A SURVEY OF FACULTY ATTITUDES: POST-SECONDARY STUDENTS WITH PSYCHIATRIC VS. NON-PSYCHIATRIC DISABILITIES

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A Survey of Faculty Attitudes: Post-Secondary Students With Psychiatric vs. Non-Psychiatric Disabilities

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Abstract

Research shows that students with psychiatric disabilities attending post-secondary institutions are less likely to seek supports using the office of disability services than are students with other disabilities. One of the reasons that students give for not disclosing their disabilities is a belief that they will face stigmatizing attitudes as a result of such disclosure. While it is known that negative attitudes toward psychiatric disabilities exist within the general population, there is a paucity of research that profiles attitudes toward post-secondary students who have psychiatric disabilities, particularly in contrast to attitudes toward post-secondary students with other disabilities. The present study therefore investigated the attitudes of faculty regarding post-secondary students with psychiatric and other disabilities using an internet-based quantitative survey method. Results confirmed previous findings that attitudes toward non-visible disabilities are less positive than they are toward visible disabilities, and that within the non-visible category, attitudes toward psychiatric disabilities are more negative than they are toward learning disabilities. Attitudes were improved by providing faculty members with either a term identifying a particular type of disability or detailed disability information, suggesting that disclosure can reduce the effects of stigmatization. Several characteristics that were correlated with disability attitudes in previous studies were investigated as well. Of these, gender and access to disability information exerted the strongest influence on disability attitudes. Suggestions are given for combating the identified issues via disability training for faculty members.

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Chapter 1: Introduction

The number of students with psychiatric disabilities in post-secondary institutions is increasing dramatically every year (Sharpe, Bruininks, Blacklock, Benson, & Johnson, 2004), and yet these students are less likely to seek supports using the office of disability services than are students with other disabilities (Rana, Smith & Walkling, 1999). One of the more common reasons that students cited for deciding not to self-identify is a belief that they will face stigmatizing attitudes as a result. Stigmatizing attitudes toward individuals with psychiatric disabilities are known to exist in the general population. Post-secondary students and faculty appear to have varying degrees of stigmatizing attitudes toward students with disabilities in general, and particularly toward students with non-visible disabilities, which would include psychiatric disabilities. However, very little research has specifically addressed attitudes toward students with psychiatric disabilities at the post-secondary level. In an attempt to begin to fill this gap, an investigation was conducted to ascertain the attitudes of faculty toward students with psychiatric versus other disabilities, and in particular other non-visible disabilities. Certain known correlates of disability attitudes were also examined as independent variables, including gender, age, ethnicity, size of one's community, level of education, years of teaching experience, academic rank, academic department, disability knowledge, training in disability issues, familiarity with campus services, and the amount of previous disability contact.

Purpose of the Study

Insufficient information regarding faculty attitudes toward post-secondary students with psychiatric disabilities exists in the current literature. Given the prevalence

of students with psychiatric disabilities attending post-secondary institutions and the anticipated dramatic increase in their numbers this was seen as a cohort needing greater attention (Sharpe et al., 2004).

Previous research has indicated that post-secondary students with psychiatric disabilities perceived that they were being stigmatized (Blacklock, Benson & Johnson, 2003; Grayson, Miller & Clarke, 1998; Hill, 1996; Liebert, 2003; Manthorpe & Stanley, 1999; McDiarmid & Ratzlaff, 2003; Meltzer, Bebbington, Brugha, Farrell, Jenkins & Lewis, 2000; Rickerson, Souma, & Burgstahler, 2004; Thomas, 2003; Weiner, 1999; Weiner & Wiener, 1996). It was important to determine if these perceived stigmatizing attitudes were actually present in the post-secondary setting. Previous research has shown that post-secondary faculty and peer views of students with non-visible disabilities were less favourable than for students with visible disabilities, (Hill, 1996; Leyser, Vogel & Wyland, 1998; Rickerson et al., 2004; Upton & Harper, 2002), and other research had suggested that some faculty held negative attitudes toward students with psychiatric disabilities (Becker, Martin, Wajeeh, Ward & Shern, 2002; Rickerson et al., 2004), but these studies did not compare students with psychiatric disabilities to students with non-psychiatric disabilities. Thus, the extent to which attitudes toward students with psychiatric disabilities differ from attitudes toward students with other disabilities remained largely unknown. The study therefore attempted to determine if faculty hold different attitudes toward students with psychiatric disabilities than they do toward students with other disabilities, including other non-visible disabilities.

Definitions

Accommodation(s): An accommodation is an intentional act undertaken to facilitate the ability of persons with disabilities to do things differently than others (A Legal Resource Centre for Persons with Disabilities [ARCH], n.d.). For purposes of this study, 'accommodation' refers to efforts made in post-secondary environments to remove the barriers that limit the full participation or educational potential of persons with disabilities. Some common examples of accommodations are note takers or scribes for individuals who are not able to write for one reason or another (e.g., poor concentration due to mental illness, learning disability, attention deficit disorder, cerebral palsy), allowing beverages in class (e.g., students taking medications), providing extra time and/or quiet locations to write exams, providing electronic copies of written materials, etc.

Attitude: This study uses a three-part definition of attitude proposed by Triandis, Adamopoulos and Brinberg (as cited in Leyser et al., 1998): "an attitude is an idea (cognitive component) charged with emotion (affective component) which predisposes a class of actions (behavioral component) to a particular class of social situations" (p. 9). In agreement with several previous researchers, willingness to learn about disabilities, and willingness to teach and make accommodations for individuals with disabilities are considered an expression of a positive attitude (Leyser et al., 1998; Nelson et al., 1990).

Disability: There is no one legal definition of disability in Canada. The *Canadian Charter of Rights and Freedoms* is the legislation that protects disability rights, but it does not provide a definition. The 'social model' of disability defines it in terms of functional limitations, that is, disabilities are often not intrinsic to the individual but are

the consequence of socially created barriers, including policies, procedures, and attitudes. A disability may result from a physical limitation, an ailment, a social construct, a perceived limitation or a combination of these (ARCH, n.d.). An individual may experience functional limitations (and hence be considered to have a disability) in one environment but not in another, or at one point in time but not at another. For this study, students with disabilities are considered to be those who have some form of functional limitation that hinders full participation in post-secondary education and requires some form of accommodation(s). Common examples of such disabilities include mental illnesses such as depression, obsessive-compulsive disorder, schizophrenia, anxieties or phobias; chronic illnesses such as HIV/AIDS, chronic fatigue syndrome, or kidney dialysis; physical disabilities such as cerebral palsy or spinal chord injuries; sensory disabilities such as blindness or hearing difficulties; learning disabilities; intellectual disabilities such as Down syndrome or Fragile X syndrome. Students with disabilities are usually required to register with disability services to receive accommodations, but this will not considered part of the definition of 'disability' for this research.

Disability Services: The term Disability Services, or Disability Services Office, refers to the office that is responsible for arranging disability supports, services and accommodations at post-secondary institutions throughout Newfoundland and Labrador. A faculty member or staff person, such as a Coordinator of Disability Services, usually oversees these offices.

Faculty: Full-time and part-time teaching staff at public post-secondary institutions in Newfoundland and Labrador; members of the post-secondary institutions' faculty association or union.

Non-psychiatric disability: A disability that is not psychiatric in nature (i.e., not a mental illness); applies to individuals who have a disability but do not have a psychiatric disability.

Post-secondary institution: A degree, diploma or certificate-granting institution recognized by or registered with the Government of Newfoundland and Labrador (Government of Newfoundland and Labrador, n.d.).

Psychiatric disability: The term 'psychiatric disability' is applied to individuals having "diagnosed mental illnesses that limit their capacity to perform certain functions…and their ability perform certain roles" (Anthony et al., cited in Weiner & Weiner, 1996, p.1). This means that all mental illnesses listed in the *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition (American Psychiatric Association, 2000) can be considered as disabilities, including adjustment, anxiety, cognitive, mood, psychotic, sleep, and several other categories of disorders. For this study, the term 'psychiatric disability' will be applied to students within a post-secondary setting whose disability is psychiatric in nature. Note that students with psychiatric disabilities may or may not have other disabilities as well, and that for purposes of this study the psychiatric disability need not be considered the primary disability.

Chapter 2: Literature Review

Psychiatric Disabilities in Post-secondary Education

The overall number of students with disabilities attending post-secondary institutions has increased dramatically during the past 30 years. For example, York University reported having 19 students with disabilities in the 77/78 school year, and 114 in 85/86; McGill reported having 78 such students in 88/89, and 245 in 97/98 (Canadian Association of Disability Service Providers in Post-secondary Education, CADSPPE, 1999). A 1991 Health and Activity Limitation Survey (HALS) estimated that 112,000 people with disabilities were enrolled in post-secondary institutions in Canada (CACUSS, 1999). This represents seven percent of the Canadian post-secondary student population at that time. There has been no comprehensive survey since that date, although anecdotal accounts seem to suggest that these numbers have increased.

The number of post-secondary students with psychiatric disabilities has increased primarily within the last decade (Sharpe et al., 2004). As a result, this segment of the population has not been studied extensively within the context of post-secondary education, and information regarding barriers, needs, and appropriate accommodations is only just emerging. Any research that has been undertaken suggests that this group of students faces different barriers and has different needs than students with other types of disabilities.

Estimates indicate that of all post-secondary students reporting disabilities, 15-21% report having psychiatric disabilities (Rickerson et al., 2004). Further, the number of students with psychiatric disabilities attending post-secondary institutions is on the rise. For example, in 1999, 5 of 10 surveyed American institutions reported increases from 30% to 100% in the number of students with psychiatric disabilities (Sharpe et al.,

2004). There are a number of reasons for this increase. First, more and more illnesses and maladaptive behaviours are now identified as 'mental illnesses'. Where twenty years ago this term applied primarily to the 'major disorders' such as schizophrenia, mood and personality disorders, it now encompasses a host of anxiety, phobic, eating and addiction disorders as well. Second, mental illness appears to be on the rise in the general population. In 2001, 2.2% of Canadians over age 15 had psychiatric disabilities (Statistics Canada, 2001). In *A Report on Mental Illness in Canada* (Health Canada, 2002), more than 12% of the adult population was estimated to have a mental illness[1]. A 1993 Health Canada study estimated that the total cost of mental illness in Canada, in terms of productivity loss and health care expenses, was $7.331 billion. In 1996/97, this cost was estimated at $14.4 billion (Health Canada, 2002). Third, changes in the treatment of mental illness means that more individuals are able to carry on relatively functional lives in the community, including post-secondary environments, thanks to improvements in psychotropic medications. Fourth, unlike many other disabilities, psychiatric disabilities tend to be cyclical in nature with periods of remission and the possibility of recovery (Cooper, 1993). During periods of wellness, participation rates in post-secondary education would be comparable to those of the general population. Fifth, thanks to the Disability Rights Movement and resulting changes in legislation, equal access to post-secondary education is guaranteed to individuals with all manner of disabilities, including psychiatric disabilities. In Canada, the Charter of Rights and Freedoms is the main piece of legislation guaranteeing access to post-secondary education for individuals with disabilities (*Disability Rights in Canada*, 2003). This

[1] Though not necessarily a psychiatric disability; see *Definitions*, pp. 4-5.

legislation applies across the country via the 'duty to accommodate', which means that all work places and educational institutions are legally obliged to make 'reasonable' accommodations for students with disabilities, to the point of 'undue hardship' (Alberta Human Rights and Citizenship Commission, 2004). Finally, many mental illnesses manifest themselves in late adolescence and the early 20's, an age at which many youth are enrolled post-secondary education programs.

Stigma and Psychiatric Disabilities

Despite the increasing numbers of students with psychiatric disabilities attending post-secondary educations, or perhaps because of the recency of this increase, this remains a relatively unstudied and underserved segment of the population. Studies that have been undertaken suggest that there are a number of barriers these students face in pursuing post-secondary level education. Some of these may be unique to psychiatric disabilities. It has been suggested that one of the greatest barriers for these students is the perceived stigma associated with mental illness (Blacklock et al, 2003; Grayson et al., 1998; Hill, 1996; Liebert, 2003; Manthorpe & Stanley, 1999; McDiarmid & Ratzlaff, 2003; Meltzer, Bebbington, Brugha, Farrell, Jenkins & Lewis, 2000; Rickerson et al., 2004; Thomas, 2003; Weiner, 1999; Weiner & Wiener, 1996). Partially perpetrated by media portrayals of mental illness, the general public tends to greet individuals who have psychiatric disabilities with fear, including fear of violence. However, research has shown that there is no greater risk of experiencing violence at the hands of someone with a mental illness than by someone one who does not have a mental illness (Liebert, 2003; Freidl, Lang & Sherer, 2003; *How can we decrease stigma?*, n.d.; Pinfold, Toulmin, Thornicroft, Huxley, Farmer & Graham, 2003). The stigma surrounding mental illness

also results from to the mistaken belief that mental illness is a sign of weakness of character, unlike physical illness. Studies have demonstrated that the general public believes people with mental illnesses are less intelligent, less trustworthy, lazy, unreliable, irrational, unpredictable, lacking in willpower, and are generally taken less seriously than others (Ellison, Russinova, MacDonald-Wilson, & Lyass, 2003; Freidl et al., 2003; *How can we decrease stigma?*, n.d.). Students with psychiatric disabilities are cognizant of this stigma and therefore tend to be highly fearful of how they will be received by others and how disclosure might impact the assessment of their academic work (Grayson, Miller & Clarke, 1998; Manthorpe & Stanley, 1999; Meltzer et al., 2000; Weiner, 1999; Weiner & Wiener, 1996). Weiner and Wiener (1996) asked students with psychiatric disabilities about various challenges and barriers they faced. Students described feelings of shame and embarrassment about their illness, difficulty explaining their needs and challenges, and a lack of understanding on the part of faculty. These concerns, along with others, resulted in high levels of stress.

As a result of perceived stigma and other barriers, fewer students with mental illness disclose their disability in the post-secondary setting compared to students with other disabilities (Rana et al., 1999). This finding is consistent with other studies in which fear of stigma was one of the main reasons cited by mentally ill persons for not contacting a psychiatrist (Halter, 2003; Kessler, Olfson, & Berglund, 1998; Freidl, 2003), and not disclosing a psychiatric disability at work (Ellison et al., 2003). Because these individuals are not disclosing their disabilities, they generally do not receive the supports and accommodations that they may need to be successful in school.

Attitudes in the Post-secondary Environment

Several studies have shown that negative attitudes toward people with all types of disabilities persisted in the post-secondary environment (Becker et al., 2002; Hill, 1996; Leyser et. al, 1998; Liebert, 2003; McDiarmid, & Ratzlaff, 2003; Megivern, Pellerito, & Mowbray, 2003; Mino, Yasuda, Kanazawa, & Inoue, 2001; Sharpe et al., 2004; Thomas, 2003; Upton & Harper, 2002; Weiner & Wiener, 1996). Some research showed that faculty had positive attitudes toward integrating students with disabilities, however (Fonosch & Schwab, 1981; Hill, 1996; Leyser et al., 1998), while others report contradictory findings (Leyser et al., 1998). Fichten (1988, as cited in Hill, 1996) commented that although most faculty members had moderately favourable attitudes toward students with disabilities in general, they were less positive about having these students in their own department or their own classes. Even when faculty expressed a willingness to accommodate students with disabilities, the majority reported lacking the knowledge or skills to do so, and most fell short of meeting their students' needs (Leyser et al., 1998).

Research comparing attitudes toward post-secondary students with various disabilities showed that there is a hierarchy of acceptance, with visible disabilities (sensory and physical disabilities) generally being more accepted than non-visible disabilities (learning, intellectual and psychiatric disabilities) (Hill, 1996; Leyser et al., 1998; Rickerson et al., 2004; Upton & Harper, 2002). Because non-visible disabilities are not obvious to others, these students are often criticized as not having a 'true' or 'legitimate' disability, and they are sometimes suspected of 'taking advantage of the system' (Rickerson et al., 2004). For example, Upton and Harper (2002) showed that

post-secondary students rated their peers with visible disabilities as more deserving of accommodations than peers with non-visible disabilities such as depression or bi-polar disorder.

Becker et al. (2002) investigated faculty and student attitudes toward and knowledge of psychiatric disabilities in a university setting. They found that although the vast majority of faculty and students considered mental illnesses to be serious disorders, they were not especially adept at assessing if a student had a mental illness or was just temporarily upset. The majority believed that students with psychiatric disabilities could succeed in their academic pursuits. However, only two-thirds of faculty and less than half of students felt they could discuss concerns with a student who showed signs of a mental illness. Although only a minority of faculty felt that having students with mental illnesses in the classroom would be dangerous and cause them to feel unsafe, the authors suggested that this figure (13%) was still cause for concern. Further, a troubling small minority (5%) felt that individuals with mental illnesses should not be allowed to attend classes at all. Half the faculty reported that they were not comfortable dealing with students who exhibited signs of a mental illness, and a large number were not familiar with mental health services on campus. The more fearful faculty members were also less likely to provide accommodations or make referrals, demonstrating a connection between faculty attitudes and the educational experiences of students with psychiatric disabilities. However, because this study did not draw a comparison between attitudes toward students with psychiatric versus other disabilities, the possibility remains that faculty held similar attitudes toward students with other disabilities as well.

In the United States, post-secondary institutions cannot discriminate on the basis of a student's disability. If a student believes that s/he has been discriminated against, the case is reported to the Equal Educational Opportunity Commission (EEOC). According to Rickerson et al. (2004), the greatest number of cases reported to the EEOC involved students with psychiatric disabilities. This suggests that there may be greater discrimination against this group than other groups of students with disabilities.

Correlates of Disability Attitudes

Studies have shown that disability attitudes and knowledge in general are related to the following characteristics

a) Gender: females have generally reported more positive attitudes than males (Becker et al., 2002; Fonosch & Schwab, 1981; Leyser et al., 1998; Upton & Harper, 2002), although some studies have found conflicting effects (Leyser et al., 1998).

b) Level of education: results for this variable were conflicting, with some studies finding that people with higher levels of education expressed more favourable attitudes toward people with disabilities (Upton & Harper, 2002), while one study found that those with higher education were more likely to endorse the statement that "most people believe that a former mental patient is less trustworthy than the average person" (Freidl et al., 2003, p. 272). Note, however, that this is a perception of social acceptance and not necessarily a personal view.

c) Age: varying effects of age have been noted in the research literature (Freidl et al., 2003; Upton & Harper, 2002). For example, Freidl et al. (2003) found that younger age was associated with more frequent endorsement of the statement that

"most people believe that a person who has been in a mental hospital is less intelligent than the average person" (p.272). As with 'level of education', above, it should be noted that this statement reflects perception of social acceptance and not necessarily the respondents' personal views.

d) Years of teaching experience: in the study by Becker et al. (2002), faculty with fewer years experience were more likely to consult with campus mental health services, but faculty with more experience provided more accommodations.

e) Familiarity with campus services: the more familiar faculty members were with campus services, the more confident they were in their ability to discuss concerns with students and to convince them to seek help (Becker et al., 2002).

f) Disability knowledge and training: faculty who were more informed about disabilities had more positive attitudes (Becker et al., 2002; Leyser et al., 1998).

g) Academic discipline: a few studies found that faculty in education had more positive attitudes, more knowledge, and more willingness to learn about disabilities than faculty in business, social sciences or arts and sciences (Leyser et al., 1998; Nelson, Dodd & Smith, 1990). Law faculty tended to have more knowledge of pertinent legislation (Leyser et al., 1998).

h) Disability contact: individuals who had previous experience with people with disabilities reported more positive attitudes (Fonosch & Schwab, 1981; Leyser et al., 1998; Upton & Harper, 2002).

i) Academic rank: higher ranking faculty reported more experience with students with disabilities and more knowledge of campus services, but less knowledge of recent legislation and less interest in receiving training. They also reported

spending less time with their students with disabilities, and making fewer accommodations (Leyser et al., 1998).

j) Location: individuals in non-educational rural settings have been shown to perceive greater stigma than those in non-educational urban settings (Freidl, 2003).

It is interesting to note that faculty in Leyser et al.'s (1998) study reported having less contact with students with psychiatric disabilities and chronic health illnesses than other disabilities. Given that degree of contact is generally associated with disability attitudes, it stands to reason that faculty may have poorer attitudes toward students with psychiatric versus non-psychiatric disabilities.

Survey Instruments

Becker et al. (2002) developed a two-page instrument with six sections assessing mental illness identification, the ability to successfully intervene on behalf of students, factual knowledge of the rights of students with mental illnesses, expectations of their success in post-secondary education, referrals to campus mental health services, and the provision of accommodations. Faculty members were asked to respond to items on a four-point Likert-type scale. Sample items included: (a) "Students with mental illnesses are considered disabled and eligible for ADA benefits[2]"; (b) "Preoccupation with odd ideas is a sign of mental illness"; and (c) "I would be able to discuss concerns with a student who shows signs of a mental illness". Subjects were asked to respond with 'often', 'sometimes', 'rarely' or 'never'. Faculty members were also asked to indicate the extent to which they agreed or disagreed with other statements, such as: (a) "Students

[2] Americans with Disabilities Act

with mental illnesses should not be allowed to attend classes"; and (b) "Students with mental illnesses are dangerous to have in a classroom". A factor analysis of the Becker survey revealed two factors: (a) "faculty confidence in identifying mental illnesses among students and perceived ability to intervene on behalf of such students"; and (b) "degree of fear and social distance" (p. 361). Becker et al. did not investigate attitudes toward students with non-psychiatric disabilities, however, and thus their study can not determine if attitudes toward students with psychiatric disabilities differ from attitudes toward students with other disabilities.

Pinfold et al. (2003) developed a questionnaire that was based on an instrument piloted in the World Psychiatric Association's anti-stigma schools project in Calgary. It included: (a) Four factual statements about psychiatric disabilities, such as "1 in 4 people will develop mental health problems over the course of their lives"; (b) five attitude statements, such as "People with mental health problems are unpredictable"; and (c) four "social distance" items, such as "I would be afraid to talk to someone with mental health problems". Subjects were asked to rate the extent to which they agreed or disagreed with the statements using either a three- or a five-point Likert-type scale. There are no reliability or validity measures for this instrument, and it did not contain any items measuring attitudes toward students with non-psychiatric disabilities.

Leyser et al. (1998) used a survey instrument titled *A Faculty Survey of Students with Disabilities* to measure general disability attitudes. This instrument was a modified version of a survey developed by Leyser in 1989, which also incorporated items from several other similar studies (Leyser et al., 1998; Nelson et al., 1990). This instrument used a 4-point Likert-type scale, as well as multiple-choice items and several open-ended

questions. This survey had a Cronbach alpha reliability coefficent of .86. It did not ask any questions specifically about students with psychiatric disabilities.

Upton & Harper (2002) administered Antonak's *Scale of Attitudes Toward Disabled Persons* (1992), but added 12 scenarios of classroom accommodations to their study. Each scenario described a type of disability - four physical and two brain-based (cognitive and emotional) - as well as three functional limitations. Participants were first asked if the college student in the scenario deserved educational accommodation(s). If the answer was affirmative, they were then asked to select what they considered to be appropriate types of accommodation(s).

Chapter 3: Design of the Study

This study utilized a web survey tool, Survey Monkey, which was sent to survey respondents using an email link. The survey, which included multiple-choice questions, questions requiring responses on a 5-item Likert-type scale and scenario questions, was developed for the study. The survey was modeled after other currently existing scales that measure disability attitudes in post-secondary education, and other scales that measure attitudes toward individuals with psychiatric disabilities. The survey was used to assess faculty attitudes toward post-secondary students who had psychiatric versus non-psychiatric disabilities. Faculty members were also questioned on several independent variables, such as age, level of education, amount of previous contact with people with disabilities, and others. In addition, faculty members were asked to complete the *Scale of Attitudes Toward Disabled Persons* (SADP) (Antonak, 1982), a widely used scale of attitudes toward individuals with disabilities, as a measure of concurrent validity for the newly developed study survey.

Instruments

The survey that was developed for this study was modeled after related instruments developed by Becker et al. (2002), Leyser et al. (1998), Pinfold et al. (2003) and Upton and Harper (2002). Furthermore, it was developed according to the suggestions of Antonak and Livneh (1988), whose book *The Measurement of Attitudes Toward People With Disabilities* contains guidelines for the development of psychometrically sound measures of disability attitudes. Items were designed to allow comparisons of attitudes toward students with psychiatric versus non-psychiatric disabilities, where the definition of 'attitude' was drawn from that which was proposed by

Triandis et al. (1984, as cited in Leyser et al., 1998). They defined attitude as, "an idea (cognitive component) charged with emotion (affective component) which predisposes a class of actions (behavioral component) to a particular class of social situations" (p. 21). Faculty members were therefore questioned about their beliefs or ideas regarding students with psychiatric and non-psychiatric disabilities (cognitive component), their feelings about students with these disabilities (affective component), and their anticipated and actual practices in accommodating these students in their classes (behavioural component). The survey was reviewed and authenticated by a panel of experts, including: (a) Dr. Richard Antonak, developer of the SADP and co-author of *The Measurement of Attitudes Toward People With Disabilities* (Antonak and Livneh, 1988); (b) Dr. Enid Weiner, Coordinator of the Psychiatric Dis/Abilities Program at York University and author of several papers pertaining to psychiatric disabilities in post-secondary education (Weiner, 1997; Weiner, 1999; Weiner, E., Wiener, J., 1996; Weiner, E., Wiener, J., 1997); (c) BettyAnn Knight, Coordinator of Disability Services at College of the North Atlantic's Happy Valley-Goose Bay Campus; and (d) Dr. Ivan Emke, Social/Cultural Studies Professor at Sir Wilfred Grenfell College and an expert in survey design.

