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ATTITUDES TOWARD TITLE I OF THE AMERICANS  
WITH DISABILITIES ACT: AN INDIRECT  
METHOD OF MEASUREMENT

By

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## ABSTRACT

### ATTITUDES TOWARD TITLE I OF THE AMERICANS WITH DISABILITIES ACT: AN INDIRECT METHOD OF MEASUREMENT

By

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Some individuals in the disability rights and independent living movements, their advocates, and disability and rehabilitation professionals believe that attitude is a barrier to inclusion of individuals with disabilities in the workforce. Responding to these attitudes, a civil rights law for individuals with disabilities, the Americans with Disabilities Act (ADA) was enacted in 1990. Its aim was to create equal opportunity to employment and other life activities for individuals with disabilities. If, however, employers hold attitudes that individuals with disabilities are less productive or more costly to employ than are individuals without disabilities, or if they resent government regulation of labor markets, exclusion of individuals with disabilities may persist (Johnson & Baldwin, 1993). It is important then, to understand these attitudes.

Direct measures of attitude are limited by socially desirable response sets (Antonak & Livneh, 1994), so this study adapted an indirect measure, the error-choice technique. The technique has yet to be used to measure attitudes toward disability or the ADA. This approach

hypothesizes that an extremely difficult factual test can serve to measure attitudes, because respondents will make systematic errors that reflect their biases when they guess at answers to obscure questions.

A 50-item instrument, the ADA-Information Survey, (ADA-IS), was designed in an initial attempt to measure attitudes toward the ADA's employment provisions. It was field tested on three groups expected to have significantly different attitudes toward the ADA's employment provisions: (a) masters level rehabilitation counseling students; (b) individuals with disabilities; and (c) small business owners and/or employers. Additionally, the ADA-IS was compared to a direct measure of attitudes toward the ADA's employment provisions, the ADA Employment Inventory (ADA-EI).

The ADA-IS measured attitude based on responses sympathetic to disability, and showed significant differences among the three groups, whereas the ADA-EI did not. Evidence was mixed regarding the validity and internal consistency of the ADA-IS. Possible confounds leave findings open to multiple interpretations. Implications for the efficacy of the error-choice technique, and for identifying attitudes toward the ADA and in turn toward disability, support further studies that employ indirect methods.



This dissertation is dedicated to my two families;  
the Dalton clan, and the Smedley Butler clan.

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## Chapter 1

### Introduction

#### Purpose

Social attitudes toward disability. Historically, American social attitudes toward individuals with disabilities as a group have been problematic. Although the public often feels sympathy for individuals with disabilities, they also openly or covertly stereotype them as inferior, incompetent, and deviant (Holmes & Karst, 1990; Wolfensberger & Tullman, 1982; Wright, 1960). Some people believe that one consequence has been the development and institutionalization of social barriers to individuals with disabilities, who in turn face social as well as environmental barriers to employment and other mainstream life activities in the United States (DeJong, 1983; Liachowitz, 1988; Roth, 1983). In 1990, in an effort to transcend and extinguish these barriers, the Americans with Disabilities Act (ADA) was enacted into federal law. The provisions of Title I of the ADA prohibits discrimination against qualified individuals with disabilities in employment practice.

ADA stakeholder groups. Three groups of people who are directly affected by the employment provisions of the ADA include: (a) rehabilitation counselors; (b) individuals with disabilities; and (c) small business

owners/employers. Although no studies were located that indicated the attitude of rehabilitation counselors toward the ADA's employment provisions, studies do indicate that rehabilitation counselors have a positive attitude--higher than the national average--toward individuals with disabilities (Huitt, K. & Elston, R. R., 1991; Martin, W. E., Scalia, V. A., Gay, D A., & Wolfe, R. R., 1982). In what might be a stretch, one could, based on these findings, hypothesize that rehabilitation counselors may demonstrate positive attitudes toward the ADA. The ADA should facilitate the work of counselors, helping individuals with disabilities return to work, which might also influence rehabilitation counselors' attitudes toward the ADA.

Individuals with disabilities and their advocates have mixed expectations of the ADA's impact on their employment rates. Some view the ADA as the liberating force for individuals with disabilities, while others remind us that former public policies aimed at fostering inclusion of individuals with disabilities have garnered only marginal success (Liachowitz, 1988).

Employers play a determinant role in the extent to which the ADA employment provisions are successful in expanding employment opportunities to qualified individuals with disabilities. The results of one study indicated that, "employers were only moderate in their agreement with the ADA" (Satcher & Hendren, 1992, p. 14), and that "the

employment area of the ADA was agreed with significantly less than the transportation, telecommunications, and public services accommodations areas" (Satcher & Hendren, 1992, p. 15). Another study found that private (business) sector representatives scored significantly lower than two other groups--individuals with disabilities, and rehabilitation service providers--on estimation of workplace accommodations, indicating that private sector representatives had a negative attitude toward costs of workplace modifications (Moore, 1993; Moore & Crimando, 1995). Some studies indicated that in the business community there was ambivalence about specific terms of the law, such as reasonable accommodations and undue economic hardship (Bennett, 1990; Gatty, 1991), and that these ambiguities will foster prolonged costly litigation (Brown, 1990; Jay, 1990).

If employers hold negative attitudes toward government regulation of the marketplace, if they believe the ADA will cause costly and time-consuming litigation, or if they are reluctant to hire individuals with disabilities, it could be hypothesized that they may in turn hold less positive attitudes toward the ADA than do the other two groups. Those attitudes may affect successful implementation of the law.

Purpose of the study. The purpose of this study was to develop a method to examine the attitudes of individuals who have a stake in the success of ADA. An instrument was

developed and administered to three groups expected to have differing perspectives on employment of individuals with disabilities: (a) rehabilitation counseling students (as proxies for rehabilitation counselors); (b) people who themselves have disabilities; and (c) small business owners/employers.

#### Justification for the study

Sociopolitical evolution of disability policy. Until the 1970s, American disability policies were aimed at fixing what was wrong (the disability) with the person, and at providing income support for individuals with disabilities, who, because of the disability, were presumed to be unemployable. The public vocational rehabilitation system, created by federal legislation in the 1920s, was designed to help handicapped people adjust to their disabilities, and to become employed if possible (Berkowitz, 1987).

During the 1960s the disability rights and independent living movements developed along with other civil rights movements, and ultimately influenced a shift in disability policy. Handicap, they believed, was social construct (Roth, 1988), and the problem resided within the environment, rather than within the individual. It was the attitudes of society--the assumptions of incompetence, deviance, and negative stereotyping--they believed, that served to limit their lives to the role of the sick child (DeJong, 1983; Scotch, 1984). Blanket exclusion of the

individuals, then, was discriminatory. In Section 504 of the Rehabilitation Act of 1973, the federal government prohibited discrimination against qualified individuals with disabilities in employment within organizations or institutions that received federal funds.

It was estimated (Berkowitz, 1984) that during the period of 1950-1980, less than 30% of handicapped individuals who wanted to work actually became employed. Of those who were able to obtain employment, the vast majority earned wages at or below the poverty level (Berkowitz, 1987). In 1986, Harris reported that less than 30% of individuals with disabilities were employed, and most of those were in low wage positions. Those in the disability rights and independent living movements, as well as their advocates, disability professionals, and some members of the U.S. Congress believed attitude was still the primary barrier. The belief led to the introduction of the Americans with Disabilities Act, a civil rights bill for individuals with disabilities. It was enacted into federal law in July, 1990.

The Americans with Disabilities Act. The purpose of civil rights legislation is to change behavior in a manner that will lead to changed attitudes, and thus extinguish negative, discriminatory behavior. Civil rights legislation sends a message to the nation's citizens that certain groups are to be afforded an equal opportunity to engage in life

activities. The Americans with Disabilities Act of 1990 attempts to create a level playing field for individuals with disabilities by prohibiting discrimination against them in all mainstream public activities and social functions, as well as in public and private sector employment practices.

Variables in policy implementation. Predictors of success of the implementation of public policy designed to change behavior, and thus attitude, have been identified (Hofferbert, 1974; Mazmanian & Sabatier, 1983). When these parameters are applied to the ADA, there may be reason for concern about potential for the law's success. The first variable is tractability of the problem, the degree to which a problem clearly identified and addressed. The second variable is the degree of behavior to be regulated. A small and definable amount of behavior modification predicts success. The basic hypothesis is that the greater the amount of behavioral change, the more problematic will be successful implementation (Mazmanian & Sabatier, 1983; Wade, 1972). The third variable is the size of the target groups whose behavior must change. A small, easily identifiable target group influences success, because it reinforces enforcement of the law (Hofferbert, 1974; Mazmanian & Sabatier, 1983; Moe, 1985; Stevens, 1993).

It is important to understand the attitude of the group whose behavior is mandated to change, because attitude is also a predictive factor in a policy's success. If the

target group feels ambivalent about specific mandates, if the group is expected to make a radical behavioral shift, and if the group is noncontainable, global enforcement of the law can be difficult (Kingdon, 1995; Mazmanian & Sabatier, 1983).

The ADA and discrimination. Under the ADA's employment provisions, an otherwise qualified person with a disability who believes he or she has been discriminated against by an employer or potential employer can file a discrimination claim with the Equal Employment Opportunity Commission (EEOC), a division of the U.S. Office of Civil Rights. Discrimination, however, is often subtle, and thus difficult to prove. Furthermore, the EEOC is understaffed, thus it can take as long as eighteen months after the charge has been filed before the adjudication process begins.

Under the ADA an employer who practices discrimination risks penalty for noncompliance. If, however, the risk of penalty for discrimination is perceived by an employer as less costly than the price of compliance, the employer may choose not to comply (Johnson & Baldwin, 1993). That choice may be conscious or unconscious, and may be applied to individual experiences, such as choosing to hire a person for whom the cost of a reasonable accommodation would be limited, or choosing not to hire a person because he or she may not seem to fit into the organization's culture.

Discrimination, whether deliberate or not, may in some



cases seem to be economically efficient; employers may discriminate against individuals with disabilities out of rational economic self-interest, and in fact employers may or may not be purposely discriminatory. Business is based on economic motives rather than social equity. Efficiency means maximizing output while minimizing cost of production; and employers may believe that employment certain individuals with disabilities would be costly. The consequence can be statistical discrimination.

Statistical discrimination. Statistical discrimination occurs when all people with a particular characteristic--in this case disability--are grouped together, and are assumed to be alike. Even though individuals with disabilities are a heterogeneous group with a wide variety of characteristics, the disability characteristic may lead to their being viewed as a homogeneous group. The disability then may have an effect on their ability to gain employment. Employers tend to hire those people who have characteristics like already employed successful and productive workers. If an employer has never hired an individual with a disability, and believes that individuals with disabilities are inferior to individuals without disabilities, the employer may choose to exclude individuals with disabilities, particularly individuals with severe disabilities (Bowman, 1987; Grand, Bernier, & Strohmer, 1982; Strohmer, Grand, & Purcell, 1984) from employment in the organization. Some studies show that

employers who have hired and have experience with individuals with disabilities are more willing to hire others with similar characteristics than are employers who have not hired and have not had experience with individuals with disabilities (Levy, Jessop, Rimmerman, & Levy, 1993).

Type I and Type II errors in hiring. In labor economics, the choice to hire or not to hire is discussed in terms of Type I and Type II errors. A Type I error occurs when one fails to accept a null hypothesis (that there are no differences between workers) when it is true. Committing a Type I error results in failing to hire a person who actually does have the characteristics of the typical successful employee. In terms of individuals with disabilities, this means not hiring because of perceived, rather than real differences between them and individuals without disabilities. Committing a Type I error is not a major problem to employers, because sooner or later, another applicant will come along who does have the proper characteristic--no disability.

A Type II error occurs when one fails to reject the null hypothesis (that there are no differences between workers) when it is false. Committing a Type II error results in hiring a worker who does not have the characteristics to be productive and successful. The consequences of committing a Type II error are worse than the consequences of committing a Type I error. It is more

difficult to fire someone who is not successful and productive than it is to forgo hiring, and waiting for the right person to come along. If for whatever reasons employers and employees believe an individual with a disability may not be a good fit in the workplace, the employer may believe it would be more economically efficient than not to exclude that person from employment.

Summary. Although the ADA prohibits discrimination and sends a symbolic message that persons with disabilities are equal members of society, with the same rights as all other members of society, attitudes may still play a part in the inclusion of persons with disabilities in the employment arena. Attitudes may affect the implementation of the ADA's employment provisions. Following is an overview of the development of social attitudes.

#### Development of social attitudes

Social attitudes are highly abstract psychological constructs with multiple attributes. They are comprised of cognitive, affective, and behavioral responses toward, beliefs and perceptions about, and expectations of a particular social phenomenon or social object; in this case disability. Social attitudes are developed through a process of cultural normative standard setting. Cultural norms establish social parameters of acceptability and inclusion. Those individuals who possess one or more negative characteristics are considered to be outside the

established parameters, and thus are considered socially deviant. The consequence is social exclusion and isolation. It is important then, to develop reliable and valid measures of attitude, in order to understand what they are, and to attempt to discern whether attitudes effect inclusion.

Methods of attitude measurement. Given that attitude is a complex construct, attitude measurement can be plagued with issues pertaining to construct and external validity, or generalizability. In spite of that, the measurement of social attitudes has a long history. Two methods have generally been utilized in measuring attitudes; indirect and direct.

Indirect methods. Indirect methods of measuring attitudes are designed to ensure that respondents are unaware of what is being measured, so that they will reveal their true attitudes, rather than respond in a socially or politically desirable manner. Respondents are asked to answer objective statements or questions, or participate in straightforward tasks, and researchers infer perception or attitude based on respondents' unconscious latent psychological constructs (Antonak & Livneh, 1995a; Campbell, 1950).

