilities. It also provided an
illumination of some of the more global constellations of relevant dimensions of
attitudes, values, and beliefs that may be useful for the design of curricula in
personnel preparation programs and for interviews, orientation, and supervision
practices.

The study also provided support for the significance of the demographic
variables of amount of work experience, level of education, size of population of
employment community, supervision time, and effectiveness. These results may
have implications for recruitment and interviewing of prospective employees, the
orientation of new employees, and specific directions and elements of ongoing
supervision dialogue.

While the study's results provide support for the significance of attitudes,
values, and beliefs in general, the significance is not universal to all specific
variables (or factors) of attitudes, values, and beliefs that were identified in the literature. It is unclear whether this is due to a lack of universality regarding these specific aspects of attitudes, values, and beliefs. The lack of universality could also be a function of limitations associated with the instrumentation employed. Further investigation in this regard is recommended.

The results also provide support for the impact of the demographic variables selected for study; however, the support for the significance of these variables is also not universal. The support is clear and evident for the impact of level of education, amount of work experience, and population size of employment community. Not all aspects appear to be significantly impacted; however, there are some principal factors that were significantly different at different levels of all five demographic variables. Of particular concern is the variable of supervisor time. A lack of significant differences suggest that supervisor time is not related to attitudes, values, and beliefs. A failure to control for equal distribution of subjects across supervision time groups resulted in disproportionate distribution in the two groups with minimal supervisor time. Such a distribution could contribute to the lack of significant differences. As a result, further research on this variable is recommended.

Another aspect of the research that suggests further research and analysis is in regards to the results that are based upon the factor analysis technique which was employed to reduce the number of specific elements of attitudes, values, and beliefs to be examined. This procedure is defensible given the exploratory nature of the study. Unfortunately, the data reduction procedure resulted in a significant loss in specificity in terms of identification of specific elements of attitudes, values, and beliefs, and their relationships with the demographic variables. Further research efforts could limit the number of dimensions of attitudes, values, and beliefs to be examined at one time. This would allow for more detailed analysis of specific aspects of any one dimension and a more detailed description of the
specific aspects of the particular dimension would be generated. It would also facilitate a more exacting measure of the impact of the demographic variables. It is hypothesized that a more precise focus on the elements of the dimensions of attitudes, values, and beliefs would yield an increase in the number of significant differences on the demographic variables. Further research that is limited and focused in this manner is recommended. The dimensions of attitudes, values, and beliefs that produced the most number of significant results were work values and job satisfaction. It is suggested that further research focus upon these two dimensions. These two dimensions should be investigated individually.

More specifically, future research into the dimension of work values should focus upon the sub-scale variables that are included the principle factors of external working conditions and physical aspects of work since these factors appeared to be most significant in terms of the demographic variables. The external working conditions factor consisted of the sub-scale scores on autonomy, lifestyle, creativity, variety, risk, and authority. The physical elements factor includes risk, physical prowess, and physical activities. It is suggested that future research specifically address these particular work values variables.

There is another observation that appears to be relevant to the results of this study. It is reasonable to expect that attitudes, values, and beliefs will vary according to the type of rehabilitation service setting and age of the clients served. It is suggested that further research includes comparisons of attitudes, values, and beliefs of personnel serving preschool-aged children with special needs, adults in residential programs, and adults in vocational service settings.

In terms of job satisfaction, the focus should be on the principal factors of supervision and recognition and social value of work. The supervision and recognition factor is comprised of general satisfaction, human and technical elements of supervision, recognition, and organizational policy and practice.
The social value of work factor is comprised of achievement, moral value, social service, working conditions, and co-worker relations. Independent study of this dimension should focus on these specific elements of job satisfaction.

Based upon this exploratory study, it is possible to summarize the results visually. This summary would be used to develop a hypothetical model for further research that would examine these results with a focus limited to one dimension at a time.

Such narrower focus to further research will enable a more detailed study of the specific dimensions which was not possible in this study as a result of the necessity of adapting the factor analysis data reduction procedure. It will also allow for independent replication of the dimensions examined in this study. Similar results would confirm these results and would address the issue of increased likelihood of Type I errors associated with large numbers of omnibus Fs and post-hoc multiple comparisons.

Further, it is suggested that, instead of treating the effectiveness ratings by the supervisors as an independent variable, effectiveness be considered as the dependent variable. In this case the hypothetical model would suggest that the demographic variables impact the various dimensions of attitudes, values, and beliefs which, in turn, impact effectiveness. The various dimensions of attitudes, values, and beliefs would be conceptualized as intervening variables which would impact behaviour in terms of effective practices.

This visual summary with the re-conceptualization of effectiveness is represented in figure 6 and could be considered as an emerging hypothetical model that could be tested in further research efforts. It is suggested that the testing of this emerging model be conducted one dimension at a time in order to
maximize detailed study of the dimension itself to reduce the likelihood of Type I errors.

In conclusion, this research has been successful in terms of generating an initial "portrait" of significant dimensions of attitudes, value, and beliefs relevant to serving persons with disabilities. The support for the significance of the impact of the demographics is not universal, but there are enough significant differences to warrant further research. These preliminary results have significant potential for application to post-secondary education and employment practices, however, further more specifically focused research is necessary before the potential can be realized. The combination of this initial investigation together more specific further research has the potential to significantly impact the lives of persons with disabilities and the personnel that provide services to them.
Figure 6

Demographic Variables  Dimensions of Attitudes, Values, and Beliefs

Independent  Intervening  Dependent

- Education Level
- Work Experience
- Population Size
- Supervision Time

- ATDP
- Self-efficacy
- Locus Of Control
- Task Specific Self-efficacy
- Effectiveness
- Work Values
- Self-concept
- Job Satisfaction
- Quality Of Life

Emerging Hypothetical Model
ABBREVIATIONS


Hales, L. W., & Fenner, B. J. (1973) Ohio work values inventory, Athens. OH.


