

**ATTITUDES TOWARDS INDIVIDUALS WITH DISABILITY AMONGST
STUDENTS AND EMPLOYEES IN A HIGHER EDUCATION
INSTITUTION IN THE WESTERN CAPE**

BY

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KEYWORDS

Attitudes

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Disability at tertiary institutions

Work place disability

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Employee attitudes

Student attitudes

Factors impacting attitude

Disability instruments

ABSTRACT

Even though attitudes have been studied for many years, attitudes toward individuals with disabilities still remain an important issue, today (Geskie & Salasek, 1988; Popovich, Scherbaum, Scherbaum & Polinko, 2003). With the relationship between numerous demographic factors and attitudes toward those with disabilities being inconsistent across existing research and the absence of research conducted in the South African context this research study investigated whether variables such as gender, age, education level, exposure to a person with a disability or having a friend or family member with a disability had an effect on attitude towards disability.

The population of this study constituted students from the Economic and Management Sciences (EMS) Faculty and Support Staff in a Higher Education Institution in the Western Cape. A non-probability convenience sample method was utilised of which 140 respondents completed two questionnaires. Namely, a Biographical questionnaire and the Affective Reactions Subscale of the Disability Questionnaire (Popovich et al. (2003). Statistical analyses included both descriptive and inferential statistics (the t-Test and ANOVA).

According to the findings of this research study, significant relationships do not exist between variables such as gender, age, educational level, amount of contact and exposure to or having a friend or family member with disability and staff and student attitudes toward those with disabilities in a Higher Education Institution in the Western Cape. A few limitations related to the study were recognized and it is recommended that a combination of quantitative and qualitative research approaches be implored as well as other faculties and Institutions in the Western Cape be used to contribute to greater representativeness and generalisability for future research. Also, to establish organisations or institutions as employers and institutions of choice among those with disabilities, organisations and institutions are to better market disability facilities and accommodations. It is also proposed that students and staff with disabilities should be encouraged to fully participate in the design and event management of disability awareness campaigns.

DECLARATION

I declare that *Attitudes towards individuals with disability amongst students and employees in a Higher Education Institution in the Western Cape* is my own work, that it has not been submitted before for any degree or examination in any other university, and that all the sources I have used or quoted have been indicated and acknowledged as complete references.

Full name: Lauren Jodi Franke

Date: November 2016

Signed: _____

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CHAPTER 1

INTRODUCTION AND OVERVIEW

1.1 INTRODUCTION

According to Nowicki (2006) as long as negative attitudes towards individuals with a disability persist, the absolute impartial acceptance of people with disabilities is unlikely. According to Hergenrather and Rhodes (2007), Chubon (1982) and Offergeld (2012) research over the past forty years, suggest that attitudes toward persons with disabilities were negative and served as invisible barriers for persons with disabilities to participate in society. These researchers added that negative attitudes contribute greatly on the success/failure of individuals with disabilities as they pursue opportunities to work, live independently and partake in community life. Although there are indications that attitudes towards disability are progressing, the National Disability Authority (2001) and National Disability Authority (2007) found that globally, negative attitudes toward disability still persist and there is a noticeable connection between personal experience of disability and attitude. Shapiro (2000) indicates intimate

relationships with individuals with disabilities are still frowned upon and negatively received by the public. For this reason, negative attitudes and perceptions of individuals and the world at large towards disability is an area that is in need of great attention, as these attitudes hinder progress towards global equality.

Regarding worldwide attitudes towards persons with disabilities and employment; employers only expressed positive attitudes toward workers with physical and psychological difficulties and disabilities when appropriate support was provided (Chubon, 1982). American research revealed that the discrepancy between verbal willingness to employ and actually employing individuals with disabilities also appears to be losing ground (Copeland, 2007). Research also emphasises the importance of a recruitment agency between employers and possible employees with disabilities as the utilization of an agency would assist employers to recognise both the competence and potential of employees with disabilities and consequently improve the rate of success of employment for people with disabilities (NDA, 2007). In South Africa, one of the most significant players in the mainstreaming of persons with disabilities is PMI Human Capital

Development Solutions. PMI has developed an end-to-end solution that positively addresses learning and employment opportunities for the disabled within South African businesses (PMI SA).

In international educational settings, Marks (1997) and Nowicki (2006) found young people with disabilities attach immense value to being treated the same as anyone else; they want their views and experiences to be respected and actively listened to. Milsom (2001) and (2002) also found that schools and educational institutions are not actively engaged in challenging negative societal attitudes to disability. This may be consequent that attitudes towards students with disabilities amongst teachers and staff play a significant role in the educational experiences of students with disabilities and ultimately on inclusive education.

Within the South African context, according to the Independent Living Institute (n.d.), during the apartheid era people with disabilities, like the majority of people in this country, were denied of their fundamental human rights. Furthermore, people with disabilities as a group on their own experienced further discrimination on the basis of their disability. Today within institutions and workplaces the divide is still evident. According to a Statistics South Africa Census 2011 report, seven point

five percent of the South African population live with some type of a disability. Moreover, of the 2,870,130 people living with a disability approximately one-fifth of persons are enrolled in tertiary education institutions (Statistics South Africa, 2011). A study published by the University of Johannesburg's Centre for Social Development in Africa (CSDA) in 2014, further revealed that 68% of working-age South Africans with disabilities never even tried to seek employment, questioning the companies and organisations who boldly boast employment equity (Reitumetse & Khulekani, 2014).

Based on this backdrop of information and limited research found within the South African context this study will focus on the attitudes of students and employees in a Higher Education Institution towards individuals with a disability. The research will provide literature relevant to exploring attitudes and disability and will conduct statistical tests to determine if a relationship exists between certain biographical variables and attitude towards disability. This will in turn provide a general understanding of the acceptance or rejection of people with disabilities amongst students and employees and identify variables on which to intervene and modify attitudes toward persons with disabilities within the South African con

1.2 RATIONALE FOR THIS STUDY

Negative stereotypes and mythology create deep-rooted injustice toward people with disabilities (Shapiro, 2000). This unfairness is then reflected through negative feelings and behaviour, which hinders the social, educational and work-related participation of people with disabilities (White, Jackson & Gordon, 2006; Rusch, Wilson, Hughes & Heal, 1995). According to Genesi (2000) being aware of the reality that persons with disabilities are still exposed to and exploited by discrimination and prejudice may be the first step in reducing unfavourable attitudes. In pursuit of co-rectifying the deeds of the past, society as a whole needs to change its attitude towards persons with disabilities both at an individual and universal level. However, before attitudes can be changed and improved they will first need to be described, identified and categorised.

With many listed Broad Based Black Economic Empowerment (BBBEE) compliant companies and all national Higher Education Institutions being governed by the Higher Education Act No. 101 of 1997 it is argued that these policies merely become check box exercises. According to Massie (2006), public attitudes can be a central barrier to the success and full implementation of such policies and the public

ultimately influences and controls how much value is then given to an issue. The result, discrimination in the workplace continues to be a major setback for people with disabilities; unfavourably affecting their employment outcome (Brostrand, 2006).

Decades of research also reveal that results regarding various demographical variables as a contributor to attitudes toward individuals with disabilities have been mixed (Bricout & Bentley, 2000; Loo, 2001). Inconsistent results in relation to the impacts of age have been found (Hsu, 2012). Lau and Cheung (1999) clarified that people with higher education levels may be more tolerant, accepting, and educated about persons with disabilities and other issues, which led them to have more favourable attitudes toward persons with disabilities than those with a limited educational background. Conversely, negative attitudes are linked to behaviours such as social rejection and maintenance of higher levels of social distance toward persons with disabilities (Olkin & Howson, 1994; Wright 1988; Evans, 1976). In general, participants with prior positive contact with disability expressed more favourable attitudes toward the employment of people with disabilities. Ten Klooster, Dannenberg, Taal, Burger, and Rasker (2009), found that having a relative or friend with a physical

disability proved to be a strong and independent predictor of a positive attitude towards people with physical disabilities.

The UN Convention on the Rights of Persons with Disabilities places great importance on the inherent dignity of individuals with disability and appeals to Nations; to firstly increase knowledge and understanding on and to encourage respect for the dignity and rights of individuals with disability; secondly, to challenge stereotypes, prejudices and harmful practices toward persons with disabilities and lastly to promote awareness of the strengths, potential and contributions of individuals with disability" (Offergeld, 2012).

The rationale of this study is to examine the attitudes of students and employees at a Higher Education Institution toward general persons with disabilities and determine whether these attitudes are generally positive or negative. Furthermore, it will be determined whether certain demographic variables explain the respondents' perception about individuals with disabilities. This research, through the literature review, will then further enable one to gain context and understanding around disability in the workplace.

1.3. PROBLEM STATEMENT

As the purpose of this study is to explore situational factors to ultimately identify and understand the characteristics of the phenomena of interest (Sekaran, 2001); student and staff attitudes towards individuals with disability, the research question of the present study is as follows:

- What are the general attitudes towards individuals with disability amongst students and employees in a Higher Education Institution in the Western Cape and to what extent do certain biographical variables influence these attitudes of the students and employees?

1.4. RESEARCH OBJECTIVES

The study aims to address the following objectives:

- To determine the general attitudes of students and employees toward individuals with disabilities and their affective reactions toward these individuals with disabilities.
- To determine whether variables such as gender, age, educational level, regular contact and exposure, and having a family member or friend with a disability influence the attitudes of students and employees toward individuals with disabilities.

- To offer recommendations for future research endeavours focusing on attitudes towards those with disability.

1.5. HYPOTHESES

A hypothesis can be clarified as a logically conjectured relationship between two or more variables expressed in the form of a testable statement. By testing the hypotheses and confirming the speculated relationships, it is expected that answers can be found to correct the problem encountered (Sekaran, 2001).

The following hypotheses have been developed for this research:

H1: There is a statistically significant difference in attitudes towards individuals with disabilities based on gender.

H2: There is a statistically significant difference in attitudes towards individuals with disabilities based on age.

H3: There is a statistically significant difference in attitudes towards individuals with disabilities based on educational level.

H4: There is a statistically significant relationship between regular contact with and exposure to a person with disabilities and attitudes towards individuals with disabilities.

H5: There is a statistically significant relationship between having a family member or friend with a disability and attitudes towards individuals with disabilities.

1.6. OUTLINE OF CHAPTERS

Chapter 1 provides an outline of the purpose of the study. The problem statement, motivation, and objectives for the study are provided. Moreover, the hypotheses of the study are established and the structure of the research study is outlined.

Chapter 2 provides literature significant to attitudes towards disabled individuals in educational and workplace environments.

Chapter 3 discusses the research methodology used in this study. The sampling technique, data collection methods and research instruments are discussed. The selection of tests utilised in the statistical

analyses are also examined ethical considerations to conducting research is highlighted.

Chapter 4 provides a summary of the study's results, obtained from utilising statistical analyses to test the hypotheses.

Chapter 5 extracts conclusions from the most significant results of the study, highlights various limitations to conducting the research and importantly based on the findings of the study provides recommendations for future research.

1.7. CONCLUSION

This chapter provided a framework of the study with regards to the motivation, aims and objectives and the problem statement of the research. Furthermore, the hypotheses of the study were highlighted and the structure of the study was clarified. The next chapter will review and present literature relevant to examining the attitudes of students and employees towards individuals with disability.