The resulting survey contained: (a) Ten multiple-choice demographic questions; (b) a section with several typical classroom accommodation scenarios ('scenarios'); (c) a section with sixteen Likert-type survey items that collected data related to disability attitudes ('rating scales'); (d) a 'personal experiences' section with questions about disability contact, previous teaching experiences, disability knowledge and training; and

(e) open-ended questions that elicited faculty opinions on various topics related to teaching students with disabilities.

An introduction to the survey instructed respondents on how to navigate the survey and respond to each of the items in a way that best described their views. Respondents were advised that there were no time limits for entering responses. They were not advised that psychiatric disabilities were a focus of the research, as the researcher believed that doing so may have influenced the nature of the information that was provided. Such an effect is known as 'respondent reactivity', and refers to the tendency for people to attempt to modify or distort their attitudes when they are aware of what is being measured (Antonak & Livneh, 2000). For example, one may attempt to please the researcher by proving a response that one thinks will conform to the researcher's hypothesis ('experimenter demand effect'), or one may attempt to respond in a way that one believes is the socially acceptable response ('social desirability bias'). It was therefore important that survey respondents were not aware that the researcher was concerned about psychiatric disabilities in particular.

The demographics section (Appendix A, Section A) obtained information on several variables that previous research suggested might be related to disability attitudes. These were: (a) the respondent's age; (b) gender; (c) cultural/ethnic background; (d) highest level of education; (e) years of teaching experience; (f) academic rank; (g) academic discipline; (h) the population of the community where they taught; and (i) whether or not they themselves had a disability.

The scenario section (Appendix A, Section B) presented nine typical classroom accommodation situations, representing three types of disabilities (learning, physical and

psychiatric) and three different disclosure situations. That is, for each type of disability, one scenario was presented in which the student's classroom behaviour was described but no disability information was provided, and the student was unwilling to discuss his/her disability with the instructor. For each type of disability, the same scenario was presented again, but this time the disability was appropriately named and the student was described as willing to discuss their disability with the instructor. Each scenario was presented a third time with the addition of detailed information about the particular disability, which helped to explain the behaviours that were described in each of the scenarios. This resulted in the following nine scenarios: (a) learning disability, no information; (b) physical disability, no information; (c) psychiatric disability, no information; (d) learning disability, term provided; (e) physical disability, term provided; (f) psychiatric disability, term provided; (g) learning disability, details; (h) physical disability, details; and (i) psychiatric disability, details. The instructions for completing this section stated that, for each scenario, the student had brought the instructor a note from the Disability Services Office confirming that s/he had provided disability documentation and required accommodations. For each scenario, faculty members were asked to rate the extent to which the student deserved accommodations[3] (referred to herein after as 'accommodation deservedness'). This question reflected the cognitive and affective dimensions of Triandis et al.'s three-part definition of attitude (1984, in Leyser et al., 1998). Survey respondents were then asked to indicate which, if any, of a series of accommodations they felt the student should be given. The number of accommodations selected was considered to reflect the behavioural aspect of the Triandis et al. definition,

[3]ie.: any effort to remove the barriers that limit the participation of students with disabilities

in that the individual would be predisposed to the action suggested by their response (i.e., providing the selected accommodations). Accommodations were presented as categories with examples, such as "test/exam (e.g., extra time, alternate format, private location)". The list of accommodations was selected based on a review of the literature pertaining to accommodation hierarchies, needs and related topics (e.g., Cooper, 1993; Hill, 1996; Loewen, 1993; Unger, 1991; Weiner & Wiener, 1996), as well as a review of the potential accommodations listed by Disability Services Offices at a convenience sample of post-secondary institutions across Canada, including Newfoundland and Labrador.

In the rating scales section (Appendix A, Section C), sixteen attitude statements were presented, and respondents were asked to rate the extent to which they agreed or disagreed with each statement for each of four types of disabilities (learning, physical, psychiatric, sensory). These were presented as fill-in-the-blank statements, with the four types of disabilities listed underneath, each with its own rating scale for responding. The statements reflected primarily the cognitive and affective components of attitude identified by Triandis et al., in that they were all "ideas charged with emotion" (1984, cited in Leyser et al., 1998, p.21). In addition, the sixteen statements incorporated several dimensions that were previously identified as relevant to disability attitudes. First, because Becker et al. (2002) identified "degree of fear and social distance" (p. 361) as a factor in their study of disability attitudes, four questions were included that were intended to assess this dimension. These were (a) "Students with _____ can be dangerous to have in the classroom"; (b) "Students with _____ can be unpredictable"; (c) "I would be comfortable teaching students who have _____"; and (d) "Students with _____ are usually friendly and cheerful".

Second, because students with non-visible disabilities are often criticized as "taking unfair advantage of the...system" (Rickerson et al., 2004, p.1), four statements were selected to represent issues of blame, effort, and locus of control: (a) "Students with _____ are usually hard-working and highly motivated", (b) "Students with _____ are generally weak and only have themselves to blame", (c) "Students with _____ generally do not try as hard as other students", and (d) "Students with _____ usually request accommodations that are reasonable and legitimate".

Third, since a number of studies have demonstrated that the general public believes people with mental illnesses are less intelligent (Ellison et al, 2003; Freidl et al., 2003; *How can we decrease stigma?*, n.d.), several items were intended to assess beliefs about ability: (a) "Students with _____ can be successful at college/university", (b) "Students with _____ tend to achieve lower grades than students with other disabilities", (c) "Students with _____ are often below average intelligence", and (d) "Students with _____ are usually capable of achieving success in the workforce after they graduate".

The final four statements were intended to reflect general attitudes related to students with disabilities in post-secondary education: (a) "Most people with _____ should not be allowed to attend college/university", (b) "Students with _____ are usually difficult to talk to", (c) "Students with _____ are usually easier to provide accommodations for than students with other disabilities", and "The least restricting disabilities for post secondary students are _____". Two of the four statements for each 'factor' were phrased positively, such that agreeing strongly indicated a positive attitude, and the other two were phrased negatively, such that agreeing indicated a negative attitude. The sixteen statements were arranged randomly via a random numbers chart.

Within each statement, subjects were always asked to rate the extent to which they agreed or disagreed with the statement for learning disabilities first, followed by physical disabilities, then psychiatric, and finally sensory.

A 'Personal Experiences' section (Appendix A, Section D) asked respondents if they knew someone with a disability and, if so, what their relationship to the person was, and the nature of the disability. It also asked if instructors had previous experience teaching students with each of learning, physical, psychiatric and sensory disabilities, and if so, what accommodations they had offered to these students. Six questions were asked about disability knowledge and training. Finally, instructors were asked what they thought was important to know for teaching students with disabilities, and what they would personally be interested in learning regarding students with disabilities.

After completing sections A through D, survey respondents were asked if they would be willing to complete a second, short survey: the *Scale of Attitudes Toward Disabled Persons* (SADP) (Appendix B). The SADP is a 24-item Likert scale instrument created by Antonak in 1982 and revised in 1992 (Form R). The SADP has yielded Spearman-Brown reliability coefficients ranging from .81 to .85, and alpha coefficients of internal consistency ranging from .88 to .91. Support for the criterion-related validity of the SADP has been found using various indicators (Antonak and Livneh, 1988). There is also evidence of the scale's convergent validity when compared to other well-known measures of disability attitudes, such as the Attitude Toward Disabled Persons (ATDP) (Antonak & Livneh, 1988). Thus, the SADP is a valid and reliable instrument. It is a widely respected and often-used measure that has quantified the existence of negative disability attitudes in a variety of circumstances and with various groups of people. It

was included in the present study to obtain an overall measure of disability attitudes that could be compared to results from the newly developed study survey, providing an indication of its validity. The SADP was adapted into an on-line format for use in the current study, but retained its original format and content.

The study used an electronic format to so that it could easily be distributed to all faculty members via email, and because there is some evidence that electronic surveys increase the ease of responding, which has the potential to increase response rates (Buck & Watson, 2002; Stanton, 1998)[4]. Suggested response rates for Web surveys vary from 36.83% to 43% (Schmidt, Strachota & Conceição, 2006). It was therefore anticipated that response rates would be at least 37%. "SurveyMonkey.com" was the Internet survey-development service provider that was used to develop and deliver the survey. The electronic survey was sent to faculty as a link in an email describing the study and requesting their participation (Appendix C).

The electronic survey instrument, including the study survey and the Scale of Attitudes Toward Disabled Persons (SADP) (Antonak, 1992), was piloted on a convenience sample of seven faculty members from Memorial University, College of the North Atlantic, and Academy Canada, one of Newfoundland and Labrador's private colleges. It has been suggested that between eight to ten people is as an appropriate number for a pilot study (*Air University Sampling and Surveying Handbook,* 1996), and thus the current pilot sample was just short of the recommended number. Following the pilot phase, the survey was revised, incorporating suggestions from the pilot subjects.

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[4] Some authors suggest that Web surveys have lower response rates than traditional paper surveys (Matz, 1999, in Idleman, 2003), while others suggest that there is no difference (Idleman, 2003).

The Sample

A review of web sites associated with public post-secondary institutions for the province of Newfoundland and Labrador, as listed on the provincial Education System Directory (Government of Newfoundland and Labrador, n.d.), revealed that there are more than 2400 post-secondary faculty employed at public colleges and universities in the province. The initial intent was to send the survey to all faculty members at College of the North Atlantic (CNA), the provincial public college, and Memorial University of Newfoundland (MUN), including Sir Wilfred Grenfell College (Grenfell). With College of the North Atlantic and Sir Wilfred Grenfell College it was possible to directly email a link to the survey to all faculty at both institutions. The survey was therefore emailed to 650 faculty at all of College of the North Atlantic's provincial campuses, and 100 faculty at Sir Wilfred Grenfell College. However, with the St. John's campus of MUN, permission to email all faculty was not granted. Instead, faculty could only be notified of the survey via a short notice, which was posted on the MUN listserv. This listserv was a daily news posting of events at the University which was available to all employees and not just faculty. Information about the number of faculty who receive the listserv was unfortunately not available, since it was not automatically sent to all faculty. The response rate at MUN was extremely low (8 replies), likely because of the lack of access to a faculty email list. Accordingly, the response rate was higher at Sir Wilfred Grenfell College, where the researcher did have access to an email list. However, a decision was made to drop both MUN and Grenfell from the study after the initial survey attempt, and to focus exclusively on Newfoundland and Labrador's public college system. MUN was dropped because of the extremely poor response rate, and, although the initial response

rate at Grenfell was acceptable, it is a small campus and therefore yields a sample that is too small to analyze in a meaningful manner on its own.

Procedure

Two days prior to sending out the survey, an endorsement email letter was sent out by the Coordinators of Disability Services at each campus of College of the North Atlantic, and by the Learning Centre Coordinator at Sir Wilfred Grenfell College, who is responsible for coordinating services for students with disabilities at that institution. As noted under *Instruments* above, an attempt was also made to do the same at Memorial University of Newfoundland, but permission to email all faculty directly was not granted. As a result, no letter of support was sent to this institution. The endorsement letter outlined the value of the research and encouraged faculty to respond to the survey (Appendix D).

Two days later the survey was distributed via a link contained within an introductory email, which outlined the survey purpose and provide instructions for completion (see Appendix C). It said that the goal of the study was "...to measure faculty knowledge, practices, experiences and attitudes regarding students with various disabilities". It did not reveal that psychiatric disabilities were the specific focus of the research. It also informed faculty members that participation in the study was completely voluntary, and that responses would be kept completely anonymous and confidential. The same individuals who had previously sent out the endorsement email sent out the introductory email. Once participants clicked on the emailed survey link, they were immediately directed to the electronic survey. The survey began with a short list of instructions, followed by the list of questions, which were presented in small groups of

between one to sixteen questions at a time. Participants were given one week to complete the survey.

Following the initial email, response rates from College of the North Atlantic and Sir Wilfred Grenfell College were 20-21% (Table 1). As noted previously, email access was not granted at Memorial University of Newfoundland. Consequently, the survey had to be posted on the faculty listserv, along with a condensed version of the introductory email. Faculty members could not click on a direct link to the survey from within the listserv. Because of this, and because no endorsement letter could be included, response rates at MUN were extremely low (eight faculty in total). The exact response rate is not known, since the number of faculty who received the listserv is not known. As a result, all of Memorial University, including Grenfell, was dropped from the study after the first round of completed surveys was returned.

There is evidence that response rates to electronic surveys can be improved via follow-up contacts (Cook, Heath & Thompson, 2000; Crawford,Couper & Lamias, 2001, in Granello & Wheaton, 2004; Kittleson, 1997, Solomon, 2001). A second email was therefore sent to all faculty at College of the North Atlantic, encouraging those faculty who had not already completed the survey to do so. This increased the total response rate to 28% (Table 1).

Limitations and Delimitations

Limitations.

1. The electronic survey instrument, including the study survey and the SADP, was piloted on a convenience sample of seven faculty members from Memorial University, College of the North Atlantic, and one of the private colleges. It has

Table 1

Survey Response Rates

	First Attempt		Second Attempt	
Institution	Number[a]	Rate	Number[b]	Rate
College of the North Atlantic	136	21%	184	28%
Sir Wilfred Grenfell College	20	20%	N/A	N/A
Memorial University	8	N/A	N/A	N/A

[a]Actual number of surveys completed. [b]Total number of surveys completed, including first and second attempts. Thus, an additional 48 responses were collected from College of the North Atlantic during the second round.

been suggested that between eight to ten people is as an appropriate number for a pilot study (*Air University Sampling and Surveying Handbook,* 1996), and thus the current pilot sample was just short of the recommended number. It is therefore possible that the survey was inadequately piloted, affecting its internal consistency.

2. This study did not compare faculty attitudes with other factors that may influence the educational experience of students with psychiatric disabilities. For example, these students have been shown to be reluctant to seek help not only because of perceived stigma, but also due to a denial that they need help, beliefs that it will not make a difference, and feelings that requesting help is demeaning or undeserved (Meltzer et al., 2000; Weiner, 1999, in Thomas, 2003). Further, Ciarrochi and Deane (2001, in Thomas, 2003) found that those university undergraduates who were most likely to need help were the least likely to seek it or to benefit from it when they did seek it. Thus, there are other issues affecting disclosure decisions besides fear of stigma and faculty attitudes, and it is impossible to say on the basis of this study whether or not faculty attitudes have a causal effect on student disclosure patterns. It is also not possible to say if the attitudes faculty members expressed in their survey responses would translate into any actual classroom behaviours.
3. Because the study used an electronic format, individuals who are not comfortable with this technology may have elected not to participate, although all faculty at

College of the North Atlantic are expected to use email as a requirement of their positions (i.e.: Microsoft Outlook).

4. Seven people opened the survey link yet terminated the survey before completing an entire section. These individuals were removed from the final sample. Other subjects completed only one, two or three sections of the four-section survey. The fact that some survey respondents terminated the survey without completing it in its entirety may have affected responses.

Delimitations.

1. Because only public college faculty within the province of Newfoundland and Labrador were included in the study, the results of the present study may not be generalizable to universities or private colleges, or institutions outside of the Newfoundland and Labrador. Likewise, the results may not be generalizable to non-faculty post-secondary employees (e.g., student services or administration),
2. Given that the survey respondents were predominantly Caucasian, the survey may not be generalizable to individuals of non-Caucasian backgrounds.
3. A total of 165 survey responses were analysed, representing a 25% response rate. This response rate is lower than responses rates from other web based surveys. Sheehan (2001) examined 31 online surveys and found an average response rate of 36.83%. Response rates for Web surveys have been reported between 30% (Idleman, 2003) to 43% (Schmidt et al., 2006). Thus, the response rate for the present study is at the low end of recorded response rates, which may impact the accuracy with which the results reflect the population as a whole.

Chapter 4: Data Analyses and Interpretation of Finding

Results from this survey were analysed using SPSS version 14. A combination of descriptive analyses, repeated measures analyses of variance (ANOVAs), post-hoc Bonferroni pairwise comparisons, and correlations were performed. Descriptive statistics were used to calculate frequencies, means and standard deviations. Repeated measures ANOVAs were used where the survey design included within-subjects variables (scenario and rating scale sections of the survey). Bonferroni pairwise comparisons were used because this post-hoc test is appropriate for both equal and unequal sample sizes, and it is considered one of the more conservative post-hoc measures (*Pairwise comparisons*, n.d.). In addition, the survey itself was subjected to reliability and validity analyses. For example, Cronbach's Alpha provided a measure of internal consistency, and correlations were performed to look at the relationships between different sections of the survey as a measure of convergent validity.

The Sample

Of 184 surveys that were completed by College of the North Atlantic faculty (28% response rate), one was removed because the respondent worked in Disability Services. Although Disability Services Coordinators are members of the faculty union at College of the North Atlantic, it was felt that their attitudes and practices with respect to students with disabilities would not likely reflect those of the teaching faculty. An additional four were removed because they worked directly with students who had disabilities, either as student assistants or as resource facilitators, and were not members of the faculty union. Four student services support staff were also removed, along with one campus administrator, because these individuals are not members of the faculty

union. Six counsellors responded and, as members of the faculty union, were kept in the analyses. Subjects who terminated the survey without completing a full section were also removed, since it was not possible to perform meaningful statistical analyses on the data from these respondents (seven people). This yielded a total of 165 survey responses, representing a 25% response rate. This response rate is lower than responses rates from other web based surveys. Sheehan (2001) examined 31 online surveys and found an average response rate of 36.83%. Response rates for Web surveys have been reported between 30% (Idleman, 2003) to 43% (Schmidt et al., 2006). Thus, the response rate for the present study is at the low end of recorded response rates.

With a College of the North Atlantic faculty population of 650, a sample of 165 has a 95% confidence level, and a 6.6% margin of error. This means that we can be 95% sure that the results of the survey are an accurate representation of the views of College of the North Atlantic Faculty, within +/- 6.6 percentage points.

Reliability and Validity of the Instruments

A reliability analysis using 87 respondents who completed all of the rating scales from the scenario section (Section B), plus all of the Likert-type attitude statements from the rating scales section (Section C), yielded a Cronbach's Alpha of .736. For the scenario ratings of 'accommodation deservedness'[5] alone (n = 103), an Alpha of .832 was noted. A reliability analysis of the Likert-type questions alone yielded a Cronbach's Alpha of .732 (n = 106). Generally, an Alpha value of .7 to .8 is considered an acceptable reliability level (Field, 2005). Thus the survey can be considered reliable.

[5] The extent to which the student in the scenario deserved accommodations

Correlation analyses were conducted to compare the scenario and rating scale sections of the survey (Appendix A, Sections B and C), as an indicator of convergent validity. Convergent validity is the idea that different methods (scenarios versus attitude statements) of assessing the same construct (attitudes toward psychiatric versus non-psychiatric disabilities) should be highly correlated. Strong correlations were found between mean scores on the rating scale section and ratings of 'accommodation deservedness' for all nine scenarios in the scenario section (Table 2). As well, mean ratings for the three types of disabilities and the three information levels in the scenario section were all correlated with total scores and mean scores for the physical, learning and psychiatric disabilities in the rating scale section. The number of accommodations (e.g., assignment, classroom, instructional etc.) offered in response to the scenarios was not strongly correlated with ratings on the Section C rating scales, but there were strong correlations with ratings of 'accommodation deservedness' (Table 3). Thus there are strong indications that the study survey has convergent validity.

Antonak and Livneh (1998) reported that the Scale of Attitudes Toward Disabled Persons (SADP) had a Spearman-Brown reliability of .81, with internally consistent test items (Cronbach's alpha of .88) (p.160). The electronic version that was adapted for the present study yielded a Spearman-Brown reliability of .631, and a Cronbach's alpha reliability measure of .789 ($n = 56$). Generally, an alpha value of .7 to .8 is considered an acceptable reliability level (Field, 2005). A Spearman-Brown coefficient of 0.50 is considered acceptable for criterion-referenced tests (Hulse, n.d.), and there is support for the criterion-related validity of the SADP (Antonak and Livneh, 1988). Although the reliability of the SADP may be slightly lower in the electronic

Table 2

Correlations Between Rating Scale Scores for the Scenarios and the Likert-type Sections

	Mean Likert Scores By Type of Disability			
Scenario	Learning	Physical	Psychiatric	Total
Learning, no information	.330**	.190*	.341**	.317**
Physical, no information	.483**	.409**	.344**	.475**
Psychiatric, no information	.312**	N.S.[a]	.364**	.309**
Learning, name only	.251**	.336**	.234*	.324**
Physical, name only	.228*	.217*	.213*	.265**
Psychiatric, name only	.317**	.257**	.328**	.321**
Learning, details	.272**	.255**	.213*	.298**
Physical, details	.223*	.269**	N.S.	.243*
Psychiatric, details	.335**	N.S.	.351**	.316**

[a]N.S. = not significant.

* $p < .05$. ** $p < .01$.

Table 3

Correlations Between Mean Rating Scale Scores and Mean Number of Accommodations Offered for the Nine Scenarios, by Type of Disability and Amount of Information Provided

	Number of Accommodations Provided					
Accommodation	Type of Disability			Amount of Information		
Deservedness	Learning	Physical	Psychiatric	No Info	Name	Details
Learning	-.369**	-.238**	-.353**	-.400**	-.306**	-.186*
Physical	-.253**	-.332**	-.298**	-.330**	-.307**	N.S.[a]
Psychiatric	-.272**	-.239**	-.439**	-.321**	-.288**	-.273**
No Info	-.257**	N.S.	-.286**	-.418**	N.S.	N.S.
Name	-.276**	-.306**	-.300**	N.S.	-.436**	-.239*
Details	-.260**	-.319**	-.335**	-.222*	-.331**	-.309**

[a]N.S. = not significant

$p < .05$. ** $p < .01$.

version, it is still a reliable instrument.

Correlation analyses were conducted to compare the study survey and the SADP as an indicator of convergent validity. That is, if the two instruments are assessing the same construct, they should be highly correlated. Only two of the individual attitude statements from the rating scales section of the survey (Appendix A, Section C) were significantly correlated with SADP scores, and this was only true for some disabilities. Using Spearman's rho correlation coefficient, the following were significantly correlated with SADP scores: (a) "Students with _____ tend to achieve lower grades than students with other disabilities," physical disabilities (r_s = -.305, p = .024) and sensory disabilities (r_s = -.403, p = .002); and (b) "I would be comfortable teaching students who have _____", physical disabilities (r_s = -.291, p = .031). However, using Spearman's rho, total rating scale scores for the physical (r_s = -.312, p = .024), psychiatric (r_s = -.283, p = .04) and sensory disabilities (r_s = -.361, p = .009) were significantly correlated with SADP scores, but rating scale scores for learning disabilities were not. None of the rating scale scores from the scenario section (Appendix A, Section B) were correlated with SADP scores. Thus, there is some evidence of convergent validity between the SADP and the rating scales section of the study survey, but not between the SADP and the scenario section of the survey. That is, while the SADP and the rating scales section of the survey (Section C) may be measuring similar constructs, the scenario section of the study survey appears to be measuring something different. It may be that the SADP and the rating scales section of the survey are similar in that they both deal with general constructs, which are closely aligned with the cognitive and affective components of the Triandis et al. (1984) three-part definition of attitude, while the scenario section puts these constructs

into specific and personalized classroom situations which may give greater emphasis to the behavioural component of the Triandis definition (1984, as cited in Leyser et al., 1998).

Respondent Demographics

Appendix E shows a complete breakdown of all respondent demographics. Overall, slightly more female than male faculty members completed the survey. The vast majority of respondents were between the ages of 40 and 59 (65.4%), with approximately a quarter between the ages of 30 to 39. An undergraduate degree was the highest level of education completed by most faculty members (45.5%), although quite a few had completed Master's degrees (20.6%) or at least some graduate courses (17%). In addition, ten people (6%) had completed or were working on a diploma in adult education from Memorial University. Each of these ten also had one, two or three years of college education, or an undergraduate degree. Faculty members had an average of 10.5 years of full-time teaching experience, with a range of 0 to 33 and a standard deviation of 8.34. In addition, they had an average of 1.57 years of part-time teaching experience, with a range of 0 to 25 and a standard deviation of 3.42. The most common academic department for survey respondents to work in was general academics, including Adult Basic Education (ABE), math, science, and communications ($n = 58$; 35.1%). Business was also strongly represented ($n = 40$; 24.4%), followed by trades ($n = 21$; 12.7%).

In terms of ethnicity, the sample was predominantly Caucasian (93.9%). This is consistent with the ethnic mix of the college community and the province in general. In Newfoundland and Labrador, visible minorities (not including Aboriginal Peoples) make

up less than 1% of the population, and Aboriginal Peoples make up approximately 4% of the population (Newfoundland and Labrador Statistics Agency, 2001).

Of 163 people who responded to the question, ten indicated that they had a disability (6.1%). For four of these people the disability was visible, and for six it was not. Four people had sensory disabilities (vision and/or hearing), three had physical disabilities (agility or mobility), one had attention deficit disorder, one had a medical condition, one had soft tissue injuries and one had insulin-dependent diabetes. Note that one individual had two different disabilities. No one identified as having a psychiatric disability. Five respondents said that they are very open about their disability(s) with their colleagues, while three are somewhat open and one has not disclosed their disability to others. Reasons for disclosing included the fact that a visible disability was very obvious and a medical condition required awareness from co-workers. One respondent chose not to disclose at work because s/he felt that the disability did not impact their work. A second person said it just didn't come up much. One person with a visible disability indicated that he or she experienced "trouble with jokes".