Appendix A

Tables
Table 1

Distribution of Educational Level

<table>
<thead>
<tr>
<th>Education Level</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than high school</td>
<td>15</td>
<td>6.8%</td>
</tr>
<tr>
<td>High school diploma</td>
<td>19</td>
<td>8.6%</td>
</tr>
<tr>
<td>Some college or university</td>
<td>54</td>
<td>24.5%</td>
</tr>
<tr>
<td>College diploma</td>
<td>81</td>
<td>36.7%</td>
</tr>
<tr>
<td>University degree</td>
<td>51</td>
<td>23.1%</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>.5%</td>
</tr>
</tbody>
</table>
Table 2

Distribution of Work Experience

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than three months</td>
<td>8</td>
<td>3.6%</td>
</tr>
<tr>
<td>Between three months and one year</td>
<td>13</td>
<td>5.5%</td>
</tr>
<tr>
<td>More than one year but less than three</td>
<td>44</td>
<td>19.9%</td>
</tr>
<tr>
<td>More than three but less than six</td>
<td>51</td>
<td>23.1%</td>
</tr>
<tr>
<td>More than six years</td>
<td>105</td>
<td>47.5%</td>
</tr>
</tbody>
</table>
Table 3

**Distribution of Population of Employment Community**

<table>
<thead>
<tr>
<th>Category</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater than 500,000</td>
<td>64</td>
<td>29%</td>
</tr>
<tr>
<td>Between 50,000 and 500,000</td>
<td>63</td>
<td>28.5%</td>
</tr>
<tr>
<td>Between 10,000 and 50,000</td>
<td>33</td>
<td>14.9%</td>
</tr>
<tr>
<td>Between 3,000 and 10,000</td>
<td>40</td>
<td>18.1%</td>
</tr>
<tr>
<td>Less than 3,000</td>
<td>21</td>
<td>9.5%</td>
</tr>
</tbody>
</table>
Table 4

Distribution of Amount of Supervision Time

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 minutes per week</td>
<td>110</td>
<td>49.8%</td>
</tr>
<tr>
<td>Between 5 and 15 minutes per week</td>
<td>70</td>
<td>31.7%</td>
</tr>
<tr>
<td>Between 15 and 30 minutes per week</td>
<td>19</td>
<td>8.6%</td>
</tr>
<tr>
<td>More than 30 minutes per week</td>
<td>22</td>
<td>10.05%</td>
</tr>
</tbody>
</table>
Table 5

Instrumentation

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Locus of control</td>
<td>Internality, Powerful Others, and Chance Scales (Levenson, 1981)</td>
</tr>
<tr>
<td>2. Self-efficacy</td>
<td>General Self-Efficacy Scale (Sherer, et al., 1982)</td>
</tr>
<tr>
<td>3. Task specific self-efficacy</td>
<td>Task specific Self-Efficacy Scale (Ford, 1990)</td>
</tr>
<tr>
<td>4. Attitudes towards disabled persons</td>
<td>Attitudes Toward Disabled People (Yuker, Bloch, &amp; Young, 1986)</td>
</tr>
<tr>
<td>5. Work values</td>
<td>Life Roles Inventory Values Scale (Macnab, Fitzsimmons, &amp; Casserly, 1992)</td>
</tr>
<tr>
<td>8. Quality of life</td>
<td>Quality of Life Questionnaire (Evans &amp; Cope, 1990)</td>
</tr>
</tbody>
</table>
Table 6

**Factor Analysis of Task Specific Self-efficacy**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Communality</th>
<th>Factor</th>
<th>Eigenvalue</th>
<th>Pct of Var</th>
<th>Cum Pct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advocacy</td>
<td>.53927</td>
<td>1</td>
<td>2.63874</td>
<td>44.0</td>
<td>44.0</td>
</tr>
<tr>
<td>Communication</td>
<td>.44390</td>
<td>2</td>
<td>1.23201</td>
<td>20.5</td>
<td>64.5</td>
</tr>
</tbody>
</table>

Varimax rotation 1 for extraction 1 in analysis 1 - Kaiser Normalization.
Varimax converged in 3 iterations.

**Rotated Factor Matrix**

<table>
<thead>
<tr>
<th>Interpersonal Skills</th>
<th>Physical Interaction Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advocacy</td>
<td>.73403</td>
</tr>
<tr>
<td>Communication</td>
<td>.64241</td>
</tr>
<tr>
<td>Human Relations</td>
<td>.77254</td>
</tr>
<tr>
<td>Service Planning</td>
<td>.66350</td>
</tr>
<tr>
<td>Personal Care</td>
<td>.89963</td>
</tr>
<tr>
<td>Teaching</td>
<td>.89687</td>
</tr>
</tbody>
</table>
Table 7

Factor Analysis of Work Values

<table>
<thead>
<tr>
<th>Variable</th>
<th>Communality</th>
<th>Factor</th>
<th>Eigenvalue</th>
<th>Pct of Var</th>
<th>Cum Pct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilization</td>
<td>.70255</td>
<td>1</td>
<td>7.65571</td>
<td>38.3</td>
<td>38.3</td>
</tr>
<tr>
<td>Achievement</td>
<td>.80341</td>
<td>2</td>
<td>1.68373</td>
<td>8.4</td>
<td>46.7</td>
</tr>
<tr>
<td>Advancement</td>
<td>.76097</td>
<td>3</td>
<td>1.50171</td>
<td>7.5</td>
<td>54.2</td>
</tr>
<tr>
<td>Aesthetic</td>
<td>.38931</td>
<td>4</td>
<td>1.41125</td>
<td>7.1</td>
<td>61.3</td>
</tr>
<tr>
<td>Altruism</td>
<td>.66999</td>
<td>5</td>
<td>1.13903</td>
<td>5.7</td>
<td>67.0</td>
</tr>
</tbody>
</table>

Varimax rotation 1 for extraction 1 in analysis 1 - Kaiser Normalization.
Varimax converged in 9 iterations.