CHAPTER 2

LITERATURE REVIEW

2.1. INTRODUCTION

In attempt to provide a platform to better understand the attitudes of staff and students toward those with disability, this chapter will focus on the literature relevant to examining attitudes towards disabled individuals in educational as well as workplace environments.

The structure of the review is as follows; a definition of disability, along with a model will be provided, employment legislation and disability will then follow. Subsequently, attitude will be defined along with its components, attitude models and literature on positive and negative attitudes as well as origins of negative attitudes towards individuals with disability will also be addressed. Briefly means of changing negative attitudes towards disability will be stressed followed by the impact of demographic variables and different means of measuring attitudes. Lastly, problems associated

with attitude assessments, the social desirability factor and the conclusion will be presented.

2.2. DISABILITY DEFINED

According to the Americans with Disabilities Act (2011), disability is defined as a "physical or mental impairment that substantially limits a major life activity." The World Health Organisation (WHO) has made a functional division between impairment, disability and handicap (Johnson, 1996). According to Gross and Mcilveen (1998, p. 672) WHO defines an impairment as "the objective pathology or psychological difficulty", disability as "the effects that the impairment has on everyday activities" and lastly handicap as "the effect of the impairment on social and occupational roles". Kent (1995) adds that a single impairment leads to varying degrees of handicap, depending on the amount of the person's social and occupational exclusion or involvement.

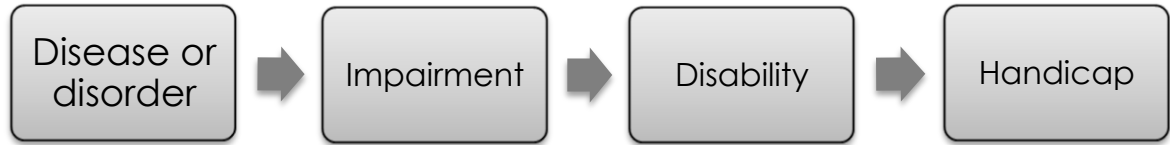


Figure 2.1 The World Health Organisation model of disability

(Gross & Mcilveen, 1998, p. 672)

2.3. LEGISLATION AND DISABILITY

Today, numerous laws and norms are in place to ensure equal treatment of people with disabilities. As consequence of living in a society that takes pride in its tolerance and integration, open enmity or dislike towards people who are physically different is no longer socially desirable and accepted (Krahe´ & Altwasser, 2006).

International and local legislation regarding the employment of those with disabilities will now be discussed.

In the West, according to Acemoglu and Angrist (2001) the Americans with Disabilities Act (ADA) formed by the U.S. Congress in 1990, is the most influential act pertaining to the employment of those with disabilities in the United States of America. On July 26, 1990, President

George H. W. Bush certified the ADA as law. Fielder (2004) states that the main purpose of the ADA is to prohibit discrimination towards those with disabilities; similar to the Civil Rights Act of 1964 which made discriminating towards an individual's gender, race, religion, national origin, and other biographical features, illegal. There are five parts or rather titles to the ADA; Title I -Employment, Title II- Public Entities (and public transportation), Title III- Public Accommodations (and commercial facilities), Title IV-Telecommunications and lastly Title V- Miscellaneous Provisions. In Title I, which focuses primarily on the employment of the disabled, it is declared that an organisation or employer shall not discriminate against a qualified individual with a disability, with regards to the recruitment and selection process, promotions and dismissals of employees, employees' rewards and remuneration, post training, and other conditions and advantages of employment (Johnson, 2000).

In the East, the Taiwanese government saw the employment of individuals with disabilities as important, and therefore passed necessary employment-related legislation to ensure that the population with disabilities receives appropriate guidance and service, to better prepare them for the workplace (Hsu, 2012). According to

Hsu (2012) the most significant Taiwanese legislation includes; The Regulations of Establishment of Shelter Factories and Reward for the Disabled, The Employment Services Act, and lastly The Protection Act for the Handicapped and Disabled of 1997.

The Regulations of Establishment of Shelter Factories and Reward for the Disabled promulgated in 2002 was considered the first law that outlined the functions of employment for individuals with disabilities in Taiwan (Bureau of Employment and Vocational Training, Republic of China, Taiwan, 2010 as cited in Hsu, 2012). The primary purpose of this bylaw is to provide work opportunities, experience and training for the disabled Taiwanese. Secondly, The Employment Services Act, promulgated in 2003 stresses the importance of equal opportunity for individuals with disabilities in Taiwan. The main objective of this act is to regulate employer discrimination towards current employees and job candidates with disabilities (Laws and Regulations Database of the Republic of China, 2010a, as cited in Hsu, 2012).

Lastly, the People with Disabilities Rights Protection Act, promulgated in 2007, controls vital issues regarding the employment rights, opportunities, personalised care, and accessibility to public areas of disabled persons in Taiwan. The act also obligates bigger public agencies and private business organisations to hire specific numbers of

workers with disabilities, fining them monthly with an amount that equals the minimum wage of hiring a non-disabled individual, should they fail to respect the agreement (The Government Information Office, Republic of China, Taiwan, 2009 as cited in Hsu, 2012).

In South Africa, there is, at present, no comprehensive legislation pertaining to only people with disabilities and their rights. However those with disabilities are constitutionally protected in the Bill of Rights (Independent Living Institute, n.d.). Article nine of the Bill of Rights pertains to disabled persons stating that “there shall be no discrimination against disabled persons and legislation shall provide for measures to promote the progressive opening up of employment opportunities for disabled men and women, the removal of obstacles to the enjoyment by them of public amenities and their integration into all areas of life” (Bill of Rights, 1993).

However, while the South African Constitution authorities' affirmative action in broad strokes for persons or classifications of persons who were previously disadvantaged, the Employment Equity Act (EEA), 55 of 1998, issued in terms of section 25 (1) shifts the focus more on race, gender and disabilities (Macgregor, 2006). The Employment Equity Act (1998, p.12), states that the main purpose of the act is to achieve

equality in the workplace by promoting equal opportunity and fair treatment in employment through the elimination of unfair discrimination.

2.4. ATTITUDE TOWARDS DISABILITY

2.4.1 Defining attitude and its components

Attitude is complex; different researchers have defined it in different ways (Hsu 2012). Eagly and Chaiken (1993) defined attitude in psychology as “a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour” (p. 1). Trevo, Palmer and Redinius (2004) states attitudes are learned dispositions directing feelings, thoughts and actions”. Longoria and Marini (2006) define attitude as “any belief or opinion that includes a positive or negative evaluation of some target (an object, person, or event) and that predisposes us to act in a certain way toward the target” (p. 540).

Likewise, Agnes and Laird (2002) deem attitudes can be described as one's bodily posture, manner, and nature that show mood, feelings, thoughts, and opinions.

This gives way to many researchers being of the same opinion that there is a significant relationship between attitude and behaviour (Hsu, 2012). For instance, research by Allport (2008) stated that “an attitude characteristically provokes behaviour that is acquisitive or generous, favourable or unfavourable, affirmative or negative toward the object or class of objects with which it is related” (p. 21). Additionally, studies by Antonak and Livneh (1988), Upmeyer and Six (1989) and Krosnick and Petty (1995) all claim that attitudes may guide and determine people's judgments or opinions, or may directly influence human behaviour.

The numerous definitions of attitude further imply that attitudes are built on and influenced by a wide range of factors. According to Longoria and Marini (2006) attitudes have a cognitive, behavioural and affective component which may not necessarily be congruent with one another. In concurrence, Oppenheim (1992, p. 175) described that attitudes “are reinforced by beliefs (the cognitive component) and often attract strong feelings (the emotional component) which may lead to particular behavioural intents (the action tendency component)”. Kothandapani (1971) and Breckler (1984, as cited in Ten Klooster, Dannenberg, Taal, Burger & Rasker, 2009) also commonly

considered that attitudes are a combination of three elements: beliefs, feelings, and the intention to act.

Furthermore, Rosenberg and Hovland (1960) claim that attitude is a tripartite relationship that contains cognitive, affective, and behavioural components. However, Eagly and Chaiken (1998) claim that experimental studies fall short to support clear distinctions between thoughts, emotions, and behavioural intentions associated with a particular attitude. A limitation of the tripartite view is that it may be implausible, requiring all the components; cognitive, affective, and behavioural associations of an attitude to be consistent (Fazio, Russell, & Michael, 2003).

2.4.2 Theoretical frameworks of attitude

The significant effect of attitude on behaviour has prompted the development of two theoretical approaches; the theory of reasoned action by Ajzen and Fishbein (1980) and its theoretical progeny, the theory of planned behaviour by Ajzen (1991).

The theory of reasoned action (TRA), developed by Fishbein and Ajzen (1975), is a model for the prediction of behavioural intention, spanning predictions of attitude and predictions of behaviour. According to Hale, Householder and Greene (2002, p. 259) the theory was "birthed

out of frustration with traditional attitude-behaviour research, much of which found weak correlations between attitude measures and performance of volitional behaviours." There are three constructs of TRA: behavioural intention (*BI*) measures a person's relative strength of intention to perform behaviour, attitude (*A*) consists of beliefs about the consequences of performing the behaviour and subjective norm (*SN*) is a combination of perceived expectations from relevant individuals or groups along with intentions to comply with these expectations (Fishbein & Ajzen, 1975). The TRA implies that a person's behavioural intention is dependent on their attitude about the behaviour and socially desirable norms ($BI = A + SN$) (Fishbein & Ajzen, 1975).

Developed from the theory of reasoned action, is the theory of planned behaviour (TPB), proposed only by Icek Ajzen in 1985. The theory of planned behaviour is about the link between beliefs and behaviour, stating that attitude toward behaviour, together with subjective norms, and perceived behavioural control, shape an individual's behavioural intentions and actions (Ajzen, 1991). According to Armitage and Conner (2001), it is one of the most predictive persuasion theories, applied to various studies of the relations among

beliefs, attitudes, behavioural intentions and behaviours in several different contexts.

2.4.3 Literature on positive attitudes towards disability

Tervo et al. (2004) defines a positive attitude towards disability as: “a belief that persons with disability can be productive community members, decide what their own self-interests are, and lead a normal life. At the affective level, it suggests sensitivity toward positive attributes and liking the person. On a behavioural level, it involves helping an individual” (p. 908–909).

Employers portrayed positive attitudes towards hiring and working alongside people with disabilities in numerous studies. For example; in America a national mail survey sent to the executives of Fortune 500 corporations revealed positive responses toward the employment of people with severe disabilities (Levy et al., 1992). In a regional American survey, Able Trust (2003) conducted on general employers it was found that 80% of participants employed people with disabilities and provided them with the necessary accommodations. Furthermore a localized American survey of businesses also found that employers were generally positive towards their disabled employees, ensuring

equality in the recruitment process by considering similar worker traits when evaluating job candidates (Weisenstein & Koshman, 1991).