Institution Demographics

Roughly one quarter of survey respondents (23%) indicated that their campus was located in a community with more than 50,000 people (St. John's, Newfoundland and Labrador). Fifty-one people (30.9%) said that their campus was in a community of between 10,000 to 49,999 people, while 76 people (46.1%) were in communities of less than 10,000 people.

In response to the question, "Does your institution/campus have a disability services office and/or designated person(s) who is responsible for disability services,"

114 of 128 people who responded (89.1%) knew that their institution/campus had these services, while 7 people (5.5%) said that their institution/campus did not have these services, and 7 people (5.5%) did not know. One hundred and three faculty members (90.4%; $n = 114$) had visited the disability services office, or consulted with someone from disability services. When asked if they informed their students about the services that their institution had available for students with disabilities, 80 people (66.1%) said that they did inform their students of these services, while 24 (14.5%) said that they sometimes informed their students of these services, and 17 (10.3%) indicated that they did not do this.

Personal Experiences

Disability contact.

Respondents were asked to indicate (a) if they knew anyone with a disability; (b) what their relationship to that person was; and (c) the nature of that person's disability(s). 126 of 129 respondents (97.7%) said they knew someone with a disability. Regarding their relationship to this person, the most common response was 'other'. An examination of the 'other' category revealed two groups that were not in the provided list (i.e., students and instructors). With 'other' responses re-coded into these two groups, the three relationships indicated most frequently by respondents were acquaintance, student and close friend (Table 4). The most commonly identified disability amongst this group was physical, followed closely by learning. Approximately 35% were said to have psychiatric disabilities (see Table 5).

Prior teaching experiences and practices.

Of 129 faculty members who responded to the question, 90 (69.8%) indicated

Table 4

Relationships of people with disabilities to survey respondents

Relationship to the respondent	Frequency[a]	Percent[b]
Acquaintance	37	29.6
Student	34	27.2
Close friend	33	26.4
Child	23	18.4
Niece/Nephew	20	16.0
Co-worker	18	14.4
Aunt/Uncle	18	14.4
Neighbour	17	13.6
In-law	13	10.4
Sibling	11	8.8
Parent	10	8.0
Spouse	4	3.2
Instructor	4	3.2
Grandparent	2	1.6
Grandchild	2	1.6
Employer/Employee	2	1.6
Other	2	1.6

[a]Respondents were asked to "check all that apply", with the result that the frequency total is greater than n (n=128)

[b]Percent of respondents who knew one or more persons of the specified relationship

Table 5

Type of Disabilities for people with disabilities known to survey respondents

Type of Disability	Frequency[a]	Percent[b]
Physical	68	54.84
Learning	67	54.03
ADD/ADHD	44	35.48
Psychiatric	43	34.68
Sensory	43	34.68
Cognitive	27	21.77
Medical	26	20.97
Don't know	6	4.84
Other	3	2.42

[a]Respondents were asked to "check all that apply", with the result that the frequency total is greater than n (n=124). [b]Percent of respondents who knew one or more persons with the specified disability

that they provide their students with information about disability services, while 21 (16.4%) said that they sometimes inform their students of disability services, and 18 (14%) said they did not inform their students of these services. There were no significant effects of any previously known correlates of disability attitudes on these practices.

Faculty were asked to indicate if they had ever previously taught students with a variety of disabilities, and to indicate which accommodations they had provided to those students. One hundred and fifteen of 127 (90.6%) of faculty members indicated that they had experience teaching students with learning disabilities. Faculty members offered a total of 525 accommodations to these students, or 4.57 per faculty member on average. Seventy-seven of 127 (60.63%) respondents also said that they had taught students with physical disabilities. A total of 282 accommodations were offered to these students, or 3.66 per faculty member on average. Sixty-two of 128 (48.44%) of faculty members said that they had taught students with psychiatric disabilities. Two hundred accommodations were offered to these students, or 3.23 accommodations per instructor on average. Sixty-six of 121 (54.55%) of respondents indicated that they had taught students with sensory disabilities. A total of 269 accommodations were offered to these students, or 4.08 per faculty member on average. The rates at which specific accommodations were offered to students with the four types of disabilities can be seen in Table 6.

Disability Knowledge, Awareness and Training

When asked to rate their overall knowledge of the services that their institution or campus offers to students with disabilities on a scale of 1 to 5, where 1 equals extensive knowledge and 5 equals no knowledge, faculty members gave an average rating of 2.42 (SD = .98). Similarly, when asked to rate their overall knowledge of their

Table 6

Accommodations offered, by Type of Disability

	Disability			
Accommodation	Learning[a]	Physical[b]	Psychiatric[c]	Sensory[d]
Assignment	77(66.96)	32(41.56)	32(51.61)	28(42.42)
Classroom	62(53.91)	53(68.83)	25(40.32)	41(62.12)
Instructional	67(58.26)	35(45.45)	19(30.65)	46(69.70)
Interpersonal	98(85.22)	44(57.14)	49(79.03)	41(62.12)
Peer assistance	74(64.35)	39(50.65)	19(30.65)	36(54.55)
Test/exam	99(86.09)	45(58.44)	36(58.06)	39(59.10)
Technology	45(39.13)	30(38.96)	13(20.97)	31(46.97)
Other	3(2.61)	4(5.19)	7(11.29)	7(10.61)
None	2(1.74)	3(3.90)	6(9.68)	3(4.55)

Note. Values outside of parenthesis represent the number of faculty members who offered the accommodation. Values enclosed in parentheses represent the percent of faculty who offered the accommodation.

[a]$n = 115$. [b]$n = 77$. [c]$n = 62$. [d]$n = 66$.

institution's policies regarding disability services, respondents gave an average rating of 2.49 (*SD* = 1.06). Respondents felt slightly less confident about their knowledge of the human rights code as it pertains to disabilities, giving an average rating of 2.65 (*SD* = 1.05). They felt similarly knowledgeable of the life conditions of persons with disabilities in general, with an average rating of 2.68 (*SD* = .96). However fewer people gave themselves ratings of ones or twos and more gave themselves ratings of three and four in response to this question than for the other questions, indicating less knowledge of general life conditions of persons with disabilities than of services, policies and legislation (Figure 1).

Of 120 people who responded to the question, 46 (38.3%) claimed to have received some training in the area of disabilities, while 74 (61.7%) had not. However, 'disability training' included discussions with outside agencies, reading institutional manuals, volunteer experiences, short seminars of less than one day, and one-day workshops delivered by the Coordinator of Disability Services. It also included university courses, and degrees or diplomas in related areas such as Community Studies or Educational Psychology. Nevertheless, having some type of disability 'training' was significantly correlated with all four ratings of disability knowledge and awareness (services, $r = .260$, $p = .003$; policies, $r = .200$, $p = .024$; human rights, $r = .306$, $p = .000$; life conditions, $r = .310$, $p = .000$).

When asked about what they felt was important to know for teaching students with disabilities, 104 faculty members provided a wealth of information. On the question of what faculty members would personally be interested in learning with respect to students with disabilities, 97 responses were provided. The most commonly stated need

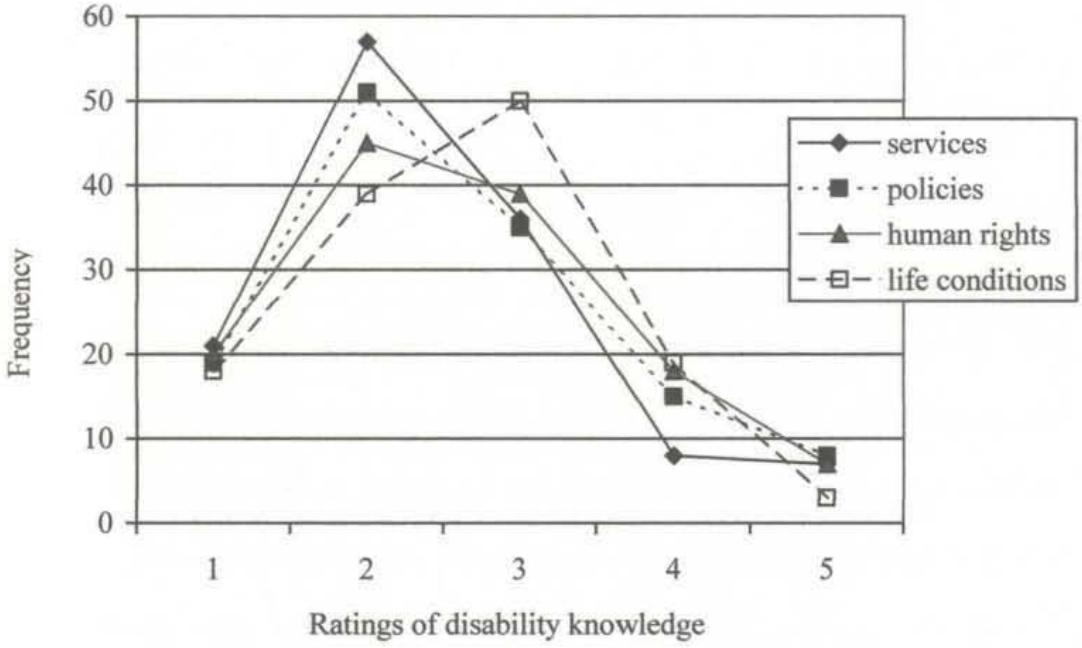

Figure 1. Ratings of personal knowledge of institutional services and policies, human rights and the general life conditions of people with disabilities, expressed as frequencies of ratings, where a rating of 1 = extensive knowledge and a rating of 5 = no knowledge.

in response to both questions was the provision of disability-specific information, although numerous other suggestions were also provided. These will be reviewed in detail in the discussion section of this thesis.

Survey Scenarios

The nine scenarios in the survey represented a 3 x 3 repeated measures design, with within-subjects independent variables of type of disability (learning, physical, psychiatric) and information (no disability information, name only, and detailed disability information). Dependent variables were ratings of 'accommodation deservedness' (the extent to which the student in the scenario deserved accommodations), and the number of accommodations that would be offered in each situation. Repeated measures ANOVAs were used to determine if there were mean differences between scenarios, since this is appropriate where the same individuals are measured in each of the study conditions (i.e.: each of the nine scenarios). Bonferroni pairwise comparisons, a post-hoc measure that is conservative and is considered appropriate for both equal and unequal sample sizes (*Pairwise comparisons*, n.d.), were made for the nine scenarios.

Ratings of 'accommodation deservedness'.

After reading each scenario, faculty members were asked, "In your opinion, how deserving is this student of disability supports and/or accommodations?" with 1 indicating "very deserving" and 5 indicating "not at all deserving." A 3 x 3 repeated measures analysis of variance (ANOVA) was performed on these ratings, with type of disability and information as within-subjects variables. This revealed significant effects of both type of disability, $F(2,202) = 162.26$, $p = .000$, and amount of information, $F(2,202) = 53.94$, $p = .000$. Bonferroni pairwise comparisons for type of disability

revealed that both the psychiatric (M=1.98) and the learning disability (M=1.71) scenarios received significantly less positive ratings than the physical disability scenario (M=1.57), p = .000. Furthermore, ratings for the psychiatric disability scenarios were significantly less positive than for the learning disability scenarios. Bonferroni pairwise comparisons for the amount of disability information that was provided in the scenarios showed that faculty ratings of accommodation deservedness were significantly more positive when either a disability name (M=1.31) and/or detailed disability information (M=1.33) was presented, as opposed to when no disability information was presented (M=2.56), p = .000. However, providing detailed information about the student's disability did not significantly change ratings beyond the improvement that was achieved by naming the disability.

There was also a significant interaction of type of disability and amount of information revealed in the 3 x 3 ANOVA, $F(4,404) = 19.5$, $p = .000$. Despite this highly significant interaction, the only significant post hoc effect was for physical disabilities with detailed disability information ($M = 1.20$), $p = .044$ (Figure 2). Regardless, Figure 2 clearly shows that with no disability information provided, a hypothetical student with a physical disability is viewed much more favourably, based on how s/he presents in class, than a student with learning disability, who in turn is viewed more favourably than a student with a psychiatric disability. Although this pattern remains constant regardless of how much disability information is provided, the gap narrows as more information is provided. Further, providing faculty members with a disability term leads to more favourable views of students with disabilities than when no information is provided. Providing additional, detailed information further improves attitudes only slightly. It

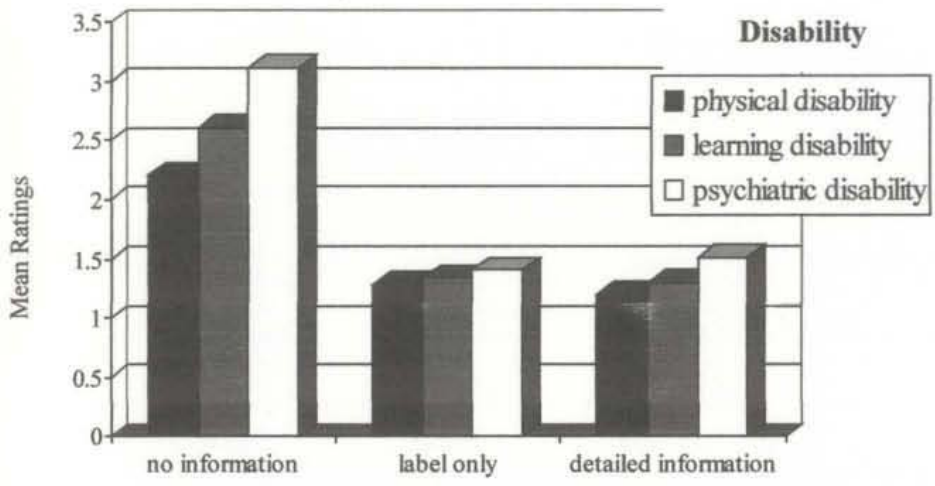

Figure 2. Mean ratings of accommodation deservedness by type of disability and amount of information, where 1 = extremely deserving and 5 = not at all deserving.

should be noted that this lack of additional difference may be due to a ceiling effect. That is, ratings for the 'name only' condition were already extremely close to 1 (very deserving), leaving little room for additional improvement.

Scenario accommodations.

For each of the nine scenarios, faculty members were asked which of seven accommodation types they felt the student in the scenario should be given. Instructions directed respondents to check any/all that they felt might be appropriate. There was also an opportunity for faculty to check 'other' and provide comments or other ideas. Survey accommodations were first added together to provide a total number of accommodations that faculty indicated for each scenario. Looking at the comments that were provided under 'other', adjustments were made to reflect comments such as "all of the above" (seven accommodations total), or "none of the above" (zero accommodations total). Where the 'other' accommodations were already listed under the provided headings, this was not counted as an additional accommodation. For example, quite a few people provided comments under 'other' indicating that they would refer the student to a counselor. Because referral to a counselor is already listed under the 'interpersonal' heading, this did not count as an additional accommodation.

A 3 x 3 repeated measures analysis of variance (ANOVA) was performed on the total number of accommodations listed for each scenario, with type of disability and information as within-subjects variables. This revealed significant effects of both type of disability, $F(2,224) = 34.6$, $p = .000$, and amount of information, $F(2,224) = 96.99$, $p = .000$. Bonferroni pairwise comparisons for type of disability revealed a significant difference between the number of accommodations offered for the psychiatric disability

scenario ($M = 3.71$), and both the learning disability ($M = 4.54$) and physical disability ($M = 4.57$) scenarios, $p = .000$. The difference between the physical and learning disability scenarios was not significant. Bonferroni pairwise comparisons for were also performed for the amount of disability information that was provided, revealing significant differences between all levels of information (no information, $M = 3.04$ vs. name only, $M = 4.71$, $p = .000$; no information vs. detailed information, $M = 5.31$, $p = .000$; name only vs. detailed information, $p = .035$).

The 3 x 3 ANOVA also yielded a significant disability x information interaction, $F(4,448)$, 4.94, $p = .001$ (Figure 3). Post Hoc analyses did not show any significant differences between any individual scenarios, but the gap between the types of disabilities appeared narrowest when only a disability name was provided.

Rating Scales

Part C of the survey presented sixteen fill-in-the-blank statements that could be completed with each of four types of disabilities: learning disabilities, physical disabilities, sensory disabilities, and psychiatric disabilities. Respondents were asked to rate the extent to which they agreed with each statement, for each type of disability, on a scale of 1 (agree strongly) to 5 (disagree strongly). Half the statements were worded in the negative, such that agreeing strongly indicated a negative attitude, while the other half were worded positively, so that agreeing strongly indicated a positive attitude. Responses to these items were first recoded so that a rating of 1 indicated a positive attitude, and a rating of 5 indicated a negative attitude. Total scores for each type of disability were then calculated, and a repeated measures analysis of variance (ANOVA) was conducted on the resulting total scores, revealing a significant effect for type of disability, $F(3,315) =$

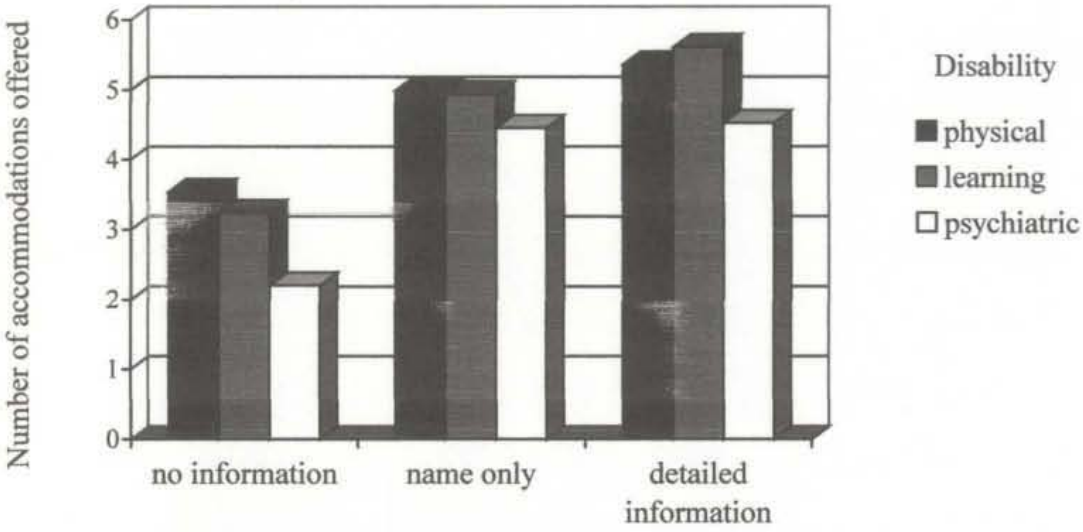

Figure 3: Number of accommodations offered for each scenario, by type of disability and amount of information provided (maximum is eight).

110.62, $p = .000$. Bonferroni pairwise comparisons showed significant differences between responses for psychiatric disabilities and all other disabilities. Looking at the average rating for each type of disability, using the scale where 1 represents a maximum expression of positive attitude and 5 represents a maximum expression of negative attitude, significance levels for the various pairwise comparisons are: psychiatric (M = 2.47) vs. physical disabilities (M = 1.82), p = .000; psychiatric vs. sensory disabilities (M = 1.94), $p = .000$; psychiatric vs. learning disabilities (M = 2.05), $p = .000$. Significant differences were also found between physical disabilities and learning disabilities, p = .000, as well as physical disabilities and sensory disabilities, $p = .000$. The difference in ratings for sensory disabilities and learning disabilities was not significant. As shown in Figure 4, and predicted by previous research, physical disabilities are viewed more positively than other disabilities, especially non-visible disabilities. Psychiatric disabilities are viewed the least favourable of the four types of disabilities. It should be noted, however, that the lowest mean rating observed overall was 3.38 (psychiatric disabilities), which represents a mid-point on the scale. Thus no extremely negative mean ratings were observed.

Each question was also examined individually for differences between the four types of disabilities, using a series of repeated measures analyses of variance (ANOVAs), with type of disability as a within-subjects variable. Each question revealed a significant effect of type of disability, except for one: "Students with _____ are generally weak and only have themselves to blame." The mean ratings for this statement ranged from 1.22 to 1.27, indicating that faculty members strongly disagreed with this statement, regardless of the disability. However, although not significant, it is still worth noting that

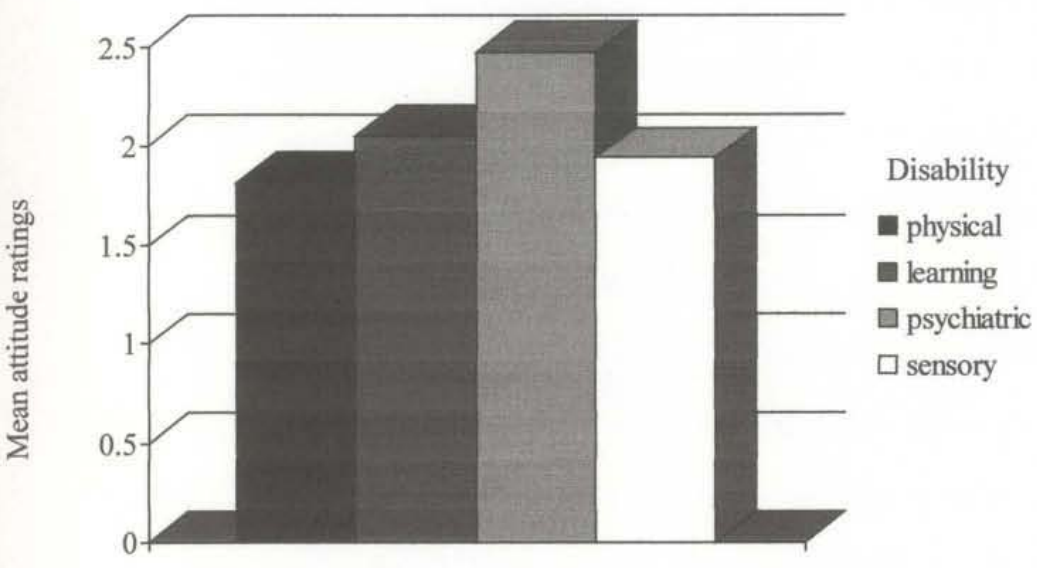

Figure 4. Mean attitude ratings by type of disability, where 1 indicates a positive attitude and 5 indicates a negative attitude

fewer people (74%) gave ratings of one (disagree strongly) for psychiatric disabilities than for learning (85%), sensory (85.6%) or physical disabilities (87.4%). Thus, even this question demonstrates that attitudes toward students with psychiatric disabilities are more negative than toward students with other disabilities, and that this effect persists even when attitudes are quite positive overall.

Bonferroni pairwise comparisons found that psychiatric disabilities were rated significantly less favourably than all of the other three types of disabilities, on each of the fifteen remaining individual questions, except numbers nine, eleven, twelve, and thirteen, $p < .01$. These questions were, " Students with _____ generally do not try as hard as other students," "Students with _____ tend to achieve lower grades than students with other disabilities," " Students with _____ usually request accommodations that are reasonable and legitimate," and " Students with _____ are often below average intelligence." For these questions, psychiatric disabilities were given significantly less favourable ratings than both physical and sensory disabilities ($p < .01$ for all questions except number thirteen: psychiatric vs. sensory disabilities, $p < .05$), but there were no significant differences in ratings for the psychiatric vs. learning disabilities. In addition, ratings for learning disabilities were significantly more negative than ratings for both physical and sensory disabilities for questions three, four, nine, eleven, twelve and thirteen ($p < .01$, except question four: learning versus sensory disabilities, $p < .05$). Questions nine, eleven, twelve and thirteen appear to address academic effort and ability, suggesting that students with psychiatric and learning disabilities are viewed similarly negatively in this regard, while students with learning disabilities are viewed more

positively than students with psychiatric disabilities in terms of inter- and interpersonal characteristics.

Ratings for learning disabilities were significantly more negative than ratings for physical but not sensory disabilities for questions one, two, eight and fifteen ($p < .01$, except question two where $p < .05$). As well, physical disabilities were given significantly different ratings from sensory disabilities for questions one, seven, eight, ten, eleven, fifteen and sixteen ($p < .01$ for each question except number fifteen, $p < .05$). This data confirms that there is a disability hierarchy, with physical disabilities viewed most positively and psychiatric disabilities viewed most negatively.

Correlates of Disability Attitudes

Several known correlates of disability attitudes were examined as independent variables in repeated measures analyses of variance (ANOVAs). These were gender, age, ethnicity, highest level of education, academic department, academic rank, campus location (community population), years of teaching experience, familiarity with campus services, previous disability training, self-reported disability awareness, several measures of previous disability contact. It was not possible to compare faculty with disabilities to faculty without disabilities due to the extremely small number of faculty with disabilities ($n = 10$). It was also not possible to examine effects of culture/ethnicity due to the small number of non-Caucasians who responded to the survey ($n = 9$). Because of missing cases, for some items the number of responses from non-Caucasians and/or faculty with disabilities were as low as two. Likewise, only three respondents indicated that they did not personally know someone with a disability, and thus the effects of this characteristic could not be analyzed.

Ratings of accommodation deservedness.

For the nine scenarios, repeated measures ANOVAs were conducted, with type of disability and amount of information as within-subjects variables, and each known correlate as an independent between-subjects variable. Thus, separate analyses were conducted for each of the thirteen known correlates identified above.

Gender was one independent factor that significantly effected ratings of accommodation deservedness in the present study. A main effect of gender was found for this 3 x 3 x 2 ANOVA, $F(1,101) = 9.45$, $p = .003$. Furthermore, the interaction between amount of information and gender was significant, $F(2,202) = 5.94$, $p = .003$ (see Figure 5). Post hoc analyses did not reveal significant differences between any of the individual gender x information pairs, however. No other gender interactions were significant. For learning, physical and psychiatric disabilities, women indicated that the students in the case studies were more deserving of disability supports and/or accommodations than did men. Further, this difference was greatest when no disability information was provided, but narrowed as disability information was provided.