Rotated Factor Matrix

<table>
<thead>
<tr>
<th>Working Conditions</th>
<th>Rewards</th>
<th>Meaningfulness of Work</th>
<th>Social Elements</th>
<th>Physical Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy</td>
<td>.79874</td>
<td>.81176</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifestyle</td>
<td>.79506</td>
<td>.76086</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creativity</td>
<td>.72848</td>
<td>.75236</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variety</td>
<td>.64416</td>
<td>.64612</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk</td>
<td>.57640</td>
<td>.52604</td>
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<td></td>
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<td>Authority</td>
<td>.53915</td>
<td>.78994</td>
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<td>.52884</td>
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<tr>
<td>Advancement</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Prestige</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Economic</td>
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<td>Achievement</td>
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</tr>
<tr>
<td>Altruism</td>
<td>.57011</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability Utilization</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Personal Development</td>
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<td></td>
</tr>
<tr>
<td>Aesthetic</td>
<td>.56854</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Relations</td>
<td>.57011</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural Identity</td>
<td>.56854</td>
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<td></td>
<td></td>
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<tr>
<td>Social Integration</td>
<td>.56854</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Working Conditions</td>
<td>.56854</td>
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<td></td>
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<tr>
<td>Physical Prowess</td>
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<tr>
<td>Physical Activities</td>
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187
Table 8

Factor Analysis of Self-concept

<table>
<thead>
<tr>
<th>Variable</th>
<th>Communality</th>
<th>Factor</th>
<th>Eigenvalue</th>
<th>Pct of Var</th>
<th>Cum Pct</th>
</tr>
</thead>
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<tr>
<td>Self-criticism</td>
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<td>6.10775</td>
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<td>38.2</td>
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<td>Physical Behaviour</td>
<td>.68658</td>
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<td>1.43151</td>
<td>8.9</td>
<td>47.1</td>
</tr>
<tr>
<td>Physical Identity</td>
<td>.54952</td>
<td>3</td>
<td>1.19969</td>
<td>7.5</td>
<td>54.6</td>
</tr>
<tr>
<td>Physical Satisfaction</td>
<td>.58160</td>
<td>4</td>
<td>1.05212</td>
<td>6.6</td>
<td>61.2</td>
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Varimax rotation 1 for extraction 1 in analysis 1 - Kaiser Normalization.
Varimax converged in 11 iterations.

Rotated Factor Matrix

<table>
<thead>
<tr>
<th></th>
<th>External</th>
<th>Personal</th>
<th>Internal</th>
<th>Family &amp; Morality</th>
<th>Self-Identity</th>
<th>Morality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Self</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Behaviour</td>
<td>.80296</td>
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<tr>
<td>Physical Satisfaction</td>
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Factor Analysis of Job Satisfaction

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Varimax rotation 1 for extraction 1 in analysis 1 - Kaiser Normalization. Varimax converged in 10 iterations.

Rotated Factor Matrix

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Table 10

Factor Analysis of Quality of Life

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<th>Eigenvalue</th>
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<th>Cum Pct</th>
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</thead>
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<td>Material Well Being</td>
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<td>1.78082</td>
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Varimax rotation 1 for extraction 1 in analysis 1 - Kaiser Normalization.
Varimax converged in 23 iterations.

Rotated Factor Matrix

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<th>Health &amp; Family Factors</th>
<th>Individual Factors</th>
<th>Concert. for Others</th>
<th>Group Membership</th>
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<tr>
<td>Material Well Being</td>
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<td>Creative Aesthetic Behaviour</td>
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<td>Personal Growth</td>
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# Table 11

## Factor Analysis of Effectiveness Ratings

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Varimax rotation 1 for extraction 1 in analysis 1 - Kaiser Normalization. Varimax converged in 5 iterations.

### Rotated Factor Matrix

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<th>Human Relations</th>
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Table 12

Analysis of Variance of Education Level and General Self-efficacy

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<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Prob</th>
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<td>1342.9199</td>
<td>335.7300</td>
<td>5.9453</td>
<td>.000</td>
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<td>12141.0668</td>
<td>56.4701</td>
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<td>Total</td>
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Multiple Range Tests: Scheffé test with significance level .05

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<th>Mean</th>
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<th>College Diploma</th>
<th>Some College</th>
<th>High School Grad.</th>
<th>No High School</th>
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* Denotes significant difference at .05 level.
### Table 13

#### Analysis of Variance of Education Level and Service Planning

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Multiple Range Tests: Scheffé test with significance level .05

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<th>High School Grad.</th>
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Analysis of Variance of Education Level and Communication Beliefs

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Multiple Range Tests: Scheffé test with significance level .05

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Table 15

Analysis of Variance of Education Level and Physical Elements of Work

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<th>F Prob</th>
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Multiple Range Tests: Scheffe test with significance level .05