On the topic of international studies, in Canada it was found that respondents demonstrated a strong support for the inclusion of people with disabilities in the workplace (Freeze, Kueneman, Frankel, Mahon, & Nielsen, 2002). Similarly, in Taiwan Hsu (2012) indicated that 135 voluntary non-disabled Taiwanese employees, who completed the Mental Retardation Attitude Inventory-Revised (MRAI-R) (Antonak & Harth, 1994) and the Affective Reactions Subscale of the Disability Questionnaire (Popovich et al., 2003) had positive attitudes toward people with disabilities in general and also held positive affective reactions toward working with their co-workers with various disabilities. Concerning the size of the organisation, research by Levy et al. (1992) a study on Fortune 500 companies indicated that large employers held positive attitudes toward the employability of individuals with severe disabilities. Employers actually considered employees with disability to be dependable, productive workers who were the driving force behind positive workplace morale. Later another study by Levy et al. (1993) reported that smaller sized organisations and employers also

held positive attitudes towards the employment of workers with disabilities.

Focusing on managerial and industry specific populations portraying positive attitudes towards the disabled, a survey by Unger (2002) of frontline supervisors, interacting with workers with disabilities on a daily basis, found that the supervisors had overall positive attitudes towards people with disabilities. Employee managing respondents were satisfied with the work performance of their fellow disabled colleagues and subordinates, in various areas and even considered the job performance of workers with disabilities equal to or better than the performance outputs of employees without disabilities. Employees in the information technology sector also believed individuals with disabilities were able to perform as well as people without disabilities and therefore supported the employment of people with disabilities and indicated sincere eagerness to hire qualified applicants with disabilities (Greenan, Wu, & Black, 2003).

Several researchers also administered surveys to samples of students and despite the different categories of students, studies produced favourable results regarding the general attitudes of students toward the employment of people with disabilities (Copeland, 2007).

Gordon, Feldman, Tantillo, and Perrone (2004) found that students reported generally positive attitudes toward disabilities and demonstrated a willingness to be friends with persons with disabilities. Similarly, a study by Hergenrather and Rhodes (2007) indicated students showed positive attitudes toward persons with disabilities in various social situations like dating, marriage, and the workplace.

Furthermore, it has been found that both undergraduate and graduate students in particular, were generally positive about the idea of working with people with disabilities (Jones and Stone, 1995).

In an early study by Kreffing and Brief (1976), undergraduate students were asked to evaluate job candidates with and without disabilities. The study indicated that disability had no significant effect on ability, quality or quantity output, absenteeism, tardiness, social interaction, and overall ratings and the attitudes of the undergraduate students towards the disabled candidates were both positive and fair.

In more recent times Popovich et al. (2003) uncovered positive affective reactions toward the employability of people with disabilities and fairness of common workplace accommodation among undergraduate students. Additional research conducted by Gouvier, Sytsma-Jordan and Mayville (2003), required undergraduate students

to evaluate application materials of job seekers with disabilities, and also resulted in generally positive attitudes toward the employability of the persons with disabilities. In addition to this, Rose and Brief (1979) found that graduate participants also did not discriminate against applicants with disabilities.

Accompanying the positive attitudes of undergraduate and graduate university students, results from a survey of community college students also indicated that these students demonstrate positive attitudes towards those with disabilities and do not stigmatize persons with disabilities (Corrigan et al., 2001).

Major specific studies including the work by Satcher and Dooley-Dickey (1992) has shown that human resource students revealed positive attitudes toward hiring and working with persons with disabilities. Another study by Ten Klooster et al. (2009) provided results that Dutch nursing students are generally more positive towards people with disabilities than their non-nursing peers. While testing business students, Rose and Brief (1979) found that subjects did not discriminate against applicants with disabilities in the instance of hypothetical hiring decisions.

Limited research is available on the attitudes of children towards individuals with disabilities. However, the study by Longoria and Marini (2006) explored the perceptions of 8 to 12 year old Mexican-American children in relation to viewing a photograph of a child in a wheelchair versus a child sitting in a feeding chair. The results of this study indicated that child subjects generally expressed positive attitudes regarding the child in the wheelchair's future in relation to work, tertiary study, marriage and having a family. In other research, Laws and Kelly (2005) proved more positive attitudes toward intellectual disabilities were expressed by children who were provided with information about Down syndrome. The study investigated developing children's attitudes to physical and intellectual disabilities. Partakers included 202 children aged from 9 to 12 years from mainstream classes in the United Kingdom that completed the Peer Attitudes toward the Handicapped Scale (PATHS).

2.4.4 Literature on negative attitudes towards disability

In contrast to the literature reflecting overall positive attitudes towards people with disabilities, the following studies indicated negative attitudes toward people with disabilities in varying environments (Copeland, 2007).

In earlier research, Combs and Omvig (1986) examined whether certain disabilities were more effortlessly accepted in employment than others. They found that employers had generally negative responses toward individuals with disability regardless of the type of disability. The study also discovered employers went as far as indicating that none of the sixteen disability types highlighted in the questionnaire could be employed by their organisations. Barratte, Garcia and Laroche (2002) studied employer respondents' attitudes regarding whether or not people with communication disabilities could adequately perform in the modern workplace, which demands fast communication. Results indicated that participants expressed generally negative attitudes and believed employees with communication disabilities were unable to handle their organisation's high level productivity and challenging workloads.

With the focus on global research, in the national survey conducted by Hornberger and Milley (2005) it was found that negative attitudes and cultural biases within organisations continued to prevent the inclusion of individuals with disabilities into the Canadian workplace. Results indicated employers expressed concerns regarding the costs linked with accommodating disabled workers and indicated a lack of knowledge regarding legislative law on recruiting, hiring, and

employing people with disabilities. On the other side of the globe, in Australia, employers consistently rated employees without disabilities as the higher, top performers, while the employees with disabilities were rated averagely (Smith, Webber, Graffam, & Wilson, 2004). In addition, results from a survey of Swiss employers revealed employers were generally more negative towards those with disabilities and that they would go as far as to increase the level of social distance when they believed the relationship was becoming too intimate (Lauber, Nordt, Falcato, & Rossler, 2004).

Furthermore, an interesting study in Hong Kong had researchers themselves responding to classified advertisements for secretarial positions, playing the roles of hypothetical applicants, i.e. one applicant being without a disability and other three suffering from hearing loss, a mobility impairment and lastly depression. Results indicated that employers offered the applicant without a disability the opportunity to come for a job interview more than twice as many times as job interviews were offered to the other three candidates with disabilities (Pearson, Ip, Hui, Yip, Ho, & Lo, 2003). Bricout and Bentley (2000) requested human resource employees to evaluate and make hiring recommendations for candidates with and without disabilities.

Their study indicated respondents reacted negatively towards those with disabilities; rating the candidate without a disability as the more suitable candidate. In another study including human resource personnel as participants, it was found that the Fortune 500 employees expressed negative attitudes toward the employability of people with disabilities, as also they viewed the accommodations people with disabilities needed, as costly and the promotion opportunities available for employees with disabilities, as very limited (McFarlin, Song, & Sonntag, 1991).

Pertaining to the negative attitudes of students towards the disabled, research by Premeaux (2001) revealed students who hypothetically acted as human resource managers, displayed negative attitudes towards candidates with disabilities; always selecting candidates without disabilities when making their hypothetical hiring recommendations for vacant jobs.

The study by McCaughey and Strohmer (2005) found that student respondents, when analysing common samples of people with disabilities, perceived the population with disabilities as helpless and defined them by their disease or condition. The samples of people with disabilities allocated to student group for analysis were prevalent of

misconception and overgeneralisations and further proved that students tended to focus more on the individual's dysfunctions and imitations rather than their capabilities and strengths.

Thomas (2001) also adds that students' attitudes toward the employment of individuals with disabilities were generally negative. He explained that the reason behind these negative attitudes was that the students held many concerns about the contagiousness, distraction level, need for assistance, and the individual's response to stressful situations, stability, and work longevity of an employee with a disability, should the individual be offered employment by an organisation.

According to Copeland (2007) studies with undergraduate student respondents regarding general reactions toward people with disabilities, beguilingly offered similar negative results.

Undergraduate Management students in Canada revealed dramatically negative attitudes toward workers with disabilities, a result to note considering that these very students would be future managers and supervisors (Loo, 2001). Additionally another study found, undergraduate students' negative attitudes were based on stigma

and stereotypical perceptions, not necessarily the features of a person's disability or the inherent existence of a disability (McLaughlin, Bell & Stringer, 2004). According to Reilly, Bocketti, Maser and Wennet (2006) undergraduate students also demonstrated a negative trend of bias toward job applicants with disabilities applying for a management post.

Graduate programme students also revealed negative attitudes and reactions toward those with disabilities in the workplace (Copeland, 2007). An example from Colella, DeNisi and Varma (1998) requested graduate students to select potential partners for a class competition and the results showed negative biases toward a fellow student with a disability. The students had negative attitudes towards pairing with a fellow disabled classmate as they believed the partnership would hinder them from completing and ultimately winning the competition.

Furthermore, in studies involving college students, responses also revealed that interactions with people with disabilities elicited more negative thoughts among the respondents (Copeland, 2007).

According to Krahe´ and Altwasser (2006) negative attitudes towards people with disabilities begin to develop early in the process of development. Research by Maras and Brown (2000) found that

children from a young age, already categorise people into disabled and nondisabled groups and tend to favour the nondisabled more (Krahe´ & Altwasser, 2006). According to Lee and Rodda (1994, p. 231) children acquire false beliefs about disability due to 'pervasive socio-cultural conditioning'.

2.5 ORIGINS OF NEGATIVE ATTITUDES

Over the past century a number of attempts have been made to categorize the different sources of negative attitudes toward individuals with disabling conditions. Gleeson (2006) and Livneh (1982) and Barker (1948) found the following:

Minority group comparability views that attitudes toward those with disabilities are corresponding to those evident toward marginal groups (Barker, 1948). Being a member of a minority group carries with it the same stereotypical reactions of occupying a devalued and inferior status common in cultural, racial, and religious groups. The resulting attitude toward those with disability can then be categorized as being discriminatory and prejudiced in nature.

Another source of negative attitudes towards those with disability is the factor of disability seen as a reminder of death. Defencelessness to

illness and death are feared and unconsciously that fear is projected onto people with disability. The argument is that the loss of a body part or an abnormal physical function constitutes the death of a part, and this worry is rekindled when seeing a disabled person (Gleeson, 2006).

According to Livneh, (1982) socio-cultural conditioning also contributes to negative attitudes towards disability. From a young age we are taught into thinking about 'normal' and 'not normal' groupings of people and regard those categories to be accurate and accepted. Bodies are pressured to conform to an 'ideal' appearance, and wholeness and everyday visual imagery and marketing paints a narrow category of how bodies should look and behave and as result of this a degradation status is attached to disability.

Lastly, lack of experiential contact and exposure to persons with disabilities as well as the lack of knowledge and information about disability also tends to lead to negative attitudes (Anthony, 1972). People are fearful of and tend to resist the strange and different as it does not fit into the structure of an expected life or rather what they are comfortable with. Strange and different functioning bodies then trigger a conflict in the observer, because of mismatched perceptions,

creating a feeling of distress in the observer, who then expresses the distress in a negative form.

Apart from varying populations differing in attitude towards those with disability, different origins of negative attitudes it is important to note that demographic variables may also contribute to an individual's attitude towards disability.

2.6 CHANGING NEAGTIVE ATTITUDES

NDA attitudes are ultimately shaped and influenced through learning and observation or by learning through association (Fossey, 1993 and Sdorow, 1990).

Offergeld (2012) states that providing ample information and extended personal contact served as promising strategies for the elimination of prejudices and misconceptions. In agreement, Au and Man, (2006) found that when comparing attitudes of four groups of health professionals (n=489) and students (n=511) toward people with disabilities, the quality of contact was found to be a dominant factor affecting the attitude scores. Interestingly, NDA (2007) found when individuals with disabilities freely connect with others with disabilities they too become more positive towards the thought of disability.