Ratings of accommodation deservedness were also influenced by the number of years of full-time teaching that instructors had. Although no main effect was found, there was a significant interaction between years of full-time teaching experience and type of disability, $F(80, 124) = 2.07$, $p = .000$. Furthermore, the three-way interaction of teaching experience, disability and amount of information was significant as well, $F(160, 248) = 1.57$, $p = .001$. Figure 6 displays a trend of attitudes toward students with psychiatric

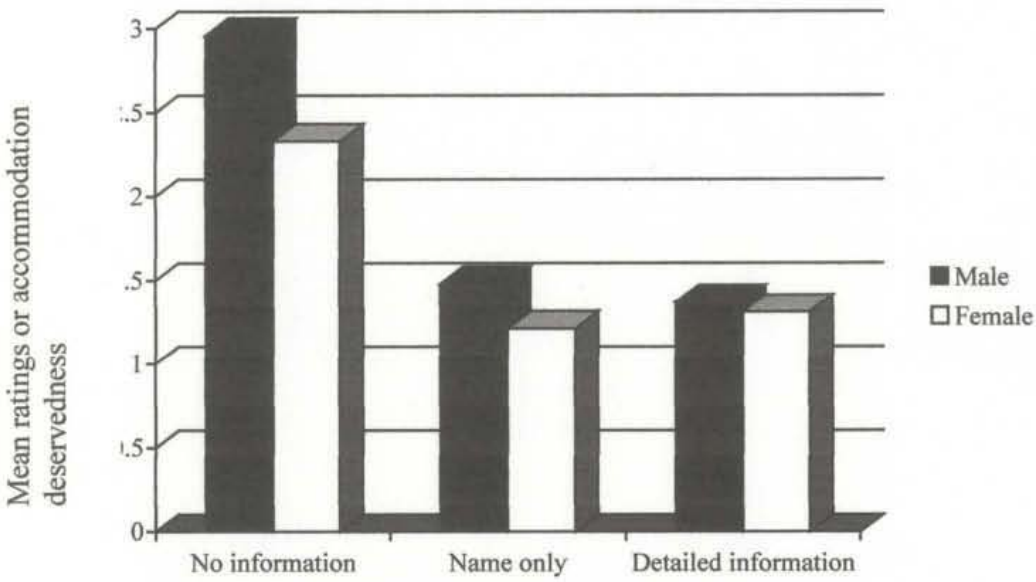

Figure 5: Mean ratings of accommodation deservedness, by gender and amount of disability information provided, where 1 = "very deserving" and 5 = "not at all deserving"

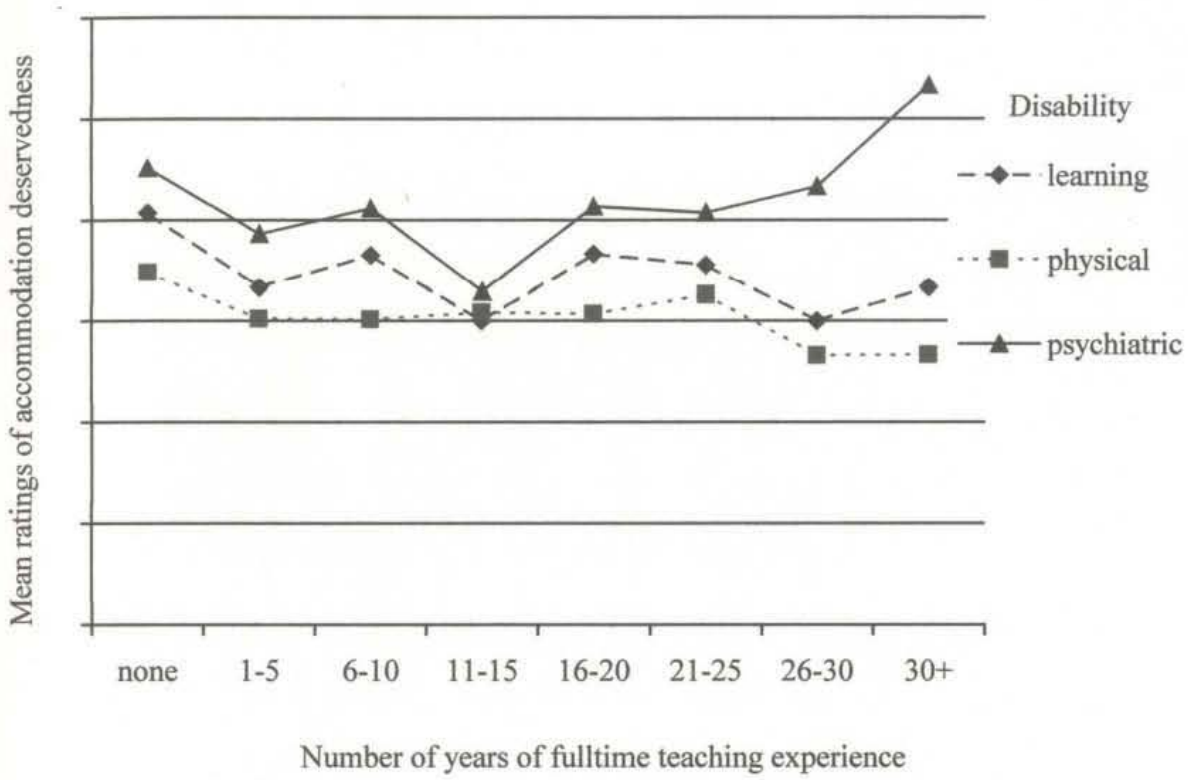

Figure 6. Mean ratings of accommodation deservedness, by years of fulltime teaching experience and type of disability, from 1 (very deserving) to 5 (not at all deserving).

disabilities worsening as faculty members increase in their years of fulltime teaching experience, while attitudes toward students with learning or physical disabilities remain relatively neutral or even improving slightly. This effect is not linear, however, and the relationship between the two variables remains unclear. Regardless, faculty at each level of teaching experience gave the most positive ratings of accommodation deservedness to scenarios involving students with physical disabilities and the least positive to scenarios involving psychiatric disabilities.

The population of the community where the college campus was located also had a significant effect on ratings of accommodation deservedness, $F(2,100) = 3.8$, $p = .026$. Bonferroni pairwise comparisons showed that faculty who taught in communities with less than 10,000 people (Baie Verte, Bonavista, Burin, Carbonear, Clarenville, Happy Valley-Goose Bay, Labrador City, Placentia, Port aux Basque, St. Anthony, Stephenville) gave more positive ratings than faculty who taught in communities of 10,000-49,000 people (Conception Bay South, Corner Brook, Gander, Grand Falls-Windsor; CNA, n.d.a), $M = 1.64$ versus $M = 1.97$, $p = .024$, but neither differed significantly from ratings given by people in a community of over 50,000 people (St. John's, $M = 1.71$; see Figure 7). This did not interact significantly with either type of disability or amount of information provided.

Instructors who had previously taught student(s) with psychiatric disabilities gave significantly more positive ratings of accommodation deservedness for all scenarios than did instructors who had not previously taught student(s) with psychiatric disabilities, $M = 1.57$ versus $M = 1.91$, $F(1.98) = 10.4$, $p = .002$. No interactions were found. Having previous experience teaching students with learning disabilities, physical disabilities or

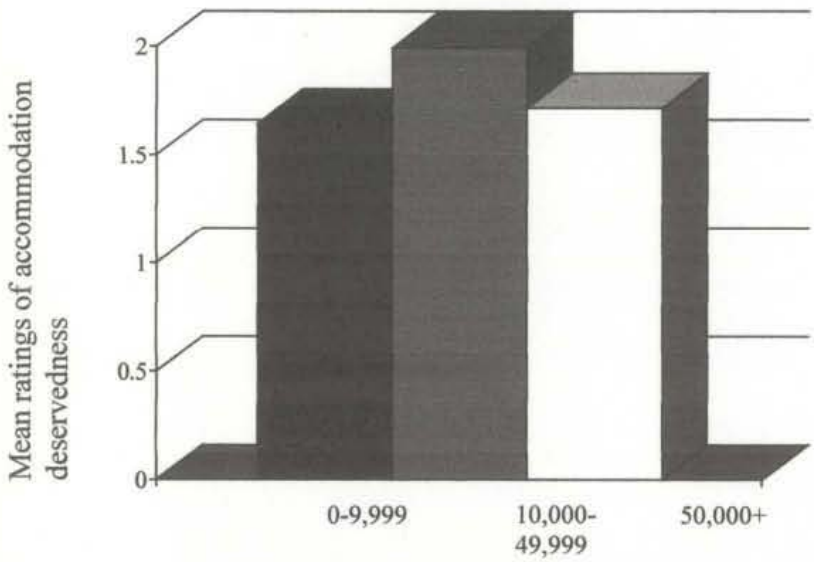

Figure 7. Mean ratings of accommodation deservedness by community size, from 1 (very deserving) to 5 (not at all deserving).

sensory disabilities did not have a similar effect.

Each type of disability was also examined separately via two-way ANOVAS with 'amount of information' as within-subjects variables and 'previous teaching experience' as between-subjects variables. That is, the three psychiatric disability scenarios were analysed via an ANOVA with 'previous experience teaching psychiatric disabilities' as the between-subjects variable, and the same was done for the learning disability scenarios and the physical disability scenarios. This confirmed the findings from the three-way ANOVA. That is, only ratings for the psychiatric disability scenarios were significantly effected by previous teaching experience, $F(1,113) = 19.9, p = .000$, and no interactions were found. Thus, instructors who have taught students with psychiatric disabilities have more positive attitudes toward all types of disabilities, yet teaching students with other disabilities does not result in a similar attitude change.

Disability knowledge also had an impact on instructor's rating. Instructors were first asked to rate their overall knowledge of the services and supports that their institution/campus offers to students with disabilities on a scale of one to five, where one indicates 'extensive knowledge' and five indicates 'no knowledge'. A 3 x 3 ANOVA with 'knowledge of services' as an independent variable yielded a main effect for this variable, $F(1,95) = 3.85, p = .006$. Bonferroni pairwise comparisons found a significant difference between instructors who rated their knowledge of disability services as '1' versus '5', $p = .007$. Knowledge of disability services also interacted with the variable 'amount of information', such that instructors with the least knowledge of disability services gave disproportionately lower ratings of accommodation deservedness when no

disability information was provided than they did when either a disability name or detailed disability information was provided (Figure 8).

Knowledge of institutional policies likewise had an effect on accommodation deservedness ratings. That is, faculty members with more knowledge of institutional policies gave more positive overall ratings of accommodation deservedness, $F(4,94) = 3.67$, $p = .008$ (Figure 9). Bonferroni pairwise comparisons revealed a significant difference between faculty with a policy knowledge rating of five (no knowledge), $M = 2.24$, and those with ratings of one (extensive knowledge), $M = 1.49$, $p = .022$, or two ($M = 1.62$, $p = .035$. No interactions were found.

Knowledge of the human rights code as it pertains to disabilities also significantly impacted overall faculty ratings of accommodation deservedness, $F(4, 95) = 222.55$, $p = .044$. This effect varied across the different types of disabilities, such that individuals with greater knowledge of human rights saw less distinction between the three types of disabilities than did those with less knowledge, $F(8,190) = 2.56$, $p = .011$ (Figure 10). However, Bonferroni pairwise comparisons did not reveal any significant differences between specific variable combinations.

Finally, previous training regarding disabilities influenced faculty ratings of accommodation deservedness. Although there was no main effect, disability training interacted with type of disability such that individuals who did not have previous disability training gave disproportionately poorer ratings for the psychiatric disability scenarios than they did for the learning or physical disability scenarios, $F(2,194) = 3.08$, $p = .048$ (Figure 11). Bonferroni pairwise comparisons did not reveal any significant

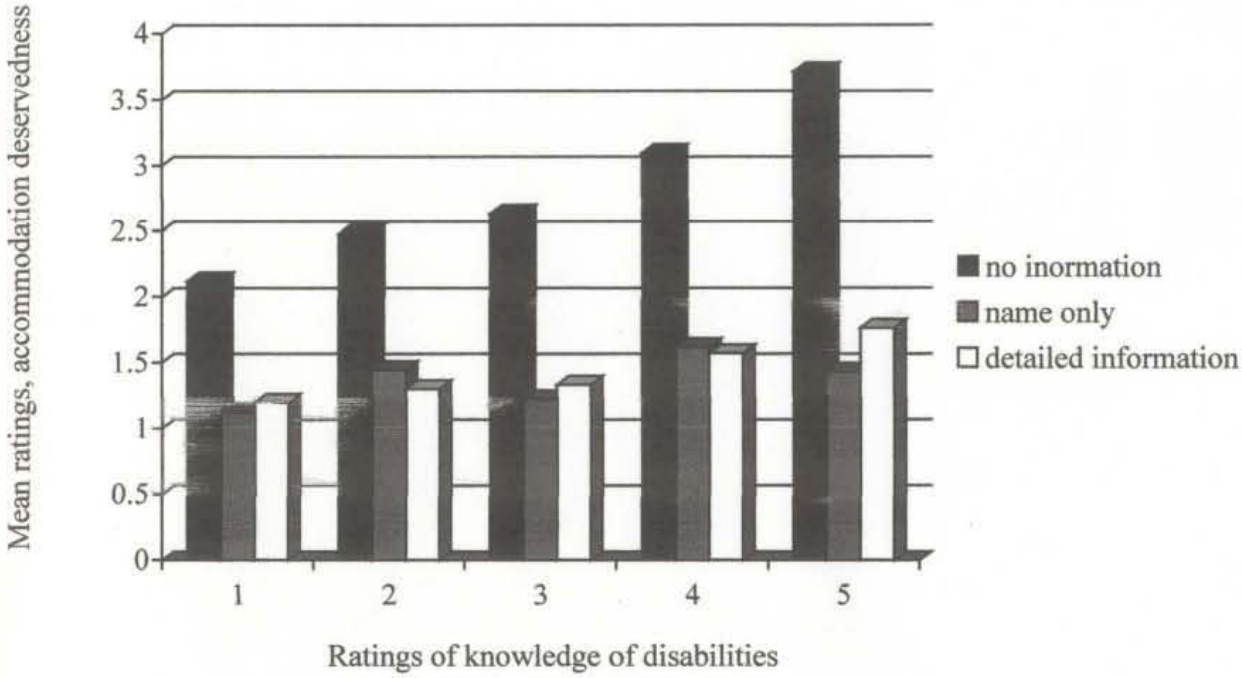

Figure 8. Mean ratings of accommodation deservedness, by knowledge of disability services and amount of information provided. Ratings of accommodation deservedness range from 1 (very deserving) to 5 (not at all deserving); ratings of knowledge of disabilities range from 1 (extensive knowledge) to 5 (no knowledge).

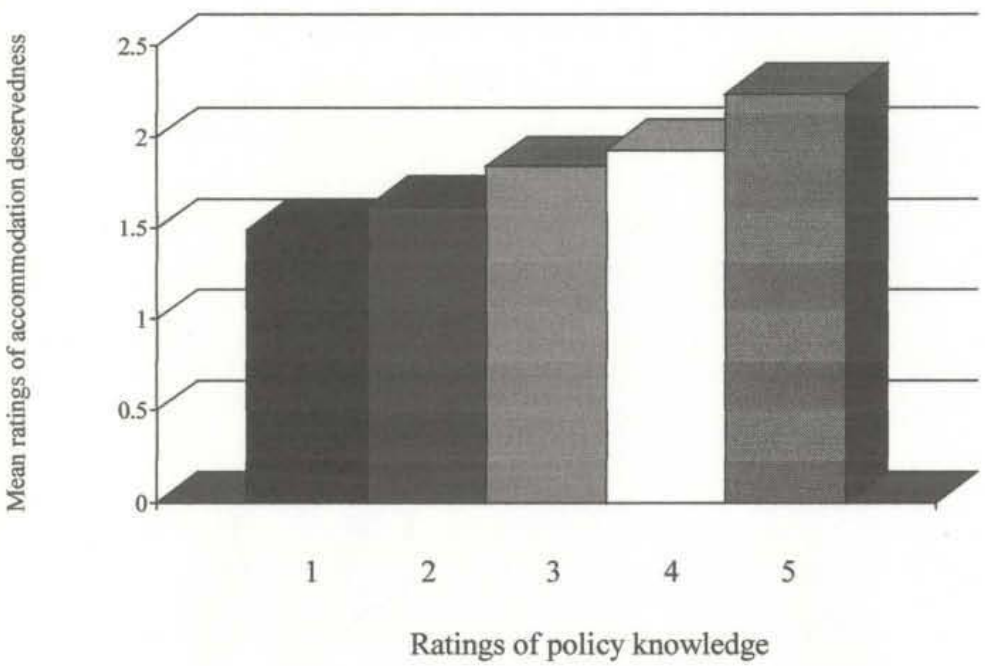

Figure 9. Mean ratings of accommodation deservedness, by knowledge of disability policies. Ratings of accommodation deservedness range from 1 (very deserving) to 5 (not at all deserving); ratings of policy knowledge range from 1 (extensive knowledge) to 5 (no knowledge).

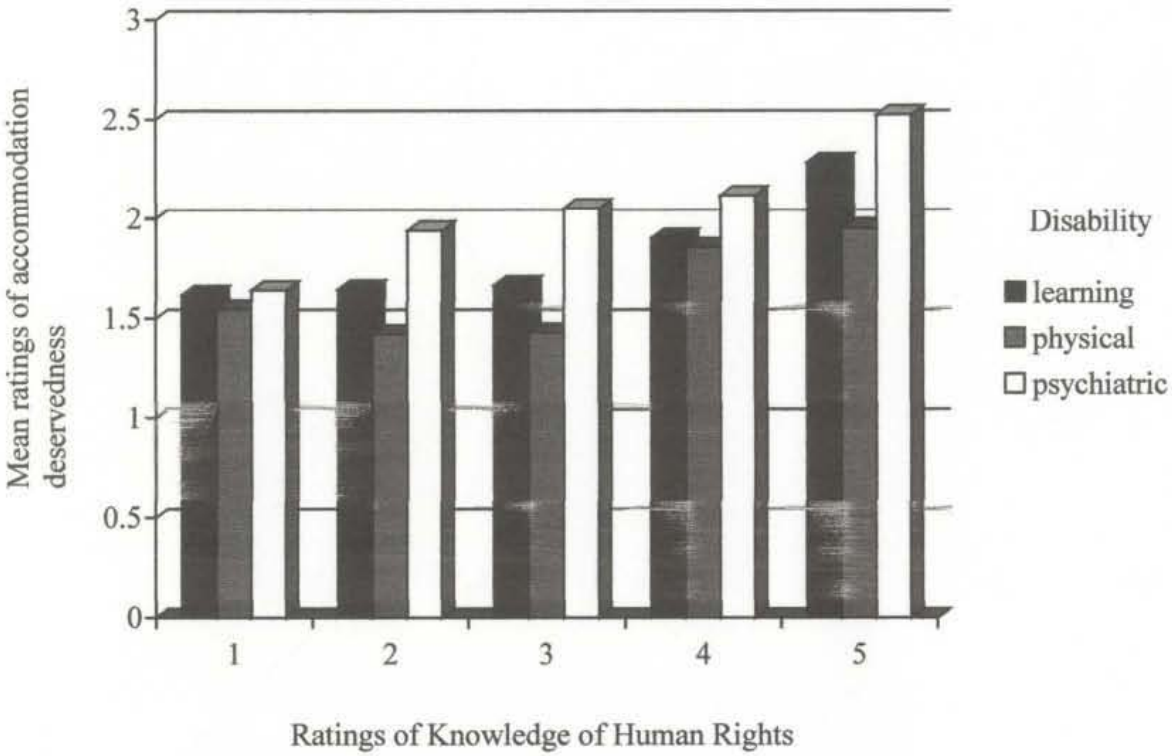

Figure 10: Mean ratings of accommodation deservedness, by knowledge of human rights and type of disability. Ratings of accommodation deservedness range from 1 (very deserving) to 5 (not at all deserving); ratings of knowledge of human rights range from 1 (extensive knowledge) to 5 (no knowledge).

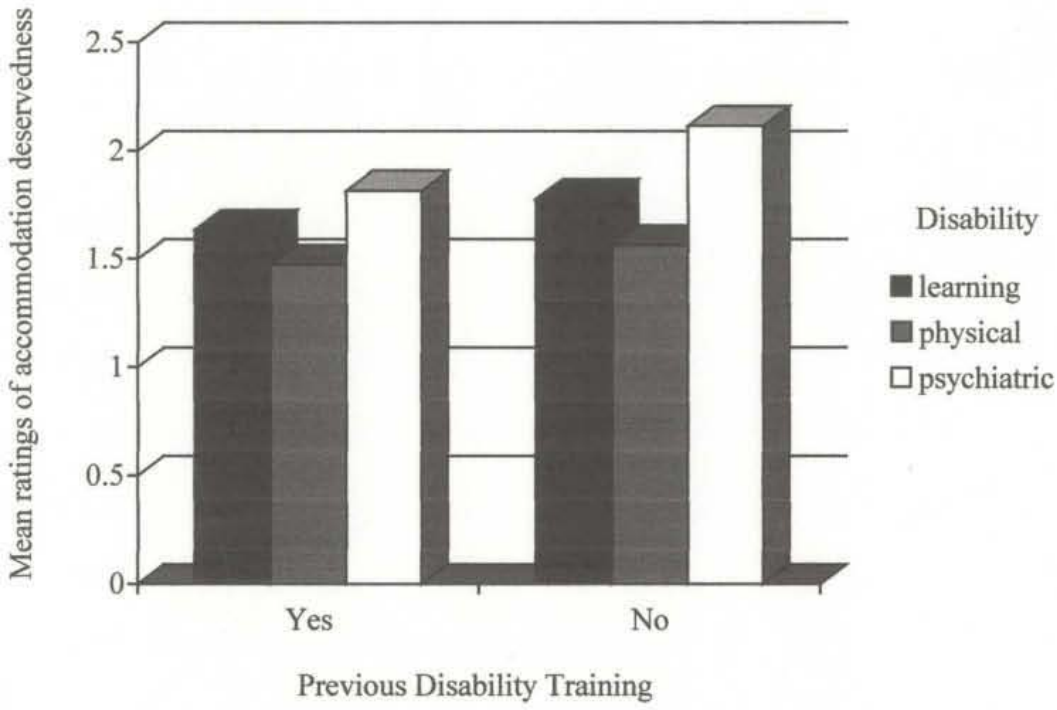

Figure 11. Mean ratings of accommodation deservedness, by previous disability training and type of disability. Ratings of accommodation deservedness range from 1 (very deserving) to 5 (not at all deserving).

differences between specific pairings, however. No other correlates of disability attitudes were found to have a significant influence on ratings of accommodation deservedness.

Scenario accommodations.

Gender did not have a significant impact on the total number of accommodations that faculty members were willing to offer in response to hypothetical scenarios describing students with different disabilities, despite gender differences in ratings of accommodation deservedness. However, the population of the community where the college campus was located did have a significant interaction with the amount of information provided, $F(4,220) = 2.85$, $p = .025$. Although none of the Bonferroni pairwise comparisons were significant, faculty in smaller communities appear willing to offer more accommodations than faculty in larger communities, especially when disability information is provided (Figure 12).

The number of accommodations provided to students with psychiatric disabilities in the past influenced the number of accommodations offered in response to the nine scenarios, with those who provided more accommodations in the past also offering more accommodations in response to the scenarios $F(8,44) = 2.34$, $p = .035$. Furthermore, the interaction between type of disability and number of accommodations previously offered to students with psychiatric disabilities was significant, $F(16,88) = 1.9$, $p = .030$. However, there is no obvious relationship between the two (Figure 13). When analyzed as a two-way scenario for psychiatric disabilities only, with 'amount of information' as a within-subjects variable and 'number of accommodations previously provided' as a between subjects variable, the effect is even more pronounced, $F(8,44) =$

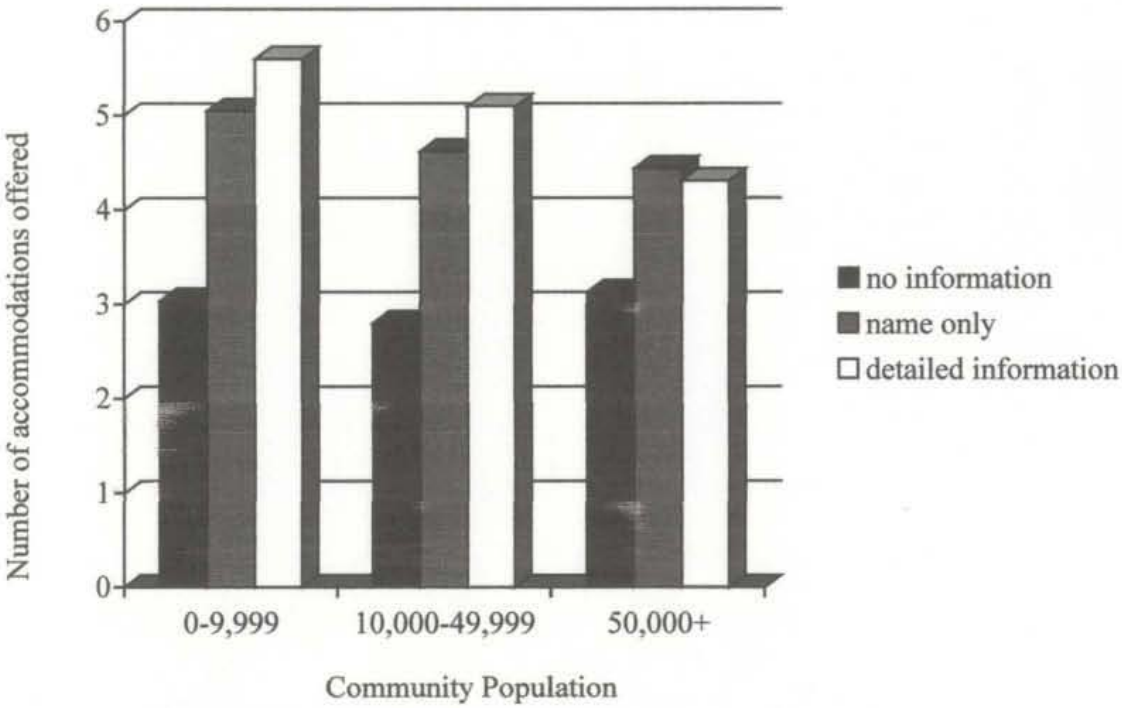

Figure 12. Mean number of accommodations offered, by population and amount of information. Maximum number of accommodation categories is eight.