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Table 16

Analysis of Variance of Education Level and Self-identity

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<th>Mean Squares</th>
<th>F Ratio</th>
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</thead>
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<tr>
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<td>4</td>
<td>14.9352</td>
<td>3.7338</td>
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<tr>
<td>Within Groups</td>
<td>215</td>
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<td>.9524</td>
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<td>Total</td>
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</table>

Multiple Range Tests: Scheffé test with significance level .05

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<th>University Degree</th>
<th>College Diploma</th>
<th>Some College</th>
<th>High School Grad.</th>
<th>No High School</th>
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Table 17

Analysis of Variance of Education Level and Value of Work

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<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Prob</th>
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</thead>
<tbody>
<tr>
<td>Between Groups</td>
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<td>14.1490</td>
<td>3.5372</td>
<td>3.7109</td>
<td>.006</td>
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<td>Within Groups</td>
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<td>.9532</td>
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Multiple Range Tests: Scheffé test with significance level .05

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<th>College Diploma</th>
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<th>High School Grad.</th>
<th>No High School</th>
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Table 18

Analysis of Variance of Work Experience and Attitudes Towards Disabled Persons

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<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Prob</th>
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<tr>
<td>Between Groups</td>
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<td>667.4977</td>
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<td>5.6443</td>
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</tr>
<tr>
<td>Within Groups</td>
<td>216</td>
<td>6386.0770</td>
<td>29.5652</td>
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</tr>
</tbody>
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Multiple Range Tests: Scheffé test with significance level .05

<table>
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<tr>
<th>Mean Work Experience</th>
<th>More than 6 years</th>
<th>Between 3 &amp; 6 years</th>
<th>Between 1 &amp; 3 years</th>
<th>Between 3 months &amp; 1 year</th>
<th>Less than 3 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>38.5587</td>
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<tr>
<td>39.1895</td>
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<tr>
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<td>Between 3 months &amp; 1 year</td>
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Table 19

Analysis of Variance of Work Experience and Interpersonal Interactions

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<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Prob</th>
</tr>
</thead>
<tbody>
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<td>16.5623</td>
<td>4.1406</td>
<td>4.3962</td>
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<td>216</td>
<td>203.4377</td>
<td>.9418</td>
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Multiple Range Tests: Scheffé test with significance level .05

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<th>Mean Work Experience</th>
<th>More than 6 years</th>
<th>Between 3 &amp; 6 years</th>
<th>Between 1 &amp; 3 years</th>
<th>Between 3 months &amp; 1 year</th>
<th>Less than 3 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>.1713</td>
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<td>*</td>
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<tr>
<td>-.0678</td>
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<tr>
<td>-.0500</td>
<td>Between 1 &amp; 3 years</td>
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<td></td>
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<td>*</td>
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<tr>
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<td>Between 3 months &amp; 1 year</td>
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Table 20

Analysis of Variance of Work Experience and External Working Conditions

<table>
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<th>Sum of Squares</th>
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<th>F Ratio</th>
<th>F Prob</th>
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<tbody>
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<td>.9504</td>
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Multiple Range Tests: Scheffé test with significance level .05

<table>
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<th>Mean Work Experience</th>
<th>More than 6 years</th>
<th>Between 3 &amp; 6 years</th>
<th>Between 1 &amp; 3 years</th>
<th>Between 3 months &amp; 1 year</th>
<th>Less than 3 months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>.0421</td>
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<tr>
<td>-.4198</td>
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Table 21

Analysis of Variance of Work Experience and Physical Elements of Work

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<th>F Ratio</th>
<th>F Prob</th>
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<td>3.5100</td>
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<td>Within Groups</td>
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Multiple Range Tests: Scheffé test with significance level .05

<table>
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<th>Mean Work Experience</th>
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<th>Between 3 &amp; 6 years</th>
<th>Between 1 &amp; 3 years</th>
<th>Between 3 months &amp; 1 year</th>
<th>Less than 3 months</th>
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</thead>
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<td>-.0330</td>
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<td>.7188</td>
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Table 22

Analysis of Variance of Work Experience and Self-identity

<table>
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<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Prob</th>
</tr>
</thead>
<tbody>
<tr>
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<td>15.1688</td>
<td>3.7872</td>
<td>3.9933</td>
<td>.003</td>
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<td>216</td>
<td>204.8512</td>
<td>.9484</td>
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Multiple Range Tests: Scheffé test with significance level .05

<table>
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<th>Mean Work Experience</th>
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<th>Between 3 &amp; 6 years</th>
<th>Between 1 &amp; 3 years</th>
<th>Between 3 months &amp; 1 year</th>
<th>Less than 3 months</th>
</tr>
</thead>
<tbody>
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Table 23

**Analysis of Variance of Work Experience and Work Skills and Intrinsic Rewards**

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<th>F Ratio</th>
<th>F Prob</th>
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</thead>
<tbody>
<tr>
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<td>13.5298</td>
<td>3.3825</td>
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<td>206.4702</td>
<td>.9559</td>
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Multiple Range Tests: Scheffé test with significance level .05

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<th>Mean Work Experience</th>
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<th>Between 3 &amp; 6 years</th>
<th>Between 1 &amp; 3 years</th>
<th>Between 3 months &amp; 1 year</th>
<th>Less than 3 months</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
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<td>-.2404</td>
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<td>Between 3 &amp; 6 years</td>
</tr>
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<td>Between 1 &amp; 3 years</td>
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<tr>
<td>-.5170</td>
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### Table 24

**Analysis of Variance of Population Level and Powerful Others**

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<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Prob</th>
</tr>
</thead>
<tbody>
<tr>
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<td>1834.2758</td>
<td>458.5689</td>
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<td>Within Groups</td>
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<td>35497.2287</td>
<td>164.3390</td>
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</table>