The advantage of the indirect method is that because subjects are unaware of what is being measured, there is less threat to external validity due to response set systematic error, specifically social desirability. Social

desirability occurs when a respondent answers the questions in a socially or politically correct manner, rather than in a manner that is reflective of the respondent's actual beliefs, emotions, or attitudes. An indirect measure may have less face validity than a direct method, since the testing is represented as something other than what it really is, but because indirect methods minimize the threat of socially desirable response sets, an indirect measure may have greater potential to measure the intended concept than might a direct measure.

A disadvantage of employing indirect methods is subject deception. Subjects believe they are completing an objective test, when in fact something else is being measured (Antonak & Livneh, 1995a; Campbell, 1950). The researcher then is "fooling" the participants, and the ethics of the investigation can be called into question. Subject deception may also be disadvantageous and limit the findings of the study, because researchers make inferences based on something other than what respondents believe is being tested. For instance, in the present study, participants were asked to take a test of knowledge about the employment provisions of the ADA, when in fact the researcher's aim was to use the information gathered to infer their attitudes toward the ADA. This is an inferential leap, and in an even longer inferential leap, the present study attempted to infer attitude toward

individuals with disabilities. The findings must be interpreted cautiously, therefore, with these constraints in mind.

Discussion about, and development and use of indirect methods of measuring attitudes are scarce in the literature (Antonak and Livneh, 1995a; Campbell, 1950; Hammond, 1948). No studies of indirect measures of attitude toward disability or attitude toward the ADA were located, nor were any cited in the literature (Antonak & Livneh, 1995a). Antonak and Livneh (1995a) encourage the development of the indirect error-choice technique, since it might have an increased probability of achieving construct validity over current direct methods.

Direct methods. Direct methods entail respondents' knowledge that attitudes are being measured (Antonak & Livneh, 1995a; Dawes, 1972; Lemon, 1973; Livneh & Antonak, 1994). An advantage of direct methods is that subjects are not deceived. The instrument measures what it purports to measure, thus researchers make no inferential leaps about underlying latent psychological constructs.

Respondents' knowledge of what is being measured can result in systematic errors caused by response set effects (Rorer, 1965). Response set systematic errors are a pervasive problem and a limitation in direct measurement methods (Antonak & Livneh, 1995a; Livneh & Antonak, 1994). Respondents often wish to present themselves in a positive

light, so their answers are colored by social desirability. This calls into question the construct validity of such instruments (Makas, Finnerty-Fried, Sigafos, & Reiss, 1988). Research findings may be invalidated because of these issues (English & Oberle, 1971; Horne, 1980; Nederhof, 1985; Rorer, 1965).

Measures of attitudes toward disability. The Attitudes Toward Disabled Persons Scale (ATDP), developed by Yuker, Block, and Campbell (Cannon & Szuhay, 1986) is a widely known and tested direct-method instrument for measuring attitudes toward disability. Several other instruments have been developed as well. Siller developed the General Disability Factor Scale (GDF) to identify psychological reasons that generate attitude toward individuals with disabilities (Makas et al., 1988; Roush & Klockars, 1988). Antonak (1982) developed the Scale of Attitudes toward Disabled Persons (SADP). Makas et al. (1988) developed the Issues in Disability Scale (IDS).

Findings about the issue of response set systematic error due to faking socially desirable responses on the ATDP have been contradictory; it may or may not be fakeable (Hagler, Vargo, & Semple, 1987; Scott & Rohrbach, 1977; Speakman & Hoffman, 1979, Speakman & Kung, 1979; Vargo & Semple, 1984). The ATPD and GDF were also found to be vulnerable to systematic response set error, and thus their construct validity is questionable (Vargo & Semple, 1984).

Measures of attitudes toward the ADA. Two direct measures of attitude toward the ADA have been developed. The first measure, the ADA-Survey (Satcher & Hendren, 1991), examined acceptance of four areas of the ADA: (a) transportation; (b) telecommunications; (c) public services; and (d) accommodations provisions. The second measure, and ADA Employment Inventory (ADA-EI), (Moore, 1993; Moore & Crimando, 1995) investigated attitudes toward Title I, the employment provisions of the ADA. The one study reported in the literature that used the ADA-EI to examine the attitudes of people in contrasting groups failed to find significant results, perhaps because respondents may have answered in manners that reflect what was socially or politically correct, rather than in manners that reflected their individual beliefs. An indirect measure of these attitudes, which eliminates the threat of social desirability, may indicate more significant differences among the groups.

Significance of the study.

Using the error-choice technique as a foundation, this study developed and field-tested an instrument, the ADA Information Scale (ADA-IS), to measure attitudes toward the employment provisions of the ADA. It was assumed that the ADA-IS was less prone to response set error than a direct measure of attitude toward the ADA. It was also hypothesized that the ADA-IS would indicate more clearly than would



direct methods differences among groups, ultimately providing researchers with more valid technique of assessing attitudes. Attitude toward the employment provisions of the ADA of three stakeholder groups--rehabilitation counseling masters students, university students who have disabilities, and small business employers/owners--were examined in this study. In the study, rehabilitation counseling students were included as proxies for rehabilitation counselors. It was assumed that there was a difference in attitudes among the three groups. Specifically, it was assumed that rehabilitation counseling students and individuals with disabilities would exhibit more positive attitudes than would small business owners/employers (Moore, 1993).

What is ultimately important is behavior. Some researchers believe that attitude and behavior are directly related, while others argue that this is not necessarily so (Lemon, 1973). The question is twofold; what are the attitudes, and to what degree is there a relationship with behavior? The behavior of employers is of utmost importance in the degree of success of the ADA. The ADA-IS may be used to indirectly infer attitudes toward the ADA, toward individuals with disabilities in the workplace, and eventually, to investigate the impact of workplace attitudes toward the employment provisions of the ADA on the inclusion of individuals with disabilities in the workplace. This

could be accomplished by examining the relationship between attitude as determined by the ADA-IS and behavior; whether there is a correlation between attitude level and inclusion and/or return to work of individuals with disabilities.

The instrument may also serve as a structure for training and education. The measure's outcomes may help researchers, educators, and advocates to identify the level of knowledge (or lack of knowledge) that the three groups hold concerning the employment provisions of the ADA. Curriculum can then be developed that will help these individuals, all of whom are affected by the ADA, to increase and/or strengthen their knowledge of the law. This in turn may help to prevent some legal entanglements, which would be helpful, because discrimination litigation is painful, costly, and usually a losing situation for all involved. In the future, the instrument may be used to assess the degree of relationship between attitude and behavior.

#### Research questions and Hypotheses

1. Research question: Are there significant mean score differences in attitude toward Title I of the ADA among three groups; individuals with disabilities, rehabilitation counseling masters students, and small business owners and/or employers?

Null hypothesis: There are no significant mean score differences among three groups of individuals on the

ADA-IS.

2. Research question: Does the ADA-IS have construct validity?

Null hypothesis: There is no relationship between attitude as it is defined in this study, and what is measured by the ADA-IS.

Null hypothesis: There is no relationship between outcomes on the ADA-IS and the ADA-EI.

3. Research question: Does the ADA-IS exhibit reliability in the form of internal consistency?

Null hypothesis: There is no item homogeneity in the ADA-IS.

#### Definitions used in the present study

1. Attitude: cognitive and affective influences that affect the direction of sympathy and behavior toward the attitude object, measured by level of sympathetic response to factual obscure items on the ADA-IS.

2. Sympathetic response: A response that is favorable toward disability, regardless of whether it is or is not the correct response to the question.

3. Error-choice technique: An indirect method of measuring attitude that is based on forcing respondents to choose between erroneous answers, resulting in a pattern that reflects attitude.

4. College student with disabilities: College students who are registered with the student disability

services office at Michigan State University.

5. Masters level rehabilitation counseling students. Students who are currently enrolled in a masters level rehabilitation counseling program.

6. Small business employer/owner: An employer or owner who works in or owns a business with 50 or fewer employees.

7. Construct validity: The degree to which the instrument measures attitude as it is defined.

8. Criterion-related construct validity: The degree to which the ADA-IS is related to another measure of attitude toward the employment provisions of the ADA. The instrument to be used to assess criterion-related construct validity is the ADA-EI, a direct method of measuring attitudes toward the ADA's employment provisions.

#### Organization of the study

Chapter 2 reviews literature concerning attitudes, and attitude measurement, as well as an overview of public policy and its processes, with a particular focus on the implementation process. Chapter 3 describes the research methods, Chapter 4 discusses the research results, and Chapter 5 provides insights into the interpretation and inferences drawn from the study's results. It goes on to make recommendations for research, education, policy, and practice.

## Chapter 2

### Literature review

#### General review

Because this research project developed a method of measuring attitudes it was important to review attitudes and their measurement. This chapter reviews literature concerning the components of attitudes, their measurement, measurements of attitude toward disabilities, and measurements of attitude toward the ADA. Because the project developed a method for measuring attitude toward the employment provisions of the ADA, it was important to review the literature on public policy. The chapter defines public policy and its processes, and focuses on the implementation process. A focus on the implementation stage was important, because the ADA is currently in that stage.

#### Attitudes

Definition. Social attitudes, according to Bernard (1930) are, "individual attitudes directed toward social objects. Collective attitudes are individual attitudes so strongly interconditioned by collective contact that they become highly standardized and uniform within the group" (p. 305). Attitude is a multidimensional construct that includes three components: (a) cognition; (b) affect; and (c) behavior (Lemon, 1973).

The cognitive component. This component refers to how the attitude object is perceived and conceptualized. It represents the individual's personal constructs and/or beliefs about the attitude object (Lemon, 1973). According to Lemon, this conception is akin to Kelley's (1955) theory of personal constructs. Cognitive theorists view attitudes as constructed realities that help people develop standard frames of reference for categorizing individuals and objects within their worlds. Attitude is a function of knowledge, and evaluation of object appraisal (Allport, 1935; Lemon, 1973). Cook, (1992), stated that, "attitudes are evaluations made toward an object, person, or idea" (p. 259).

The affective component. Affect is concerned with the emotional underpinning of these beliefs and represents the amount of positive or negative feeling that an individual holds towards the attitude object. Psychoanalytic theorists believe that attitudes serve as ego-defensive functions; attitudes arise as a response to an individual's inner conflicts (Lemon, 1973). Newcomb's (1952) definition: "Attitude is a structure which directs existing sources of energy into some channels and not into others" (p. 18). Doob (1967) defines attitude as, "an implicit, drive-producing response considered socially significant in the individual's society" (p. 135).

Behavior. In essence, the behavioral component is the outcome of processed cognitive and affective events. Early behavioral theorists "define attitude as a shorthand description for behavior" (Lemon, 1973, p. 8). Fuson (1942) defines attitude as, "the probability of occurrence of a defined behavior in a defined situation" (p. 856). Berven, (1991), defines attitudes as behavioral response tendencies toward particular people or objects. Campbell, (1950), defines attitude as, "a syndrome of response consistency with regard to a set of social objects" (p. 16).

Later behavioral theorists extend the stimulus-response definition to include cognitive and/or affective components, so attitude takes on a multidimensional definition. DeFleur and Westie (1963) define attitude as a latent process, wherein attitudes arise out of an underlying cognitive and/or affective mechanism or process that mediates behavior. Campbell, Converse, Miller, and Stokes (1960) extend this definition, stating that, "responses towards most objects are prefaced by attitudes toward these objects which in a proximal sense determine these responses" (p. 23). Allport (1935) defines attitude within this realm: "Attitude is a mental and neural state of readiness, organized through experience exerting a directive or dynamic influence upon the individual's response to all objects or situations with to which it is associated" (p. 798). Thus, while this group of definitions retains the behavioral

element, an indirect mediating process that creates a barrier between simple observable behavior and arousing stimulus is added. The researcher, then, can only infer attitude through a mediated process. According to Lemon (1973), some theorists define attitude as a mediating construct, "which relates essential situations with responses in such a way that the influence of a number of antecedents is seen as being channeled through a single mediating process, which then generates an appropriate set of responses" (p. 9).

Relationships among the components. According to Lemon (1973), we expect to see a strong relationship among these various components, since the way an individual perceives and conceptualizes an object should influence the strength of feeling about it, which should in turn influence the individual's overt behavior. Lemon (1973) also stated that empirical evidence both supported and rejects the notion that overt behavior is directly related to attitude. People may not behave in a fashion that is congruent with their attitudes. Those, for instance, with negative attitudes toward members of minority groups, may not act out those attitudes for fear of social or legal reprisal.

Behavior may or may not be influenced by the mediating process. Thus, in order to predict behavior, it is important to understand the elements of cognitive and affective processes: (a) norms; (b) deviance; (c) stigma;



(d) spread; and (e) categorizing and stereotyping. Below is a discussion of the elements of attitudes, and how they influence individuals in manners that contribute to the development and consistency of social attitudes.

### Elements of attitudes

Norms and deviance. Norms are the, "should's and should not's in society, and evolve out of the experience of people interacting within society" (Dinitz, 1969, p. 3). Norms define acceptability; the rules by which it is determined whether one is considered to "fit" within socially acceptable boundaries. Norms assist individuals in defining their worlds and the order within those worlds. Norms, "guide, channel and limit future relationships" (Dinitz, 1969, p. 3). Jones et al. (1984) stated that humans need a, "symbolic frame of reference for ordering social reality" (p. 83) because, "systems of shared meanings enable us to achieve stability in our relationship to the world" (p. 82). Jones et al. (1984) speculate that humans need a defined set of social standards, because we live in a universe which is beyond our total understanding and control. Those individuals who are perceived as outside the boundaries of accepted social norms are perceived as deviant. Perceived deviance can have an effect on attitude.