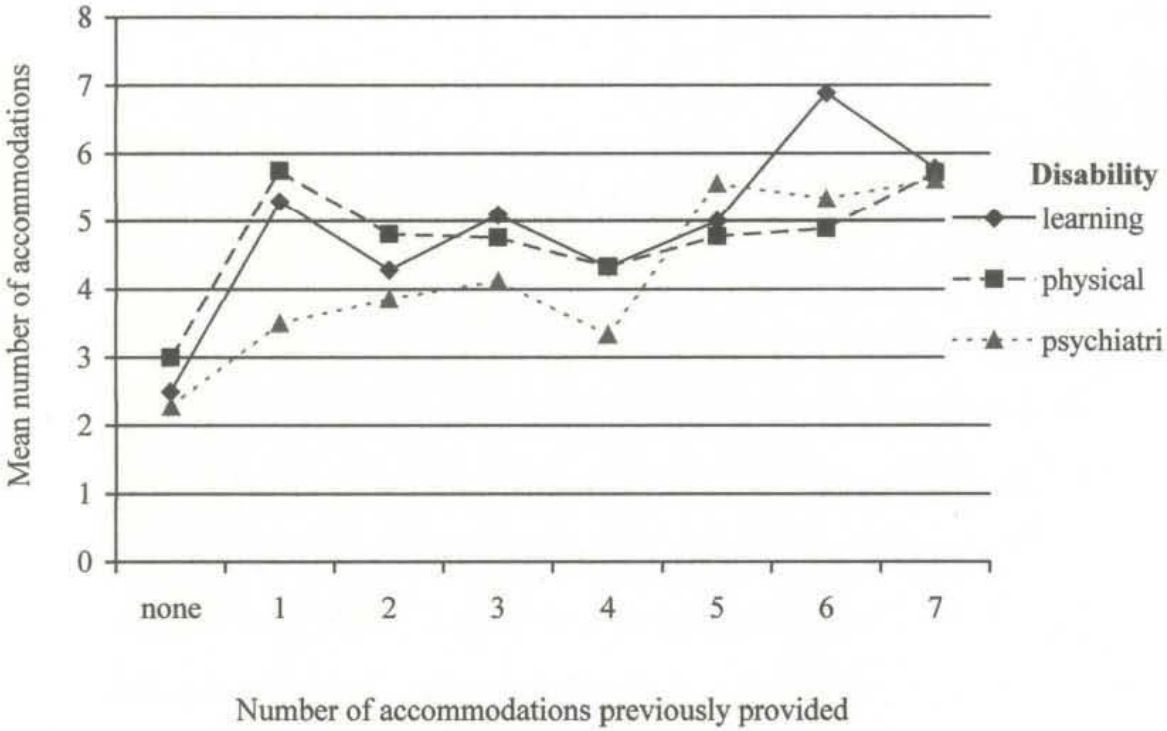

Figure 13. Mean number of accommodations offered, by number of accommodations previously provided to students with psychiatric disabilities. Maximum number of accommodations is eight.

2.74, $p = .015$. Bonferroni pairwise comparisons revealed a significant difference between faculty who had previously offered accommodations in seven different categories ($M = 5.611$), versus those who did not offer any accommodations ($M = 2.278$), $p = .036$.

Faculty who had previously provided more accommodations for students with learning disabilities offered more accommodations in response to the survey scenarios than did faculty who had provided fewer accommodations to these students in the past, $F(8,88) = 4.43$, $p = .000$. This effect also interacted significantly with type of disability, $F(16,176) = 3.08$, $p = .000$. However, as with psychiatric accommodations above, there is no obvious relationship between the two (Figure 14). When analyzed as a two-way scenario for learning disabilities only, with 'amount of information' as a within-subjects variable and 'number of accommodations previously provided' as a between subjects variable, the effect is even more pronounced, $F(8,98) = 3.2$, $p = .003$. Bonferroni pairwise comparisons revealed significant differences between faculty who had previously offered accommodations in only one category ($M = 2.17$), versus those provided accommodations in four ($M = 4.82$), $p = .025$, five ($M = 4.86$), $p = .018$, six ($M = 5.15$), $p = .008$, and seven ($M = 5.25$), $p = .005$, categories.

Having previously provided accommodations for students with physical and/or sensory disabilities did not significantly affect the offering of accommodations in response to the nine scenarios when analyzed via a three-way ANOVA, although there was a non-significant trend in the same direction. A two-way ANOVA on the physical disability data with 'amount of information' as a within-subjects variable and

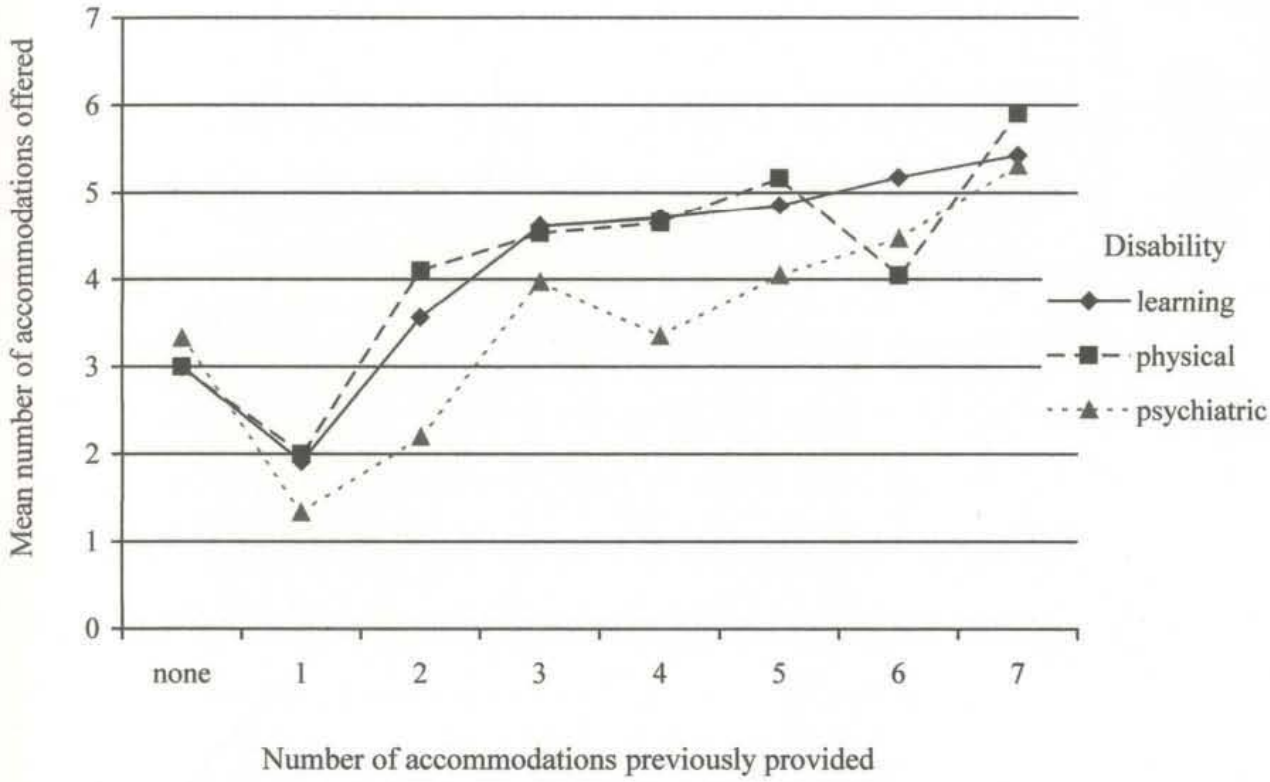

Figure 14. Mean number of accommodations offered, by type of disability and number of accommodations previously provided to students with learning disabilities. Maximum number of accommodations is eight.

'accommodations previously offered' as a within-subjects variable revealed a significant effect, $F(8,60) = 2.86, p = .009$. Bonferroni pairwise comparisons yielded only one significant difference: between faculty who had previously provided accommodations for students with physical disabilities in only one category ($M = 2.88$), versus those who had provided accommodations in seven categories ($M = 5.52$), p = .049 (Figure 15). Simply having taught students with learning, physical or psychiatric disabilities did not have an impact on the number of accommodations offered in response to the nine scenarios.

A significant interaction was found between the number of accommodations offered for the three types of disabilities and the faculty members' highest level of education, $F(14,210) = 2.41, p = .004$. Post hoc analyses did not reveal any significant individual interactions. However, Figure 16 suggests that college-educated faculty are willing to offer more accommodations to students with learning and psychiatric disabilities than other faculty members. The number of accommodations offered to students with physical disabilities is unaffected by level of education.

No other interactions or main effects were found.

Rating scales.

As with the nine scenarios above, repeated measures ANOVAs were conducted on the rating scale data, with type of disability as a within-subjects variable, and each known correlate as an independent between-subjects variable. Thus, separate analyses were conducted for each of gender, age, ethnicity, highest level of education, academic department, academic rank, community population, years of teaching experience, familiarity with campus services, previous disability training, self-reported disability awareness and previous teaching experiences.

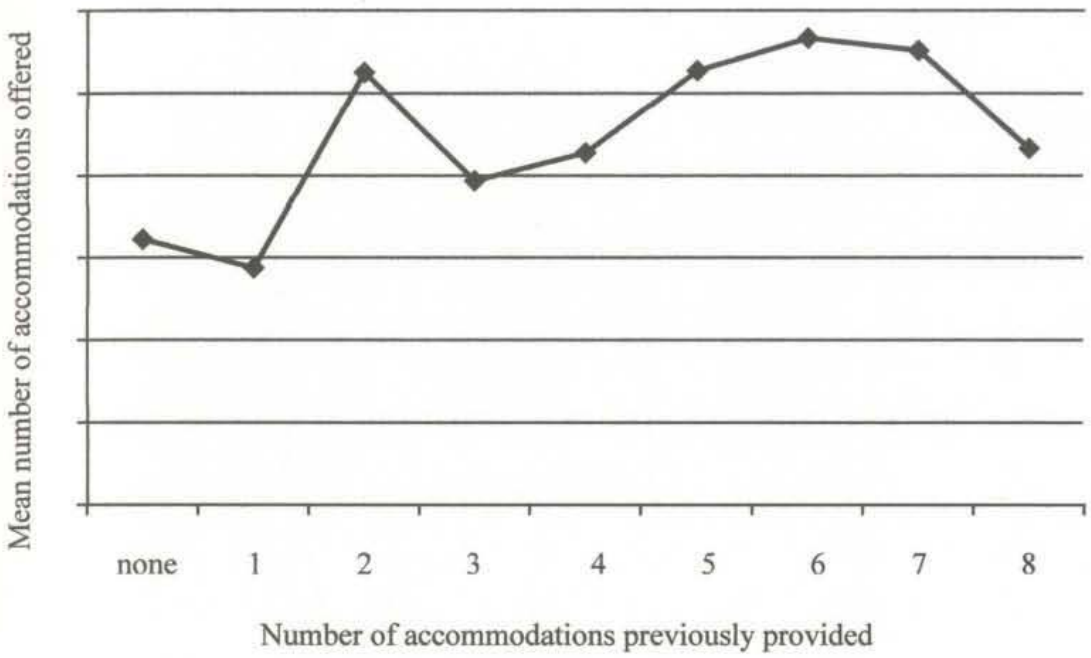

Figure 15. Mean number of accommodations offered, by number of accommodations previously provided to students with physical disabilities. Maximum number of accommodations is eight.

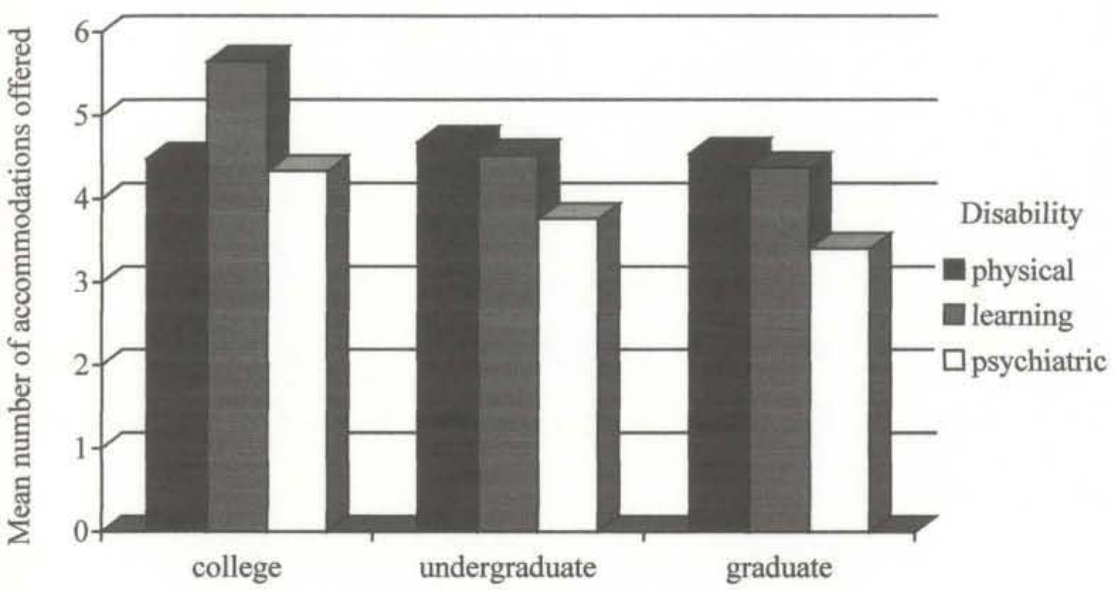

Figure 16. Mean number of accommodations offered, by type of disability and highest level of education. Maximum number of accommodations is eight.

A main effect of gender was found for this 4 x 2 ANOVA, $F(1,96) = 8.11$, $p = .005$, with women giving more positive ratings than men for each type of disability (Figure 17). No significant interactions were found.

Ratings were also significantly effected by the number of years of full-time teaching experience that the faculty member had, but only in interaction with type of disability, $F(114,201) = 1.76$, $p = .000$. Although there were no significant post hoc comparisons, psychiatric disabilities appeared to be viewed more positively by instructors with less experience, while the reverse was true of physical disabilities. Years of experience did not appear to influence attitudes toward learning or sensory disabilities (Figure 18).

The population of the community where the individual worked also had an impact on attitude ratings, $F(2,103) = 2.08$, $p = .028$. Bonferroni pairwise comparisons found a significant difference between St. John's and the mid-sized communities only, with individuals in St. John's expressing more positive attitudes overall ($M = 1.96$ vs. $M = 2.23$), $p = .026$. This effect was influenced by the type of disability, $F(6,309) = 2.88$, $p = .01$. Attitudes toward psychiatric disabilities were more negative than attitudes toward other disabilities in all communities, but the gap narrowed somewhat St. John's (Figure 19).

Having previous experience teaching students with sensory disabilities also had a significant impact on attitude ratings, but this interacted with type of disability, such that faculty with previous experience teaching students with sensory disabilities showed

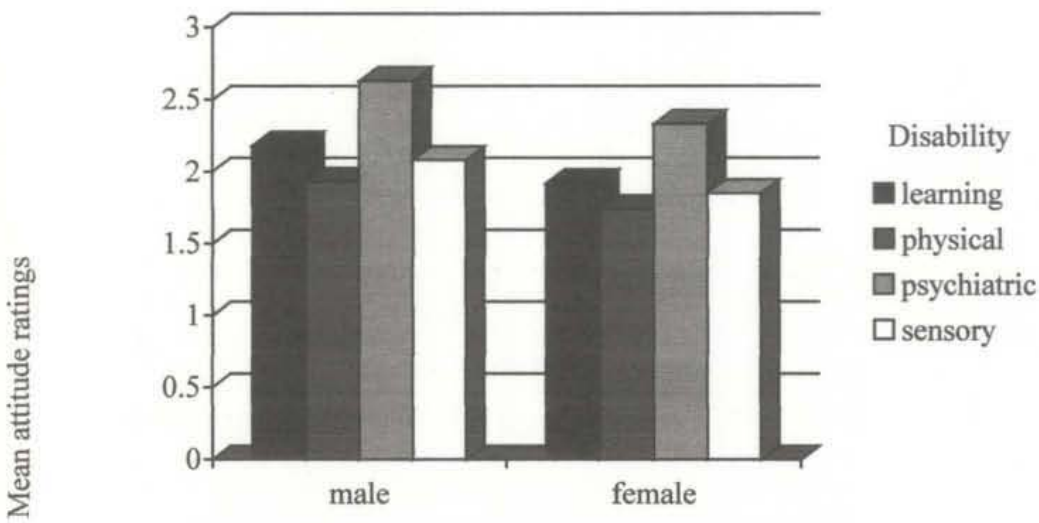

Figure 17. Mean attitude ratings by gender and type of disability, where 1 indicates a positive attitude and 5 indicates a negative attitude.

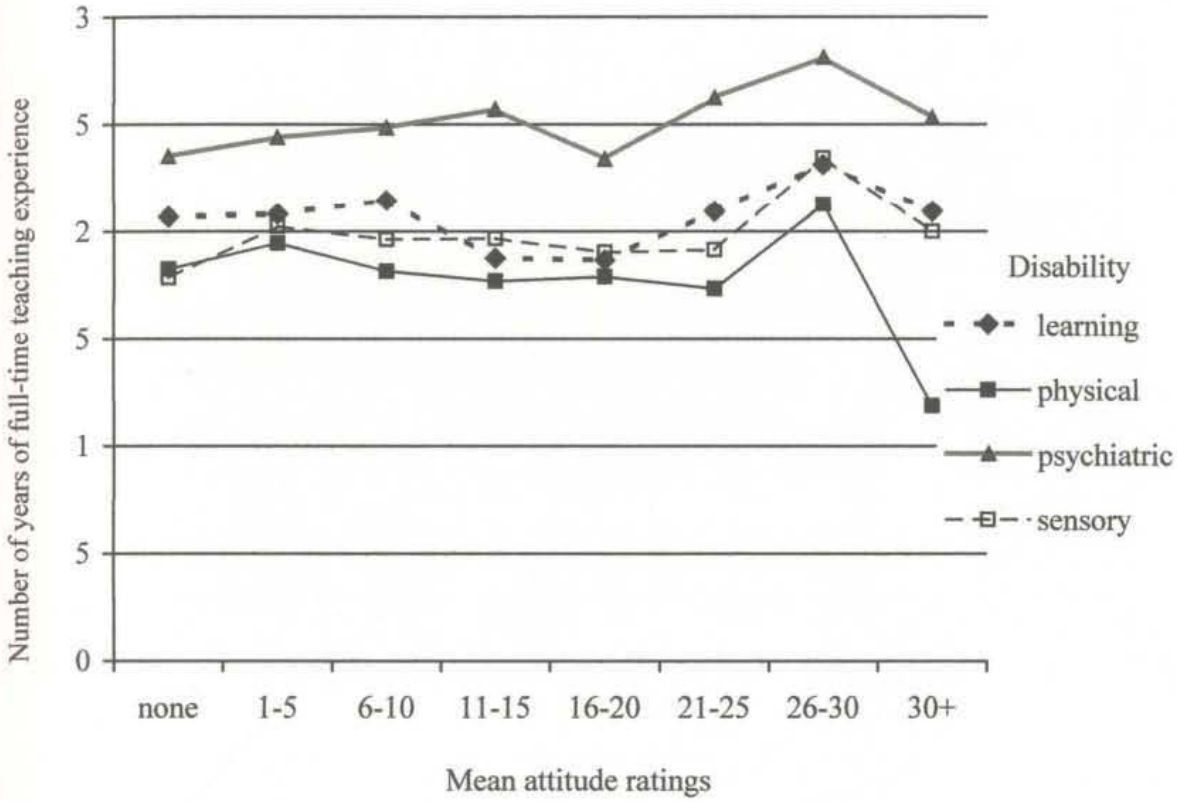

Figure 18. Mean attitude ratings by type of disability and years of teaching experience, where 1 indicates a positive attitude and 5 indicates a negative attitude.

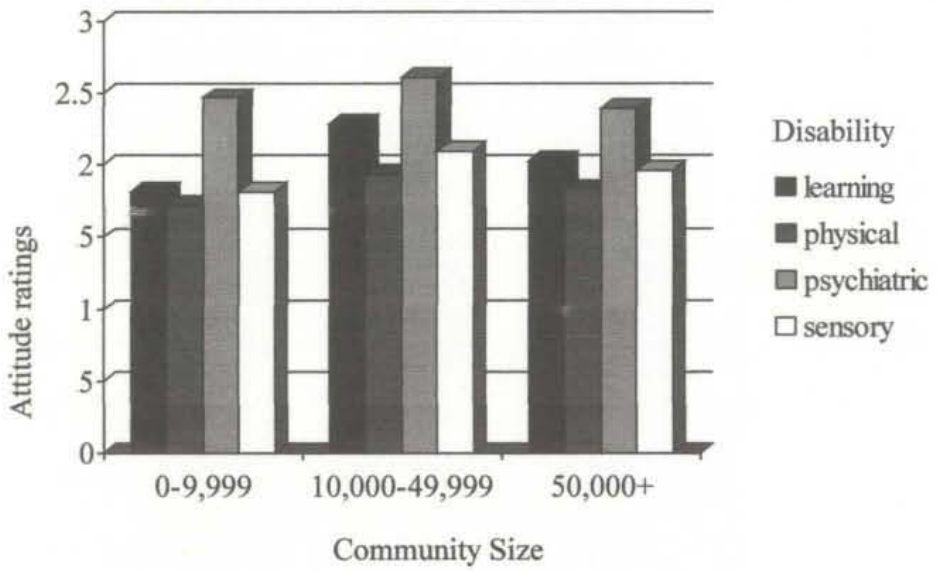

Figure 19. Mean attitude ratings by population and type of disability, where 1 indicates a positive attitude and 5 indicates a negative attitude.

more positive attitudes toward students with learning, physical and sensory disabilities, yet less positive attitudes toward students with psychiatric disabilities, $F(3,309) = 4.32, p = .005$. Bonferroni pairwise comparisons did not reveal significant differences between any of the variable pairs, however (Figure 20).

In contrast, having taught students with psychiatric disabilities was associated with improved attitudes toward students with all types of disabilities ($M = 1.97$ vs. $M = 2.18$), $F(1, 103) = 8.52, p = .004$. Having taught students with learning disabilities or physical disabilities did not result in any attitude differences, nor did previous accommodation practices for any of the types of disabilities.

Attitude ratings were also related to the individual's reported knowledge of the human rights code as it pertains to disabilities, with individuals having greater knowledge of the human rights code giving more positive attitude ratings, $F(4,100) = 2.71, p = .034$ (Figure 21). Bonferroni pairwise comparisons revealed a significant difference between the two extremes of human rights knowledge only, that is, between ratings of one (extensive knowledge; $M = 1.83, n = 8$) versus five (no knowledge, $M = 2.32, n = 4$), $p = .044$. However, due to the small sample size for each variable combination, this data should be viewed with caution.

Attitude ratings were also effected by whether or not an individual had previously received some form of disability training, with individuals who had received prior training giving more positive ratings than individuals with no prior training ($M = 1.96$ vs. $M = 2.17$), $F(1,103) = 7.8, p = .006$. This trend was not influenced by type of disability. No other known disability correlates were found to have significant effects on this scale of disability attitudes.