Multiple Range Tests: Scheffé test with significance level .05

<table>
<thead>
<tr>
<th>Mean</th>
<th>Pop. Level</th>
<th>between 3,000 &amp; 10,000</th>
<th>between 10,000 &amp; 50,000</th>
<th>between 50,000 &amp; &gt; 500,000</th>
</tr>
</thead>
<tbody>
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<td></td>
</tr>
<tr>
<td></td>
<td>3,000 &amp; 10,000</td>
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<tr>
<td>15.8333</td>
<td>between</td>
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<td>*</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>10,000 &amp; 50,000</td>
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<td>14.0873</td>
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<td></td>
<td>50,000 &amp; 500,000</td>
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<tr>
<td>9.6484</td>
<td>&gt; 500,000</td>
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Table 25

**Analysis of Variance of Population and External Work Values**

<table>
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<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>4</td>
<td>9.2077</td>
<td>2.3019</td>
<td>2.3588</td>
<td>.050</td>
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<td>Within Groups</td>
<td>216</td>
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<td>.9759</td>
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<td>Total</td>
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</tbody>
</table>

Multiple Range Tests: Scheffé test with significance level .05

<table>
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<tr>
<th>Mean</th>
<th>Pop. Level</th>
<th>between 3,000 &amp; 10,000</th>
<th>between 10,000 &amp; 50,000</th>
<th>between 50,000 &amp; 500,000</th>
<th>&gt; 500,000</th>
</tr>
</thead>
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</tbody>
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Table 26

Analysis of Variance of Population and Physical Work Values

<table>
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<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>4</td>
<td>11.6172</td>
<td>2.9043</td>
<td>3.0105</td>
<td>.019</td>
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<td>Within Groups</td>
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<td>.9647</td>
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</tbody>
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Multiple Range Tests: Scheffé test with significance level .05

<table>
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<tr>
<th>Mean</th>
<th>Pop. Level</th>
<th>between 3,000 &amp; 10,000</th>
<th>between 10,000 &amp; 50,000</th>
<th>between 50,000 &amp; 500,000</th>
<th>&gt; 500,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>.4418</td>
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<td></td>
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<tr>
<td>-.0117</td>
<td>between 3,000 &amp; 10,000</td>
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<td>.1056</td>
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<tr>
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<td>between 50,000 &amp; 500,000</td>
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<tr>
<td>-.3117</td>
<td>&gt; 500,000</td>
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</table>
Table 27

Analysis of Variance of Population and Supervision and Recognition

<table>
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<tr>
<th>Source</th>
<th>D.F.</th>
<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>4</td>
<td>10.1164</td>
<td>2.5291</td>
<td>2.6028</td>
<td>.037</td>
</tr>
<tr>
<td>Within Groups</td>
<td>216</td>
<td>209.8836</td>
<td>.9717</td>
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<td></td>
</tr>
<tr>
<td>Total</td>
<td>220</td>
<td>220.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Multiple Range Tests: Scheffé test with significance level .05

<table>
<thead>
<tr>
<th>Mean Pop. Level</th>
<th>&lt; 3,000</th>
<th>10,000</th>
<th>50,000</th>
<th>500,000</th>
<th>&gt; 500,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>.5220</td>
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<td>*</td>
<td>*</td>
<td>*</td>
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Table 28

Analysis of Variance of Population and Value of Work

<table>
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<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Prob</th>
</tr>
</thead>
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<td>Between Groups</td>
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<td>10.4410</td>
<td>2.6193</td>
<td>2.6905</td>
<td>.032</td>
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<tr>
<td>Within Groups</td>
<td>216</td>
<td>209.5590</td>
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<td>Total</td>
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<td>.9702</td>
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Multiple Range Tests: Scheffé test with significance level .05

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<th>Pop. Level</th>
<th>between 3,000 &amp; 10,000</th>
<th>between 10,000 &amp; 50,000</th>
<th>between 50,000 &amp; 500,000</th>
<th>&gt; 500,000</th>
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<td>.0996</td>
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<td>3,000 &amp; 10,000</td>
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<td>between</td>
<td>10,000 &amp; 50,000</td>
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<tr>
<td>.0463</td>
<td>between</td>
<td>50,000 &amp; 500,000</td>
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<tr>
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Table 29

Analysis of Variance of Population and Extrinsic Rewards

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<th>D.F.</th>
<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
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<td>12.8926</td>
<td>3.2232</td>
<td>3.3615</td>
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<td>216</td>
<td>207.1074</td>
<td>.9588</td>
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<td>Total</td>
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<td>220.0000</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Multiple Range Tests: Scheffé test with significance level .05

<table>
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<tr>
<th>Mean Pop. Level</th>
<th>&lt; 3,000</th>
<th>10,000</th>
<th>50,000</th>
<th>500,000</th>
<th>&gt; 500,000</th>
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</thead>
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<tr>
<td></td>
<td>10,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.0037</td>
<td>between</td>
<td>10,000 &amp;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>50,000</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-.2207</td>
<td>between</td>
<td>50,000 &amp;</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>500,000</td>
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Table 30

Analysis of Variance of Supervisor Time
and Supervision and Recognition

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<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3</td>
<td>10.3987</td>
<td>3.4662</td>
<td>3.5886</td>
<td>.014</td>
</tr>
<tr>
<td>Within Groups</td>
<td>217</td>
<td>209.6013</td>
<td>.9659</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>220</td>
<td>220.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
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Multiple Range Tests: Scheffé test with significance level .05