Historically, people with disabilities in the United States have been considered to be deviant members of society (Holmes & Karst, 1990; Wolfensberger & Tullman, 1982;

Wright, 1960). Some theorists have determined that deviation is difficult to define, because it is socially constructed, and different cultures adopt various concepts of deviation (Dinitz, 1969; Douglas & Waskler, 1982). Several authors agree, however, that one of the circumstances which defines deviancy is, "congenital or adventitious physical differences associated with disease, age, primary and secondary bodily impairments" (Wolfensberger & Tullman, 1982, p. 21).

Wolfensberger and Tullman (1982) stated that a deviant person is one who possesses a characteristic which is negatively valued by the majority population. Dinitz (1969) suggests that, "deviance can be considered as behavior that represents some form of undesirable difference" (Dinitz, 1969, p. 12). Norms provide the baseline against which deviation is, "defined, measured and sanctioned" (Goffman, 1967, p. 5). Jones et al. (1984) stated that one perspective from which deviance can be viewed is that of freak; the individual as someone to avoid, someone who is scary, and threatening.

From the "freak" point of view, difference is normally distributed throughout the population of interest. Deviation is the statistical exception, and the deviant person falls some distance from the mean (Dinitz, 1969). In statistical language, the deviant is the outlier. Outliers threaten to contaminate the integrity of statistical measurement, thus

we attempt to eliminate them or their impact on statistical results. Since individuals with disabilities are assumed to be negatively deviant from accepted social and physical norms, individuals with disabilities may be considered the societal outliers, who threaten the integrity of social norms and order. Their perceived deviance stigmatizes them.

Stigma. Stigma is a discrediting attribute, which reduces the value of people who possess the stigmatizing characteristic (Goffman, 1967). According to Goffman (1967) stigma is, "the situation of the individual who is disqualified from full social acceptance" (p. xi). It is "an undesired differentness from what we had anticipated" (Goffman, 1967, p. 5). Goffman (1967) stated that the ancient Greeks originated the term stigma, "to refer to bodily signs designed to expose something unusual and bad about the moral status of the signifier. ... and advertised that the bearer was ... ritually polluted, to be avoided, especially in public places" (p. 1). The attributes, "are incongruous with our stereotype of what a given type of individual should be" (p. 2). Sociological features of stigma include the perspective that one individual characteristic alienates people from the society, because the characteristic is stigmatized negatively by society. According to Wolfensberger and Tullman (1982), "disability myths typically hinge upon the inference that the stigma of disability automatically implies incompetency" (p. 32).

Holmes and Karst (1990) stated that disability myths (perceptions, attitudes), are so socially ingrained that they may be unconscious.

According to Jones et al. (1984), "The essence of stigma is fear" (p. 65). This fear is based upon the just world hypothesis, and people assume that one gets what one deserves, and that people who have disabilities or other characteristics which are outside the domain of social acceptance deserve that label and its consequent ramifications. The just world hypothesis is based on the idea that people are in control of their destinies, and that to assume chance into our lives is a threat to our existence. (Jones et al., 1984). One characteristic leads to a spread effect, wherein it is assumed the sum of all characteristics are deviant.

Spread. Wright (1983) defines spread as, "the tendency for loss of a particular part or function to lessen the value or worth of other attributes of the person" (p. 33). Wright (1960) stated that, "spread is the condition in which people tend to base several attributes upon one that exists" (p. 118). Physique evokes a wide variety of impressions and feelings about the person. Wright (1960), stated that "physical deviation is frequently seen as the central key to a person's behavior and personality and largely responsible for the important ramifications in the person's life" (p. 23). Other authors agree that the degree of attractiveness,

or aesthetic qualities that an individual with a disability is perceived to have, can influence the extent to which individuals without disabilities consider them to be deviant (Amsel & Fichten, 1988; Bowman, 1987; Fichten & Amsel, 1988; Goffman, 1967; Jones et al., 1984; Livneh, 1982; Morrison & Ursprung, 1987). Essentially, people put individuals with disabilities into cognitive and affective compartments; they categorize and stereotype individuals with disabilities.

Categorizing and stereotyping. According to Goffman (1967), society establishes categories of people. Criteria by which people are placed into different categories, are based on what is "felt to be ordinary and natural for members of each of these categories" (p. 1). Holmes and Karst (1990) write that negative stereotyping "involves the issue of personal failure as a contributor to the condition" (p. 22). We unconsciously transform these categories into normative expectations.

Cognition and affect interact to arrive at these normative expectations, and behavior--individual or collective--is the outcome. In order to infer behavior based on attitude, we must first measure the attitude. The following section reviews attitude measurement.

### Attitude measurement

Introduction. Social scientists have been investigating a wide range of social attitudes for more than 70 years. Attitude measurement is, "an attempt to convert

observations of a person's behavior toward a referent into an index representing the presence, strength, and direction of the attitude presumed to underlie the behavior" (Antonak & Livneh, 1995a, p. 4). Two methods have generally been utilized in measuring attitudes; indirect methods, and direct methods.

Indirect methods of measuring attitudes. With indirect methods, respondents are not aware of what is being measured. They are asked to respond to objective statements or questions, or participate in straightforward tasks. From these responses or participation, researchers infer perception or attitude based on respondents' unconscious latent psychological constructs (Antonak & Livneh, 1995a; Campbell, 1950). There are several types of indirect measurement: (a) nonobtrusive behavioral observations; (b) projective techniques; (c) non-structured disguised techniques; and (d) structured disguised techniques (Antonak & Livneh, 1995a; Campbell, 1950; Horne, 1980).

An advantage of the indirect method may be that because subjects are unaware of what is being measured, there is less threat to external validity due to response set systematic error. Response set systematic error occurs when respondents provide responses they believe may be socially or politically correct, rather than reflective of their individual beliefs and feelings. This is a pervasive problem and a limitation in direct measurement methods. It

calls into question the construct validity of the instrument, so research findings may be invalidated (English & Oberle, 1971; Horne, 1980; Makas et al., 1988; Nederhof, 1985; Rorer, 1965). Antonak and Livneh (1995b) stated that indirect methods of attitude measurement may be less vulnerable to systematic error, and that indirect methods, "hold promise for research on attitudes toward persons with disabilities, but that few investigations have used them" (p. 14). Antonak and Livneh (1995b) hope to, "increase the likelihood that disability attitude researchers consider indirect methods" (p. 14).

A disadvantage of employing indirect methods is subject deception and its possible consequent psychological stress. Subjects believe they are completing an objective test, when in fact something else is being measured (Antonak & Livneh, 1995a; Campbell, 1950). Another limitation of indirect methods is the inferential leap that researchers make from the collected data. When using direct methods, respondents are simply asked to respond to questions/items about the topic of interest, and subsequent interpretations of the data are based on that topic. With indirect methods, researchers make inferences based on what theory or beliefs state should be identified by the data. In reality, the measure could be tapping different constructs.

Direct methods of measuring attitude. Direct methods of research method entail respondents' knowledge that attitudes are being measured. This occurs in one of two ways; either the researcher informs respondents that attitudes are being measured, or the assessment instrument clearly indicates that attitudes are being measured. (Antonak & Livneh, 1995a; Dawes, 1972; Lemon, 1973; Livneh & Antonak, 1994). Researchers generally describe the following direct methods of attitude measurement: (a) interviews (both structured and nonstructured); (b) sociometrics; (c) rankings; (d) adjective check list; (e) paired-comparison scales; (f) semantic differential scales; (g) summated rating scales; and (h) social distance scales (Antonak & Livneh, 1995a; Campbell, 1950; Dawes, 1972; Lemon, 1973; Livneh & Antonak, 1994).

Because subjects are aware of what is being measured, the instrument is more likely to have face validity than will an indirect measure. The corresponding disadvantage is vulnerability to systematic response set error.

#### Choosing an indirect method of attitude measurement

There are very few examples of indirect methods of measuring attitudes. None has been cited in the disability attitude literature (Antonak and Livneh, 1995b; Campbell, 1950; Hammond, 1948). Antonak and Livneh (1995b) describe a possible indirect method that could be developed; the disguised procedure error-choice technique.



The error-choice technique. The error-choice technique was developed by Hammond (1948), who considered attitude to be, "a (nonprimary) source of energy, or an affective state, capable of producing error in perception and recall" (p. 38). Hammond endeavored to measure the effect of perception on attitude. He conducted two studies designed to infer attitude from systematic error, or uncontrolled variance. Each of the close-ended questions in Hammond's instruments offered participants a choice of six responses, none of which was the correct answer. The questions either had no correct answer, or the correct answer was not offered in the response choices. Thus, the instruments forced respondents into a choice between errors. Hammond (1948) determined that respondents chose erroneous answers that formed patterns indicating attitudes (positive or negative).

The first study concerned attitudes toward Russia; the second study concerned attitudes toward labor-management. Hammond (1948) chose participant groups for each test based on the known differences between the groups. For example, in the labor-management study, he chose one group of participants who were pro-union and pro-labor, and another group that was pro-management and anti-labor. Hammond's expectation was that systematic error would exist, and group distributions would be bi-modal by group, at opposite ends of the attitude continuum, because they came into the study with already existing attitudes at opposite ends of the

spectrum. Results of the studies indicated that there was a statistically significant mean difference between the two groups, and that the distributions were bimodal. The second study was a replication of the first. Hammond found similar results in the second study.

Weschler (1950) also used the error-choice technique to measure attitudes toward labor and management. The technique was employed in order to develop a scale that would, "allow for the discovery of those individuals showing considerable bias in either the pro-labor or the pro-management direction" (p. 52). He chose the error-choice technique because it provided indirect measurement disguised as an information test. Weschler (1950) used a purposive sample of two groups, one of which expressed a pro-labor bias prior to the assessment, and another that expressed a pro-management bias prior to the assessment. The results of Weschler's (1950) study supported the research hypothesis that there would be statistically significant mean score differences between the two groups.

Justification for the error-choice method. Because direct methods may evoke politically or socially correct responses, any direct observation of the behavior influenced by the attitude may also be contaminated. The error-choice technique has not been used to measure attitudes toward individuals with disabilities, thus it was employed in this study. If this method is valid and reliable, it may be used

to extend the studies of Hammond and Weschler to the measurement of attitudes, and to establish the relationship between the existence, strength, and direction of attitude, and behavior. The following sections discusses direct methods of measuring attitudes.

#### Direct methods of attitude measurement

The Attitudes Toward Disabled Persons Scale. The most widely used and studied direct measurement method instrument related to measuring attitudes toward individuals with disabilities is The Attitudes Toward Disabled Persons Scale (ATDP), developed by Yuker, Block, and Campbell (Cannon & Szuhay, 1986). The ATDP has several variations, but all entail the same method of measurement. The scale consists of statements about individuals with disabilities, and respondents indicate agreement with each statement on a six-point Likert-type scale. Whether the ATDP is a valid measure, however, has been debated.

The issue of response set systematic error due to faking socially desirable responses on the ATDP has been debated by several authors. The findings are contradictory. Some researchers (Speakman & Hoffman, 1979; Speakman & Kung, 1979) have concluded that the scale is not susceptible to faking, while others (Hagler, Vargo, & Semple, 1987; Scott & Rohrbach, 1977; Vargo & Semple, 1984) have concluded that it is susceptible to faking. Yuker (1986) concludes that it may or may not be fakeable, and suggests that the

instrument should be used in combination with other instruments that measure one's attitude, rather than as a single source of measurement.

The General Disability Factor Scale. Siller developed the General Disability Factor Scale (GDF) to identify psychological reasons that generate attitudes toward individuals with disabilities (Makas et al., 1988; Roush & Klockars, 1988). The GDF is a 69-item, six-point Likert type scale. Roush and Klockars (1988) conducted a study to measure the construct validity of the GDF, and found that construct validity is questionable. The instrument's vulnerability to response set error may invalidate its results.

The Scale of Attitudes toward Disabled Persons. Antonak (1982) developed the Scale of Attitudes toward Disabled Persons (SADP). The SADP is a 64-item, "Likert-format scale to measure attitudes toward disabled persons as a group," (Antonak, p. 23). Respondents rate, "each statement on a 6-point scale, ranging from -3 to signify 'I disagree very much' through +3 to signify 'I agree very much'" (Antonak, p. 23). Individual composite scores are computed, and a high score indicates a favorable attitude. The scale was found to be reliable and to have content validity. Roush and Klockars (1988) evaluated the construct validity of the SADP, and found that it is questionable. Like other direct measures of attitude, the scale may be

susceptible to response set errors, and thus may be limited.

The Issues in Disability Scale. Makas et al. (1988) developed the Issues in Disability Scale (IDS) to, "measure both the cognitive and affective components of attitudes toward persons with physical disabilities" (Makas et al., 1988, p. 21). It was designed, "to address attitudes toward disabled people in a wide range of social settings and at varied social distances" (Makas et al., 1988, p. 25). Makas et al. (1988), and others (Altman, 1981; Antonak, 1982) have criticized the ATDP as being unidimensional. The IDS addressed the multidimensionality of attitudes.

The IDS is a 100-item, seven-point Likert-type scale. Responses range from "strongly agree" to "strongly disagree." Results of testing indicated that the scale had construct validity and internal consistency. Although the authors urged other investigators to replicate their study in order to further validate the instrument, no further studies could be located.

Summary of attitude measurement. There is a question about the efficacy of direct measures to clearly identify attitudes. It is worthwhile, then, to pursue indirect methods. The error-choice technique may contribute a valid and reliable measure of the relationship between attitude and behavior. Since the purpose of this research was to measure attitudes toward a public policy, the ADA, it was important to review the general principles of public policy.

The next section presents a general discussion of the development of public policy, and highlights the implementation stage of public policy, since the ADA is currently in that stage.

### Public policy

When the status quo of a particular situation that may negatively impact a significant number of people in a society is no longer socially acceptable or tolerable, the situation is identified as a social problem. Once a social problem is identified, the affected stakeholder or interest groups attempt to develop solutions, often by creating a broad, general set of legislative and regulatory objectives. These objectives comprise social, or public policy (Howards, Brehm & Nagi, 1980).