Offergeld (2012) also highlights institutions and organisations have to focus more on the availability of adequate resources to accommodate those with disabilities as well as promote the involvement of and include persons with disabilities in the intended plan and execution of awareness campaigns.

2.7 THE IMPACT OF DEMOGRAPHIC VARIABLES

Even though the relationship between various demographic factors and attitudes toward those with disabilities have been studied by researchers for decades, it still remains as an important issue, today (Popovich et al., 2003).

2.7.1 Gender

Results regarding gender as a contributor to attitudes toward individuals with disabilities have been mixed (Bricout & Bentley, 2000; Loo, 2001). Some studies showed that female high school students (Krajewski & Flaherty, 2000), female college students (Popovich et al., 2003) and female healthcare students (Tervo, Azuma, Palmer, & Redinius, 2002), and females in general (Ten Klooster et al., 2009) tended to have more positive and favourable general attitudes toward individuals with disabilities. Similarly, in a survey of 120 business

students and managers assessing attitudes toward and evaluation of performance of the employed with disabilities, researchers found that "women had more positive attitudes than men" (Hunt & Hunt, 2000, p.271 cited in Shannon, Tansey & Schoen, 2009).

Laws and Kelly (2005) investigated 202 children, aged from 9 to 12 years in mainstream classes in the UK's attitudes toward physical and intellectual disabilities, using the Peer Attitudes Toward the Handicapped Scale (PATHS) and alongside Bagley and Green (1981), Clunies - Ross and Thomas (1986) and Roberts and Smith (1999), found that girls expressed more positive attitudes than boys to physical disability. Furthermore, McLaughlin et al. (2004) found that women made fewer discriminatory judgments regarding the employment of people with disabilities and female respondents also reported more positive attitudes toward people with disabilities in the social contexts of the workplace, friendship, dating, and marriage (Hergenrather & Rhodes, 2007).

Other research however stresses that gender does not predict a respondent's affective reaction toward working with individuals with disabilities or beliefs about reasonableness of accommodations (Copeland, 2007).

2.7.2 Age

Inconsistent results in relation to the impacts of age have also been found (Hsu, 2012). Researchers, Bakheit and Shanmugalingam (1997) and Yazbeck, McVilly and Parmenter (2004), found that younger people have more positive perceptions toward persons with disabilities. In disagreement the study by Ten Klooster et al. (2009), conducted in 2006, found that older age was a statistically significant predictor of a more positive attitude to physically disabled persons. The study comprised of a sample of Dutch nursing students (n = 81) and an age-matched group of non-nursing peers (n = 48), who completed standardised scales measuring attitudes about physically or intellectually disabled people.

According to Livneh (1982) attitudes toward those with disabilities are less favourable at early childhood, teenage years, and elderly age and more positive at young to middle adulthood.

In other studies among, college students (Perry, Ivy, Conner, Shelar, 2008), professional healthcare students (Tervo, Palmer & Redinius, 2004), and other health care professionals (Al-Abdulwahab& Al-Gain, 2003), age was not a determining variable influencing attitude toward those with disabilities.

2.7.3 Educational level

Educational achievement is considered to have an influence on individual's attitude towards those with disabilities (Fichten, 1988 as cited in Hsu, 2012). In support of Fichten other studies also indicated that people with higher educational achievements or levels tend to have more positive attitudes toward others with disabilities (Lau & Cheung, 1999; Scior, Kan, McLoughlin, & Sheridan, 2010; Yazbeck et al., 2004 as cited in Hsu, 2012). Furthermore Lau and Cheung (1999) as well as Livneh (1982) clarified that people with higher education levels may be more tolerant, accepting, and educated about persons with disabilities and other issues, which led them to have more favourable attitudes toward persons with disabling conditions than those with a limited educational background. However according to a study focused on the attitudes of occupational therapy undergraduate students (Yuker, Block, & Young, 1966) years of undergraduate education completed or academic training does not appear to affect the attitudes toward persons with disabilities.

2.7.4 Contact and exposure

In general, participants with prior positive contact with disability expressed more favourable attitudes toward the employment of

people with disabilities. Data from numerous studies indicated that employers with positive contact were more willing to hire people with disabilities, gave them higher job performance ratings, and believed these individuals contributed to overall business success (Able Trust, 2003; Gilbride et al., 2000; McLoughlin, 2002; Popovich et al., 2003; Scherbaum, Scherbaum, & Popovich, 2005; Smith et al., 2004a as cited in Copeland, 2007).

Riches and Green (2003) indicated that direct work contact experience may enhance the attitudes of non-disabled supervisors and employees toward their fellow co-workers with disabilities in a positive direction. An additional study by Laws and Kelly (2005) on developing children's attitude towards physical and intellectual disabilities using the Peer Attitudes Toward the Handicapped Scale (PATHS), which involved 202 children aged between 9 to 12 years old from normal schools in the UK, revealed that contact in school or rather at an early stage in one's life, can provide a starting point for the development of positive attitudes towards disability.

Similarly, McFarlin et al. (1991), studied a sample of Fortune 500 companies and found that the more exposure respondents had with employees with disabilities in their own workforce, the more positive

their reported attitudes. Further, in a survey of 120 business students and managers assessing attitudes toward and evaluation of performance of the employed persons with disabilities, researchers found that "people who had worked around people with disabilities had more positive attitudes than people who had not had any work contact" (Hunt & Hunt, 2000, p.271 cited in Shannon et al., 2009). Evidently, many findings have consistently demonstrated that employers and employees who have had more frequent contact and experience with people with disabilities, have more favourable attitudes towards persons with disabilities, are more willing to work with them (Diksa, 1996; Gade; Gruenhagen, 1982; Levy et al., 1992; McFarlin et al., 1991 and Mitchell, Hayes, Gordon & Wallis, 1984) and less likely to negatively label and discriminate against these individuals (Corrigan et al, 2001).

In other research, using the Attitudes Toward Disabled Persons Scale, a sample of 223 occupational therapy students and 326 business students at an Australian higher learning institution and it was found, students who had contact with persons with disabilities beyond the occupational therapist role had notably more positive attitudes than students without such relationships (Livneh, 1982).

In contrast to this trend, Kregel and Tomiyasu (1994) failed to identify a relationship between employers' previous experience with individuals with disabilities and attitudes toward individuals with disabilities in the workforce. The researchers interviewed 170 randomly selected employers, located in a large urban area in the United States and found that employers reported favourable attitudes toward individuals with disabilities in the workforce, regardless of previous experience with persons with disabilities (Unger, 2002)

2.7.5 Having a family member or friend with a disability

The study conducted by Ten Klooster et al. (2009) in 2006, of a sample of Dutch nursing students (n = 81) and an age-matched group of non-nursing peers (n = 48), who completed standardized scales measuring attitudes about persons with physical or intellectual disabilities, found that having a relative or friend with a physical disability proved to be a strong and independent predictor of a positive attitude towards people with physical disabilities, as measured with both the ATDP-A and the SADP.

Interestingly, other studies by Lyons (1991), McConkey and Truesdale (2000), Horner-Johnson, Keys, Henry, Yamaki, Watanabe, Fugjimura

(2002) and Stachura and Garven (2003) also suggested that the form of contact is a more powerful predictor for attitudes than contact by itself, indicating that those with personal contact with people with disabilities outside their working lives i.e. having a relative or close friend hold more positive attitudes.

Conversely, a study by Tripp, French, & Sherril (1995) stated that contact with persons with disabilities alone appears insufficient even when the contact is a close relative or peer. This was supported by an additional study, Shannon et al. (2009). The study was conducted on a sample of 218 undergraduate students, enrolled in elective courses at a large university in the USA, who completed the Attitudes toward Disabled Persons Scale (ATDP), a direct measure of attitudes toward people with disabilities.

2.8 PROBLEMS ASSOCIATED WITH ATTITUDE ASSESSMENTS

Attitudes can be difficult to measure because measurement is arbitrary and attitudes are ultimately a hypothetical construct that cannot be observed directly. Furthermore according to Longoria and Marini (2006) researchers Antonak and Livneh (2000) and Wright (1988) have paid careful attention to how attitudes are measured and intrinsic

researcher prejudices that could influence the assessment of attitudes toward disability.

Longoria and Marini (2006) argue that researchers do not pay enough attention to factors that contribute to the formation of attitudes, such as education, vocation, socioeconomic status, physical appearance and even stranger status, but rather tend to make the disability the most important facet of the research design.

According to Longoria and Marini (2006), Wright deems that in any survey people typically tend to rate relationships with a stranger more negatively than a relationship with someone they are familiar with, she believes this is particularly evident in many attitude instruments.

Wright (1988) also adds that numerous attitude questionnaires have negatively loaded questions (e.g., "Should persons with disabilities pay more for auto insurance?") which carry a pessimistic connotation regarding the capabilities of persons with disabilities (Longoria and Martini ,2006). Similarly, Antonak and Livneh (2000) have been critical of attitude surveys' negatively laden questions, psychometric properties and attitude obvious items where respondents consciously respond in socially desirable ways.

Furthermore, Wright expostulates that researchers only concentrate on obtaining statistically significant results regarding the attitude variations

between those individuals with and without disabilities for publishing purposes , as they believe that non-significant findings will not be published. And because of this ideology they discard their 'non-significant' results and ultimately the similarities between individuals with and without disabilities is overlooked and unavailable (Ten Klooster et al., 2009).

With the focus on a particular scale Antonak (1980), Livneh (1985), Cannon and Szuhay (1986), Yunker (1986), Antonak and Livneh (1988) and Speakman et al. (1994 as cited in Ten Klooster et al., 2009) agree that even though the ATDP is the best known and most universally used questionnaire measuring attitudes towards people with disabilities, concerns have been raised about its hypothesized, one-dimensional structure, old-fashioned items, and its propensity to socially desirable responses.

2.8.1 The social desirability factor

According to Constantine and Ladany (2000) as it is seen as socially appropriate more people are encouraging positive attitudes towards disability. However, when investigated, these attitudes have been documented to be more negative. In agreement, Genesi (2007)

provides evidence in the educational field that teachers tended to verbally agree with inclusion programs for children with disabilities, but expressed doubts when asked to make use of these inclusion programmes in the classroom. This may be part of the social desirability phenomenon.

According to Foxcroft and Roodt (2009) social desirability response bias is where the respondent answers in a manner which is more socially acceptable, to portray a positive impression of themselves.

To date attitudes toward disability have most commonly been investigated through self-report surveys and even though confidentiality and anonymity are always stressed individuals may still respond in a more desired way. For this reason the social desirability factor should be also be noted when designing questionnaires and interpreting results.

2.9 CONCLUSION

In this chapter a comprehensive review of the literature concerning attitudes towards the disabled was presented. Disability, along with a model of disability was provided. Secondly, attitude and its components were defined, accompanied by theoretical frameworks

associated with attitude studies. Literature on positive and negative attitudes towards those with disability and the means to change negative attitudes toward persons with disabilities were also discussed. Furthermore, the impact of demographical variables on attitude was explored and the problems associated with measuring attitudes and the social desirability factor was highlighted. Even though the results of general attitudes and the impact of demographic variables toward individuals with disabilities were mixed, the literature emphasises the importance of studying attitudes of staff and students towards those with disabilities in the South African context.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1. INTRODUCTION

The previous chapter discussed literature relevant to examining attitudes towards disabled individuals in educational as well as workplace environments. This chapter provides an overview of the research design utilized in the present study. It includes a description of the research sample, the research setting and method of data collection. Thereafter, the content as well as the reliability and validity of the research instrument used in this study are presented and lastly statistical analysis techniques and ethical considerations to conducting this research are discussed.