<table>
<thead>
<tr>
<th>Mean</th>
<th>Sup. Rate</th>
<th>&gt; 30 minutes per week</th>
<th>between 15-30 minutes per week</th>
<th>between 5-15 minutes per week</th>
<th>&lt; 15 minutes per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>.0771</td>
<td>&gt; 30 minutes per week</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.0434</td>
<td>between 15-30 minutes per week</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-.7813</td>
<td>between 5-15 minutes per week</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-.3563</td>
<td>&lt; 15 minutes per week</td>
<td></td>
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Table 31

Analysis of Variance of Effectiveness and Physical Elements

<table>
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<th>Source</th>
<th>D.F.</th>
<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3</td>
<td>9.3487</td>
<td>3.1162</td>
<td>3.2102</td>
<td>.023</td>
</tr>
<tr>
<td>Within Groups</td>
<td>217</td>
<td>210.6513</td>
<td>.9707</td>
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<td></td>
</tr>
<tr>
<td>Total</td>
<td>220</td>
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<td></td>
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</table>

Multiple Range Tests: Scheffé test with significance level .05

<table>
<thead>
<tr>
<th>Mean</th>
<th>Sup. Rate</th>
<th>Highly Effective</th>
<th>Marginally Effective</th>
<th>Minimally Effective</th>
<th>Ineffective</th>
</tr>
</thead>
<tbody>
<tr>
<td>-.1664</td>
<td>Highly</td>
<td>Effective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.2234</td>
<td>Marginally</td>
<td>Effective</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>.1782</td>
<td>Minimally</td>
<td>Effective</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>-.6740</td>
<td>Ineffective</td>
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</tbody>
</table>
Table 32

Analysis of Variance of Effectiveness and Moral Self

<table>
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<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3</td>
<td>10.4013</td>
<td>3.4671</td>
<td>3.5895</td>
<td>.014</td>
</tr>
<tr>
<td>Within Groups</td>
<td>217</td>
<td>209.5987</td>
<td>.9659</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>220</td>
<td>220.0000</td>
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<td></td>
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</tbody>
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Multiple Range Tests: Scheffé test with significance level .05

<table>
<thead>
<tr>
<th>Mean</th>
<th>Sup. Rate</th>
<th>Highly Effective</th>
<th>Marginally Effective</th>
<th>Minimally Effective</th>
<th>Ineffective</th>
</tr>
</thead>
<tbody>
<tr>
<td>-.1773</td>
<td>Highly Effective</td>
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</tr>
<tr>
<td>.1384</td>
<td>Marginally Effective</td>
<td>*</td>
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</tr>
<tr>
<td>.4415</td>
<td>Minimally Effective</td>
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<td>.8441</td>
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### Table 33

**Analysis of Variance of Effectiveness and Social Rewards**

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<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3</td>
<td>10.3987</td>
<td>3.4662</td>
<td>3.5886</td>
<td>.014</td>
</tr>
<tr>
<td>Within Groups</td>
<td>217</td>
<td>209.6013</td>
<td>.9659</td>
<td></td>
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<tr>
<td>Total</td>
<td>220</td>
<td>220.0000</td>
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Multiple Range Tests: Scheffé test with significance level .05

<table>
<thead>
<tr>
<th>Mean</th>
<th>Sup. Rate</th>
<th>Highly Effective</th>
<th>Marginally Effective</th>
<th>Minimally Effective</th>
<th>Ineffective</th>
</tr>
</thead>
<tbody>
<tr>
<td>.0771</td>
<td>Highly Effective</td>
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<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>.0434</td>
<td>Marginally Effective</td>
<td></td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>-.7813</td>
<td>Minimally Effective</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>-.3563</td>
<td>Ineffective</td>
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Table 34

Analysis of Variance of Effectiveness and Health and Family Factors

<table>
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<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3</td>
<td>13.5312</td>
<td>4.5104</td>
<td>4.5940</td>
<td>.004</td>
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<td>Within Groups</td>
<td>139</td>
<td>136.4697</td>
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<td>Total</td>
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Multiple Range Tests: Scheffé test with significance level .05

<table>
<thead>
<tr>
<th>Mean</th>
<th>Sup. Rate</th>
<th>Highly Effective</th>
<th>Marginally Effective</th>
<th>Minimally Effective</th>
<th>Ineffective</th>
</tr>
</thead>
<tbody>
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<td>.2721</td>
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Table 35

Summary of Significant Differences on Dimensions of Attitudes, Values, and Beliefs

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<tr>
<th>Dimension</th>
<th>Education Level</th>
<th>Work Experience</th>
<th>Population Size</th>
<th>Supervision Time</th>
<th>Effectiveness</th>
</tr>
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<tbody>
<tr>
<td>1. Attitudes towards disabled persons</td>
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<tr>
<td>2. Self-efficacy</td>
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<tr>
<td>. General</td>
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<td>. Social</td>
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<tr>
<td>3. Locus of control</td>
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<td>. Internal</td>
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<td>5. Work values</td>
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<td>6. Self-concept</td>
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<tr>
<td>. Self-identity</td>
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<td>7. Job satisfaction</td>
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<td>. Work skills and intrinsic rewards</td>
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<td>. Extrinsic rewards</td>
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<td>. Concern for others</td>
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<td>. Group membership</td>
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</table>
### Table 36