Public policy is both a process and a product. It is a process of activity by which government officials decide how to allocate scarce resources, and then act to implement, interpret, and enforce the law or policy decision (Bullock, Anderson & Brady, 1983; Howards et al., 1980; Danek, Parker & Szymanski; 1991). Public policy is a product that exists to serve the public interest. (Bullock et al., 1983; Danek et al., 1991).

Processes in the policy stream. There are several processes in the policy stream (Kingdon, 1995). The first process is initiation; problem identification and agenda setting. During the initiation stage, the social problem is

identified. Identification can develop through media attention to a particular issue, routine legislative reauthorizations, or through stakeholder pressure. It is during this stage that the policy window opens (Kingdon, 1995). Kingdon (1995) and Moe (1985) write that there are certain circumstances under which the window of opportunity for policy change occurs. Those circumstances include increased knowledge of issues, as well as the exogenous shocks to the political structure and administration. The policy window is that time of opportunity for attention to the issues on the political agenda.

The second process in the policy stream is specifying alternative choices. The issue is placed on the political agenda, and alternative policy choices are developed, analyzed, and proposed. The policy then moves downstream to the third process, where a legislative or other authoritative choice is made among those alternatives. When policy choices are articulated, and officials choose the alternative that is most appropriate to address the core issue.

The next process is implementation of the decision; putting the policy into action. After an appropriate time has passed, the fifth process of the policy stream, evaluation, occurs. During this period measures of the effect of the policy, and accomplishments of the policy objectives, are conducted. Depending on the outcomes of

evaluations, a final process, remediation, may occur. The policy may be remediated as needed, continue unchanged, or be terminated (Brewer & deLeon, 1983; Bullock et al., 1983; Howards et al., 1980; Kingdon, 1995; Stokey & Zeckhauser 1978).

The ADA is now primarily in the fourth stage, implementation. Following is a review of the implementation process, and identification of the predictors of implementation success.

The implementation process. Implementation is, "a process of interaction between the setting of goals and actions shared to achieve them" (Goggin, 1987, p. 4). The implementation of any program involves the effort of policymakers to regulate the behavior of one or more target groups (Brewer & deLeon, 1995; Bullock et al., 1983; Hofferbert, 1974; Kingdon 1995; Mazmanian & Sabatier, 1983; Wade, 1972; Stevens, 1993). Predictors of successful implementation comprise three broad categories: (a) tractability of the problem; (b) the ability of the wider environment to favorably support the implementation process; and (c) the net effect of several political variables of support for the objectives (Hofferbert, 1974; Mazmanian & Sabatier, 1983).

Tractability of the problem. In order to implement the policy, implementors need a clear understanding of the problems; what the issue is, and how it can most effectively



be addressed by action. The tractability of a problem is the degree to which an issue can be clearly identified, and successfully addressed. A clear definition of the problem and the objectives to alleviate it are crucial to a policy's successful implementation (Mazmanian & Sabatier, 1983). In the case of the ADA, the problem is well articulated; there is an institutionalized exclusion of individuals with disabilities from mainstream life activities. The question is whether it clearly addresses the policy objectives.

Essentially, the ADA mandates that public, social, educational, and private institutions take into account the differing needs of individuals with disabilities, and to incorporate behaviors that allow for equal life activity opportunity. Some studies indicate that in the business community there is ambivalence about specific terms of the law, such as reasonable accommodations and undue economic hardship (Bennett, 1990; Gatty, 1991), and that these ambiguities will foster prolonged costly litigation (Brown, 1990; Jay, 1990).

Target group size. Another important variable is the target group as a percentage of the population. The smaller and more definable the target group whose behavior needs to be changed, the more likely the mobilization of political support in favor of the program and thus the more probable the achievement of statutory objectives (Hofferbert, 1974; Mazmanian & Sabatier, 1983; Moe, 1985; Stevens, 1993). The

ADA's target group is large; in the employment arena all private and public sector employers, institutions, and others who hire workers in the United States, are affected by it. The amount of behavioral modification required to achieve statutory objectives depends on the number of people in the target groups, and the amount of change required.

Required behavioral change. The behavior to be regulated is most important, and the amount of behavioral change required among target groups should be modest. The more diverse the behavior regulated the more difficult it becomes to frame clear regulations (Hofferbert, 1974; Mazmanian & Sabatier, 1983; Moe, 1985). The basic hypothesis is that the greater the amount of behavioral change, the more problematic will be successful implementation (Mazmanian & Sabatier, 1983; Wade, 1972). The behavior to be modified in order to comply with the ADA is in some cases, a radical shift.

The need for continuing social support. While a statute establishes the basic legal structure, implementation is also influenced by the need for any program attempting to change behavior to receive political support. Failure to garner the support may mean too long a delay in fostering cooperation among large numbers of people, many of whom perceive their interests to be adversely affected by successful implementation of statutory objectives (Mazmanian & Sabatier, 1983; Wade, 1972). Attitudes of government

officials and implementing bureaucrats, as well as constituency groups, all have an influence on the successful implementation of public policy.

Public and media attention to many policy issues tends to follow a cycle in which an initial awakening of public concern--the policy window--is followed by a decline in widespread support as people become aware of the costs of solving the problem, or as other issues crowd it off the political agenda (Kingdon, 1995; Stevens, 1993). Literature indicates that small business owners/employers, members of the target group, may hold attitudes toward the ADA that may impair the success of implementation (Bennett, 1990; McKee, 1990; Weaver, 1990).

Policy compliance. In practice, behavioral compliance generally depends on an individual's assessment of the relative costs and benefits of following legal directives. The decision to comply is often a function of: (a) the probability that noncompliance will be detected and successfully prosecuted; (b) that the sanctions are available to penalize noncompliance; (c) the target groups' attitudes concerning the fundamental legitimacy of the rules; and (d) and the costs to target groups of compliance (Mazmanian & Sabatier, 1983).

The probability that substantial sanctions will follow noncompliance is affected by the variety and magnitude of sanctions provided by statute: (a) the implementing agency's

ability to monitor noncompliance; (b) voluntary social collective action to supplement agency resources in monitoring compliance and enforcement actions; and (c) the commitment of agency officials to prosecuting noncompliance (Goggin, 1987; Hofferbert, 1974; Kingdon 1995; Stevens, 1993). Discrimination is often subtle, and difficult to prove, and even though the enforcing agency, the EEOC, can impose monetary damages, it has a backlog of cases. The fear of sanctions may be minimal.

Summary of public policy. There may be reasons to question the ability of the ADA to address the problems it was designed to alleviate. The intent of civil rights legislation may be noble, but questions concerning the efficacy of civil rights laws to end discriminatory practices against women and individuals from ethnic-minority backgrounds abound (Mazmanian & Sabatier, 1983). Further, the degree of behavior to be changed is high; in some instances, it calls for a complete restructuring of hiring and retention policies. The ADA is a reflection of modern America's public methods of addressing issues of discrimination. There is a long history of disability policy, and its evolution is discussed in the following section.

#### Disability policy

What passes for public policy toward disability stems from an almost casual sequence of historical events,

beginning with the passage of industrial accident laws in the Progressive Era...continuing with the creation of Social Security in the New Deal, and concluding with the extension of civil rights coverage in the 1970's. (Berkowitz, 1987, p. 2)

Workers' compensation. The first disability policy in the U.S. was the institution of workers' compensation laws. One of the conditions that defines a market failure is negative externality. An externality is an unintended consequence of market activity (Stevens, 1993). One of the unintended consequences, or negative externalities, of the American industrial revolution was the economic plight of injured workers, or that of families of workers who were killed as a result of employment.

In the early 1900s, as industrialism expanded in the U.S., the rate and number of industrial accidents and deaths climbed dramatically. Workers' only recourse was to sue employers in civil court for medical expenses and lost wage damages. Employers were often protected from these damages, and it was rare that workers (or the families of dead workers) won damage suits. Many injured workers--unemployable because of the injuries--and their families, were forced to seek economic relief from charities. Even those who were successful in their legal efforts suffered; cases could easily take as long as three years to be heard and judged (McGarity, & Shapiro, 1993; White, 1983). Often,

these workers and/or their families were left in dire economic straits, unable to return to employment after injury, and uncompensated by the employer. This situation was viewed by many in the U.S., including government officials, as a market failure.

Responses to market failure. When markets fail, one alternative course of action is to do nothing, and wait for the market to self-correct through voluntary action. The second available alternative to market failure is government intervention. According to Stokey and Zeckhauser (1978), there are four types of government intervention: (a) attempt to improve market efficiency; (b) coerce specific individual and organizational behavior; (c) influence individual and organizational decision through incentives; and (d) become directly involved in providing goods and services. In the case of injured workers, the market could have corrected itself by improving workplace safety and decreasing injury, or by accepting liability. It did not.

Although early in the 1900s the federal government tended to refrain from intervening in the marketplace, progressive social and political values and power led to indirect government intervention, attempting to make the market work better by influencing the court systems. State governments intervened more directly, instituting legislative regulation of workers' compensation that required firms to behave in specified ways. By 1920, most

states had enacted workers' compensation laws (McGarity & Shapiro 1993; Reasons, Ross, & Paterson, 1981; White, 1983).

Historical background: Disability policy. Until the 1950s, American society viewed the handicapped (as individuals with disabilities were then labeled) as sick, and in need of cure (Berkowitz, 1984). This medical model, or functional imitations model, was steeped in paternalism. According to Hahn (1986), paternalism reflects a relationship of superiority and inferiority. Professionals perform the parental role, and the disabled play the passive, child role, unable to make decisions about their own lives. Disability was a pathological condition, and the goal was to eliminate it or cure it to its maximum level.

It was perceived by policy makers as well as the general public that the care and financial support of individuals with disabilities was a social issue, and thus social policy aimed at meeting needs was developed and implemented. Government intervention in this area was to become directly involved in the provisions of goods and services. Until the 1970's, disability policy was directed primarily at taking care of individuals with disabilities, outside the mainstream of American life.

Policy: Vocational rehabilitation and compensation. Two types of disability policy dominate history; vocational rehabilitation, and compensation. The early history reflects vocational rehabilitation policy. In 1917, he

Smith-Hughes Vocational Act (PL 64-347) was enacted, and it provided federal support to states for purposes of vocational education. The Smith-Sears Act of 1918 authorized vocational services for disabled veterans. The Smith-Fess Act of 1920 (PL 66-236) provided for vocational services for people with physical disabilities.

The Federal Social Security Act of 1935 (PL 74-217) institutionalized and expanded disability policy through two programs, both of which required that the individual has a permanent disability that prevents employment. It was also the first time that compensation became part of disability policy. The Act authorized the Social Security Disability Insurance (SSDI) program, which, "provides cash benefits for individuals and their dependents who have contributed to the trust fund through tax on their earnings" (Jenkins, Patterson & Szymanski, 1992, p. 17). The Supplemental Security Income (SSI) program, "provides a minimum income level, based on financial need, for elderly individuals and individuals with disabilities" (Jenkins et al., 1992, p. 17). Disability became an all-or-nothing construct. A person was permanently and totally disabled and unable to work, and thus received transfer payment from the government, or conversely, in the absence of total disability a person was able to work, and received no government support. These programs served to keep people with disabilities out of the work force (Berkowitz, 1987).



The Vocational Rehabilitation Amendments of 1954 increased funding for rehabilitation services, in order to assist states to help prepare individuals with disabilities to enter the workforce. It was assumed that the handicapped would be happy to have any job, and content to remain in lower level, secondary labor market jobs (Berkowitz, 1987). The characteristics of secondary labor market positions include few benefits, low skill, low pay, high turnover, little chance for promotion (Wegman, Chapman, & Johnson, 1989). Employers who hired the handicapped were perceived as benevolent people. During the 1960s, rehabilitation was extended to underprivileged and disadvantaged groups through the Vocational Rehabilitation Amendments of 1965 (PL 89-333), and the social security and welfare laws (Jenkins, et al., 1992).

The independent living movement. According to Berkowitz (1984), handicapped rights activists came to political maturity in the late 1960s, and adopted a civil rights ideology. According to DeJong (1983) "Significant social movement becomes possible when there is revision; people looking at some misfortune see it no longer as warranting charitable consideration, but as an injustice which is intolerable in society" (p. 5). A small, politically liberal, well-educated, middle-class group of young, Caucasian individuals with disabilities began to view themselves not as people who were sick and needed healing by

professionals, but as a minority group that had suffered the same discrimination as women and minorities before them. This group, consisting primarily of people with spinal cord injury, muscular dystrophy, cerebral palsy, multiple sclerosis, and postpolio disablement, believed that handicap resided in the environment. Barriers to their entrance into mainstream American society centered on architectural and attitudinal barriers, rather than their individual disability characteristics (DeJong, 1983).

Thus began the independent living (IL) movement (Batavia, 1989). According to DeJong, (1983), the movement was, "intent on reshaping the thinking of disability professionals and researchers..." (p. 5). The IL movement promoted the idea of consumer sovereignty, defined as people being their own judges, people having a larger voice in determining their destinies. It was the attitudes of society, the assumptions of incompetence, deviance, and negative stereotyping, they believed, that served to limit their lives to the role of the sick child. This group, and others who believed in their cause, began to attempt to change attitudes, in order to change the lives of individuals with disabilities, and increase their opportunities in mainstream social and economic activities, including employment (Berkowitz, 1984; DeJong, 1983). They believed that handicap was a social construct (Liachowitz 1988; Roth, 1983), that the true need was to change the

physical environment. The Rehabilitation Act of 1973 reflected a change from care-taking to civil rights for individuals with disabilities.

The civil rights paradigm. Consistent with its time in history, the Rehabilitation Act of 1973 introduced the notion of consumer choice reflected the civil rights legislation of 1964. Rehabilitation consumers were given an equal voice in development of their Individual Written Rehabilitation Programs. Section 501 of the rehabilitation act prohibited discrimination against individuals with disabilities in federal employment. Section 503 banned employment discrimination against individuals with disabilities for all organizations receiving federal funds (Berkowitz, 1987; Jenkins et al., 1992; Roth, 1983; Scotch, 1984).