3.2. AIM OF THE STUDY

The purpose of this study was to examine attitudes towards individuals with disability amongst students and employees in a Higher Education Institution in the Western Cape. As noted in Chapter 1, the objectives of the study are:

- a) To determine the general attitudes of students and employees toward individuals with disability.
- b) To determine whether variables such as gender, age, educational level, regular contact and exposure, and having a family member or friend with a disability influence the attitudes of students and employees toward individuals with disability.

3.3. RESEARCH DESIGN

A quantitative, survey based research approach was used in this study. According to Kumar (1996) quantitative research is usually focused on measuring social reality. Cohen, Manion and Morison (2000) and Creswell and Miller (2000) define it as the research method that explains a phenomenon by using the collection of numerical data, which is analysed through mathematical procedures. Furthermore, Kumar (1996) describes the quantitative approach as being 'realist' or 'positivist'. According to this positivist view 'the truth is out there' and can be proven impartially through research.

Benefits of using a quantitative survey approach in this study include; it allowed for large amounts of data to be summarised at once and produced broadly generalisable information about the phenomena

i.e. staff and students attitudes towards those with disability. Furthermore, utilising the quantitative method in allowed for statistical comparison between various groups and indicated the extensiveness of attitudes held by staff and students; which serves to form a baseline understanding of the research in question. Specifically, the use of the statistical programme, Statistical Package for the Social Sciences (SPSS) version 23 ensured accurate and objective hypothesis testing through standardised t-Test and Analysis of Variance (ANOVA) methods. Lastly, data collection and analysis was quick, inexpensive and allowed for the respondents (n=140) to maintain their anonymity as attitudes towards individuals with disability may be regarded as a sensitive topic.

3.4. SELECTION OF SAMPLE

3.4.1. Population

According to Sekaran (2001, p. 266) a population refers to “the entire group of people, events, or things of interest that the researcher wishes to investigate.” Similarly, Terre Blanche, Durrheim and Painter (2006) define the population as the entire set under consideration from which samples are drawn.

The population of this research study constituted students from the Economic and Management Sciences (EMS) Faculty and Support Staff in a Higher Education Institution in the Western Cape.

3.4.2. Sample and sample size

A sample is a division, subgroup or subset of the population (Sekaran, 2001). Sekaran (2001) adds that by studying the sample, the researcher would be able to draw relevant conclusions that would be generalisable to the population of interest. Furthermore a sample is a representative of the population from which it is drawn, if the aggregate characteristics of the sample closely resemble those aggregate characteristics of the population (Babbie & Mouton, 2007). The sample for this study constitutes Support Staff members as well as EMS Faculty students (at varying study levels) from the University of the Western Cape, situated in Bellville, in the Western Cape.

An intended sample size of one hundred and fifty ($n=150$) participants was decided on for the study. According to Roscoe (1975 cited in Sekaran, 2001, p. 296), a sample size ought to be larger than thirty and less than five hundred to be noteworthy.

3.4.3. Sampling technique

According to Sekaran (2001) there are two categories of sampling design; probability and non- probability sampling. For the purpose of this study non-probability sampling was used. According to Loubser (1996, cited in Whitlow, 2005) in non-probability sampling there is no way of estimating the probability that any element will be included in the sample, and therefore there is no method of finding out whether the sample is truly representative of the population.

The non-probability sampling designs fit into the broad kinds of convenience sampling and purposive sampling (Sekaran, 2001). Convenience sampling is a type of non-probability sampling which involves the collection of information from the most easily accessible members of the population (Sekaran, 2001). Purposive sampling is where sampling is confined to specific types of people who can provide the desired information, either because they are the only ones who possess it, or conform to some type of criteria set by the researcher (Sekaran, 2001).

Convenience, non-probability sampling was used in this study as the researcher used individuals who volunteered and who were easily accessible to participate in the research.

Even though convenience non – probability sampling is one of the best approaches of getting basic information to get an overview for the phenomenon in question, it is important to be mindful of the techniques advantages and disadvantages which include; it is possibly the best and least expensive way of getting information quickly and efficiently (Sekaran, 2001). However, Sekaran (2001) and Terre Blanche et al. (2006) identified that the technique is one of the least reliable, highly unrepresentative sampling designs as generalisability is restricted i.e. therefore the findings from this study sample cannot be confidently generalised to the population and the sample is thus not an accurate representation of the population for this study.

3.5. METHOD OF DATA COLLECTION

Consent was requested and granted from the University of the Western Cape's Ethics Committee to distribute questionnaires (consisting of a biographical questionnaire and the Affective Reactions Subscale of the Disability Questionnaire) to the sample of one hundred and fifty (n = 150) EMS students and Support Staff at the Institution. The researcher visited administrative offices and lecture halls to distribute questionnaires and inform participants about the purpose of the

research, as well as the procedure and conditions of participating. Voluntary participation and signing a consent form was encouraged.

The questionnaire took more or less ten minutes to complete and a cross sectional design was adopted. Meaning the study or rather questionnaire was to be completed once, either at the present time or over a period of days.

3.6. RESEARCH INSTRUMENTS

3.6.1. Different measuring instruments used in measuring attitudes towards persons with disabilities

According to Martin and Arregui (2013) general attitudes towards disability in various contexts have prompted different research projects, highlighting the importance of quality questionnaires to measure them. Roush and Klockars (1988) reiterated the importance of valid and reliable instruments and with this numerous questionnaires exclusively intended to measure attitudes towards those with disabilities will be discussed in this section. The surveys include; the Attitude toward Disabled Persons Scale (ATDP), the Scale of Attitudes toward Disabled Persons (SADP), the Interaction with Disabled Persons Scale (IDP), Contact with Disabled Persons Scale (CDP) and the

Disability Questionnaire - subscale 2: the Affective Reactions and subscale 3: the Issue of Reasonable Accommodations.

According to Shannon, Tansey and Schoen (2009), Martin and Arregui (2013) the very first form of instrumentation measuring attitude towards disabilities was the Attitude toward Disabled Persons Scale (ATDP- O), a direct measure of attitudes towards people with disabilities, published by Yuker, Block and Young (1966). The ATDP has three versions (Hsu, 2011); the original ATDP-O by Yuker, Block and Young (1966) and the ATDP- Form A and ATDP- Form B, which was developed for the same purpose but had additional questions added and different scoring methods (Yuker, Block, &Young, 1966 as cited in Hsu, 2012). According to Hsu (2012) all three forms of the ATDP have been regularly administered by researchers to examine attitudes toward individuals with disabilities held by people with diverse backgrounds and according to Martin and Arregui (2013) this instrument has become a global referent.

According to Paris (1993 as cited in Trevo et al., 2004) the ATDP questionnaire presumes that certain people perceive individuals with disability as being different from and thus inferior to non- disabled persons (Yuker, Block, & Campbell 1960). The ATDP is a 6-point Likert

scale, which is fairly quick to administer and consists of 20 items. Achieving a low score indicates that the respondent perceives people with disabilities as different from normal people (Antonak & Livneh, 1988; Yuker, Block & Young, 1970; Yuker et al. 1960).

Concerning psychometric properties of the ADTP, Antonak and Livneh (1988) state that the scale is internally consistent, stable and reliable, with split-half reliability coefficients ranging from 0.75 to 0.85, and test-retest reliability values of 0.66 to 0.89. Similarly, a study conducted by Tervo et al. (2004) on 338 health professional students, to investigate student attitudes toward people with disability, calculated a reliability coefficient of 0.7884 and another study by Shannon et al., (2009) with 218 undergraduate students, the reliability coefficient calculated ranged between 0.72 and 0.87; indicating that the ADTP is a reliable and valid instrument.

Consequently, the Scale of Attitudes toward Disabled Persons (SADP) was developed after the ADTP by, Antonak in 1992 (Chenoweth, Pryor, Jean & Hall-Pullin, 2004). According to Antonak (1981 as cited in Tervo et al., 2004) the SADP measures attitudes toward persons with disabilities as a group. The SADP consists of 24 positive and negative statements about the abilities and rights of people with all forms of

disability in three domains, randomly arranged alongside a composite six-point Likert scale (Antonak, 1982 as cited in Chenoweth, Pryor, Jean & Hall-Pullin, 2004).

The first domain consists of ten questions concerning civil and legal rights: equity and equality of persons with disabilities. The second domain consists of five questions about free public education, the financial cost of adequate housing and rehabilitation programmes rights of those with disabilities. Lastly, the third domain contains nine questions regarding destructive stereotypes of personality and social characteristics of disabled persons (Chenoweth et al. (2004).

Chenoweth et al. (2004) adds, respondents are asked to rate their degree of agreement or disagreement for each statement from (-3) 'I disagree very much' to (+3) 'I agree very much'. A negative score indicates that the respondent displays more positive and accepting attitudes towards people with disabilities (Chenoweth et al., 2004).

Regarding the scales reliability and validity the Spearman-/Brown corrected reliability coefficients for the subscales were 0.71, 0.55 and 0.61 respectively and alpha coefficients ranging from 0.88 to 0.91 (Antonak, 1988). However according to Beckwith and Matthews

(1994), the scales had low levels of internal consistency and were therefore not suitable for longitudinal follow-up studies.

According to Martin and Arregui (2013), Gething and Wheeler (1992) developed the Interaction with Disabled Persons Scale (IDP) to make up for the limitations of the SADP which led to a review of the ATDP'S original version (Gething, 1986). The questionnaire by Gething and Wheeler (1992), measures attitude towards disabilities in general (Gilmore, Campbell, & Cuskelly, 2003). The survey consists of 20 questions which have to be rated on a 5-point scale (from 5 being "strongly agree" to 1 being "strongly disagree") (Gilmore et al., 2003). Gething (1991 as cited in Gilmore et al., 2003) reported fitting levels of reliability and validity have been established for the IDP; results of several test-retest assessments included reliability coefficients of over 0.8 for periods of 1 or 2 weeks, and 0.71 over a 6 month period. The internal consistency was also repeatedly demonstrated, with Gething (1991) documenting the alpha coefficients ranging from 0.74 to 0.86 (Gilmore et al., 2003). Furthermore, according to Forlin, Fogarty and Carroll (1999 as cited in Martin & Arregui, 2013) the IDP was shown to have adequate cross-cultural validity in research comparing South Africa and Australia.

According to Hsu (2012) another instrument for studying attitudes toward people with disabilities is the Contact with Disabled Persons Scale (CDP), developed by Yuker and Hurley (1987). The purpose of the CDP is to measure the amount of contact between individuals with and without disabilities as developers; Yuker and Hurley (1987) believed it was necessary to understand prior contact experience between people with and without disabilities, since it could be regarded a significant factor to influence one's attitude towards those with disabilities (Hsu, 2012).