**Principal Factors of Attitudes, Values, and Beliefs**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Principal Factors</th>
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<tr>
<td>1. attitudes towards disabled people</td>
<td>1. attitudes towards disabled people</td>
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<tr>
<td>2. self-efficacy</td>
<td>2. general self-efficacy</td>
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<td>3. locus of control</td>
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<td>4. task specific self-efficacy</td>
<td>4. internal</td>
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<td>5. work values</td>
<td>5. powerful others</td>
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<td>6. self-concept</td>
<td>6. chance</td>
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<td>7. job satisfaction</td>
<td>7. interpersonal interactions skills</td>
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<td>8. quality of life</td>
<td>8. physical interaction skills</td>
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<td>9. working conditions</td>
<td>9. working conditions</td>
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<tr>
<td>10. rewards of work</td>
<td>10. rewards of work</td>
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<td>11. meaningfulness of work</td>
<td>11. meaningfulness of work</td>
</tr>
<tr>
<td>12. social elements of work</td>
<td>12. social elements of work</td>
</tr>
<tr>
<td>13. physical elements of work</td>
<td>13. physical elements of work</td>
</tr>
<tr>
<td>14. family and moral identification</td>
<td>14. family and moral identification</td>
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<tr>
<td>15. self-identity</td>
<td>15. self-identity</td>
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<tr>
<td>16. moral self</td>
<td>16. moral self</td>
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<tr>
<td>17. work skills and intrinsic rewards</td>
<td>17. work skills and intrinsic rewards</td>
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<td>18. supervision and recognition</td>
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<td>19. value of work</td>
<td>19. value of work</td>
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<td>20. extrinsic rewards</td>
<td>20. extrinsic rewards</td>
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<td>21. work factors</td>
<td>21. work factors</td>
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<td>22. health and family factors</td>
<td>22. health and family factors</td>
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<td>23. individual personal elements</td>
<td>23. individual personal elements</td>
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<td>24. concern for others</td>
<td>24. concern for others</td>
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<tr>
<td>25. group membership</td>
<td>25. group membership</td>
</tr>
</tbody>
</table>
Appendix B

Statement of Consent
STATEMENT OF CONSENT

1. Subject Name: ________________________________

2. Purpose of Study:

This research study is designed to investigate the relationship between effective practice and several dimensions of beliefs, values, and attitudes of personnel providing services to persons with disabilities.

3. Methods:

Your participation in the research is strictly voluntary and you have the right to withdraw at any time. You must be nineteen years of age to participate.

Your anonymity is guaranteed. This form will identify you as a participant in the research only. Your responses to the questionnaires will be only identified by an identification number and will not make use of your name. Your supervisor's rating of your functioning will make use of the same identification number and will not make use of your name. Data records will not identify you by name and only the researcher will have access to the data which will be kept in secure files. Confidentiality of your participation is guaranteed by the researcher.

Your participation in the research will not be discussed with your employer and will not affect employment or advancement. Your responses on the questionnaires and your supervisor's rating will not identify you personally nor will they be discussed with employers.

Detailed and summary reports of the results will be published and made available to participating agencies and organizations. The results will include discussion of groups only and in no way will an individual's responses be identified and discussed.

4. Declaration of Consent:

I have been informed of the nature and purpose of the study and the guarantee of confidentiality and anonymity. I am at least nineteen years of age. I understand that I may withdraw at any time and/or refuse to answer any question without penalty.

________________________  ____________________
signature               date

5. Investigator:

________________________
Ian Thumlert
CURRICULUM VITAE

OF

IAN DOUGLAS THUMLERT

Lethbridge, AB
Revised 04/03/95
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1.0 Personal

Name: Ian Douglas Thumlert

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          Lethbridge, Alberta
          T1K 6R9

Telephone: (403) 326-1463 (home)
         (403) 329-7224 (office)
         (403) 380-3537 (fax)

Date of Birth: July 30, 1945

Place of Birth: Lacombe, Alberta, Canada

Citizenship: Canadian

SIN: 611-009-747

Marital Status: Married
One dependent child

2.0 Post-Secondary Education

Bachelor of Arts (1969) University of Calgary
                Psychology

Bachelor of Education (1970) University of Calgary
                Special Education

Masters of Science (1977) University of Calgary
                School of Community Psychology
                Thesis: Instructor Level and Performance of
                the Developmentally Handicapped

3.0 Current Appointments

3.1 Chair, Department of Human Service Programs
        Lethbridge Community College
        1985 to present

3.2 Faculty, Rehabilitation Services Program
        Lethbridge Community College
        1980 to present
3.3 Coordinator, International Work Experience in Human Services

1986 - Great Britain
1987 - Great Britain
1988 - Great Britain and Australia
1989 - Great Britain and Australia
1990 - Great Britain and Thailand
1991 - Great Britain, Thailand, Australia, and St. Vincent

4.0 Previous Appointments

4.1 Institutional Attendant
Alberta Hospital Ponoka, Ponoka, Alberta
1964
1965

4.2 Psychologist I
Alberta Hospital Ponoka, Ponoka, Alberta
1966-67

4.3 Special Education Teacher
F.P. Walsche School, Fort Macleod, Alberta
1969-70

4.4 Special Education Teacher
Woods Homes, Calgary, Alberta
1970-71

4.5 Coordinator, Residential Training
Vocational Rehabilitation and Research Institute, Calgary, Alberta
1971-74

4.6 Coordinator, Staff Training
Vocational Rehabilitation and Research Institute, Calgary, Alberta
1972-75

4.7 Faculty and Section Head
Rehabilitation Services Program
Grant MacEwan Community College, Edmonton, Alberta
1975-80

4.8 Sessional Faculty
Department of Educational Psychology
University of Alberta, Edmonton, Alberta
1978-80
4.9 Chair, Advisory Committee
Community Behavioral Services, Edmonton, Alberta
1976-80