The implementation of Section 504 of the Rehabilitation Act of 1973, gave political voice and kinship to individuals with disabilities (Scotch, 1984). Through section 504, responsibility for protecting their civil rights was extended to employers and other entities that received federal funding. Those in the IL movement, and other individuals with disabilities, believed that this legislation was the gateway to vocational choice, and legal protection from discrimination (Berkowitz, 1987; Scotch, 1984).

Section 504 and the ADA. A national study of individuals with disabilities (Harris, 1986) painted a gloomy picture. Even with section 504 of the Rehabilitation Act of 1973 less than 30% of individuals with disabilities were employed; wages were still, on average, at or below poverty level (Harris, 1986). Activists within and supporters of the disability rights movement believed that social attitudes served as a handicap and barrier to integration of individuals with disabilities into the mainstream. Until attitudes changed, they believed, the impact of those negative attitudes would reinforce the status of individuals with disabilities; they would remain a group excluded from economic and social opportunity.

It was the result of the Harris (1986) study, as well as the lobbying efforts of individuals with disabilities and their supporters in and out of Congress, that led to the introduction of a civil rights bill for individuals with disabilities. The Americans with Disabilities Act (ADA) was enacted into law by congress in July, 1990. The Act attempts to create a level playing field for individuals with disabilities by prohibiting discrimination against them in employment practices, as well as in other normal life activities and social functions. Whether social attitudes and behavior can be modified and/or extinguished through legislation is questionable. If social attitudes remain stagnant, legislation alone may not change the

circumstances of the lives of individuals with disabilities.

Furthermore, if the problem in hiring individuals with disabilities is more about fears of costs related to potential litigation and/or a resentment of federal interference, rather than negative attitudes toward individuals with disabilities, circumstances may not change.

Thus, even with the ADA it is important to understand the nature and consequences of attitudes. The following sections discuss indirect and direct methods that have been developed to measure attitudes toward the ADA.

#### Measuring attitudes toward the ADA

No indirect methods of measuring attitude toward the ADA have been cited in the literature (Antonak & Livneh, 1995a). Two direct measures concerning the ADA have been developed. The first measure, the ADA-Survey (Satcher & Hendren, 1991), examines acceptance of four areas of the ADA: (a) transportation; (b) telecommunications; (c) public services; and (d) accommodations provisions. The second measure (Moore & Crimando, 1995) investigates attitude toward Title I, the employment provisions of the ADA.

The ADA-Survey. Satcher and Hendren (1991) developed the ADA-Survey to investigate the, "extent to which upper and graduate level personnel management students accepted the ADA and to identify predictors of their acceptance" (p. 15). Predictor variables included attitudes toward individuals with disabilities, gender, extent of contact

with individuals with disabilities, size and type of occupational setting, and race. The second purpose of this study was to determine whether the level of acceptance of the ADA employment provisions was different than the level of acceptance toward provisions regarding transportation, telecommunications, public services, and accommodations provisions.

The authors developed a 12 item, Likert scale. Likert ratings ranged from 1 = strongly disagree, to 5=strongly agree. Factor analysis of the final instrument determined that four subscales were present; employment provisions, transportation, telecommunications, public services and accommodations provisions. Participants (n=161) were volunteers from undergraduate college personnel management classes. Each participant completed the ADA Survey, and the Attitudes toward Persons with Disabilities Scale. Results indicated that the students were, "relatively moderate in their attitudes toward persons with disabilities as evidenced by their ATDP scores..." (Satcher & Hendren, 1991, p. 16).

A regression analysis indicated that of the predictor variables, only, "attitude toward individuals with disabilities accounted for a significant amount of variance ( $R^2=.061$ ) in acceptance of the ADA" (Satcher & Hendren, 1991, p. 16). The ADA-Survey indicated that students were significantly more accepting of the public services and

accommodations provisions, and of the employment provisions, than they were of transportation, or telecommunications provisions. The authors caution that the use of a nonrandom, accessible population limits generalization of the study's findings.

Satcher and Hendren (1992) utilized the ADA-Survey to "investigate the extent to which employers agree with the ADA and to identify possible predictors of their agreement" (p. 14). Predictor variables were gender, subject disability, contact with individuals with disabilities, type and size of organization, and highest level of the employer's education. Regression analysis showed that "none of the predictor variables accounted for a significant amount of the variance in agreement with the ADA" (Satcher & Hendren, 1992, p. 15). Results indicated that, "employers were only moderate in their agreement with the ADA" (Satcher & Hendren, 1992, p. 15), and that "the employment area of the ADA was agreed with significantly less than the transportation, telecommunications, and public services and accommodations areas" (Satcher & Hendren, 1992, p. 15).

The ADA Employment Inventory. Moore (1993) and Moore and Crimando (1995) developed the ADA Employment Inventory to measure the attitudes of three groups--rehabilitation service providers, private sector representatives, and persons with disabilities--toward Title I, (employment provisions) of the ADA. The final instrument was a 32-item

Likert-type scale ranging from 1=strong agreement, to 6=strong disagreement. The authors developed questions pertaining to six areas, including

(a) attitude toward the potential cost of the ADA, (b) whether the ADA is fair to employers, (c) whether the expectation of compliance is practical, (d) whether the Title is too vague and ambiguous for businesses to work with, and (e) general feelings about the effectiveness of the legislation...(f) attitudes about the role of federal government in mandating antidiscrimination laws. (Moore & Crimando, 1995, p. 235)

The final instrument included six subscales reflecting these different areas. Results of the study indicated that there were significant differences in mean scores on estimation of cost of workplace modifications between private sector representatives and the two other groups. Private sector representatives scored significantly lower than the other two groups, indicating that private sector representatives had a negative attitude toward costs of workplace modifications. This was the only significant difference among the three groups. Most differences were, "in the level of agreement or disagreement with a statement at different levels of intensity, rather than some groups agreeing and some disagreeing on the same statement" (p. 243).



The efficacy of developing an indirect method. It could be that the lack of significant differences in agreement/disagreement among groups in their attitudes toward the ADA in this study was due to social desirability error. Since the Inventory was a direct measure, respondents may have answered in manners that reflected what was socially or politically correct, rather than in manners that reflected their individual beliefs. An indirect measure of these attitudes, which eliminates the threat of social desirability, may indicate more significant differences among the groups. Because it eliminates or decreases response set error, an indirect measure may also be able to distinguish more clearly among groups. The indirect error-choice method had not previously been utilized in assessing attitudes toward individuals with disabilities (Antonak & Livneh, 1995b).

This study developed an instrument, the ADA Information Scale, using the indirect method, error-choice technique. This instrument may be used with caution to indirectly measure attitudes toward the employment provisions of the ADA, and then draw inferences about attitudes toward individuals with disabilities in the workplace. The ADA-IS may be used to help establish the existence and degree of relationship between attitudes and inclusion. Again, caution is appropriate when interpreting an indirect method.

## Chapter 3

### Method

#### Design

The design of this study was a descriptive cross-sectional survey of groups among whom were expected differences on the variable of interest.

#### Variable of interest

The variable of interest was attitude toward the employment provisions of the ADA, as measured by the ADA Information Scale (ADA-IS), an indirect disguised procedure measure adapted from the error-choice technique. The operational definition of attitude for this study was: Cognitive and affective influences that affect the direction of sympathy and behavior toward the attitude object, measured by level of sympathetic response to factual obscure items on the ADA-IS.

#### The error-choice technique

The ADA-IS is a 50-item alternate choice instrument developed to address the employment provisions of the ADA. Historically, the error-choice technique entailed the use of four types of items: (a) general knowledge items; (b) truth determinable obscure factual items; (c) truth indeterminable factual items; and (d) truth indeterminable and controversial items (Hammond, 1948; Antonak & Livneh, 1995; Weschler 1950).

General knowledge items. General knowledge questions offered one correct response, and one incorrect response. Providing these items lent credibility to presenting the test as an information scale, and should have eliminated the general disadvantage in indirect measurement methods, deception of participants. These items also provided information concerning level of knowledge of the ADA employment provisions, which could have an impact on the attitude toward the those provisions.

Truth determinable obscure and factual items. These items offered only incorrect responses equidistant from the truth. Items in this set consisted of obscure minutiae, so that it was difficult for, "respondents with advanced knowledge of the referent" to "discover the absence of correct answers" (Antonak & Livneh, 1995b, p. 16). It was possible that respondents may have read something about these items, but because the items consisted of such minute detail, it was probable that the information was not readily at hand for the respondents to recall. Consequentially, this type of item tested error in recall.

Truth indeterminable and factual items. A correct answer might have existed for these items, but there were no data available to support a specific correct answer. This forced respondents to guess between errors.

Truth indeterminable and controversial items. These items were somewhat like items found in direct measures of attitudes, and were expected to evoke attitude more directly than the other error-choice items (Antonak & Livneh, 1995a; Hammond, 1948; Weschler, 1950). For truth indeterminable and factual items, as well as truth indeterminable and controversial items, possible response choices varied, "in direction and intensity from a hypothetical neutral point" (Antonak & Livneh, 1995b, p. 27). Respondents were forced to choose between erroneous answers, and thus it was expected that respondent bias would be illuminated by consistent patterns in direction of erroneous responses chosen (Weschler, 1950).

Adaptation of the item types. Upon discussion with committee members during the dissertation proposal meeting, it was decided that only (a) general knowledge, and (b) truth determinable factual obscure items would be included in the ADA-IS. The instrument would have fifty items; twenty-five general knowledge, and twenty-five truth determinable factual obscure. It was further decided that each of the items on the scale would offer one correct, and one incorrect response. This adaptation minimized deception of participants, and reduced possible psychological stress that could be incurred as a result of a respondent becoming frustrated over feeling like he or she knew less about the ADA employment provisions than he or she previously thought.

Another reason for choosing these types of items was the problem inherent in equidistant incorrect answers, and hypothetical neutral points. Whether one response indicates negative attitude and one indicates positive attitude is subjective. In a study of attitudes toward management and labor, Hammond (1948) developed the following example of a general factual item with responses equidistant from the truth: average weekly wage of the war worker in 1945 was (1) \$37, (2) \$57 (p. 42). According to Hammond, \$57 was the positive response, and \$37 the negative response. It could, however, be interpreted differently; someone who chose \$37 might have had a positive attitude toward unions, but believed that union workers were underpaid.

#### Instrument development.

Developing the items. First, an exhaustive literature review was undertaken in order to gain an understanding of issues, areas of concern, and barriers relevant to workplace implementation and function of the ADA's employment provisions. The second step involved developing the individual items for the scale. General knowledge items were culled from the ADA Technical Assistance Manual. Since, however, terms (reasonable accommodation, undue economic hardship, for instance) in the ADA are applied individually, and since there is a lack of research on topics such as cost of accommodations, choosing right and wrong answers to truth determinable factual obscure questions was particularly

difficult. The answer was to go to published ADA employment discrimination legal cases, wherein questions could be developed from case findings. These cases provided correct responses, and an incorrect answer was added. Unless respondents read the cases, they would not know the correct answer. These items represented the items of minutiae discussed by Hammond (1948). Only cases that had final findings, which were not appealed to higher courts, were utilized. The original 50-item instrument is included in Appendix A.

Instrument revision. Step three occurred once the initial 50 items were been developed. This step involved establishment of construct validity for the instrument (hypothesis 2). Four professors who, "understand the study's purpose, including the hypotheses to be tested" (Dillman, 1978, p. 156), were asked to review the scale. They were provided with copies of the research proposal, including the operational definition of the construct to be tested. The task for this group was to evaluate the questionnaire in terms of whether the questions related to the proposal's aim, and to the operational definition; whether it accomplished the study objectives. The judges, all from Michigan State University, were: (a) Dr. Michael Leahy, Professor, Rehabilitation Counselor Education; (b) Dr. Karen Roberts, Professor, Labor and Industrial Relations; (c) Dr. Irvin Lehmann, Professor, Measurement and

Quantitative Methods; and (d) Dr. William Mehrens, Professor, Measurement and Quantitative Methods. It was requested that the feedback include comments on appropriateness of items given the operational definition of the variable of interest. The judges were asked to assess whether the ADA-IS is a measure of error in perception and recall of attitude toward the ADA's employment provisions.

Overall, the judges noted that the instrument was, "interesting." Dr. Lehmann and Dr. Roberts offered extensive advice about reconstructing questions. Wording was added or changed from the original instrument to the revised instrument. A sentence was added to the instructions, to reflect the fact that there were legally determined correct responses to each item. The word ulcer (Case 4) was changed to sore at Dr. Roberts' suggestion. Questions 8, 18, 22, 24, and 35 were reworded so that they would be congruent with other questions. Prior to the rewording, these items called for making choices between two possible responses. After rewording, the majority of the items asked respondents to choose between yes and no, or agree or disagree responses, rather than making choices between two possible responses. Dr. Mehrens was cautious about the ADA-IS's ability to measure attitude, primarily because of the difficulty of measuring attitude.

Pilot testing with students. The ADA-IS was also disseminated to 36 masters level students enrolled in an introduction to a course in which the researcher was a teaching assistant. The students were asked to: (a) assess the cases and questions for understandability and readability; (b) note the time it took to read the entire instrument; and (c) write any general comments they thought would be helpful. On average it took them 22 minutes to read the entire instrument. Thirty-seven (90%) wrote that the ADA-IS was easy to read and interesting. Other comments were minor editorial ones, such as where a comma might be helpful. After all the changes were made (those of the judges and the students), a final version of the ADA-IS was completed, and is presented in Appendix B.

The ADA Employment Inventory (ADA-EI).