The 20-item questionnaire was used by Yuker and Hurley (1987) to explore whether prior contact of respondents in general would influence their attitudes toward those with disabilities and in more recent times, Elmaleh (2000 as cited in Hsu, 2012) administered the CDP to study the attitudes of specifically non-disabled employees toward their co-workers with disabilities in the workplace.

In addition, the Disability Questionnaire is also regarded as a proper instrument to determine attitudes toward working with people with disabilities (Popovich et al., 2003). The questionnaire has three subscales; section 1-beliefs about disabilities and contains 42 psychological, physical, and sensory impairments and assesses which

conditions participants believe are ADA-covered disabilities, section 2- affective reactions, contains 21 questions, and section 3- the issue of reasonable accommodations, contains 25 items (Popovich et al., 2003 as cited in Hsu, 2012). According to Hsu (2012) its original purpose was to measure the attitudes of undergraduate students, enrolled in an introductory psychology course, toward individuals with disabilities (Popovich et al., 2003).

Arrays of researchers have chosen to use the various subscales independently. According to Copeland, Chan, Bezyak, and Fraser (2009) many researchers have utilised section 2 of the Disability Questionnaire - The Affective Reactions Subscale. This Subscale consists of 21 questions formed to measure people's reactions toward working with individuals and co-workers with disabilities. Respondents are requested to rate the 21 statements on a 7-point likert-type scale which varies from (1) completely agree to (7) completely disagree. According to Copeland et al., (2009) some of the statements are reversely coded for scoring purposes. Scores for instrument are computed by finding the sum of these 21 items in the scale (Popovich et al., 2003). Possible scores of the scale ranged from 21 to 147 points,

higher scores indicating a more positive attitude toward co-workers with disabilities held by the respondent (Hsu, 2012).

According to Popovich et al. (2003) when the Affective Reactions Subscale was originally used in two studies with undergraduate Introductory Psychology students as the respondents Cronbach's Coefficient values of 0.69 and 0.74, were respectively documented. In a study by Copeland (2007) assessing Colorado Springs employers' attitudes toward people with disabilities a reliability of 0.816 was obtained for the Affective Reactions Subscale. Copeland (2007) believes that the higher internal consistency is probably a result of respondents being practitioners with more real world experience dealing with disability issues in the workplace as compared to the convenience samples of undergraduate students used in the original studies (Popovich et al., 2003). In another study by Hsu (2012), assessing the attitudes of Taiwanese employees' attitudes towards co-workers with disabilities, a reliability coefficient of 0.85 was obtained affirming that the Affective Reactions Subscale 2 of the Disability Questionnaire is valid and reliable.

To assess the construct validity of the Affective Reactions Subscale of the Disability Questionnaire, Copeland et al. (2009) conducted exploratory factor analysis of the twenty one items Copeland and colleagues (2009) recorded the coefficient value of 0.83 and concluded the Affective Reactions Subscale of the Disability Questionnaire as a reliable and valid instrument to measure non-disabled people's attitudes toward people with disabilities in the workplace (Hsu, 2012).

3.6.2.2. The rationale for use

Based on the varying instruments used to measure attitudes toward persons with disabilities (as described above) this study used a biographical questionnaire accompanied by the Affective Reactions Subscale of the Disability Questionnaire to collect the data for the purpose of this study. The Affective Reactions Subscale was specifically designed to measure people's feelings toward working with individuals with disabilities, which matches the objectives of this study. Numerous studies have indicated that the subscale is reliable and valid. And lastly containing only 21 questions the instrument was quick and easy to administer and score.

3.7. STATISTICAL ANALYSES

Descriptive and inferential statistical techniques were utilized to test the research hypotheses for this study.

3.7.1. Descriptive Statistics

Descriptive statistics describe the phenomena of interest and entail the ordering and manipulating of raw data into “a form that would provide information to describe a set of factors in a situation” (Sekaran, 2001, p. 395). Frequencies, the mean and standard deviation will be used to describe the data collected from the affective reactions subscale of the disability questionnaire.

3.7.2. Frequencies

According to Sekaran (2001) and Goddard and Melville (2004) frequencies pertain to the number of times certain phenomenon occur. It also allows for an easy calculation of the percentage and cumulative percentage of their occurrence

3.7.3. Mean

The mean (μ) is a measure of central tendency. It is the average sum or calculated value of a set of numbers. The mean provides a “general image or picture of the data without unnecessarily inundating one with each of the observations in a data set” (Sekaran, 2001, p. 397).

3.7.4. Standard Deviation

According to Goddard and Melville (2004) the standard deviation is a commonly used measure of dispersion. It is unique to interval and nominal data and is purely the square root of the variance.

3.8. INFERENCE STATISTICS

According to Babbie and Mouton (2001), inferential statistics refer to the mathematical techniques used to make deductions or judgements about a population based on the data collected from a small sample drawn from the population. Numerous inferential techniques exist however for the purpose of this research the t-Test and Analysis of Variance (ANOVA) methods were used.

3.8.1. The t-Test

According to Goddard and Melville (2004) the t-Test helps to determine whether two groups are different from each other on a particular interval or ratio-scaled variable of interest. It is completed to determine if there are noteworthy differences in the means for two groups (which is the nominal variable divided into two subgroups) in the variable of interest.

Importantly, Sekaran (2001) notes that the t – Test takes into consideration the means and standard deviations between of the two groups on the variable and test whether the numerical difference in the means is considerably different from 0 (zero) as proposed in the null hypothesis. Furthermore, the t – Test can also be used to scrutinize the differences in the same group before and after an action is carried out e.g. training.

3.8.2. ANOVA

According to Sekaran (2001), analysis of variance (ANOVA) is used to examine the significant mean differences among multiple groups on an interval or ratio scaled dependant variable. ANOVA results verify whether or not the average of the various groups are notably different from one another and is represented by the Fisher Exact Probability

Test Statistic (*F*). The *F* statistic indicates whether two sample variances vary from one another or if they are from the same population. The *F* distribution is a probability distribution of sample variances and the family of distributions change with changes in the sample size (Goddard & Melville, 2004).

In the present study the analysis of variance was used to investigate the influence of: gender, age, education level, contact with and exposure to a person with disability and having a friend or family member with a disability, on attitudes towards individuals with disability amongst students and employees in a Higher Education Institution in the Western Cape.

3.9. ETHICAL CONSIDERATIONS

According to Cooper and Schlinder (2003, cited in Whitlow, 2005, p. 73) "ethics in research refer to norms and standards of behaviour and our relationships with others" when completing a study. According to Sekaran (2001) as well as Babbie and Mouton (2007) researchers need to be mindful of the following issues when conducting research:

- It is of utmost importance that the researcher treats information given by the respondent as strictly confidential and safeguards the respondents.
- Researchers should not misrepresent the nature of the study to those who will be participating. The purpose of the research must be truthfully and thoroughly explained.
- Regardless of the nature of the data collection process the self-esteem and self-respect of the respondents should never be violated.
- Individuals should never be forced to participate, should an individual refuse participation the researcher should respect the decision. Individuals who wish to participate should complete informed consent documentation.
- Respondents should never be exposed to or experience physical or mental harm. The researcher should take personal responsibility for the respondents' safety.

- The data collected during the study should be reported accurately and openly.

In the current study participants were thoroughly informed about the purpose of the research, as well as the procedure and conditions of participating. The researcher encouraged voluntary participation and invited participants to sign consent forms which included participants' rights and guaranteed confidentiality. These consent forms were gathered separately from completed questionnaires to protect and respect the identity of the participants. Furthermore, the researcher stored completed questionnaires in a secure place and also protected the confidentiality and integrity of the study by not sharing the responses with anyone but the assigned research supervisor.

3.10. CONCLUSION

This chapter presented an overview of the research design utilized for the present study. Firstly, information regarding the sample of participants and method of data collection were provided. The content of the Affective Reactions Subscale of the Disability Questionnaire, including its reliability and validity were discussed. Lastly,

descriptive and inferential statistical techniques were defined and ethical considerations to conducting this research were highlighted. The succeeding chapter will present the significant findings of the research.

CHAPTER 4

PRESENTATION OF RESULTS

4.1. INTRODUCTION

The preceding chapter highlighted the research methodology used for this study. This chapter will present the results of the study by means of descriptive statistics and inferential statistics to make inferences about characteristics of the population based on the sample of the study.

The aim of this study was to examine attitudes towards individuals with disability amongst students and employees in a Higher Education Institution in the Western Cape. The statistical programme, Statistical Package for the Social Sciences (SPSS) version 23 was used for the analyses and presentation of data. Firstly, the demographic information of the respondents will be presented. Secondly, reliability will be discussed and lastly inferential statistics between various biographical factors and attitudes towards those with disabilities will be provided.

4.2 DESCRIPTIVE STATISTICS

This section summarises the raw data obtained from the demographic variables included in the biographical questionnaire. The demographic variables are as follows:

- Gender
- Age
- Current education level
- Contact with and exposure to a person with disabilities
- Friend or family member with a disability

For each of these variables frequencies as well as percentages are presented in the form of tables.

4.2.1 Biographical Information

Table 4.1 Gender of the respondents

Gender of the respondents	Number of respondents (n = 140)	Percentage (100%)
Male	42	30%
Female	98	70%
Total	140	100%

Table 4.1, indicates the majority of the respondents (n = 98) or 70% were female while males represented 30% of the respondents (n = 42).

Table 4.2 Age of the respondents

Age of respondents	Number of respondents (n = 140)	Percentage (100%)
18 - 25	106	76%
26 - 30	12	8.6%
31 - 39	14	10%
40 - 50	5	3.57%
51 - Older	3	2.14%
Total	140	100%

Regarding the age distribution of the respondents, it is evident that majority of respondents (76%) were in the age group 18 – 25 years (n = 106), while 8.6% are in the 26 – 30 years age group (n = 12). Furthermore, 10% of the sample was in the 31 – 39 years age group (n = 14), 3.57 % (n = 5) in the 40 – 50 years age category and lastly, 2.14% (n=3) in the 51 and older category.

Table 4.3 Education level of the respondents

Qualification	Number of respondents (n = 140)	Percentage (100%)
Grade 12	5	3.57%
Diploma	1	0.71%
1st year of degree	1	0.71%
2nd year of degree	47	33.57%
Final year of degree	45	32.14%
Bachelors Degree	16	11.43%
Honours degree	22	15.71%
Masters degree and higher	3	2.14%
Total	140	100%

Based on Table 4.3, 33.57% of the respondents are in the second year of their degrees (n = 47). Respondents who were in the final year of completing a degree represented 32.14% of the sample (n = 45). Those who had completed Degree qualifications constituted 11.43% of the sample (n = 16) and those who completed their Honours comprised of 15.71% of the sample (n = 22). Furthermore, 2.14% (n = 3) completed a Masters Degree or higher qualification, whilst 0.71% of (n = 1) completed a diploma and another 0.71% (n = 1) completed the first year of Degree study.

Table 4.4 Respondents level of contact and exposure to people with a disability

Level of contact and exposure	Number of respondents (n = 140)	Percentage (100%)
Very regular or daily contact	17	12.14%
Regular or weekly contact	24	17.14%
Seldom or monthly contact	76	54.29%
No contact or exposure	22	15.71%
No response	1	0.71%
Total	140	100%

From Table 4.4, it can be seen that the majority of the respondents, 54.29% (n = 76) had seldom or monthly contact with others with disabilities, whilst 17.14% (n = 24) had regularly or weekly contact and 12.14% (n = 17) had very regular or daily contact. Respondents who had no contact or exposure constituted 15.71% (n = 22) of the sample and one respondent (0.71%) failed to respond to the question.