4.10 Adjunct Professor
University of Calgary
CIDA Project, Gaza Strip, Israel
1985

5.0 Major Fields of Interest

5.1 Attitudes, beliefs, and values of helping professions

5.2 Education of children and adolescents with special learning needs

5.3 Training of special education and rehabilitation personnel

5.4 International education of human service personnel

5.5 Development of community services to individuals and families with special needs

5.6 Development of professional attitudes in career education of human service personnel

5.7 Enhancement of concern for ethical, cultural, and environmental issues

6.0 College and University Courses Taught

- Child Psychopathology
- Abnormal Psychology
- Survey of Exceptional Children
- Developmental Disabilities
- Psychology of Slow Learners
- Human Growth and Development
- Introductory Psychology
- Foundations of Special Education and Rehabilitation
- Design and Implementation of Individual Education Plans
- Individual Program Planning
- Assessment in Special Education and Rehabilitation
- Introduction to Behavior Management
- Advanced Treatment Methods
- Vocational Rehabilitation
- Education of Children with Special Needs
- Early Intervention
- Organizational Behavior in Human Services
- Special Issues in Education
- Cross-Cultural Issues in Education
- Interventions with Children with Behavioral Disorders
- Practicum in Special Education and Rehabilitation
- Residential Care and Treatment of Disturbed Youth
- Family Intervention and Support

7.0 Professional Memberships and Offices

- Charter Member, Psychologist's Association of Alberta, #758
- Member, Federation of International Child Care Education
- Member, American Association for Mental Retardation
- Member, Association for the Severely Handicapped
- Member, Canadian Ski Instructors Alliance (retired)

8.0 Scholarships and Honors

1963 Independent Order, Daughters of the Empire
   Advanced Study in the Humanities

1964 Lion's Club of Canada

1974 Scottish Rite Society/National Institute on Mental Retardation
   Graduate Studies in Mental Retardation

1974 Graduate Research Assistantship
   University of Calgary

1975 Graduate Research Assistantship
   University of Calgary

1993 Scottish Rite Foundation/Roeher Institute
   Scholarship/Research Grant

1994 Social Sciences and Humanities Research Council of Canada
   Doctoral Fellowship

1994 Alberta Advanced Education & Career Development
   Research Grant

1994 President's Scholarship
   University of Victoria
9.0 Major Committee and Board Appointments

9.1 Chair, Community Behavioral Services
Alberta Family and Social Services
Edmonton, Alberta
1976-80

9.2 Chair, Rehabilitation Services/Practitioners Committee
Alberta Advanced Education
Edmonton, Alberta
1980 to 1992

9.3 Member, Board of Directors
Southern Alberta Community Living Association
Lethbridge, Alberta
1981-85

9.4 Chair, Ethics Committee
Southern Alberta Community Living Association
Lethbridge, Alberta
1982-85

9.5 Member and Senior Editor
Sport Development Model
Canadian Racquetball Association
Ottawa, Ontario
1983-85

9.6 Member, Publicity Committee
Council for Exceptional Children
Regional Conference
Vancouver, British Columbia
1974

9.7 Publicity Chair
National Child and Youth Care Conference
Calgary, Alberta
1987-88

9.8 Member
Board of Directors
Lethbridge Family Services
1991 to present
9.9  Chair
Public Policy Committee
Lethbridge Family Services
1991 to present

10.0  Research Activities

1975  "Effects of Monetary Incentives in Residential Training"
National Health and Welfare, Canada
Marlett, N.J., Ryba, K., Brown, R.I., & Thumlert, I.

1975  "Instructor Level and the Performance of the Developmentally Handicapped"
Faculty of Graduate Studies
University of Calgary
Thumlert, I.

1978  "Program Evaluation"
Rehabilitation Services Program
Grant MacEwan Community College
Thumlert, I.

1984  "Program Evaluation"
Rehabilitation Services Program
Lethbridge Community College
Thumlert, I.

1988  "Program Evaluation"
International Work Experience in Human Services
Lethbridge Community College
Thumlert, I.

1988  "Effectiveness of Restrictive Practice Techniques in Behavior Reduction of Behavior in Residential Services"
Southern Alberta Community Living Association
Thumlert, I.

1988  "Program Evaluation"
Child and Youth Care Program
Lethbridge Community College
Charles, G. & Thumlert, I.
11.0 Publications


12.0 Major Presentations and Workshops


1975 "Research to Practice: An Experiment in Community Integration", 22nd Annual Conference Council for Exceptional Children, Los Angeles.

1975 "Instructor Level and the Performance of the Developmentally Handicapped", National Institute of Mental Retardation, Toronto.


1978 "Manpower Training in the '80's in Canada", American Association on Mental Deficiency Conference, Chicago.

1979 "Verbal Instructions in Special Education", Annual Conference of the Alberta Association of Teachers of the Mentally Retarded, Edmonton.

1980 "Community College Education in Special Education and Rehabilitation", Symposium on Manpower Planning for the '80's, Red Deer.


1988 "Pre-service Education of Paraprofessionals in Special Education", Brisbane, Australia.

1988 "Special Education of Pre-school Children in Canada", Seminar, Creche and Kindergarten Association of Australia, Brisbane, Australia.


1989 "Analysis of Practicum Training", National Rehabilitation Faculty Retreat, Lake Louise.

1990 "Pedagogy in Canadian Community College Curricula: Special Education, Rehabilitation, and Child and Youth Care; Examples of Excellence", Lecture Series, Bangkok, Thailand.


13.0 References

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(403) 320-3426
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Title of Dissertation:
Attitudes, Values, and Beliefs of Personnel Serving Persons with Disabilities:
A Research to Practice Challenge

Author
Ian Douglas Thumlert
April 12, 1995