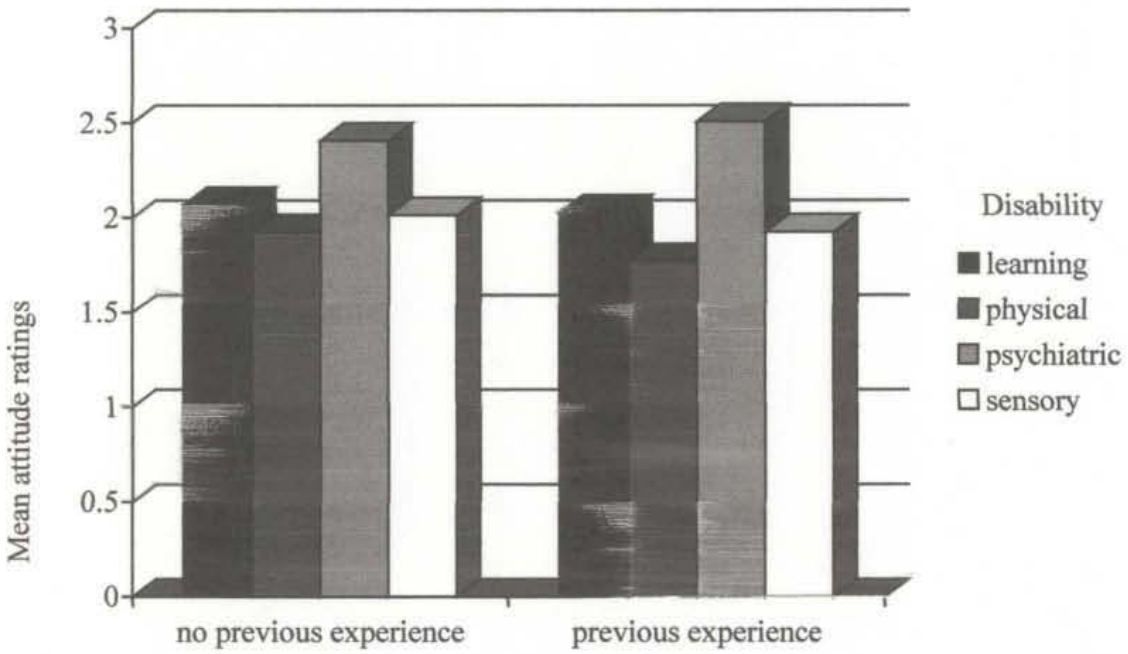

Figure 20. Mean attitude ratings by previous experience teaching students with sensory disabilities and type of disability, where 1 indicates a positive attitude and 5 indicates a negative attitude.

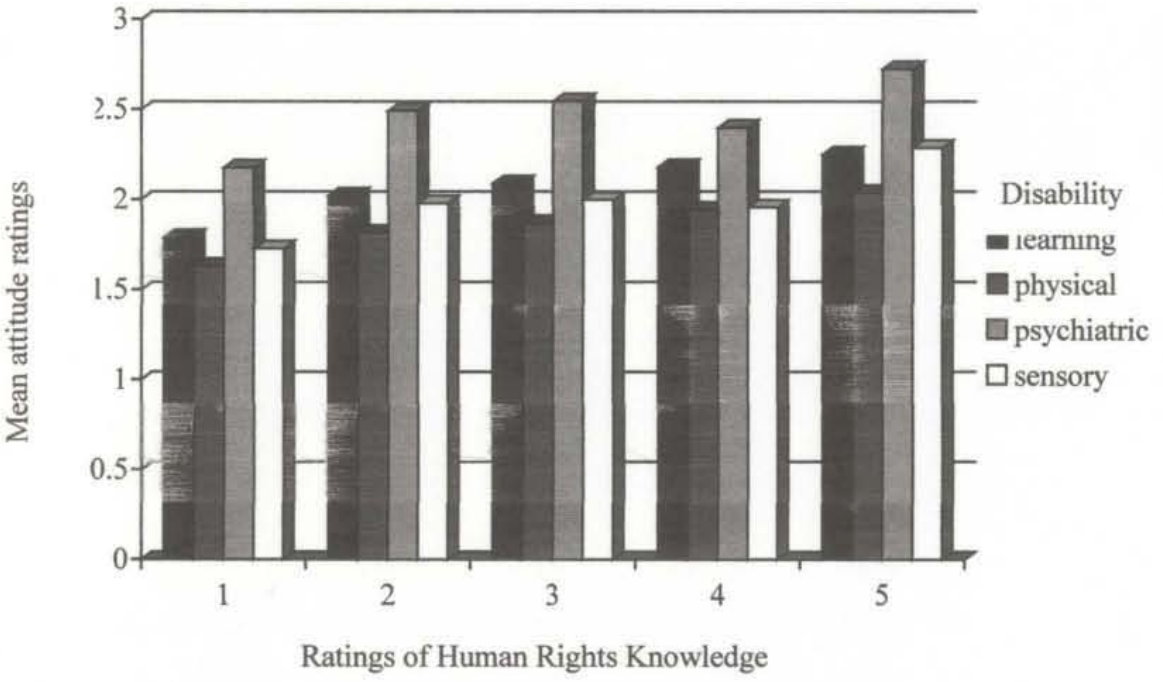

Figure 21. Mean attitude ratings by human rights knowledge and type of disability. For attitude ratings, 1 indicates a positive attitude and 5 indicates a negative attitude. For human rights knowledge, 1 indicates extensive knowledge and 5 indicates no knowledge.

Scale of Attitudes Toward Disabled Persons

Fifty-five faculty members completed the Scale of Attitudes Toward Disabled Persons (Antonak, 1992) after finishing the study survey. SADP scores for each subject were calculated using the guidelines provided by the scale's author, Dr. Richard Antonak (Appendix B). SADP scores can range from 0 to 144, with a higher score indicating a more positive attitude toward persons with disabilities as a group. Overall, faculty in the present study had a mean SADP score of 117.29 (SD = 17.28), with a range of 32 to 143.

Similar analyses were performed on SADP scores as were performed on the study survey. This is a well-respected and often-used measure of disability attitudes. If the study survey is valid, it should yield similar effects to the SADP.

The thirteen known correlates of disability attitudes were also examined in relation to SADP scores. Age had a significant effect on SADP scores, $F(4,51) = 3.73$, $p = .01$. Overall, younger faculty members held more positive attitudes toward people with disabilities. Bonferonni pairwise comparisons revealed significant differences between scores for faculty members over 60 years of age and those other age groups, $p < .05$, but not amongst any of the other age groups (Figure 22). No other previously known correlates of disability attitudes were found to significantly effect SADP scores.

Past Accommodation Practices

Known correlates of disability attitudes were also compared to faculty reports of the number of accommodation types offered to students with different disabilities whom they had taught in the past, but no significant effects were found.

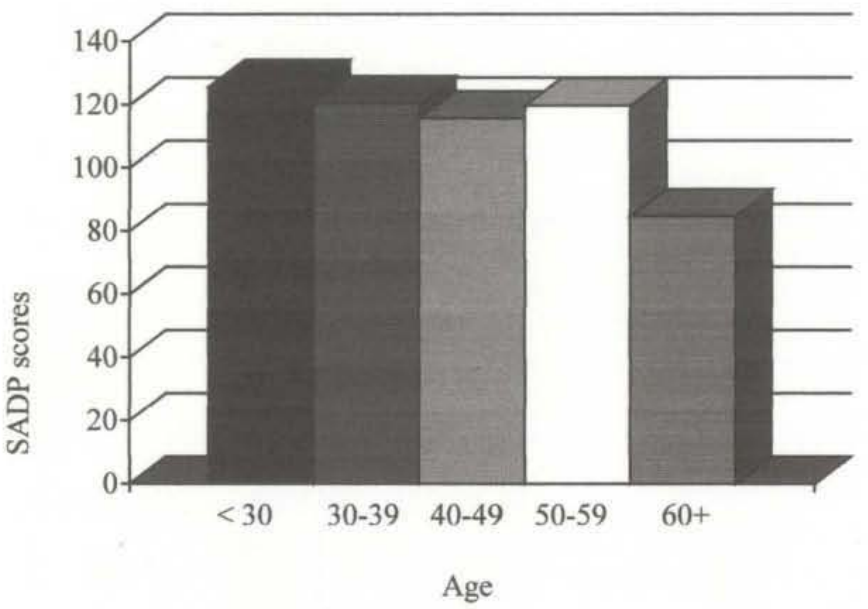

Figure 22. SADP scores, by age category. Scores range from 0 (negative attitude) to 144 (positive attitude).

Summary of the Data

The final sample for this study consisted of 165 faculty members at College of the North Atlantic's 17 campuses across Newfoundland and Labrador. Of these, 55 also completed the Scale of Attitudes Toward Persons with Disabilities (Antonak, 1992). Significant correlations between the two instruments were found for some survey items and some types of disabilities, but not all. While this measure of concurrent validity was therefore inconclusive, there were other indicators that the study survey was a valid measure of disability attitudes and practices.

The demographics of the sample appeared to be consistent with those of College of the North Atlantic faculty and provincial demographics as a whole. Thus the sample can be considered to be a true representation of public college faculty in Newfoundland and Labrador.

The majority of respondents were familiar with disability services at their campuses. The vast majority also personally knew someone with a disability, mostly on a casual basis, with physical disabilities being the most common, followed by learning disabilities. Almost 35% of those surveyed knew someone with a psychiatric disability. Most faculty also had experience teaching students with disabilities, with learning disabilities being the most common, followed by physical, sensory and psychiatric in that order. Nearly half of all faculty had taught a student with a psychiatric disability. Instructors offered the most accommodations to students with learning disabilities, followed by sensory, physical and psychiatric disabilities. When asked to rate their knowledge of their institution's services and policies regarding students with disabilities,

and their knowledge of the human rights code and the general life conditions of people with disabilities, most faculty members rated themselves midway on a scale of one (extensive knowledge) to five (no knowledge). However, only about 38% had received any disability training, and most of this training was of a superficial nature. Faculty gave various suggestions for the types of disability training that they would like to receive. These were mostly related to a perceived need for detailed information about different types of disabilities, and about their students' specific disability profiles.

In response to nine scenarios representing physical, learning and psychiatric disabilities where no, little or detailed disability information was presented, faculty tended to rate the students with the physical disabilities as most deserving of accommodations, and the students with psychiatric disabilities as least deserving. Providing the name of the disability or detailed disability information improved ratings of accommodation deservedness overall, compared to when no disability information was provided. Furthermore, the difference in ratings between the three types of disabilities was somewhat reduced when information about the disability was provided. The lowest mean rating was in the middle of the scale, suggesting relatively positive attitudes overall.

Similar effects were noted for the number of accommodations offered in response to each scenario, with more accommodations offered as the amount of disability information increased, and with psychiatric disabilities being offered the least compared to the other types of disabilities.

A series of rating scales measuring attitudes toward four different types of disabilities yielded the most positive ratings for physical disabilities, followed by sensory,

learning and psychiatric disabilities in that order. The lowest mean rating was in the middle of the scale, suggesting relatively positive attitudes overall.

Several characteristics that were related to disability attitudes in previous research were investigated. It was found that women expressed more positive attitudes than men, and this difference was more notable in the absence of disability information. The effect of years of teaching experience was unclear. The community size effect was also unclear, with individuals from larger communities expressing more positive attitudes on some measures and individuals from smaller communities expressing more positive attitudes on others. Having previously taught students with psychiatric disabilities resulted in more positive attitudes for all types of disabilities. Individuals with a college education were willing to offer more accommodations than individuals with undergraduate or graduate degrees. Previous experience teaching students with sensory disabilities lead to improved attitudes toward all types of disabilities except psychiatric disabilities (on one attitude measure). Faculty who provided more accommodations to students with psychiatric and learning disabilities in the past also offered more accommodations on the scenarios in the survey. Greater knowledge of the institution's disability policies and services, and knowledge of the human rights code, were moderately associated with more positive attitudes, especially when disability information was not provided. Prior disability training was associated with more positive attitudes, although on one measure this was only true for psychiatric disabilities. Age, academic department and academic rank did not influence attitudes for any of the measures.

Faculty in the study had SADP scores ranging from 32 to 143 on a scale of 0 to 144, with a mean score of 117.29. Of the known correlates of disability attitudes investigated for the study survey, only age had a significant effect on SADP scores, with younger faculty members having more positive attitudes.

None of the known correlates of disability attitudes were related to actual past accommodation practices.

Chapter 5: Discussion

Validity of the Study

There are several reasons why this study can be considered to have a high degree of validity. First, the survey has high levels of content and construct validity. It was developed on the basis of previous research, adapting and incorporating questions from similar surveys in the research literature. As well, it was developed according to the guidelines provided by Antonak and Livneh (1988) in their book *The Measurement of Attitudes Toward People With Disabilities,* which is intended to aid survey developers in developing psychometrically sound measures of disability attitudes. Further, the survey was reviewed by Antonak, as well as three other experts in the fields of survey development, disability services and disability research at the post-secondary level. Given that Antonak is one of the preeminent experts in the area of disability attitude surveys, his approval bodes well for the survey's validity. The survey was piloted with seven post-secondary faculty members at three different institutions in the province of Newfoundland and Labrador, and their suggestions were incorporated into the final survey instrument.

The demographics of the sample are consistent with those of College of the North Atlantic faculty in terms of level of education, age, years of teaching experience and so on. The sample is also consistent with provincial demographics as a whole in terms of ethnicity and gender balance. Thus the sample can be considered to be a true representation of public college faculty in Newfoundland and Labrador. In addition, all survey respondents whose data could be considered of questionable validity, such as those who terminated the survey before completing one entire section, were removed

from the sample. A final sample size of 165 results in a 95% confidence level, with a 6.6% margin of error. This means that we can be 95% sure that the results of the survey are a true representation of College of the North Atlantic faculty, within +/- 6.6 percentage points.

Including more than one type of scale in the study survey also provided a measure of validity, in that there was agreement between the measures. That is, known correlates that significantly influenced ratings of accommodation deservedness for the nine scenarios also tended to influence attitudes as measured by the Likert-type rating scale. Further, there were strong correlations amongst the various survey sections.

Past accommodation practices of faculty were found to relate to accommodation offerings in the study, suggesting that there is a link between this measure of attitudes and actual behaviour, which is another indication of the survey's construct validity. As well, many of the survey findings are supported by the literature on disability attitudes and disabilities in post-secondary education. Further, the survey instrument was shown to have satisfactory reliability, which is a necessary prerequisite for validity. Finally, many of the statistics are quite powerful, being significant at the .001 probability level. If we accept that the survey has a high level of external validity, then the strength of the demonstrated effects confirms the validity of the findings.

One anticipated indicator of validity was not as encouraging, however. That is, correlations between the study instrument and the SADP were found for some survey items and some types of disabilities but not others. Furthermore, investigations of known correlates of disability attitudes revealed very different patterns between the two instruments. Thus, this measure of concurrent validity was only marginally successful.

Although SADP data have previously been collected for post-secondary students, among other groups (Upton & Harper, 2002), there are no known instances in which it has been used with post-secondary faculty. There are also temporal and geographical differences between the current and previous samples, which may account for differences. Thus it may be that the current sample has different attitudes, as measured by the SADP, than other previously investigated groups. This explanation is unlikely, however, given that the average SADP score noted in the present study (117.29) is similar to SADP scores noted in other studies. For example, Upton and Harper (2002) found average SADP scores of 109.63 to 121.07 for freshman and graduate students respectively. However, it may instead be that the two instruments are both valid, but that they are actually measuring different aspects of disability attitudes. Indeed, the SADP relates to general attitudes toward all people with disabilities, while the study instrument asked about specific disabilities in the post-secondary environment. It could be that faculty members have positive attitudes toward people with disabilities in a general sense, but when asked about the place of people with disabilities in post-secondary education, different attitudes emerge. This interpretation is consistent with the work of Fichten (1988, cited in Hill, 1996), who found that although most faculty members had moderately favourable attitudes toward students with disabilities in general, they were less positive about having these students in their own department or their own classes. Given this possible interpretation, combined with other indicators that the study survey was a valid measure of disability attitudes and practices in the post-secondary environment, it is still reasonable to conclude that the survey is a valid measurement tool, and that the study results are an accurate reflection of the study population's attitudes and behaviours.

In addition, two faculty members wrote to the researcher expressing concerns about specific survey questions. One respondent had similar concerns about five of the Likert-type statements. For example, for item #47, "Students with _____ are usually friendly and cheerful," this individual commented that "...disabled people are distributed across the range of friendliness and cheerfulness. I selected the middle choice, because I believed that the true answer was not there for me to select. " This person felt these questions were flawed because their intent was unclear. However, the intent of these questions was intentionally unclear so as to elicit attitudes rather than factual responses. Further, while it is true that these traits are likely normally distributed for people with disabilities, the questions were worded to represent an end of the distribution by using words such as 'usually', as for number 47, above.

The other faculty member to express concerns felt unqualified to determine which accommodations were appropriate in response to the scenarios and was frustrated that 'no opinion' was not one of the response options provided. This person likewise wished there was a 'no opinion' option on the Likert-type scale, for the same reason. However, as noted by Antonak and Livneh (1988), forced-choice formatting may be necessary on attitude surveys to avoid a no-response bias. This person also commented that s/he felt compelled to give "politically correct" responses to some questions. This is a concern of all attitude surveys that is difficult to address. One way to address this is by ensuring the anonymity of survey responses, as was the case in the present study. Another option is to employ indirect methods of measurement, where participants are not aware that disability attitudes are being measured. It would be valuable to do this in the future, to verify the findings of this study, perhaps by undertaking classroom observations. Of course, this

type of study has its own validity problems, such as interpreting behaviours and inter-rater reliability. There may also be ethical issues associated with this approach as some form of deception is often involved. In the present study, although it was obvious that disability attitudes were being measured, it was not obvious that psychiatric disabilities were of particular interest to the researcher.

Given that only two faculty members contacted the researcher with criticisms, and given the other positive indicators of the survey's validity as noted above, there is sufficient evident to suggest that this study is indeed a valid measure of disability attitudes. Furthermore, the two faculty members with criticisms were from Sir Wilfred Grenfell College, which was not included in the final analyses. The only faculty member from College of the North Atlantic to contact the researcher expressed extremely positive comments about the survey.

There is one question that could possibly be removed from the survey in the future, however. The rating scale item "Students with _____ are generally weak and only have themselves to blame" was atypical in that there were no significant effects of type of disability, likely due to a ceiling effect for this item. That is, all respondents gave extremely positive responses leaving no room for disability differences. However, although not significant, it is still worth noting that fewer people gave ratings of one (disagree strongly) for psychiatric disabilities than for all other disabilities, reinforcing the fact that attitudes toward students with psychiatric disabilities are more negative than toward students with other disabilities, and that this effect persists even when attitudes are quite positive overall.

Respondent Demographics

Although the demographics of the sample were representative of the College system overall, and the provincial population in general, the incidence of disability was about half of that of the general population, which was estimated as 12.4% in Canada in 2001 (Statistics Canada, 2001, p. 7). It is close to a Health and Activity Limitation Survey estimate that seven percent of post-secondary students in Canada had disabilities in 1991 (CACUSS, 1999). The incidence of disability in the post-secondary student population has in likelihood increased since 1991, however, and thus this number is still somewhat low. While this is not unexpected, given that people with disabilities in Canada currently have the highest rates of unemployment and generally work in low-paying, low-status jobs (Canadian Council on Social Development, 2005; Human Resources and Social Development Canada, 2006), it is notable that, even amongst post-secondary instructors, some faculty with disabilities are still confronted with inappropriate jokes. When one particular individual (of ten who replied) was asked why s/he made the decision to not discuss a disability with his or her colleagues, the individual commented that "[the disability was] obvious to many, [and that s/he had] enough trouble with jokes already." This is just one of several indications that negative attitudes toward people with disabilities can persist in the post-secondary environment, even amongst colleagues.

Institution Demographics

Although the vast majority of respondents were familiar with disability services at their campuses, 5.5% said their campus did not have these services, and 5.5% did not know if their institution had these services. Each campus of College of the North

Atlantic does have a designated individual who is responsible for disability services. However, because each Coordinator of Disability Services is responsible for more than one campus, and does not necessarily maintain an office at each campus, there could be some confusion surrounding this question. Thus, the number of people who feel they do not know the answer to this question is perhaps actually more telling. The fact that even 5% of instructors do not know that these essential services exist suggests that more professional development in this area is necessary.

Personal Experiences

Prior teaching experiences and practices.

Most faculty also had experience teaching students with disabilities, with learning disabilities being the most common (90.6%), followed by physical (60.6%), sensory (54.6%) and psychiatric (48.4%), in that order. If experience has a positive effect on attitudes, as suggested by numerous researchers (Leyser et al., 1998; Upton & Harper, 2002), then the fact that instructors have less experience with psychiatric disabilities than with other disabilities may partially account for the more negative attitudes that were observed for this group of students. It should be kept in mind, however, that instructors have likely taught more students with psychiatric disabilities than they are aware of, since this group of students is known to be less inclined to disclose their disability to their instructors than are students with other disabilities (Rana, Smith & Walkling, 1999). This suggestion is supported by research identifying rates of disability in post-secondary environments. Although many of these studies disagree about specific disability rates, some suggest that learning disabilities are the most common disabilities in post-secondary institutions while others suggest that physical disabilities are the most common. The

majority of studies agree that psychiatric disabilities are at least as common as sensory disabilities, perhaps more so (Lewis, Farris & Greene, 1999; Moisey, 2004). Informal observations at College of the North Atlantic suggest that learning disabilities and low cognitive ability are most common types of disabilities at this particular college, followed by psychiatric, physical and sensory disabilities. The survey did not specifically state that faculty were to report only those students who had disclosed a particular disability, and thus it is possible that some faculty members included students whom they suspected of having these disabilities, whether or not they actually did. If this were the case, it could be that psychiatric disabilities were under-represented due to their non-visible nature.

Instructors offered the most accommodations to students with learning disabilities, followed by sensory, physical and psychiatric disabilities. Again this confirms that psychiatric disabilities are viewed more negatively than other types of disabilities. It is interesting to note that the types of accommodations offered varied by type of disability as well. Thus test/exam accommodations (followed closely interpersonal accommodations) were the most common for learning disabilities, adjustments to the classroom environment were most common for physical disabilities, variations in instructional methods were most common for sensory disabilities, and interpersonal accommodations were most common for psychiatric disabilities. Students with psychiatric disabilities were offered almost half as many academic accommodations as they were interpersonal accommodations. It would therefore appear that there is a lack of awareness of the impacts of psychiatric disabilities on academic and cognitive abilities, and the potential benefits of academic accommodations for these students. Students with psychiatric disabilities often experience problems with attention and concentration,

problems with organization, difficulty processing information and making decisions, reduced memory, physical side affects of medications, and other symptoms that have a direct impact on learning (Sharpe et al, 2004; Souma, Rickerson, & Burgstahler, 2001; Thomas, 2003; Unger, 1991; Weiner & Weiner, 1996). Along with interpersonal accommodations, students with psychiatric disabilities can benefit greatly from academic accommodations like extended time on exams to compensate for problems with maintaining focus or fatigue.

Disability Knowledge, Awareness and Training

Most faculty members considered themselves to be somewhat knowledgeable about various disability issues, despite the fact that only about 38% had received any disability training. In addition, much of this training was of a superficial nature. For example, reading institutional manuals, discussions with outside agencies and seminars of less than one day were all listed as examples of disability training that faculty members had received. Regardless, previous disability training was significantly correlated with all four ratings of disability knowledge and awareness. Evidently, it is important for faculty to receive training in disability issues for them to feel confident in their dealings with students who have disabilities, and apparently limited exposure to these topics is better than no training at all.

When asked about what they felt was important to know for teaching students with disabilities, the most common sentiment was a perceived need was for disability-specific information, such as the impact of a disability on cognitive or psychomotor functioning and the matching of accommodations to specific types of disabilities. Most respondents also wanted details about individual students, such as their background,

aptitudes, prognosis and full access to their disability documentation. This was interesting, given that data from the present study showed that having detailed disability information did not lead to significant improvements in attitudes beyond knowing the name of the disability, nor did it result in increased accommodation offerings. The usefulness of this information to most instructors is therefore questionable. Many of those surveyed said that they would like to know about the college's disability services, resources, policies and procedures. One individual suggested that s/he would like to view a policy/procedure manual, suggesting that s/he is not aware that this manual currently exists. Several respondents pointed out the importance of being open-minded, flexible and patient, and recognizing that all students are individuals and deserving of respect. Information about learning styles was considered important. Recognition that accommodations are intended to level the playing field and not to give advantage was also considered important. Some faculty indicated that they wanted more support from management and more guidance from disability services employees. Some felt that they needed to know how to identify disabilities in the classroom and a few indicated that they were unsure of the expectations of faculty members in "dealing with" students with disabilities. Several comments suggested that some faculty members are unaware of the role of disability services professionals and the disability services office. For example, suggestions were made that students should have appropriate documentation in order to receive supports and services, which is already standard practice at the majority of post-secondary institutions, including College of the North Atlantic. A few instructors said that students should be more open about their disabilities while others expressed concerns

that some students may abuse available accommodations. These comments reflect a variety of attitudes toward students with disabilities, both positive and negative.

In terms of what faculty members would personally be interested in learning with respect to students with disabilities, 97 responses were provided (59% of respondents). The majority of faculty members felt that they could benefit from additional learning about disabilities. Suggested topics included many of the above ideas, plus the need for a general training session of teaching post-secondary students with disabilities, the need for information about adaptive technologies, ways to incorporate learning styles into the curricula, ways to improve disability-related policies, information about how accommodations are determined, knowledge of disability rights legislation and effective ways to communicate with students who have disabilities, including appropriate terminology. Several people mentioned the need for more information on learning disabilities, and a couple of people mentioned the need for more information on psychiatric disabilities. Many respondents expressed a desire to help students with disabilities to achieve success in college and at work. One individual noted that it would be difficult to fit this training into an already busy teaching schedule. From all of the above it can be concluded that many faculty members perceive that there is a need for disability training, and that they have specific ideas about what this training should involve. In addition to the suggestions made by survey respondents, it would seem important to provide information about the disability services office itself, so that faculty members would be more aware of the extensive work that goes into identifying appropriate accommodations and screening documentation before students bring accommodation requests to the classroom. The roles of the Coordinator of Disability

Services and the instructors need to be clarified, so that instructors understand that they do not have to identify disabilities nor accommodations themselves, nor is it appropriate to do so; there are trained staff on campus for this purpose with whom they can consult when necessary. Faculty also need increased knowledge of the human rights code to understand that while students have the right to request that the nature of their disabilities not be disclosed, instructors are nevertheless obligated to accommodate these students. Thus it will often not be possible to satisfy their desire to know details about their students' disabilities. This perceived need for detailed disability information could be especially problematic for students with psychiatric disabilities, given that fewer students with these disabilities disclose than for any other disability (Rana et al., 1999). Furthermore, the reason for this request is unclear, given that having detailed information did not result in significant changes in attitudes or practices beyond what was achieved by naming the disability.