Table 4.5 Respondents with a family member or friend with a disability

Family or friend with a disability	Number of respondents (n = 140)	Percentage (100%)
I have a friend with a disability	30	21.43%
I have a family member with a disability	39	27.90%
No friend or family member with a disability	70	50%
No response	1	0.71%
Total	140	100%

Fifty percent of respondents (n = 70) do not have a friend or family member with a disability, whereas 27.90% of the respondents have a family member with a disability (n = 39) and 21.43% of the respondents have a friend with a disability (n = 30). It should be noted that one response was missing.

4.3 RELIABILITY ANALYSIS

Table 4.6 Reliability statistics of the Affective Reactions Subscale (ARS) of the Disability Questionnaire

Questionnaire	Number of items	Cronbach Alpha (α)
Affective Reactions Subscale (ARS)	21	0.770

Developed by Cronbach (1951) as a generalized measure or estimator of the internal consistency of a multi-item instrument, the Cronbach Coefficient Alpha is considerably the most universally used reliability coefficient. According to Peterson (1994) Cronbach further proposed that the closer the Coefficient Alpha is to 1, the greater the internal consistency of the items of the scale.

Kaplan and Saccuzzo (2012) with Murphy and Davidshofer (1988) affirm that coefficients between 0.70 and 0.80 can be considered as good indicators of the reliability of an instrument. The ARS with a coefficient of 0.770 is thus a reliable scale for the sample.

4.4 INFERENCE STATISTICS

The following section will elaborate on testing of the hypotheses which was computed with the t-Test and Analysis of Variance (ANOVA) methods.

Hypothesis 1: There is a statistically significant difference in attitudes towards individuals with disabilities based on gender.

Table 4.7 Descriptive statistics for the Affective Reactions Subscale and gender

Gender	N	Mean	Std. Deviation	Std. Error Mean
Male	42	55.37	13.681	2.111
Female	97	55.10	13.176	1.338

From table 4.7 it can be seen that the mean score for males on the ARS is 55.37 (SD =13.68) and the mean score for females was 55.10 (SD =13.18).

Table 4.8 Independent sample test for the Affective Reactions Subscale and gender

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
ARS Total	Equal variances assumed	.534	.466	.113	137	.910	.279	2.462	-4.589	5.148
	Equal variances not assumed			.112	75.353	.911	.279	2.499	-4.699	5.258

From table 4.8 it is evident that the significance level is greater than 0.05 hence there is no statistical difference for ARS between males and females, $F(137) = 0.534$; $p > 0.05$.

Hypothesis 2: There is a statistically significant difference in attitudes towards individuals with disabilities based on age.

Table 4.9 Descriptive statistics for the Affective Reactions Subscale and age

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
18-25	105	55.98	13.314	1.299	53.41	58.56	27	88
26-30	12	52.92	13.270	3.831	44.49	61.35	28	76
31-39	14	54.21	14.719	3.934	45.72	62.71	29	86
40-50	5	51.95	8.723	3.901	41.12	62.78	41	59
51 and older	3	46.00	14.177	8.185	10.78	81.22	35	62
Total	139	55.18	13.281	1.126	52.95	57.41	27	88

The mean scores on the ARS range from 46.00 (SD = 14.17) for the group aged 51-older, to 55.98 (SD = 13.31) for the group aged 18-25 years old. For the group of respondents aged between 26 -30 years old a mean score of 52.92 (SD = 13.270) was calculated and for the respondents between 31-39 years old a mean of 54.2 (SD = 14.719) was obtained. Lastly, a mean score of 57.96 (SD = 8.723) was calculated for the respondents in the 40-50 years old category.

Table 4.10 ANOVA for the Affective Reactions Subscale and age

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	447.368	4	111.842	.627	.644
Within Groups	23894.525	134	178.317		
Total	24341.893	138			

It can be seen in table 4.10 that there is no significant difference between the different age groups and the ARS, $F(4,134) = 0.627$; $p > 0.05$. For this reason post hoc analysis was not necessary.

Hypothesis 3: There is a statistically significant difference in attitudes towards individuals with disabilities based on educational level.

Table 4.11 Descriptive statistics for the Affective Reactions Subscale and education level

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
					Lower Bound	Upper Bound		
Grade 12	5	59.14	10.283	4.599	46.37	71.91	41	66
Diploma	1	45.00	.	.	.	.	45	45
1st year of degree	1	49.00	.	.	.	.	49	49
2nd year of degree	47	57.78	11.228	1.638	54.48	61.08	35	84
Final year	44	54.49	14.894	2.245	49.96	59.02	27	87

Degree	16	52.81	14.400	3.600	45.14	60.49	28	86
Honours degree	22	53.45	14.566	3.105	47.00	59.91	28	88
Masters and higher	3	48.67	9.292	5.364	25.59	71.75	41	59
Total	139	55.18	13.281	1.126	52.95	57.41	27	88

As seen in table 4.11 the mean score for education level on the ARS averaged between 45.00 (SD = 0) for respondents with a Diploma and completion of year 1 of their degrees and the mean score of 59.14 (SD =10.28) for respondents who had completed grade 12.

Table 4.12 ANOVA for the Affective Reactions Subscale and education level

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	841.898	7	120.271	.670	.697
Within Groups	23499.995	131	179.389		
Total	24341.893	138			

As in table 4.12, $F(7,131) = 0.670$; $p > 0.05$ indicates that there is no significant difference between the different education levels and the Affective Reactions Subscale. Thus post hoc analysis was not required.

Hypothesis 4: There is a statistically significant relationship between regular contact with and exposure to a person with disabilities and attitudes towards individuals with disabilities.

Table 4.13 Descriptive statistics for the Affective Reactions Subscale and exposure to a person with a disability

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
					Lower Bound	Upper Bound		
Very regular or daily contact	17	57.91	13.215	3.205	51.12	64.71	35	88
Regular or weekly	24	51.79	9.987	2.039	47.57	56.01	37	74
Seldom or monthly	76	55.52	14.034	1.610	52.31	58.73	27	86
No contact or exposure	21	56.24	13.917	3.037	49.90	62.57	35	87
Total	138	55.28	13.282	1.131	53.04	57.51	27	88

Table 4.13 presents that the mean scores for exposure to a person with a disability on the Affective Reactions Subscale range between 51.79 (SD = 9.987) for regular or weekly exposure and 57.91 (SD = 13.215) for very regular or daily contact.

Table 4.14 ANOVA for the Affective Reactions Subscale and exposure to a person with a disability

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	433.637	3	144.546	.816	.487
Within Groups	23733.290	134	177.114		
Total	24166.927	137			

Table 4.14 indicates that there is no significant difference between the different degrees of exposure to a person with a disability and the Affective Reactions Subscale, $F(3,134) = 0.816$; $p > 0.05$. Consequently post hoc analysis was not necessary.

Hypothesis 5: There is a statistically significant relationship between having a family member or friend with a disability and attitudes towards individuals with disabilities.

Table 4.15 Descriptive statistics for the Affective Reactions Subscale and having a friend or family member with disability

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
					Lower Bound	Upper Bound		
I have a friend with a disability	30	55.97	10.532	1.923	52.03	59.90	35	86

I have a family member with a disability	39	53.09	13.983	2.239	48.56	57.62	27	81
No friend or family member with a disability	69	55.91	14.042	1.690	52.53	59.28	28	88
Total	138	55.12	13.313	1.133	52.88	57.36	27	88

The mean scores on the ARS for having a friend or family member with a disability range from 53.09 (SD = 13.983) for respondents having a family member with a disability to 55.91 (SD = 14.042) for respondents who do not have a friend or family member with a disability.

Table 4.16 ANOVA for the Affective Reactions Subscale and having a friend or family member with disability

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	224.615	2	112.307	.630	.534
Within Groups	24055.680	135	178.190		
Total	24280.295	137			

Evident in table 4.16, there is no significant difference between having a friend or family member with disability and the ARS, $F(2,135) = 0.630$; $p > 0.05$. Once more, post hoc analysis was not required.

When investigating whether there is a significant difference in attitudes towards individuals with disabilities based on staff member or student status the following was found.

Table 4.17 Descriptive statistics for the Affective Reactions Subscale and staff and students

Staff_student	N	Mean	Std. Deviation	Std. Error Mean
Staff	17	48.35	14.313	3.471
Student	122	56.13	12.908	1.169

Table 4.17 indicates a mean of 48.35 (SD = 14.313) for staff members and 56.13 (SD = 12.908) for students on the Affective Reactions Subscale.

Table 4.18 Independent sample test for the Affective Reactions

Subscale and staff and students

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
ARS_Total	Equal variances assumed	.010	.921	-2.297	137	.023	-7.778	3.386	-14.474	-1.082
	Equal variances not assumed			-2.124	19.798	.047	-7.778	3.663	-15.424	-.133

From Table 4.18 it is clear there is no statistical difference for the Affective Reactions Subscale between staff and students as the significance level is greater than 0.05, $F(137) = 0.10$; $p > 0.05$.

4. 5.CONCLUSION

This chapter provided an overview of the most important findings which emerged from the data. The demographic information of the research participants and reliability of the scale was discussed. Lastly, significant differences in the respondents' reaction to the ARS and

various biographical factors were provided. The hypotheses set for the study was tested and no significant differences were found between the different groups and their scores on the ARS. Thus hypotheses one to five was rejected. The subsequent chapter will discuss and compare the results obtained to related research and provide limitations of the study as well as recommendations for future research.

CHAPTER 5

DISCUSSION, RECOMMENDATIONS AND CONCLUSION

5.1. INTRODUCTION

In the preceding four chapters, chapter one highlighted the motivation, hypotheses and objectives of the study. Chapter two provided literature relevant to the study of attitudes towards persons with disabilities. The research design and methodology used for this study was discussed in chapter three and chapter four presented the results of the study using descriptive and inferential statistics. This final chapter summarizes the key findings for this study, identifies limitations of the study and lastly offers conclusions and recommendations with regard to staff and student attitudes toward those with disability.

5.2. DESCRIPTIVE STATISTICS

5.2.1 Descriptive Statistics: The sample in relation to biographical variables

This segment highlights the descriptive statistics calculated on the variables included in the biographical questionnaire of the study.

The total sample consisted of 140 respondents, of whom the majority of the sample were female $n = 98$ (70%) whilst males attributed to the remaining 30% ($n = 42$). Similar, to research by the Department of Higher Education and Training (2015) which found that in 2013 women constituted approximately 51% of the population and further represented 58% of the total headcount enrolment in the public higher education sector for that year. Regarding age, majority, 76% ($n = 106$) of the complete sample are aged between 18 to 25 years old and 33.57% ($n = 47$) are currently completing their second year of degree studies. This age demographic is also typical for studies conducted at tertiary institutions as according to the headcount enrolments by age grouping for students in 2013 majority of students enrolled were aged between 20 – 24 years old (Department of Higher Education and Training, 2015). Furthermore, half of the sample 50% ($n = 70$) do not have a friend or family member with a disability and 54.29% ($n = 76$) of the sample have seldom or monthly contact and exposure to individuals with disabilities.

5.3. INFERENCE STATISTICS

The following section will elaborate on the prominent findings of the hypotheses tested to explore the relationship between various biographical variables and attitude towards individuals with disabilities.