The second instrument utilized in this study was the ADA-EI, in order to examine the criterion-related construct validity of the ADA-IS. The ADA-EI is a direct measure of attitudes toward the ADA employment provisions; a 32 item Likert-scale (ranging from 1=strong agreement to 6=strong disagreement) that attempted to measure attitude toward six areas of the ADA employment provisions: (a) potential cost; (b) its fairness to employers; (c) the practicality of compliance expectations; (d) the level of ambiguity and vagueness of the provisions; (e) attitude toward the legislation's effectiveness; and (f) attitude toward



government intervention in the marketplace (Moore & Crimando, 1995). The null hypothesis was that there would be no relationship between the two instruments. Given, however, that both instruments purported to measure attitudes toward the ADA, it was assumed that there might be significant correlations between the two. Because the instruments were designed to measure different constructs, this assumption was made with some caution.

#### Field test participants

Step five involved field-testing the revised instrument. The purpose of the field test was to select appropriate items, establish internal consistency (hypothesis 3), and to test hypothesis 1, statistically significant mean differences among groups with known differences (Dillman, 1978). Since the error-choice method is based on between group differences (specifically on systematic error or uncontrolled variance), this study included a purposive sample.

It was expected that persons with disabilities would score at the high end (Moore & Crimando, 1995), and that rehabilitation counseling masters students, who were studying to become counselors and advocates for individuals with disabilities, would score on the positive side, although lower than the group of individuals who have disabilities (Huitt & Elston, 1991; Martin, W. E., et al., 1982; Moore, 1993; Moore & Crimando, 1995). It was further

hypothesized that small business owners/employers would score lower than the other two groups (Moore, 1993; Moore & Crimando, 1995).

Developing the samples. Convenience samples, drawn from nonrandom, accessible populations were used. The goal was to obtain a sample of fifty individuals from each group. The original pools from which samples were drawn were comprised of masters level rehabilitation counselor students (n=216), individuals with disabilities (n=347), and small business members of the local regional Chamber of Commerce (n=642). The overriding rationale for choosing these three groups was four-fold: (a) they are all affected stakeholders; (b) they were from available accessible populations for the researcher; (c) they resembled the groups used in Moore and Crimando's (1995) study of the ADA-EI, the instrument which is used as a criterion referent for construct validity; and (d) the three groups were expected to have differing attitudes.

Masters level rehabilitation counseling students served as proxies for rehabilitation counselors in the present study because of cost and accessibility issues. The rationale for including the students was the rehabilitation counselors have been shown to hold higher than average attitude toward disability. The rationale for including college students with disabilities was based on the assumption that they would have highly positive attitudes

based upon their own membership in the disability community, and their self-interest. At the same time there was no reason to expect they would be highly knowledgeable about the specific content of the ADA's employment provisions. A further rationale for including these students is the researcher's belief that individuals with disabilities should be included in studies pertaining to them. The rationale for including small business owners/employers was that literature pertaining to this group indicated they may be opposed to ADA employment provisions, because they may believe that costs involved may be detrimental to their economic success (Altman, 1991; Hodge & Crampton, 1993; McKee, 1990; Newman & Dinwoodie, 1994).

### Recruitment

All participants were chosen from convenience samples based on accessibility and cost. Demographic information provided below indicate that the samples cannot be regarded as representative of their general populations.

#### Masters level rehabilitation counseling students.

Participants were recruited from CORE accredited rehabilitation counselor education programs in two ways; by personal invitation of the researcher, and/or by letters of invitation, or by request of professors at other universities (Appendix D). The researcher attended rehabilitation counselor education classes at Michigan State University, and presented an overview of the research to the

students. Each student present received a letter of invitation (Appendix E). The same invitation was mailed to those students who were enrolled in the program, but were absent from, or not registered for the classes.

Invitations were mailed to students at Wayne State University. Invitations were mailed to professors of rehabilitation counseling at the following universities: (a) the Pennsylvania State University; (b) the University of Massachusetts/Boston; (c) the University of Wisconsin-Madison; and (d) the University of Iowa. These professors read the invitations to rehabilitation counseling students. The criterion for inclusion for the masters students was that they were currently enrolled in the rehabilitation counseling program. In all, of the 216 rehabilitation counseling master's students, 57 agreed to participate.

The sample is not representative of all students enrolled in rehabilitation counseling programs nationally. According to J. Patterson (personal communication, July 25, 1997), there are a total of 3,023 students in 83 of 84 CORE accredited masters level rehabilitation counseling programs. Of the total, 547 (19%) are males. The present study included a total of 57 students, nine (16%) of whom were males. Of the 83 CORE programs, 2,449 (81%) are females. The present study included 48 (84%) females. Of the total national population, 649 (21%) are noncaucasian; the study included two (3%) people of noncaucasian backgrounds. This

indicated that gender was representative of the population of interest, whereas ethnic background was not representative of the population.

Students with disabilities. Students who were registered with disability services at Michigan State University received mailed invitations (Appendix F). The criterion for inclusion for students with disabilities was that they were registered with the disability services centers. Of 347 students recruited, 62 agreed to participate. There are 589 students registered with the Office for Programs for Handicapper Students at Michigan State University. Of those, 242 requested their names not be available for mailings outside the office, thus they were not included in the sample. Of the total population, 299 (51%) are men; five (8%) men were represented in the present study. There are 290 (49%) women in the total population; 57 (92%) were represented in the present study. Of the total population, 96 (16%) are noncaucasian; in the present study, three (5%) were of noncaucasian backgrounds (D. L. Shank, personal communication, July 28, 1997). This sample did not represent the population.

Small business owners/employers. In order to recruit small business owners/employers, the researcher originally planned to attend a meeting of the Lansing (Michigan) Regional Chamber of Commerce and present an overview of the research to members who were present. At the meeting, the

individual owners/employers would each receive a letter of invitation, and invitations would be mailed to absent members. A few days prior to the meeting, the researcher was contacted and informed that the meeting was cancelled.

In view of that, letters of invitation were mailed directly to the pool of participants (Appendix G). The criterion for inclusion of the small business owners/employers was that they currently own or manage companies with fifty or fewer employees (Gade & Toutges, 1983; Newman & Dinwoodie, 1994). Of 643 recruited, 83 agreed to participate.

According to S. E. Michaelson (personal communication, July 25, 1997), there are 2,596 small business members of the Lansing Regional Chamber of Commerce. Of those, 1,187 (71%) are males, and 779 (39%) are females. In the present study, 74 (89%) were males, and nine (11%) were females. Of the total population, 882 (34%) are of noncaucasian backgrounds; in the present study that number was seven (10%). This sample, then, was not representative of the population.

All potential participants received a notice of agreement to participate, which they were asked to return in the mail (Appendix H). A confirmation letter was mailed to each (Appendix I). Each participant receive an informed consent form at the time of the administration (Appendix J).

### Confidentiality

Each letter of invitation was presented directly or individually addressed and mailed. The names and addresses were incorporated into a computerized list. Each name received an identification number, and only the number was used on instruments and other forms that participants completed.

### Procedures

The goal of a field test is to inform the researcher about participants' reactions, and what is right and wrong with the questionnaire (Dillman, 1978). The investigator or a substitute administered the field test. The rationale for the researcher administering the test was to observe nonverbal feedback such as hesitation before answering a question, erasures, and late returns (Dillman, 1978). The ADA-IS was administered to students with disabilities in neutral locations on the university campus, to the rehabilitation counseling students on campus, but outside of regular classes, and small business participants in their places of business. The researcher observed no hesitation, or extensive erasing. Two of the rehabilitation counseling students returned the instrument later than others in their groups; both of these individuals had disabilities that may have affected their ability to keep up with the group. Nine of the students with disabilities returned the instrument later than others in their groups, and this may have been due

to their disabilities. There were no late returns from the small business owners/employers sample.

The process. Each participant received two packets. The first packet included, in order, the informed consent form, the ADA-IS, and a general comments form (Appendix K). The second packet included the ADA Employment Inventory (Appendix L, Appendix M, Appendix N) and a one-question sheet (Appendix O).

The one-question sheet asked participants to respond to the following question: How would you describe your attitude toward the ADA employment provisions? There were seven alternative responses ranging from strongly against it to strongly support it. Participants were asked to choose the one that most reflected their attitude. One rationale for asking this question was to see if there was a correlation between the groups' stated opinions, and differences in mean group scores (Weschler, 1950). Although only a small minority of participants chose to respond, Table 15 presents the findings.

The purpose of the comments form was to gather information from the participants regarding their overall assessment of the instrument. Issues addressed were: (a) understandability of the cases, and how they could be designed to be more understandable; (b) understandability of the questions, which ones needed improvement, and how could they be improved; (c) how difficult the participant found



the questionnaire, and (d) general comments about the ADA Information survey. This assisted the investigator to identify areas that need development. The majority of participants chose not to respond to the general comments sheet.

Participants were told that the ADA-IS was a test of knowledge about the employment provisions of the ADA (Appendix P). When all participants in a group completed the ADA-IS and the comments sheet, they received a short break. The group then reconvened in order to complete the ADA-EI (Moore & Crimando, 1995), which was described by the researcher or other administrator as an opinion survey.

One purpose of administering the Inventory was to investigate the construct-related validity of the ADA-IS by determining criterion-related construct validity. Criterion-related construct validity is often evaluated by determining the correlations between scores on two related tests. Criterion related construct validity then supports construct validity. As discussed, the error variance resulting from social desirability should attenuate the correlation but not wipe it out if both instruments have some validity. If indirect methods do eliminate or decrease the threat of social desirability, what may occur is significant differentiation among groups on the ADA-IS. In previous studies The ADA Employment Inventory had primarily differentiated in levels of agreement or disagreement,

rather than direction of overall attitude. Participants were instructed to complete all questions on the Inventory, and to choose the alternative that most correctly reflects their opinions.

Debriefing session. When all forms were completed, a debriefing session took place. The debriefing session had three purposes: (a) answering participants' questions and concerns; (b) explaining the underlying goals of the research; and (c) providing an ADA resource guide to each of the participants. Members of the dissertation committee were concerned that the instrument might cause some psychological frustration. The concern centered on the fact that some participants would feel they had a strong knowledge of the ADA, and become frustrated by not knowing the answers to the items. Some may have been opposed to the ADA, and have their attitudes/opinions solidified by frustration in attempting to answer questions correctly. Participants were asked about their general reactions to taking the ADA-IS, and whether it triggered any feelings of discomfort (Appendix Q). Debriefers addressed and/or discussed those issues with individual participants.

The debriefing included an explanation of the underlying goals of the research; to develop a method that may help educators and others to understand the degree to which people who are directly affected by the employment provisions of the ADA are familiar with them, and to

understand what people believe to be true when the truth is not easily evident. They were not told that the purpose of the instrument was to measure attitudes. Participant identities were confidential, and their identities were not be linked to the research. They were unaware that their attitudes were being measured, so keeping the true purpose of the questionnaire from the participants should cause them no harm.

Approximately 33% of the rehabilitation masters counseling students expressed concern about their lack of knowledge of the ADA's employment provisions. Two of the students with disabilities expressed anger over their lack of knowledge of the provisions, and many of the students with disabilities spoke about their lack of knowledge of the ADA. Some were apologetic that their lack of knowledge may have affected how they guessed at answers.

No small business owners/employers expressed concerns about the instrument. The majority of small business owners/employers did, however, want to talk about issues they have faced in the workplace pertaining to the ADA's employment provisions. Some were quite frustrated with attempting to comply with the provisions, and felt that employees with disabilities were exploiting the law. Some felt that the law was ambiguous, and that they might find themselves in legal trouble without purposely circumventing the law. Because the researcher did not apply for

permission from the University Committee on Research Involving Human Subjects to record these conversations prior to the testing, they were not included in the study.

### Data analysis

Statistical analyses were computed using the program Statistical Package for the Social Sciences, (SPSS). The first set of data consisted of descriptive statistics, specifically measures of central tendency, dispersion, and correlations. The second set of data consisted of inferential statistics, specifically ANOVAs and t-tests. The third set consisted of reliability coefficients to determine internal consistency of the instrument, and consistency across instruments.

Description of the item types. There were two types of items included in the ADA-IS; general knowledge, and factual obscure. There were 25 items of each type in the instrument, and the total possible composite score was 50. The general knowledge items were included in the instrument in order to determine participants' level of knowledge of the ADA's employment provisions. Each general knowledge item answered correctly received a score of one point, allowing for a maximum total of 25 points for general knowledge items. Though scores on the ADA-IS were computed using two methods, general knowledge items were scored in the same manner in both methods. It was hypothesized that the factual obscure items would measure attitude, and these

25 items were scored differently in the two methods in order to test that hypothesis. A scoring key for both methods is presented in Appendix C.

Scoring method one. Each of the 50 items offered two possible responses, and participants were asked to choose the correct response, or if the correct response was unknown, to choose the response that seemed most correct. General knowledge items were scored as described above; a score of one point if the answer was correct, allowing for a maximum total of 25 points. Each obscure factual item received a score of one point if the response was correct according to the legal case from which it was developed, allowing for a maximum total of 25 points for factual obscure items. The rationale for scoring the instrument in this manner was that it might provide information pertaining to the influence of general knowledge scores on obscure factual scores.

Scoring method two. This method was developed post-hoc, in order to address the issue of whether scoring method 1 might be measuring only knowledge levels. Scoring method 2 involved assigning a score of one to factual obscure item answers that were sympathetic toward the ADA or individuals with disabilities, regardless of whether the answers were or were not correct. Since the factual obscure items served as the attitude measures, this allowed the researcher to examine whether there were patterns of responses indicative

of attitude, even though the form of the ADA-IS had been modified from the original error-choice format. The responses to items 7, 9, 10, 11, 14, 16, 17, 23, 26, 29, 37, 39, 41, and 43 were recoded in the data to reflect a score of one if the answer was sympathetic, and a zero if the answer was not sympathetic. All other factual obscure items were originally written so that a one was given for the correct response, which coincidentally happened to be the sympathetic response. Thus in scoring method 2, all 25 factual obscure items were scored with 1 if they were sympathetic.