Effects of Type of Disability

On each of the Scenario rating scale and accommodation measures, as well as the Likert-type rating scales, strong effects of type of disability were observed. Physical disabilities were given the most positive attitude ratings in both cases, and psychiatric the least positive. On the Likert-type scales, sensory disabilities were rated more positively than learning disabilities.

These findings are consistent with the research literature, which shows that there is a disability hierarchy, with visible disabilities (physical and sensory) being viewed more positively than non-visible disabilities (learning and psychiatric) (Hill, 1996; Leyser et al., 1998; Rickerson et al., 2004; Upton & Harper, 2002). The findings also confirm

previous research which suggests that some faculty hold stigmatizing attitudes toward students with psychiatric disabilities (Becker et al., 2002; Rickerson et al., 2004; Upton & Harper, 2002). The present study expands these findings by clearly showing that within the non-visible disability category, psychiatric disabilities are viewed more negatively than learning disabilities. Unfortunately, this does little to alleviate students' perception of stigma within the post-secondary environment, a perception which has been documented in previous research (Blacklock et al., 2003; Grayson et al., 1998; Hill, 1996; Liebert, 2003; Manthorpe & Stanley, 1999; McDiarmid & Ratzlaff, 2003; Meltzer et al., 2000; Rickerson et al., 2004; Thomas, 2003; Weiner, 1999; Weiner & Wiener, 1996).

It should be noted that mean attitude ratings for all disabilities were on the positive end of the scale, with Likert-type ratings averaging between 1.82 (physical) and 2.47 (psychiatric) on a scale of one (positive attitude) to five (negative attitude). For the scenarios, average ratings of accommodation deservedness varied between 1.57 (physical) and 1.98 (psychiatric). This indicates that faculty members had fairly positive attitudes overall. As a result, differences in attitudes may not be immediately apparent in the 'real world'. Regardless, the differences between the types of disabilities were highly significant, and thus the stigma can be said to exist.

Similarly, faculty members offered the most accommodations to students with physical disabilities and the least to students with psychiatric disabilities in response to the survey scenarios. In actual practice, when asked about their prior teaching experiences, they indicated that they had offered the least accommodations to students with psychiatric disabilities, but offered the most to students with learning disabilities,

followed by those with sensory disabilities and physical disabilities. Regardless, in both cases students with psychiatric disabilities were offered the least accommodations.

It is essential that efforts be made to counteract this stigma, especially given that and that these attitudes appear to be related to accommodation practices, and that the number of post-secondary students with psychiatric disabilities is expected to continue to rise (Rickerson et al., 2004).

Amount of Information Effects, and Type of Disability by Amount of Information Interactions

Regarding the scenario section, providing either a disability name or detailed disability information improved ratings of accommodation deservedness overall, compared to when no disability information was provided. Furthermore, the difference in ratings between the three types of disabilities was somewhat reduced when either the disability was named or detailed information about the disability was provided. Similar effects were noted for the number of accommodations offered in response to each scenario, with more accommodations offered as the amount of disability information increased. In this case, the gap between the types of disabilities was narrowest when the disability was simply named. Since students with disabilities often choose not to disclose their disability out of fear of being stigmatized (Rana et al., 1999), it was important to determine not only if these stigmas exist, but what effect disclosure had on this stigma and on faculty willingness to provide accommodations. Although a stigma toward psychiatric disabilities persists in the post-secondary environment, disclosing information about one's disability not only improves attitudes and the provision of accommodations, it may also decrease the differences in attitudes toward the different types of disabilities.

While there was a large improvement in attitudes when a disability was named, there was little or no improvement beyond that when detailed information was provided. Thus, students could safely be advised to consider disclosing that they have a disability to their instructors, though there may be no benefit to providing further information. Students with psychiatric disabilities in particular should be encouraged to do this, since faculty attitudes improved most markedly for this group of students.

Although this study shows that there is not a strong benefit to providing detailed disability information rather than simply naming the disability, in terms of instructor attitudes and accommodation offerings, instructors believe that this information is essential to their ability to effectively teach students with disabilities. When asked to indicate which accommodations they would offer in response to the nine scenarios, instructors were provided with an 'other' category, which requested open-ended specification of the nature of the accommodation being offered. While some instructors responded as requested, most used this as an opportunity to provide comments on the scenarios. These comments turned out to be quite revealing, and most of them pertained to a perceived need for detailed disability information before accommodations could be provided. For example, instructors gave comments such as:

> First, I would need to find out the nature of the disability. If the student is not willing to discuss it, what accommodations can be made? The student needs to admit that he/she needs help before the instructor can accommodate the specific needs.

The instructor needs more specific information re: results of an assessment to determine the needs of the student, THEN the appropriate accommodations can, as much as possible, be offered.

This is impossible to answer correctly without knowing something about the type of disability.

It must be emphasized that the scenarios indicated that the students had provided documentation to disability services, and that they had taken a letter from disability services to the instructor, indicating that accommodations were required (although it did not specify which accommodations had been requested, in order to examine instructor accommodation offerings). However, only a few instructors said that they would consult with disability services to see what accommodations were appropriate, suggesting that they either are not familiar with the role of disability services in this process, or that they believe they are able to determine which accommodations are appropriate without engaging in this consultation. The data suggest that most instructors make this determination on the basis of disability names and their knowledge of what they mean, rather than on individual student behaviours.

Known Correlates of Disability Attitudes

Several characteristics that were correlated with disability attitudes in previous research were investigated in the present study. Some of the previous findings were upheld, while others were not. First, the previous finding that females generally report more positive attitudes regarding disabilities than males was supported (Becker et al., 2002; Fonosch & Schwab, 1981; Leyser et al., 1998; Upton & Harper, 2002). Further,

the gender difference was found to be greatest in the absence of information about the students' disabilities.

Previous studies found conflicting results for level of education. Some studies found that people with higher levels of education expressed more favourable attitudes toward people with disabilities (Upton & Harper, 2002), while one study found that those with higher education were more likely to endorse the statement that "most people believe that a former mental patient is less trustworthy than the average person" (Freidl et al., 2003, p. 272). This was somewhat of a value-laden statement, however, and it is possible that many people do not consider a "former mental patient" to be the same as someone with a "psychiatric disability". In the current study, instructors with college-level education offered more accommodations than individuals with undergraduate or graduate degrees.

In a study by Becker et al. (2002), faculty with fewer years of teaching experience were more likely to consult with campus mental health services, but faculty with more experience made more academic accommodations. In the present study, attitudes toward students with psychiatric disabilities were more positive amongst instructors with fewer years of teaching experience for ratings of accommodation deservedness, but this effect was not observed for the Likert-type scales nor the number of accommodations offered in response to the scenarios. Thus years of teaching experience had an inconsistent effect.

Previous investigations of the effect of disability contact on disability attitudes showed that individuals who had previous experience with people with disabilities had more positive attitudes (Leyser et al., 1998; Upton & Harper, 2002). However, in the present study the effect was more complicated. Previous experience teaching students

with psychiatric disabilities resulted in more positive attitudes for all types of disabilities, whereas previous experience teaching students with sensory disabilities lead to improved attitudes toward all types of disabilities except psychiatric disabilities, but on one attitude measure only. As well, faculty who provided more accommodations to students with psychiatric and learning disabilities in the past also offered more accommodations on the survey overall. Previous experience teaching students with physical or sensory disabilities did not influence attitudes. It would therefore appear that, although teaching students with sensory and learning disabilities may improve attitudes toward all other disabilities except psychiatric disabilities, it may be necessary to teach students with psychiatric disabilities in order to improve one's attitude toward this group of students. One could surmise that doing so would improve attitudes toward all students with disabilities at the same time. This should encourage students with psychiatric disabilities to consider disclosing their disabilities to their instructors, since teaching students with psychiatric disabilities leads to positive attitude changes.

Previous investigations of the effect of community size on disability attitudes showed that individuals in non-educational rural settings perceive greater stigma than those in non-educational urban settings (Freidl, 2003). The effect in the present study was unclear, however, with individuals from larger communities expressing more positive attitudes on some measures and individuals from smaller communities expressing more positive attitudes on others. This lack of effect may have been partially influenced by confusion around which population category certain communities belonged to. For example, Gander is listed on the College of the North Atlantic website as having a population of 10,000; some instructors may have included this community in the 0-

9,999 category, while others may have included it in the 10,000-49,999 category. Including the community names on the survey, along with the population categories, may have eliminated any possible confusion.

Age was not correlated with disability attitudes, which is contrary to other findings, although these effects were quite varied in nature (Freidl et al., 2003; Upton & Harper, 2002). Academic discipline was likewise not correlated with disability attitudes in the present study. A few past studies found that faculty in the field of education had more positive attitudes, more knowledge of disabilities and more willingness to learn about them than faculty in business, social sciences or arts and sciences (Leyser et al., 1998; Nelson, Dodd & Smith, 1990). While this may indeed be true, there were no members of a faculty of education represented in the current study, and there were no differences between members of the various academic departments that were represented. Academic rank was previously found to have a variety of effects on disability attitudes (Leyser et al., 1998), but no such effects were found in the present study.

Knowledge of institutional disability policies and services and knowledge of the human rights code were moderately associated with positive attitudes in the present study, especially when disability information was not provided. Also, prior exposure to some form of disability training was associated with positive attitudes, although on one measure this was only true for psychiatric disabilities. Previous disability training was significantly correlated with all four ratings of disability knowledge and awareness. These results were confirmed by earlier findings that faculty who were more informed about disabilities had more positive attitudes (Becker et al., 2002; Leyser et al., 1998), and that the more familiar faculty members were with campus services, the more

confident they were in their ability to discuss concerns with students and to convince them to seek help (Becker et al., 2002). However, the present study again emphasizes the importance of faculty receiving training that is specific to psychiatric disabilities.

None of the characteristics that were associated with different attitudes or anticipated accommodation practices in this study were related to faculty reports of actual past accommodation practices. While it may be that the identified correlates do not have any real life implications for accommodation practices, it may also be that other factors influenced survey responses, such as errors in remembering experiences that took place some time in the past. It would be highly valuable to investigate actual contemporary accommodation practices to gain further insight into this phenomenon.

In consideration of the various characteristics that were correlated with disability attitudes in this study, and given that disability training has been shown to improve attitudes, special care should be taken to ensure that male faculty members receive appropriate disability training. Instructors who do not have any experience teaching students with non-visible, and especially psychiatric, disabilities, should be encouraged to attend disability training. It may be worth targeting instructors with several years of teaching experience and those with university level education as well. Instructors of all ages, academic departments and academic ranks in communities and campuses of all sizes should be included.

Chapter 6: Recommendations and Conclusions

The results of this study are reliable, valid, and in keeping with the literature on psychiatric disabilities and disability attitudes in post-secondary education. Several conclusions can be drawn, based on the results of the study, although these may not be generalized beyond public college faculty in the province of Newfoundland and Labrador, due to the delimitations of the study. First, faculty attitudes toward public college students with disabilities are relatively positive overall. However, there is a troubling small minority who endorse statements such as, "Most people with _____ should not be allowed to attend college/university." Evidently there is still a strong need for disability advocacy within the post-secondary system.

Second, the present study supports previous findings that found that there is a hierarchy of disability attitudes. Thus, attitudes toward students with visible disabilities are more positive than toward students with non-visible disabilities. Within the non-visible category, it was discovered that attitudes toward students with learning disabilities are more positive that toward students with psychiatric disabilities. Psychiatric disabilities were consistently viewed more negatively than learning, sensory or physical disabilities in this study. In view of this, the need for advocacy and education regarding this particular group of students is extremely important.

Third, the amount of information that college faculty members have about a student's disability can have an impact on their attitudes toward the student and their accommodation practices. Naming one's disability or providing detailed disability information can result in improved attitudes and an increased willingness to provide accommodations, compared to students who request accommodations but do not provide

this information. This positive change in attitude is most notable for psychiatric disabilities. If students are advised of this when making disclosure decisions, it may encourage them to act more freely with disclosure comments. At the same time, instructors should be reminded that students have the right not to disclose their disability to instructors, and that this decision should not have an impact on the quality of their education. Accordingly faculty might be encouraged to work more closely with disability services personnel, who do know the student's disability details, since providing appropriate documentation is a prerequisite to receiving services from this office. Disability services personnel have specialized training in disabilities and identifying appropriate accommodations, and it is their role to review documentation and advise instructors accordingly. Thus it is neither necessary nor appropriate for instructors, who are usually not trained in field of disability services, to know all of a student's disability details.

Several demographic characteristics influence public college instructors' attitudes in Newfoundland and Labrador. Consistent with previous literature, gender has the strongest and most consistent influence, with women having generally more positive attitudes than men toward students with disabilities. Previous experience teaching students with psychiatric disabilities is also important, as this improves attitudes toward students with all types of disabilities. Having previously received some form of disability training is also strongly associated with positive attitudes, as is increased disability knowledge. Training in disability issues should acknowledge these differences in disability attitudes by actively encouraging members of those groups that tend to have more negative attitudes to attend.

There is a strong need for faculty professional development in the area of disability services. First, more than 5% of faculty members in this study did not know that disability services exist. Second, only 38% of faculty had any kind of disability training. Perhaps because of this, most faculty do not feel especially knowledgeable about disability services, supports or policies at their institution, nor do they feel knowledgeable about disability issues in general. Survey respondents provided a number of suggestions of the type of training they would like to receive. This would provide a good starting place for the development of new training regarding disabilities. This training should provide exposure to students with disabilities, especially psychiatric disabilities, since previous experience teaching these students has a positive impact on faculty attitudes. Training should also clearly outline the role of disability services and the rights of students regarding disclosure. This study has made it clear that the rights and needs of students with psychiatric disabilities especially need to be emphasized, as this group of students is perceived most negatively and receives the fewest academic accommodations, potentially jeopardizing students' chances of success in their educational endeavours.

Although this study has made significant strides in answering questions about attitudes toward students with psychiatric and other disabilities in post-secondary education, further research should be undertaken to determine if the attitudes identified in the present study translate into actual classroom practices.

Conclusion

This study makes an important contribution to the literature on disability attitudes in post-secondary education, especially as this pertains to faculty attitudes and practices

with respect to students with psychiatric disabilities. It provides strong evidence that psychiatric disabilities are consistently viewed more negatively than other disabilities, and that these attitudes influence accommodation practices. Instructor attitudes and accommodation practices were also influenced by the amount of information about a student's disability that s/he had, suggesting not only that students should be encouraged to disclose their disabilities to their instructors, but also that instructors need more information about student confidentiality and the role of Disability Services in the accommodation process. Indeed, previous disability training was strongly associated with more positive attitudes. Thus, it is highly recommended that post-secondary faculty receive comprehensive training on a variety of disability issues, including human rights, student confidentiality, institutional policies, the role of disability services, disability characteristics, and others. Further research should be undertaken to determine how the attitudes and accommodation practices identified in the present study translate into actual classroom practices.

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Appendix A

The Survey

Appendix A: The Survey[6]

Section A: Demographic Information

Thank you very much for agreeing to participate in this study! Remember that your participation is both confidential and voluntary, and that you are free to withdraw at any point in time, without penalty.

Please respond to each of the items as accurately as you can, either by clicking on the appropriate box or by typing your answer in the space provided. When you finish a section, click on "next" to proceed to the next section. There are no time limits.

1. Please indicate your gender:

2. How old are you
   - ❑ Under 30
   - ❑ 30-39
   - ❑ 40-49
   - ❑ 50-59
   - ❑ 60 or over

3. What is your cultural/ethnic background (check all that apply)?
   - ❑ Caucasian
   - ❑ Black/African Canadian/Caribbean
   - ❑ Hispanic/Latino
   - ❑ Asian
   - ❑ Native North American/Innu/Inuit
   - ❑ Other (please specify):

4. What is your level of education (check all that apply)?
   - ❑ Doctorate degree(s)
   - ❑ Masters degree(s)
   - ❑ Some graduate courses
   - ❑ Undergraduate degree(s)
   - ❑ Three year college diploma
   - ❑ Two year college diploma
   - ❑ One year college certificate (including apprenticeship programs)
   - ❑ Other (please specify):

5. How many years of experience as a full-time post-secondary instructor/professor do you have?

6. How many years of experience as a part-time post-secondary instructor/professor do you have?

7. What is/are your current academic discipline(s)/teaching area(s)?

8. What is your academic position/rank?

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[6] Formatting varied somewhat on the electronic version of the survey but cannot be represented here. For example, the electronic survey presented questions in sections, and used a monochromatic blue colour scheme.

- ❑ Full Professor
- ❑ Associate Professor
- ❑ Assistant Professor
- ❑ University Lecturer
- ❑ College Instructor
- ❑ College Instructional Assistant
- ❑ Other (please specify):

9. What is the population of the city or town where your school or campus is located?
   - ❑ More than 50,000
   - ❑ 10,000 to 49,999
   - ❑ 0 to 9,999

10. Please indicate the type of post-secondary institution where you work:
   - ❑ University
   - ❑ Public college
   - ❑ Private college

11a. Do you have a disability?
   - ❑ Yes
   - ❑ No

11b. If you answered 'yes' to question 13a. above, what is the nature of your disability?
   - ❑ Visible (e.g., physical, sensory)
   - ❑ Non-visible (e.g., learning disability, psychiatric, attention deficit disorder)

11c. Please further specify the nature of your disability.
   - ❑ Attention Deficit Disorder (ADD, ADHD)
   - ❑ Chronic Illness/Medical
   - ❑ Learning disability
   - ❑ Physical (agility or mobility impairments)
   - ❑ Psychiatric (including all diagnosed mental illnesses)
   - ❑ Sensory (hearing and/or visual)
   - ❑ Other (please specify):
   - ❑ Prefer not to respond

11d. If you answered 'yes' to question 13a. above, have you disclosed your disability to your colleagues?
   - ❑ Yes, I am very open about it
   - ❑ Yes, to some
   - ❑ No

11e. Why have/haven't you disclosed your disability to your colleagues?

Section B: Scenarios

Please read each of the following scenarios carefully and answer the questions that follow.

Imagine that the students described in the scenarios are in your class. They have each brought you a form from disability services indicating that they have documented disabilities and will need various accommodations throughout the year, the details of which will be discussed as the need arises. Please respond as you think you would respond if the situations were real.

Scenario 1

This student's written work has so far been extremely poor. The student often does not appear to be listening in class. The student is several chapters behind in the textbook. The student has not told you the nature of the disability and does not wish to discuss it.

In your opinion, how deserving is this student of disability supports and/or accommodations?

[ ]	[ ]	[ ]	[ ]	[ ]
1	2	3	4	5
very deserving				not at all deserving

Which, if any, of the following accommodations do you feel this student should be given? Please check any/all that you feel might be appropriate.

- ❑ Assignment (e.g., extended deadlines, alternate formats)
- ❑ Classroom (e.g., flexible attendance, preferential seating, tape recording lectures)
- ❑ Instructional (changes to how you instruct; e.g., enlarging handouts, visual aids)
- ❑ Interpersonal (e.g., one-on-one help after class, referral to counsellor, check-ins)
- ❑ Peer assistance (e.g., finding a peer note taker; arranging lab partners)
- ❑ Test/exam (e.g., extended time, alternate formats, private location)
- ❑ Technology (e.g., voice-activated computer, reading software such as Kurzweil)
- ❑ Other (please specify): _____

Scenario 2

This student walks with an awkward gait and has poor fine-motor control. The student's writing is not particularly legible. The student is slow and sloppy at completing physical tasks. The student has not told you the nature of the disability and does not wish to discuss it.

In your opinion, how deserving is this student of disability supports and/or accommodations?

[ ]	[ ]	[ ]	[ ]	[ ]
1	2	3	4	5
very deserving				not at all deserving

Which, if any, of the following accommodations do you feel this student should be given? Please check any/all that you feel might be appropriate.

- ❑ Assignment (e.g., extended deadlines, alternate formats)
- ❑ Classroom (e.g., flexible attendance, preferential seating, tape recording lectures)
- ❑ Instructional (changes to how you instruct; e.g., enlarging handouts, visual aids)
- ❑ Interpersonal (e.g., one-on-one help after class, referral to counsellor, check-ins)
- ❑ Peer assistance (e.g., finding a peer note taker; arranging lab partners)
- ❑ Test/exam (e.g., extended time, alternate formats, private location)
- ❑ Technology (e.g., voice-activated computer, reading software such as Kurzweil)
- ❑ Other (please specify): _____

Scenario 3

This student does not seem to have very good social skills. In class, this student often does not appear to be paying attention. The student has missed almost a third of your classes and has not handed in one assignment. The student has not told you the nature of the disability and does not wish to discuss it.

In your opinion, how deserving is this student of disability supports and/or accommodations?

[ ]	[ ]	[ ]	[ ]	[ ]
1	2	3	4	5
very deserving				not at all deserving

Which, if any, of the following accommodations do you feel this student should be given? Please check any/all that you feel might be appropriate.

- ❑ Assignment (e.g., extended deadlines, alternate formats)
- ❑ Classroom (e.g., flexible attendance, preferential seating, tape recording lectures)
- ❑ Instructional (changes to how you instruct; e.g., enlarging handouts, visual aids)
- ❑ Interpersonal (e.g., one-on-one help after class, referral to counsellor, check-ins)
- ❑ Peer assistance (e.g., finding a peer note taker; arranging lab partners)
- ❑ Test/exam (e.g., extended time, alternate formats, private location)
- ❑ Technology (e.g., voice-activated computer, reading software such as Kurzweil)
- ❑ Other (please specify): _____

Scenario 4

This student's written work has so far been extremely poor. The student often does not appear to be listening in class. The student is several chapters behind in his textbook. **The student has a learning disability, and is open to discussing it with you.**

In your opinion, how deserving is this student of disability supports and/or accommodations?

[ ]	[ ]	[ ]	[ ]	[ ]
1	2	3	4	5
very deserving				not at all deserving

Which, if any, of the following accommodations do you feel this student should be given? Please check any/all that you feel might be appropriate.

- ❑ Assignment (e.g., extended deadlines, alternate formats)
- ❑ Classroom (e.g., flexible attendance, preferential seating, tape recording lectures)
- ❑ Instructional (changes to how you instruct; e.g., enlarging handouts, visual aids)
- ❑ Interpersonal (e.g., one-on-one help after class, referral to counsellor, check-ins)
- ❑ Peer assistance (e.g., finding a peer note taker; arranging lab partners)
- ❑ Test/exam (e.g., extended time, alternate formats, private location)
- ❑ Technology (e.g., voice-activated computer, reading software such as Kurzweil)
- ❑ Other (please specify): _____

Scenario 5

This student walks with an awkward gait and has poor fine motor control. The student's writing is not particularly legible. The student is slow and sloppy at completing physical tasks. **The student has a physical disability, and is open to discussing it with you.**

In your opinion, how deserving is this student of disability supports and/or accommodations?

[ ]	[ ]	[ ]	[ ]	[ ]
1	2	3	4	5
very deserving				not at all deserving

Which, if any, of the following accommodations do you feel this student should be given? Please check any/all that you feel might be appropriate.

- ❑ Assignment (e.g., extended deadlines, alternate formats)
- ❑ Classroom (e.g., flexible attendance, preferential seating, tape recording lectures)
- ❑ Instructional (changes to how you instruct; e.g., enlarging handouts, visual aids)
- ❑ Interpersonal (e.g., one-on-one help after class, referral to counsellor, check-ins)
- ❑ Peer assistance (e.g., finding a peer note taker; arranging lab partners)
- ❑ Test/exam (e.g., extended time, alternate formats, private location)
- ❑ Technology (e.g., voice-activated computer, reading software such as Kurzweil)
- ❑ Other (please specify): _____

Scenario 6

This student does not seem to have very good social skills. In class, this student often does not appear to be paying attention. The student has missed almost a third of your classes and has not handed in one assignment. **The student has a psychiatric disability, and is open to discussing it with you.**

In your opinion, how deserving is this student of disability supports and/or accommodations?

[ ]	[ ]	[ ]	[ ]	[ ]
1	2	3	4	5
very deserving				not at all deserving

Which, if any, of the following accommodations do you feel this student should be given? Please check any/all that you feel might be appropriate.

- ❑ Assignment (e.g., extended deadlines, alternate formats)
- ❑ Classroom (e.g., flexible attendance, preferential seating, tape recording lectures)
- ❑ Instructional (changes to how you instruct; e.g., enlarging handouts, visual aids)
- ❑ Interpersonal (e.g., one-on-one help after class, referral to counsellor, check-ins)
- ❑ Peer assistance (e.g., finding a peer note taker; arranging lab partners)
- ❑ Test/exam (e.g., extended time, alternate formats, private location)
- ❑ Technology (e.g., voice-activated computer, reading software such as Kurzweil)
- ❑ Other (please specify): _____

Scenario 7

A student in your class has a learning disability, with visual-motor and sequential processing problems. The student explains to you that this causes slow processing of visual information, which makes reading slow and laborious. The student also has problems with fine-motor control, which makes writing slow and laborious as well. It is difficult for this student to listen in class and take

notes at the same time. This student's written work has so far been extremely poor. The student often does not appear to be listening in class. The student is several chapters behind in the textbook.