5.3.1 Hypothesis 1

There is a statistically significant difference in attitudes towards individuals with disabilities based on gender.

Results from this research indicate that there is no statistically significant relationship between gender and attitude towards disability, $F(1,37) = 0.534$; $p > 0.05$. Hence the hypothesis is rejected.

Correspondingly, Copeland (2007) also noted that gender does not predict a respondent's attitude toward working with individuals with disabilities or beliefs about reasonableness of accommodations for those with disabilities.

In disagreement, majority of research, including samples of college healthcare students, business students, managers, and even children aged from 9 to 12 years old, indicated a significant relationship between gender and attitude towards disability. More specifically, Krajewski and Flaherty (2000), Popovich et al. (2003), Tervo, Azuma, Palmer and Redinius (2002), Ten Klooster et al. (2009), Laws and Kelly (2005) as well as Hergenrather and Rhodes (2007) all reported that females tended to have more positive and favourable attitudes toward individuals with disabilities compared to males.

With minimal consensus to the majority of existing literature it can be assumed that the absence of a statistically significant relationship between gender and attitude towards disability is sample dependant.

5.3.2. Hypothesis 2

There is a statistically significant difference in attitudes towards individuals with disabilities based on age.

No statistically significant difference was found between age and attitude towards disability, $F(4,134) = 0.627$; $p > 0.05$. Therefore the hypothesis is rejected.

Researchers, Bakheit and Shanmugalingam (1997) and Yazbeck et al. (2004), found that younger people have more positive perceptions. Whereas, Ten Klooster et al. (2009) found that older age was a statistically significant predictor of a more positive attitude to physically disabled persons. Livneh (1982) reported attitudes toward those with disabilities are less favourable at early childhood, teenage years, and elderly age and more positive at young to middle adulthood.

Similar to the results found in this study, research by Perry et al. (2008) on college students, and research by Tervo et al. (2004) on professional

healthcare students found that age was not a determining variable influencing attitude toward those with disabilities. In addition, the study by Al-Abdulwahab and Al-Gain (2003) on health care professionals also concluded that an individual's attitude toward those with disabilities was not a consequence of the age of the individual. The absence of a relationship between age and attitude towards disability in this study may then be attributed to students comprising the majority of the sample.

5.3.3. Hypothesis 3

There is a statistically significant difference in attitude towards individuals with disabilities based on education level.

As presented in the results there is no statically significant relationship between attitude towards those with disabilities and education levels, $F(7,131) = 0.670$; $p > 0.05$. Once more the hypothesis is rejected.

Fichten (1988) accompanied by Scior, Kan, McLoughlin, & Sheridan, 2010, Lau and Cheung (1999) as well as Livneh (1982) found that firstly, people with higher educational achievements or levels tend to be more tolerant of people with disabilities. Secondly, they found that these same individuals were more accepting and generally held

positive attitudes toward others with disabilities than those with a limited educational background. However according to the Yunker, Block and Young (1966) study that focused on the attitudes of occupational therapy undergraduate students, years of undergraduate education completed or academic training does not appear to affect the attitudes toward persons with disabilities.

5.3.4. Hypothesis 4

There is a statistically significant difference in attitudes towards individuals with disabilities based on exposure to a disabled person.

Based on the results of this research there is no statistically significant relationship between exposure to a disabled person and attitude towards disability. For this reason the hypothesis is rejected.

In agreement, Kregel and Tomiyasu (1994) also failed to identify a relationship between employers' experience with individuals with disabilities and attitudes toward individuals with disabilities in the workforce.

However in contrast to this, many studies have consistently established that employers and employees who have had more frequent contact and experience with people with disabilities, have more favourable

attitudes towards persons with disabilities, are more willing to work with them and less likely to negatively label and discriminate against them (Able Trust, 2003; Gilbride et al., 2000; McLoughlin, 2004; Popovich et al., 2003; Scherbaum, Scherbaum, & Popovich, 2005, Riches & Green, 2003., Laws & Kelly, 2005.,McFarlin et al.,1991., Diksa, 1996;Gruenhagen, 1982; Levy et al., 1992; McFarlin et al., 1991.,Mitchell et al., 1984& Corrigan et al, 2001). As the results of this study is based on attitude towards disability and exposure to disabled persons is not aligned to majority of the literature it may be contingent on the sample used.

5.3.5. Hypothesis 5

There is a statistically significant difference in attitudes towards individuals with disabilities based on having a friend or family member with a disability.

No statistically significant relationship was found between having a friend or family member with a disability and attitude towards disability, $F(2,135) = 0.630$; $p > 0.05$. Hence the hypothesis is rejected.

Studies conducted by Ten Klooster et al. (2009), Lyons (1991), McConkey and Truesdale (2000), Horner-Johnson et al. (2002) and

Stachura and Garven (2003) are in disparity to the results of this study in that they concluded that the form or degree of contact is a more powerful predictor for attitudes than contact by itself, signifying that those with personal contact with people with disabilities outside their working lives i.e. having a relative or close friend hold more positive attitudes.

Conversely, research by Tripp, French, and Sherril (1995) supported by Shannon et al. (2009) found that contact with persons with disabilities alone appears insufficient even when the contact is a close relative or peer. For this reason the lack of consensus in literature may be influenced by the sample used in the study.

5.4. LIMITATIONS

Several limitations related to the researcher, population, instrument, and methodology of this study were identified.

Firstly, throughout the study the researcher used the term disability broadly leaving it up to the respondent to interpret. This could be seen as a limitation because should disability have been defined or clarified in terms of specific type, respondents may have responded differently

to the statements of the questionnaire and the possible outcomes of the study would have been significantly different.

As research was conducted at only one of the Higher Education Institutions in the Western Cape with a sample size of $n = 140$ respondents, this study may not be entirely representative of the staff and student complement at Higher Education Institutions in the Western Cape, which currently easily exceeds over 100 000 persons.

In addition, the use of non-probability convenience sampling may also be viewed as a limitation as the findings from the study of the sample cannot be confidently generalised to the greater population of staff and students at other Higher Education Institutions in the Western Cape or greater South Africa.

Furthermore, the study specifically focused on Economic and Management Sciences (EMS) Faculty students; who may be very homogeneous regarding variables of age and education level. Again this makes it difficult to generalise the results to apply to the population of students outside of this Faculty and greater Higher Education Institution community.

The method of data collection was quantitative and may have restricted the quality of responses from the sample. The questionnaire utilised in the study was presented in the format of a Likert scale and thus respondents were not able to add comments or explanations to statements in the questionnaire. Aligned to this is the exclusive use of the self-reporting questionnaire as the data collection tool. Even though this method allowed the researcher to get personal perspectives of the participants on the topic, a certain amount of social desirability, impression management and random responding are expected in self-report measures (Du Plooy & Roodt, 2013) which may result in potential validity problems.

Lastly, according to Antonak and Livneh (1998) and Oppenheim (1992) people's attitudes toward individuals with disabilities may change many times, dependant on whether they have different contact experiences with those with disabilities at different life stages or in particular circumstances. Therefore, it should be noted that the once-off completion and collection of the ARS questionnaire may also be seen as a limitation as respondents may have only expressed what they felt at that particular period or based on a more recent

experience, rather than their lifelong attitudes toward individuals with disabilities.

5.5. RECOMMENDATIONS AND CONCLUSION

5.5.1 Recommendations

Based on the limitations of the study the following recommendations are proposed for future research.

As this study failed to specify the specific kind of disabilities students and staff will be exposed to, future research should specify the type of disability (intellectual, physical, mental etc.) as respondents may yield different responses depending on the severity, visibility and general knowledge of the disability. In correspondence, Offergeld (2012) affirms attitudes towards persons with disabilities vary significantly depending on the type of impairment.

Further studies should explore how individuals with disabilities at Higher Education Institutions perceive the attitudes of their co- students and workers without disabilities toward themselves. This will provide an opportunity to examine similar issues highlighted in this study from

opposite perspectives and the findings of conducting such a study would then serve as a form of validation for the outcomes of this study. As this study was only conducted within one of the many Higher Education Institutions in the Western Cape and specifically focused on EMS Faculty students, it cannot be representative of all Higher Education Institutions in the Western Cape and greater country. Future studies should involve other Faculties, larger, more heterogeneous sample sizes and even combinations of Institutions.

As indicated in the limitations, the method of data collection was quantitative and this may have restricted the quality of responses from the sample. In the future it would be beneficial to use a combination of quantitative and qualitative data gathering methodology as attitude towards the disabled may be viewed as a sensitive topic. The additional use of qualitative measures may allow respondents to fully explain their logic behind their responses to the statements presented and may drive them to respond more truthfully.

Limited research has been completed on biographical variables and attitudes towards the disabled in the South African context. Future studies should be conducted on these variables in educational and

other sectors to enhance the South African literature on this topic, in turn making it easier to gather and compare local trends.

Lastly, the results of this study has concluded that gender, age, educational level, exposure and contact to those with disabilities as well as having a friend of family member with a disability does not have a significant impact on the attitudes of staff and students towards individuals with disabilities. Future studies should be conducted to determine what factors influence attitudes towards those with disabilities in the diverse South African context. This research could lead to the development of interventions that could create an inclusive environment and ultimately enhance the relationships between those with and without disabilities.

Regarding recommendations for organisations and institutions the following is proposed. Organisations and tertiary institutions are to continue enhancing infrastructure and facilities to better accommodate persons with disabilities. These accommodations should then also be extensively marketed and advertised to attract greater numbers of staff as well as students with disabilities to the Institution, further improving the employer or institution of choice factor for the organisation or institution.

Disability sensitisation sessions in educational and workplace settings should be explored through intensive, fun and very interactive awareness campaigns. In which students and staff with disabilities should be encouraged to fully participate in the design and event management of these campaigns. Lastly, institutions and organisations should encourage individuals without disabilities to assist individuals with disabilities during induction or orientation periods and at other random or predetermined times of the year. As in most existing research it is found that contact and exposure to disability generally improves attitude and positivity towards individuals with disabilities (Laws & Kelly, 2000).

5.5.2. Conclusion

The study aimed to determine the general attitudes of students and employees toward individuals with disabilities and more importantly to investigate whether variables such as gender, age, educational level, regular contact and exposure to persons with disabilities, or having a family member or friend with a disability influence attitudes towards individuals with disabilities.

The 2002 National Scottish Social Attitudes Survey found that attitudes towards disability in Scotland are scarcely affected by social characteristics such as age, class and education, or even by their own experience of disability (NDA, 2007).

Similarly, as evidently displayed by the findings of this research study, significant relationships does not exist between variables such as gender, age, education level, amount of contact and exposure to or having a friend or family member with disability and staff and student attitudes toward those with disabilities in a Higher Education Institution in the Western Cape. Herewith, the five hypotheses as determined in Chapter 1 are therefore all rejected on the basis of results and discussions explained in Chapter 4 and 5.

As the results of this research failed to mirror existing literature, it is conjectured that the absence of significant relationships between the biographical variables in question and attitude towards disability may be consequence of the student sample used. However, according to research by Hergenrather and Rhodes (2007) attitudes of students are acceptable to include in this type of research, as they believe this population represents persons who are preparing to enter the working

world in which they will be likely to interact with individuals with disabilities either as superiors, subordinates or colleagues.

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