### Statistics

Descriptive statistics. Each instrument was coded to indicate whether the individual was a member of group 1 (masters level rehabilitation counseling students), group 2 (individuals with disabilities), or group 3 (small business). Using the two different scoring methods, total and individual group raw composite scores and means were computed. Standard deviations were computed for the entire sample, and for each group. Additionally, means were computed for total and by-group general knowledge scores (method 1 only) and obscure factual scores (methods 1 and 2). The same descriptive statistics were calculated for the ADA-Employment Inventory.

Inferential statistics. Once descriptive statistics were computed and analyzed, inferential statistics were computed to answer the research questions. As is standard in educational research, a .05 level of significance was used. (Fraenkel & Wallen, 1996; Shavelson, 1988).

Research question 1. The first research question addressed mean differences among the groups on the ADA-IS. ANOVAs using both methods were conducted to determine whether there were significant differences among the group means; t-tests for independent means were conducted. The t-tests compared the total mean scores of the ADA-IS, the general knowledge items, and the obscure factual items between groups 1 and 2, groups 1 and 3, and groups 2 and 3. The t-test's p-value determined whether the null hypothesis (no statistically significant difference between the mean scores of the two groups) was accepted or rejected. If  $p < .05$ , the null hypothesis was rejected, and if  $p > .05$ , the null hypothesis was not rejected (Fraenkel & Wallen, 1996; Shavelson, 1988).

Confounding variables: Gender and race. Satcher and Hendren (1991, 1992) found gender, negative attitudes toward disability, contact with persons with disabilities, size and type of occupational setting, and race to be unrelated to acceptance of the ADA. Since the two studies were conducted by the same authors, it was decided that race and gender should be examined in the present study. The structure of

the samples, however, eliminated the possibility of examining these potential confounds, because there were insufficient numbers of minority participants. The sample for rehabilitation counseling students was representative of the population on gender, but not on ethnicity. The sample of students with disabilities, and the sample of small business owners/employers were not representative of their respective populations on gender or ethnicity. Additionally, the study's sample sizes were small, and thus less than adequate to represent their populations.

Confounding variable: Level of ADA knowledge. The level of knowledge of the ADA could influence response choices on an information-based measure such as the ADA-IS, so it required control. The general knowledge items on the ADA-IS provided data concerning the level of knowledge of each participant. Regression analyses were conducted in order to discern whether the obscure factual items for the entire sample and by group contributed significantly to the outcome measure when general knowledge was held constant. Subsequent correlation coefficients for the strength of the relationship between general knowledge and obscure factual items were computed for all participants as well as for each group.

Research question 2. The second question addressed construct and criterion-related construct validity. Construct validity is established based on the input from



expert judges. Criterion-related construct validity was determined by first computing ANOVA for significant group mean differences on the ADA-EI, and then conducting t-tests between the groups. Correlation coefficients were calculated for relationships between the ADA-IS and the ADA-EI for all participants, and by group.

Research question 3. The third research question addressed the issue of instrument reliability. The instrument was administered once to each group. The instrument's reliability was examined with internal consistency methods. The internal consistency coefficient is an index of content homogeneity and item quality (Crocker & Algina, 1986; Fraenkel & Wallen 1996). Methods of internal consistency focus primarily on errors caused by content sampling, (Crocker & Algina, 1986; Fraenkel & Wallen, 1996). Values yielded by these methods are, "functions of the correlation between separately scored parts of a test" (Crocker & Algina, 1986, p. 134). A coefficient of internal consistency provides an estimation of, "how consistently the examinees performed across items or subsets of items on this single test form" (Crocker & Algina, 1986, p. 134).

The method of determining internal consistency was based on item covariance (Crocker & Algina, 1986). The authors suggested employing the Kuder Richardson 20 (KR20) formula. The KR20 is one of several KR approaches. KR20 is

used when the researcher cannot assume all items on the instrument are of equal difficulty (Fraenkel & Wallen, 1996). The KR20 was calculated using SPSS, and yielded coefficient alphas, indices of internal consistency based on positive intercorrelations of all items on the instrument (Crocker & Algina, 1986; Fraenkel & Wallen, 1996). "Alpha is the mean of all possible split-half coefficients" (Crocker & Algina, 1986, p. 142). It is a coefficient of the consistency--item homogeneity and quality--of the whole test, rather than a measure of how examinees will perform on the test over time or over several administrations.

## Chapter 4

### Results

The following data analyses were conducted using SPSS. All alpha levels were set at .05. Because of the small size of the sample groups, and subsequent concerns about the effect of unequal sample sizes on statistical testing, responses of fifty participants from each group were randomly selected out of the total number of participants in each group, so that each sample had 50 participants.

#### Research question 1

Are there significant mean score difference in attitudes toward Title I of the Americans with Disabilities Act among three groups; rehabilitation counseling masters students (Group 1), students with disabilities (Group 2), and small business owners/employers (Group 3), as measured by the ADA-IS?. Descriptive data were computed and results are presented in Table 1.

In order to determine whether mean group differences existed, ANOVAs were conducted using both scoring methods to test the null hypothesis that there were no mean group differences. Results appear in Table 2. Because the p-value was significant, the null hypothesis was rejected, and the alternative hypothesis, that there were statistically significant mean differences among groups, was accepted.

Table 1

Descriptive statistics: ADA-IS

Group	n	Correct (a)		Sympathetic (b)	
		mean	standard deviation	mean	standard deviation
All*	150	27.42	6.17	25.90	7.64
Group 1	50	31.10	5.40	29.86	3.49
Group 2	50	26.82	4.17	27.74	4.99
Group 3	50	24.34	6.73	20.10	9.30

a Correct => correct scoring; scoring method 1

b Sympathetic => sympathetic scoring; scoring method 2

\* All = all participants; Group 1 = Rehabilitation counseling masters students; Group 2 = Students with disabilities; Group 3 = Small business employers/owners

Table 2

ANOVA: ADA-IS

Source		DF	Sum of squares	Mean squares	F ratio	F prob
Between groups	Cor*	2	1169.44	584.70	19.11	.000***
Between groups	Sym**	2	2635.36	1317.80	32.01	.000***
Within groups	Cor	147	4497.10	30.60		
Within groups	Sym	147	6052.14	41.17		
Total	Cor	149	5666.54			
Total	Sym	148	8687.50			

\* Scoring method 1: correct responses

\*\* Scoring method 2: sympathetic responses

\*\*\* p < .0001

Table 3 displays subsequent t-tests conducted to test the null hypothesis of no mean score differences among the individual groups.

Table 3

t-tests: ADA-IS

Groups	DF	Correct t-value	sig	Sympathy t-value	sig
Groups 1,2	98	4.44	.000*	2.46	.016**
Groups 1,3	98	2.79	.000*	6.95	.000*
Groups 2,3	98	2.22	.029**	5.12	.000*
* p < .0001. ** p < .05					

Using both scoring methods, group 1 scored significantly higher than groups 2 and 3; group 2 scored significantly higher than group 3.

Research question 2

Does the ADA-IS have construct and criterion-related construct validity? Construct validity entails understanding whether or not the instrument measures what it is supposed to measure. In this study, the construct of interest was attitude toward Title I of the ADA, defined as cognitive and affective influences that affect the direction of sympathy and behavior toward the attitude object, measured by level of sympathetic response to factual obscure items on the ADA-IS. In order to determine construct validity, the four expert judges reviewed the ADA-IS.

In general, they were concerned about whether the instrument measured attitude, or applied knowledge. The instrument was constructed in a manner that forced participants to choose responses to the factual obscure questions based perception. It was also possible that respondents who had knowledge of the ADA attempted to apply it to the obscure questions. In order to examine that possibility, descriptive statistics for general knowledge and factual obscure items were computed. Table 4 presents the descriptive statistics for general knowledge items.

Table 4

Descriptive statistics: General knowledge

Group	n	Mean		Standard Deviation Correct
		Correct	Sympathetic	
All	150	13.85	NA	4.59
Group 1	50	16.48		3.03
Group 2	50	13.40		3.34
Group 3	50	11.68		5.63

NA: scores were not recoded for scoring method 2, thus were not recomputed

Table 5 presents the results of an ANOVA that tested the null hypothesis that there were no statistically significant mean differences on general knowledge among the three groups. Because the p-value was significant, the null hypothesis was rejected, and the alternative hypothesis that

there were mean differences among the groups, was accepted.

Table 5

ANOVA: General knowledge

Source	DF	Sum of squares	Mean squares	F ratio	F prob
Between groups Cor*	2	591.41	393.53	17.14	.000**
Between groups Sym*		NA			
Within groups Cor	147	2551.77	17.36		
Within groups Sym		NA			
Total Cor	149	3142.77			
Total Sym		NA			

NA: scores were not recomputed for scoring method 2, thus

\* Cor indicates correct; scoring method 1.

Sym indicates sympathetic; scoring method 1. not recomputed.

\*\* p < .0001.

In order to understand the statistical significance of the mean score differences, t-tests were conducted, and are presented in Table 6.

There were significant mean score differences between groups 1 and 2, and between groups 1 and 3; the null hypothesis was rejected, and the alternative hypothesis that there were statistically significant mean differences was accepted. Group 1 scored significantly higher than groups 2 and 3. Since the p-value for groups 2 and 3 was not significant, the null hypothesis that there were no

Table 6

t-tests: General knowledge

Groups	DF	Correct t-value	Sig of t	Sympathetic
Groups 1,2	98	4.83	.000*	NA
Groups 1,3	98	5.31	.000*	
Groups 2,3	98	1.86	.066	

NA: scores were not changed for scoring method 2, thus not recomputed

\*  $p < .0001$

differences between the group means was accepted with caution, because the p-value (.066) was close to significance.

Descriptive statistics for obscure factual items are presented in Table 7. ANOVAs using scoring methods 1 and 2

Table 7

Descriptive statistics: Obscure factual

Group	n	Correct		Sympathetic	
		mean	standard deviation	mean	standard deviation
All	150	12.95	2.78	11.43	4.15
Group 1	50	13.84	3.23	12.60	2.48
Group 2	50	12.76	2.40	13.68	2.89
Group 3	50	12.24	2.45	8.00	4.38



tested the null hypothesis that there were no statistically significant mean differences on obscure factual items among the three groups. The findings are presented in Table 8.

Table 8

ANOVA: Obscure factual

Source	DF	Sum of squares	Mean squares	F ratio	F prob
Between Groups Cor*	2	1025.45	512.73	35.81	.000**
Between Groups Sym*	2	393.96	196.98	17.31	.000**
Within Groups Cor	147	2104.52	14.32		
Within Groups Sym	147	1061.80			
Total Cor	149	3129.97			
Total Sym	149	1455.76			

\* Cor indicates correct; scoring method 1

Sym indicates sympathetic; scoring method 2

\*\* p < .0001

Because the p-values were significant, the null hypothesis was rejected, and the alternative hypothesis that there were mean differences among the groups, was accepted. In order to understand the statistical significance of the mean score differences, t-tests were conducted, and are presented in Table 9.

Using scoring method 1 the p-value for groups 1 and 2 was close to significance, so they may or may not have scored significantly different. The p-value for groups 2 and 3 was not significant; the null hypothesis that there

Table 9

t-tests: Obscure factual

Groups	DF	Correct t-value	sig	Sympathetic t-value	sig
Groups 1,2	98	1.90	.060	-2.00	.048*
Groups 1,3	98	2.79	.006**	6.46	.000***
Groups 2,3	98	1.07	.286	7.65	.000***
* p < .05.    ** p < .01.    *** p < .0001.					

were no mean difference between these groups was accepted. Because the p-value for groups 1 and 3 was significant, the null hypothesis was rejected, and the alternative hypothesis, that there were significant mean differences between these groups was accepted. Group 1 scored significantly higher than group 3 when scored based on correct responses. When scored based on sympathetic responses all p-values were significant; group 2 scored significantly higher than groups 1 and 3, and group 1 scored significantly higher than group 3.

In order to test whether there were differences among the three groups on obscure factual items when general knowledge items were held constant, regression analyses were conducted with both scoring methods. Table 10 shows the results of the regressions. The null hypothesis was that there were no significant differences among the three groups on obscure factual item scores when general knowledge items were included in the regressions. Under scoring method 1,

Table 10

Regression analyses

Variable	Beta	Correct t	Sympathetic Beta	t
General	.8241	22.68*	.8467	17.91*
FactObsG1	.2080	4.97*	.0321	0.58
FactObsG2	.2204	4.97*	.1203	2.42**
Constant		4.89***		17.77*

\* p < .0001. \*\* p < .01. \*\*\* p < .05.

the null hypothesis that there were no differences among the groups on factual obscure items when general knowledge items were held constant was rejected. The alternative hypothesis that there were differences among the groups on obscure items, was accepted for all groups. Using scoring method 2, the null hypothesis was accepted for groups 2 and 3. The null hypothesis was rejected for group 1; there were significant differences. Subsequent correlation coefficients for strength of the relationship between the two factors were determined. The results are presented in Table 11.

Using scoring method 1, the p-value for group 2 was not significant, so the null hypothesis was accepted; there was no relationship between general knowledge and factual obscure. Because the p-values for group 1 and group 3 were statistically significant, the null hypothesis was rejected, and the alternative hypothesis that there were relationships

Table 11

Correlations: General knowledge and obscure factual

Group	DF	Correct		Sympathetic	
		r-value	sig	r-value	sig
All	148	.113	.092	.538	.000*
Group 1	48	.397	.004**	.222	.059
Group 2	48	-.005	.997	.749	.037***
Group 3	48	.276	.046***	.019	.543

\*  $p < .0001$ . \*\*  $p < .01$ . \*\*\*  $p < .05$ .

between general knowledge and factual obscure items for these two groups was accepted. Using scoring method two, the correlation between general knowledge and factual obscure items for groups 1 and 3 became insignificant, and the null hypothesis was accepted. The correlation for group 2 was significant, so the alternative hypothesis that there was a relationship between general knowledge and factual obscure items was accepted.