In your opinion, how deserving is this student of disability supports and/or accommodations?

[ ]	[ ]	[ ]	[ ]	[ ]
1	2	3	4	5
very deserving				not at all deserving

Which, if any, of the following accommodations do you feel this student should be given? Please check any/all that you feel might be appropriate.

- ❑ Assignment (e.g., extended deadlines, alternate formats)
- ❑ Classroom (e.g., flexible attendance, preferential seating, tape recording lectures)
- ❑ Instructional (changes to how you instruct; e.g., enlarging handouts, visual aids)
- ❑ Interpersonal (e.g., one-on-one help after class, referral to counsellor, check-ins)
- ❑ Peer assistance (e.g., finding a peer note taker; arranging lab partners)
- ❑ Test/exam (e.g., extended time, alternate formats, private location)
- ❑ Technology (e.g., voice-activated computer, reading software such as Kurzweil)
- ❑ Other (please specify): _____

Scenario 8

A student in your class has cerebral palsy. The student explains to you that this means that the brain has difficulty transmitting signals to the muscles, resulting in poor muscle control. Although the student can write, it is physically difficult and very time consuming. This student walks with an awkward gait and has poor fine motor control. The student's writing is not particularly legible. The student is slow and sloppy at completing physical tasks.

In your opinion, how deserving is this student of disability supports and/or accommodations?

[ ]	[ ]	[ ]	[ ]	[ ]
1	2	3	4	5
very deserving				not at all deserving

Which, if any, of the following accommodations do you feel this student should be given? Please check any/all that you feel might be appropriate.

- ❑ Assignment (e.g., extended deadlines, alternate formats)
- ❑ Classroom (e.g., flexible attendance, preferential seating, tape recording lectures)
- ❑ Instructional (changes to how you instruct; e.g., enlarging handouts, visual aids)
- ❑ Interpersonal (e.g., one-on-one help after class, referral to counsellor, check-ins)
- ❑ Peer assistance (e.g., finding a peer note taker; arranging lab partners)
- ❑ Test/exam (e.g., extended time, alternate formats, private location)
- ❑ Technology (e.g., voice-activated computer, reading software such as Kurzweil)
- ❑ Other (please specify): _____

Scenario 9

A student in your class has bi-polar disorder. The student explains to you that this is a mental illness, commonly known as manic depression. The student is currently taking medications, which are keeping the symptoms of the illness under control. However, medications affect attention

and concentration and make the student sleepy. Because mental illnesses are cyclical, some days are good days and the student is able to work well, while on other days it is not possible to get out of bed in the morning or make it to school. This student does not seem to have very good social skills. In class, this student often does not appear to be paying attention. The student has missed almost a third of your classes and has not handed in one assignment.

In your opinion, how deserving is this student of disability supports and/or accommodations?

[ ]	[ ]	[ ]	[ ]	[ ]
1	2	3	4	5
very deserving				not at all deserving

Which, if any, of the following accommodations do you feel this student should be given? Please check any/all that you feel might be appropriate.

- ❑ Assignment (e.g., extended deadlines, alternate formats)
- ❑ Classroom (e.g., flexible attendance, preferential seating, tape recording lectures)
- ❑ Instructional (changes to how you instruct; e.g., enlarging handouts, visual aids)
- ❑ Interpersonal (e.g., one-on-one help after class, referral to counsellor, check-ins)
- ❑ Peer assistance (e.g., finding a peer note taker; arranging lab partners)
- ❑ Test/exam (e.g., extended time, alternate formats, private location)
- ❑ Technology (e.g., voice-activated computer, reading software such as Kurzweil)
- ❑ Other (please specify): _____

Section C: Rating Scales

Please **rate the extent to which you agree with each of the following** statements on a scale of 1 to 5, where 5 indicates 'agree strongly' and1 indicates 'disagree strongly', **for EACH disability type**

1. Students with _____ can be successful at college/university.

	agree strongly				disagree strongly
a) Learning Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
b) Physical Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
c) Psychiatric Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
d) Sensory Disabilities (visual and/or hearing)	[ ] 1	[ ]	[ ]	[ ]	[ ] 5

2. Students with _____ can be dangerous to have in the classroom.

	agree strongly				disagree strongly
a) Learning Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
b) Physical Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
c) Psychiatric Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
d) Sensory Disabilities (visual and/or hearing)	[ ] 1	[ ]	[ ]	[ ]	[ ] 5

3. Students with _____ are usually hard-working and highly motivated.

	agree strongly				disagree strongly
a) Learning Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
b) Physical Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
c) Psychiatric Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
d) Sensory Disabilities (visual and/or hearing)	[ ] 1	[ ]	[ ]	[ ]	[ ] 5

4. Students with_____ can be unpredictable.

	agree strongly				disagree strongly
a) Learning Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
b) Physical Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
c) Psychiatric Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
d) Sensory Disabilities (visual and/or hearing)	[ ] 1	[ ]	[ ]	[ ]	[ ] 5

5. Students with _____ are generally weak and only have themselves to blame.

	agree strongly				disagree strongly
a) Learning Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5

b) Physical Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
c) Psychiatric Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
d) Sensory Disabilities (visual and/or hearing)	[ ] 1	[ ]	[ ]	[ ]	[ ] 5

6. Most people with _____ should not be allowed to attend college/university.

	agree strongly				disagree strongly
a) Learning Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
b) Physical Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
c) Psychiatric Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
d) Sensory Disabilities (visual and/or hearing)	[ ] 1	[ ]	[ ]	[ ]	[ ] 5

7. I would be comfortable teaching students who have _____.

	agree strongly				disagree strongly
a) Learning Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
b) Physical Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
c) Psychiatric Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
d) Sensory Disabilities (visual and/or hearing)	[ ] 1	[ ]	[ ]	[ ]	[ ] 5

8. Students with _____ are usually difficult to talk to.

	agree strongly				disagree strongly
a) Learning Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
b) Physical Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
c) Psychiatric Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5

d) Sensory Disabilities (visual and/or hearing)	[ ] 1	[ ]	[ ]	[ ]	[ ] 5

9. Students with _____ generally do not try as hard as other students.

	agree strongly				disagree strongly
a) Learning Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
b) Physical Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
c) Psychiatric Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
d) Sensory Disabilities (visual and/or hearing)	[ ] 1	[ ]	[ ]	[ ]	[ ] 5

10. Students with _____ are usually easier to provide accommodations for than students with other disabilities.

	agree strongly				disagree strongly
a) Learning Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
b) Physical Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
c) Psychiatric Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
d) Sensory Disabilities (visual and/or hearing)	[ ] 1	[ ]	[ ]	[ ]	[ ] 5

11. Students with _____ tend to achieve lower grades than students with other disabilities.

	agree strongly				disagree strongly
a) Learning Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
b) Physical Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
c) Psychiatric Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
d) Sensory Disabilities (visual and/or hearing)	[ ] 1	[ ]	[ ]	[ ]	[ ] 5

12. Students with _____ usually request accommodations that are reasonable and legitimate.

	agree strongly				disagree strongly
a) Learning Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
b) Physical Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
c) Psychiatric Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
d) Sensory Disabilities (visual and/or hearing)	[ ] 1	[ ]	[ ]	[ ]	[ ] 5

13. Students with _____ are often below average intelligence.

	agree strongly				disagree strongly
a) Learning Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
b) Physical Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
c) Psychiatric Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
d) Sensory Disabilities (visual and/or hearing)	[ ] 1	[ ]	[ ]	[ ]	[ ] 5

14. Students with _____ are usually friendly and cheerful.

	agree strongly				disagree strongly
a) Learning Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
b) Physical Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
c) Psychiatric Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
d) Sensory Disabilities (visual and/or hearing)	[ ] 1	[ ]	[ ]	[ ]	[ ] 5

15. The <u>least</u> restricting disabilities for post secondary students are _____.

	agree strongly				disagree strongly
a) Learning Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5

b) Physical Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
c) Psychiatric Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
d) Sensory Disabilities (visual and/or hearing)	[ ] 1	[ ]	[ ]	[ ]	[ ] 5

16. Students with _____ are usually capable of achieving success in the workforce after they graduate.

	agree strongly				disagree strongly
a) Learning Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
b) Physical Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
c) Psychiatric Disabilities	[ ] 1	[ ]	[ ]	[ ]	[ ] 5
d) Sensory Disabilities (visual and/or hearing)	[ ] 1	[ ]	[ ]	[ ]	[ ] 5

Section D: Personal Experience

Please respond to each of the following items as accurately as you can.

1a. Do you know anyone with a disability?
- ❑ Yes
- ❑ No

1b. If you answered 'yes' to question 1a. above, what is your relationship with this person or persons (check all that apply)?
- ❑ Spouse
- ❑ Parent
- ❑ Child
- ❑ Sibling
- ❑ Grandparent
- ❑ Grandchild
- ❑ Close friend
- ❑ Acquaintance
- ❑ Co-worker
- ❑ Employer/employee
- ❑ Neighbour
- ❑ Aunt or uncle
- ❑ Cousin
- ❑ Niece or nephew
- ❑ In-law
- ❑ Other (please specify): _____

1c. If you answered 'yes' to question 1a. above, what is the nature of the disability or disabilities (check all that apply)?

- ❑ Attention Deficit Disorder (ADD, ADHD)
- ❑ Chronic Illness/Medical
- ❑ Cognitive/Developmental/Intellectual
- ❑ Learning disability
- ❑ Physical (agility or mobility impairments)
- ❑ Psychiatric (including all diagnosed mental illnesses)
- ❑ Sensory (visual and/or hearing)
- ❑ Don't know
- ❑ Other (please specify): _____

2a. Does your institution/campus have a disability services office and/or a designated person who is responsible for disability services?

- ❑ Yes
- ❑ No
- ❑ Don't know

2b. Have you ever visited the disability services office or consulted with someone from disability services at your institution?

- ❑ Yes
- ❑ No

3a. To your knowledge, have you ever taught a post-secondary student or students with a learning disability?

- ❑ Yes
- ❑ No

3b. Which of the following accommodations did you encourage or provide for your student(s) with a learning disability?

- ❑ Assignment (e.g., extended deadlines, alternate formats)
- ❑ Classroom (e.g., flexible attendance, preferential seating, recording lectures)
- ❑ Instructional (changes to how you instruct; e.g., auditory or visual aids)
- ❑ Interpersonal (e.g., help after class, referral to counsellor, check-ins)
- ❑ Peer assistance (e.g., finding a peer note taker; arranging lab partners)
- ❑ Test/exam (e.g., extra time, alternate format, private location)
- ❑ Technology (e.g., voice-activated computer, reading software)
- ❑ None
- ❑ Other (please specify): _____

4a. To your knowledge, have you ever taught a post-secondary student or students with a physical disability (agility or mobility impairments)?

- ❑ Yes
- ❑ No

4b. Which of the following accommodations did you encourage or provide for your student(s) with a physical disability?

- ❑ Assignment (e.g., extended deadlines, alternate formats)
- ❑ Classroom (e.g., flexible attendance, preferential seating, recording lectures)
- ❑ Instructional (changes to how you instruct; e.g., auditory or visual aids)
- ❑ Interpersonal (e.g., help after class, referral to counsellor, check-ins)
- ❑ Peer assistance (e.g., finding a peer note taker; arranging lab partners)
- ❑ Test/exam (e.g., extra time, alternate format, private location)
- ❑ Technology (e.g., voice-activated computer, reading software)
- ❑ None
- ❑ Other (please specify): _____

5a. To your knowledge, have you ever taught a post-secondary student or students with a psychiatric disability (including all diagnosed mental illnesses)?

- ❑ Yes
- ❑ No

5b. Which of the following accommodations did you encourage or provide for your student(s) with a psychiatric disability?

- ❑ Assignment (e.g., extended deadlines, alternate formats)
- ❑ Classroom (e.g., flexible attendance, preferential seating, recording lectures)
- ❑ Instructional (changes to how you instruct; e.g., auditory or visual aids)
- ❑ Interpersonal (e.g., help after class, referral to counsellor, check-ins)
- ❑ Peer assistance (e.g., finding a peer note taker; arranging lab partners)
- ❑ Test/exam (e.g., extra time, alternate format, private location)
- ❑ Technology (e.g., voice-activated computer, reading software)
- ❑ None
- ❑ Other (please specify): _____

6a. To your knowledge, have you ever taught a post-secondary student or students with a sensory (visual and/or hearing)?

- ❑ Yes
- ❑ No

6b. Which of the following accommodations did you encourage or provide for your student(s) with a sensory disability?

- ❑ Assignment (e.g., extended deadlines, alternate formats)
- ❑ Classroom (e.g., flexible attendance, preferential seating, recording lectures)
- ❑ Instructional (changes to how you instruct; e.g., auditory or visual aids)
- ❑ Interpersonal (e.g., help after class, referral to counsellor, check-ins)
- ❑ Peer assistance (e.g., finding a peer note taker; arranging lab partners)
- ❑ Test/exam (e.g., extra time, alternate format, private location)
- ❑ Technology (e.g., voice-activated computer, reading software)
- ❑ None
- ❑ Other (please specify): _____

7. Do you inform your students of the services that your institution has available for students with disabilities?

- ❑ Yes
- ❑ No
- ❑ Sometimes

8. Please rate your overall knowledge of the services and supports that your institution/campus offers to students with disabilities.

[ ]	[ ]	[ ]	[ ]	[ ]
1	2	3	4	5
extensive knowledge				no knowledge

9. Please rate your knowledge of your institution's policy(s) regarding disability services.

[ ]	[ ]	[ ]	[ ]	[ ]
1	2	3	4	5
extensive knowledge				no knowledge

10. Please rate your knowledge of the human rights code as it pertains to disabilities.

[ ]	[ ]	[ ]	[ ]	[ ]
1	2	3	4	5
extensive knowledge				no knowledge

11. Please rate your general knowledge of the conditions and life circumstances of persons with a disability.

[ ]	[ ]	[ ]	[ ]	[ ]
1	2	3	4	5
extensive knowledge				no knowledge

12a. Have you ever received any training on disabilities, such as courses, workshops or other professional development activities?

- ❑ Yes
- ❑ No

12b. What is the nature of the disability training you received?

13. What do you think are important things to know for teaching students with disabilities?

14. What would you personally be interested in learning regarding students with disabilities?

15. Are you willing to complete a second short measure of disability attitudes, which should take approximately 10 minutes to complete?

- ❑ Yes[7]
- ❑ No

[7] If 'yes' was clicked, the faculty member was taken to an electronic version of Antonak's Scale of Attitudes Toward Disabled Persons (SADP; Antonak, 1982; see Appendix D)

Appendix B

The Scale of Attitudes Toward Disabled Persons

Appendix B: The Scale of Attitudes Toward Disabled Persons[8]

Directions: The statements presented below express opinions or ideas about persons who are disabled. There are many differences of opinion; many persons agree and many persons disagree with each statement. We would like to know your opinion about them. Circle the appropriate number, from -3 to +3, that best corresponds with how you feel about the statement. There are no right or wrong answers. You should work as quickly as you can, but don't rush. There is no time limit.

Please respond to every statement.

KEY

-3: I disagree very much
-2: I disagree pretty much
-1: I disagree a little
+1: I agree a little
+2: I agree pretty much
+3: I agree very much

-3 -2 -1 +1 +2 +3	1.	Children who are disabled should not be provided with a free public education.
-3 -2 -1 +1 +2 +3	2.	Persons who are disabled are not more accident prone than are other people.
-3 -2 -1 +1 +2 +3	3.	Individuals who are disabled are not capable of making moral decisions.
-3 -2 -1 +1 +2 +3	4.	Persons who are disabled should be prevented from having children.
-3 -2 -1 +1 +2 +3	5.	Persons who are disabled should be allowed to live where and how they choose.
-3 -2 -1 +1 +2 +3	6.	Adequate housing for persons who are disabled is neither too expensive nor too difficult to build.
-3 -2 -1 +1 +2 +3	7.	Rehabilitation programs for persons who are disabled are too expensive to operate.
-3 -2 -1 +1 +2 +3	8.	Persons who are disabled are in many ways like children.
-3 -2 -1 +1 +2 +3	9.	Persons who are disabled need only the proper environment and opportunity to develop and express criminal tendencies.
-3 -2 -1 +1 +2 +3	10.	Adults who are disabled should be involuntarily committed to an institution following arrest.
-3 -2 -1 +1 +2 +3	11.	Most persons who are disabled are willing to work.
-3 -2 -1 +1 +2 +3	12.	Individuals who are disabled are able to adjust to life outside an institution.
-3 -2 -1 +1 +2 +3	13.	Adults who are disabled should not be prohibited from obtaining a driver's license.
-3 -2 -1 +1 +2 +3	14.	Persons who are disabled should live with others who are similarly disabled.

[8] Formatting for the electronic version was different. Checkboxes were used in the electronic version.

-3 -2 -1 +1 +2 +3	15.	Zoning ordinances should not discriminate against persons who are disabled by prohibiting group homes in residential districts.
-3 -2 -1 +1 +2 +3	16.	The opportunity for gainful employment should be provided to persons who are disabled.
-3 -2 -1 +1 +2 +3	17.	Children who are disabled in regular classrooms have an adverse effect on other children.
-3 -2 -1 +1 +2 +3	18.	Simple repetitive work is appropriate for persons who are disabled.
-3 -2 -1 +1 +2 +3	19.	Persons who are disabled show a deviant personality profile.
-3 -2 -1 +1 +2 +3	20.	Equal employment opportunities should be available to individuals who are disabled
-3 -2 -1 +1 +2 +3	21.	Laws to prevent employers from discriminating against persons who are disabled should be passed.
-3 -2 -1 +1 +2 +3	22.	Persons who are disabled engage in bizarre and deviant sexual activity.
-3 -2 -1 +1 +2 +3	23.	Workers who are disabled should receive at least the minimum wage established for their jobs.
-3 -2 -1 +1 +2 +3	24.	Individuals who are disabled can be expected to fit into our competitive society.

Thank You For Your Assistance In Responding To This Questionnaire

Richard F. Antonak SADP-Form R Revised ©1992

Scale of Attitudes Toward Disabled Persons – Form R

SADP – Form R Scoring Key							
Item #	**+/–**	**Item #**	**+/–**	**Item #**	**+/–**	**Item #**	**+/–**
1	–	7	–	13	+	19	–
2	+	8	–	14	–	20	+
3	–	9	–	15	+	21	+
4	–	10	–	16	+	22	–
5	+	11	+	17	–	23	+
6	+	12	+	18	–	24	+

Scoring the SADP – Form R

Half the items on the **SADP – Form R** are worded so that a positive response (that is, +3, +2, or +1) indicates a positive attitude, while the other half are worded so that a negative response (that is, –3, –2, or –1) indicates a positive attitude. To score the **SADP – Form R** in the direction of a positive attitude, first reverse the sign of the response (that is, from + to – or from – to +) for those items that are worded negatively (i.e., items # 1, 3, 4, 7, 8, 9, 10, 14, 17, 18, 19, and 22). Sum the respondent's signed responses to all 24 items (minimum –72 to maximum +72). Finally, add a constant of 72 to the total (to eliminate negative scores). The overall SADP score ranges from 0 to 144 with a higher score indicating a more positive attitude toward persons with disabilities as a group.

Appropriate Reference Citation:

Antonak, R. F. (1982). Development and psychometric analysis of the Scale of Attitudes toward Disabled Persons. Journal of Applied Rehabilitation Counseling, 13(2), 22-29.

Antonak, R. F. (1985). Construct validation of the Scale of Attitudes toward Disabled Persons. Journal of Applied Rehabilitation Counseling, 16(1), 7-10, 48.

Antonak, R. F., & Livneh, H. (1988). The measurement of attitudes toward people with disabilities: Methods, psychometrics, and scales. Springfield, IL: C C Thomas.

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Dear Inquirer:

Thank you for your inquiry about the *Scale of Attitudes Toward Disabled Persons*. I have enclosed with this letter a copy of the most recent version of the *SADP* in two formats and a scoring key for your use.

You may reproduce the *SADP* in any form that suits your research needs. The only requirement that I have for the use of the instrument is that you ascribe authorship to me somewhere on the instrument and acknowledge me as the author of the instrument, using one of the citations below, in any publication that may arise from your use of it.

Good luck with your research. Please call or write if I can assist you further.

Very truly yours,

s/Richard F. Antonak

Vice Provost for Research

RFA/hs

Appropriate citations:

Antonak, R. F. (1982). Development and psychometric analysis of the Scale of Attitudes toward Disabled Persons. Journal of Applied Rehabilitation Counseling, 13(2), 22-29.

Antonak, R. F. (1985). Construct validation of the Scale of Attitudes toward Disabled Persons. Journal of Applied Rehabilitation Counseling, 16(1), 7-10, 48.

Antonak, R. F., & Livneh, H. (1988). The measurement of attitudes toward people with disabilities: Methods, psychometrics, and scales. Springfield, IL: C C Thomas.

Appendix C

Introductory Email

Appendix C: Introductory Email

November 3, 2006

Dear Faculty Member,

The number of students with disabilities in post-secondary institutions is increasing dramatically every year. There is a strong need for further information about how these students are integrated into the post-secondary environment. We are asking you to help fill this knowledge gap by completing a **survey** that is designed to measure faculty knowledge, practices, experiences and attitudes **regarding students with various disabilities**. As a faculty member who works on the 'front line' serving these students, your knowledge and experiences are extremely important. The information gained by this research will be useful for developing professional development sessions about disabilities; counseling students; and making policy and planning decisions.

The survey should take approximately 20 minutes to complete. The survey is being administered via SurveyMonkey.com, a web survey service-provider. SurveyMonkey.com uses a secure website, offering a high degree of both **confidentiality** and **anonymity**. When you complete the survey, it will be sent to SurveyMonkey.com where **all identifying information will be removed** before the data is sent to the researcher. Should you wish further information about SurveyMonkey.com, please visit their website at www.surveymonkey.com.

Participation is completely voluntary and you are free to withdraw from the study at any time without penalty.

Surveys **must be completed by November 8, 2006** at the latest.

CLICK HERE TO ACCESS THE SURVEY:

http://www.surveymonkey.com/s.asp?u=751612217700

NOTE: **if this link does not work**, you can access the survey by copying and pasting the link into the web address line.

Should you have any questions or should you want further information, please contact:

Mary Keefe
M.Ed. Student and Researcher
709-785-1217
mary.keefe@cna.nl.ca

OR //

Dr. George Haché
Faculty Supervisor
709-737-7630
ghache@mun.ca

Thank you very much for your participation in this study. Your assistance is gratefully appreciated!

Sincerely,

Mary Keefe
and Dr. George Haché

This survey is being conducted in partial fulfillment of the requirements of the Masters of Education (Post-secondary Studies) program at Memorial University of Newfoundland (MUN), and the researcher hopes to publish the findings in a relevant academic journal.

The proposal for this research has been approved by the Interdisciplinary Committee on Ethics in Human Research at Memorial University. If you have ethical concerns about the research (such as the way you have been treated or your rights as a participant), you may contact the Chairperson of the ICEHR at icehr@mun.ca or by telephone at 737-8368.

Appendix D

Endorsement Letter

Appendix D: Endorsement Letter

October 13, 2006

Dear Faculty,

I am writing on behalf of Mary Keefe, a M.Ed. (Post-secondary Studies) student at Memorial University of Newfoundland who has worked as Coordinator of Disability Services at College of the North Atlantic, and is currently working as Student Development Officer (Corner Brook Campus). As part of her M.Ed. thesis, Ms. Keefe is undertaking a **survey of faculty** at College of the North Atlantic and Memorial University (including Sir Wilfred Grenfell College, the Marine Institute and the School of Nursing) **regarding students with disabilities.**

The number of students with disabilities in post-secondary institutions is increasing dramatically every year. It is crucial to our understanding of the integration of these students that we gather knowledge from the experts – from those who work with them on a daily basis. This is where you come in! Ms. Keefe's survey will be sent out to faculty sometime within the next couple of days. **Although your participation is completely voluntary, I would encourage you to respond to the survey, as this information should prove to be very beneficial to Disability Services** at both institutions. The survey will ask about faculty knowledge, practices, experiences and attitudes regarding students with various disabilities. The information gained by this research will be useful for developing professional development sessions about disabilities; counseling students; and making policy and planning decisions.

This will be a web-based survey, using SurveyMonkey.com software (www.surveymonkey.com) . This software removes all personal identifiers from your responses, ensuring **complete anonymity** from Ms. Keefe.

Should you wish further information about the survey, please feel free to contact Mary Keefe at 709-637-8576, or via email, at mary.keefe@cna.nl.ca.

Thank you very much!

Sincerely,

Appendix E

Respondent Demographics

Appendix E: Respondent Demographics[a]

	Number	%
Gender		
Male	76	46.1
Female	89	53.9
Age		
Under 30	10	6.1
30 to 39	41	24.8
40 to 49	54	32.7
50 to 59	54	32.7
60+	6	3.6
Ethnicity		
Caucasian	155	93.9
Native/Innu/Innuit	2	1.2
Black/African/Caribbean	1	0.6
Asian	1	0.6
Other	5	3.0
Highest Level of Education		
Doctorate degree	4	2.4
Master's degree	34	20.6
Some graduate courses	28	17.0
Undergraduate degree	75	45.5

2 or 3 year college diploma	10	6.0
1 year college certificate	4	2.4
Academic Department[b]		
General academics	58	31.5
Business	40	24.4
Trades	21	12.7
Engineering Technology	11	6.7
Applied Arts	9	5.5
Information Technology	9	5.5
Health Sciences	7	4.2
Natural Resources	1	0.6
Counsellors	6	3.6

[a]n = 165. [b]The numbers for 'Academic Department' do not add up to 100% because several faculty members indicated that they taught in more than one department.