Criterion-related construct validity of the ADA-IS was tested by comparison to data obtained in the ADA-EI. First, descriptive statistics for the ADA-EI were computed, and are presented in Table 12.

A one-way analysis of variance was conducted in order to ascertain whether there were mean score differences among the three groups on the ADA-EI. The null hypothesis that there were no mean score differences among the groups, was

Table 12

Descriptive statistics: ADA-EI

Group	n	mean	Standard Deviation
All	150	112.73	14.73
Group 1	50	114.02	13.98
Group 2	50	110.10	14.87
Group 3	50	113.96	15.27

tested. The outcome is presented in Table 13.

Table 13

ANOVA: ADA-EI

Source	DF	Sum of squares	Mean squares	F ratio	F prob
Between Groups	2	489.81	244.91	1.13	.3255
Within Groups	147	31397.38	216.53		
Total	149	31887.19			

Because the p-value was not significant, the null hypothesis was accepted; there were no differences among the three groups on the ADA-EI.

Finally, in order to determine whether there was a relationship between scores on the ADA-IS and the ADA-EI, correlations were computed using both scoring methods, and are displayed in Table 14. The null hypothesis was that

there was no relationship between the two instruments by group.

Table 14

Correlations: ADA-IS and ADA-EI

Group	DF	Correct		Sympathetic	
		r-value	sig	r-value	sig
All	148	.0095	.099	.052	.522
Group 1	48	-.1213	.401	-.1839	.771
Group 2	48	.0625	.673	.2229	.494
Group 3	48	.0796	.583	.0659	.691

Since the p-values for all participants, group 1, group 2, and group 3, were not significant in both scoring methods, the null hypothesis was accepted.

One other test that was conducted was a comparison of response to the Likert-scale attitude question with the ADA-IS scores. One hundred thirteen respondents chose not to respond to that question. Of 57 rehabilitation counseling masters students 19 (33%) responded; of 62 students with disabilities six (10%) responded; and of 83 small business owners/employers 12 (14%) responded. Table 15 presents the findings of those who did respond.

These findings indicate that students with disabilities were most favorable, followed by rehabilitation counseling masters students, and then small business owners/employers.

Table 15

Attitude opinion

Group	n	mean	Interpretation
Group 1	19	6.5	favorable-strongly favorable
Group 2	6	7.0	strongly favorable
Group 3	12	4.7	somewhat favorable

This is consistent with the findings on the scoring of obscure factual items in method 2, but must be interpreted with caution given the small number of participants from each group who responded to the question.

Research question 3

Is the ADA-IS a reliable instrument? The research hypothesis was that the ADA-IS has internal consistency reliability. In order to address this question, alpha coefficients for internal consistency were computed for the ADA-IS using both scoring methods, and are presented in table 16.

Results for these analyses indicated that using scoring method 1, internal consistency was strong for all (combined) participants, and for groups 1 and 3. There was minimal (weak) internal consistency for group 2. Using scoring method 2, the internal consistency for all participants (combined) decreased to moderate, as did the internal consistency for groups 1 and 3. The internal consistency

Table 16

Alpha coefficients: ADA-IS

Group	n	alpha	
		Correct	Sympathetic
All	148	.8545	.6778
Group 1	48	.7292	.5887
Group 2	48	.3309	.7499
Group 3	48	.9038	.6976

for group 2 increased from weak to strong.



## Chapter 5

### Discussion

#### Introduction

The purpose of this study was to generate and field test a technique that may be used in the future to investigate the relationship between the impact of workplace attitudes toward the employment provisions of the ADA, and inclusion of individuals with disabilities in the workplace. Attitude was defined as cognitive and affective influences that affect the direction of sympathy and behavior toward the attitude object, measured by level of sympathetic response to factual obscure items on the ADA-IS.

This study adapted an indirect measurement method, the error-choice technique, which led to the development of the ADA-Information Survey. It was hypothesized that the ADA-IS would distinguish among three groups on attitude toward Title I of the ADA, and that it may reduce the response set error inherent in direct measures of attitude. It was further hypothesized that the ADA-IS would exhibit construct reliability, and internal consistency. Caution must be taken when interpreting the following outcomes. Given that the ADA-IS was an indirect measure, may also have tapped issues other than attitude (as it was defined) toward the ADA and disability.

### Research question 1

Issue under investigation. The first research question addressed the issue of distinguishing significant difference among three stakeholder groups that are directly affected by the ADA employment provisions: (a) rehabilitation counseling masters students, (group 1); (b) students with disabilities, (group 2); and (c) small business employers and/or owners (group 3). The overall means for the ADA-IS (using both scoring methods) were highest for group 1, rehabilitation counseling masters students. Group 2, students with disabilities, scored significantly lower than group 1, and significantly higher than group 3.

It was hypothesized in the study that individuals with disabilities would score highest, rehabilitation counselors would score lower than individuals with disabilities, and small business owners/employers would score lowest. Although the rehabilitation counseling students scored highest on the overall instrument, students with disabilities scored highest on the attitude measure (factual obscure items, scoring method 2).

### Research question 2

Issues under investigation. The second research question addressed the issue of validity of the ADA-IS; specifically it addressed construct and criterion-related construct validity. The major concern was whether the ADA-IS was a test of knowledge or attitude. Several tests were

conducted in order to ascertain whether general knowledge influenced responses to factual obscure items. Dr. Roberts was concerned about individuals' attitudes toward public policy in general. This was a concern, and although previous studies using the ADA-EI addressed it in a subscale of the ADA-EI, the researcher was unable to do that in the current study.

The second research question also addressed criterion-related construct validity of the ADA-IS. This was determined by calculating correlation coefficients between the ADA-IS and the ADA-EI by group.

General knowledge items. There was some differentiation among groups on general knowledge items; group 1 scored significantly higher than did groups 2 and 3. There were no significant differences between groups 2 and 3.

Factual obscure items. Scoring method 1 revealed no significant mean differences between groups 1 and 2 and between groups 2 and 3 on the factual obscure items. This statement must be qualified, however, because the p-value for groups 1 and 2 was .06, which was close to significance. There may or may not have been differences between the two groups. There were significant differences between groups 1 and 3.

Attitude as it was defined in this study, was measured using scoring method 2 on the factual obscure items.

Results indicated that the ADA-IS was able to discern significant differences on level of attitude as it was defined in this study. Scoring method 2 indicated significant differences among all groups on factual obscure items, with groups falling in the predicted order. Group 2 scored significantly higher than groups 1 and 3, and group 1 scored significantly higher than group 3. Despite achieving statistical significance the actual score differences between groups 1 and 2 was 1.08 points, thus the practical significance of the difference is open to question.

Rehabilitation counseling masters students retained a higher overall score than did the other two groups on the overall instrument, even though they scored lower on factual obscure items than did students with disabilities using scoring method 2, because they scored higher on general knowledge items. Other confounding variables such as perceived cost and feelings about government regulation also may have influenced the scores. Further studies will be needed to clarify these questions.

Regression analyses. A regression analysis using scoring method 1 determined that factual obscure items contributed to the outcome measure (total score on the ADA-IS) for all groups when general knowledge was held constant. Using scoring method 2, obscure factual items contributed to the total ADA-IS score when general knowledge was held constant for groups 2 and 3, but not for group 1.

Correlations: General knowledge and factual obscure items. Using scoring method 1, correlations for groups 1 and 3 were positive and significant, while correlation for group 2 was insignificant. Using scoring method two, correlations for groups 1 and 3 were insignificant, while the correlation for group 2 was significant. This could imply that groups 1 and 3 attempted to apply knowledge to the factual obscure items, and that group two may have responded to both general knowledge and factual obscure items in a sympathetic manner.

Correlations: ADA-IS and ADA-EI. No significant relationships were found to exist among the three groups on the two instruments using both scoring methods.

The standard deviations for the group means on obscure factual items changed from scoring method 1 to 2; group 1 decreased 23%, group 2 increased 21%, and group 3 increased 79%. In real terms the standard deviations for groups 1 and 2 changed less than one point each, (group 1 = 0.15, and group 2 = 0.49), whereas group 3 changed by 1.93 points. One could infer method 2 elicited a more diverse attitudinal perspective on the part of employers with some being fairly sympathetic and some definitely not sympathetic.

Results of the regression analysis using scoring method 2 for group 1 may have indicated that they attempted to apply knowledge to the obscure factual items. Results of the regression analysis using scoring method 2 on group 2

simply indicated that they responded differently to knowledge and factual obscure items. Correlation coefficients between general knowledge and factual obscure items using the two scoring methods indicate that in scoring methods 1 and 2, groups 1 and 3 may have attempted to apply knowledge to obscure factual items, while group 2 may responded sympathetically to both types of items.

These tests seemed to indicate that the ADA-IS may have construct validity, given the operational definition of attitude in this study. The correlation coefficients between the ADA-IS and the ADA-EI seemed to indicate that there was no relationship between the two instruments by group. Since the ADA-EI is a direct measure, this finding may be due to differences in response sets between direct and indirect methods. A caveat must be made, because as has been stated previously in the study, the ADA-IS may have measured constructs other than attitude as it was defined in this study.

### Research question 3.

Issue under investigation. The third research question addressed the issue of reliability of the ADA-IS. This was addressed by computing alpha for internal consistency of the instrument.

Using scoring method one, the alpha coefficients supported the internal consistency of the instrument, with one exception. The alpha coefficient for group 2 indicated

weak internal consistency. When, however, scoring method two was employed, the alpha coefficients for group 2 implied strong internal consistency. The internal consistency coefficient for groups 1 and 3 decreased from strong in scoring method 1, to moderate in method 2.

Internal consistency measures are indicative of the degree to which items in an instrument are homogeneous. In scoring method 1 there was item homogeneity for groups 1 and 3, while in scoring method 2 there was greater item homogeneity for group 2. One of two inferences could be made from this data. It could be inferred that the ADA-IS does not have internal consistency as a measure of knowledge for group 2, and does not have internal consistency for a measure of attitudes for groups 1 and 3. In that case, the ADA-IS was not an appropriate instrument for measuring attitudes.

It could also be inferred that the instrument had efficacy for both types of measures. It could be that changes in significance of the alphas from scoring method 1 to scoring method 2 indicated guessing on the part of group 2 members in scoring method 1, and guessing on the part of groups 1 and 3 in scoring method 2. Guessing could affect the degree to which the items were homogeneous under each condition for each group. In this scenario the ADA was an appropriate instrument for measuring attitudes.

Unexpected findings in the study

The ADA-IS as an educational tool. The researcher's primary interest in developing the ADA-IS was to determine whether attitudinal differences could be discerned among groups of individuals who were expected to have differing attitudes toward the ADA employment provisions using an indirect method of measurement. The general knowledge items were placed in the instrument for two reasons; first, to minimize participant deception, and second to establish whether or not there was a relationship between knowledge and attitude. These items were also placed into the instrument to determine to what degree the ADA-IS was measuring knowledge versus measuring attitude.

One surprising issue that surfaced during the testing phase was that the ADA-IS may serve as a basis for education. The researcher was contacted by two of the professors at other universities who administered the testing. Both professors stated that the rehabilitation counseling students who participated thought the cases used in the instrument were quite interesting and perplexing, and that they wanted more training in areas of the ADA that would help them have a better understanding of the employment provisions, and to help them understand what might cause problems or legal conflicts in the workplace. The researcher was asked to consider building an educational module for rehabilitation counseling students based on the



instrument.

Lack of differentiation. Another unexpected finding was the potential lack of significant differences between students with disabilities and small business owners/employers on general knowledge items. The researcher had assumed that small business owners/employers would score significantly higher than students with disabilities on those items for two reasons. The first rationale behind the assumption was that those employers would have knowledge of the law, since they are mandated by law to adhere to the law's mandates. The second reason for the assumption was that students with disabilities in college are not yet in the full-time workforce, and thus may not yet have the extent of knowledge that employers would have. Future projects should seek to clarify the relative knowledge levels of these groups and the reasons why employers may be less knowledgeable than expected.

#### General discussion

Attitude as it was defined in this study may or may not have been measured by the ADA-IS, using scoring method 2. The findings demonstrated statistically significant differences among groups on the outcome measure, but minor raw score group differences call the practical significance into question. Whether the confounds discussed earlier were at play in the respondents' answer choices and thus affected the outcomes is also a question. The ADA-IS appeared to

have the potential to be a valid measure; it distinguished significant differences in level of attitude among the three participant groups when a direct attitude measure, the ADA-EI, failed to do so. Evidence also supported the possible efficacy of indirect methods; the ADA-IS was able to distinguish among the three groups on level of attitude as measured in scoring method 2, while the ADA-EI was unable to do so. The ADA-IS may or may not have internal consistency.

Indirect measures of attitude. Given the findings of this study, it appeared to be worthwhile to develop an indirect measures of attitude. The adaptation of the error-choice technique used in this study offered distinctions among groups, while the direct instrument did not. This supported the efficaciousness of the error-choice technique in measuring attitudes. It further supported the notion that attitude was being measured without participants' knowledge, and was able to discern significant distinctions among attitudes of the participant groups. This supported the notion that minimized response set error may yield valid results. Again, however, it must be emphasized that the use of indirect methods should be with caution, since the inferential leap from the overt content of the instrument to what the researcher infers based on theory or belief may contaminate results.

Limitations of the study

Defining attitude. Given myriad constructional and operational definitions of attitude, any attempt to measure them is limiting. Although testing indicated that the ADA-IS measured attitude as it was defined in the study, (by using scoring method 2), the definition itself is limiting. Even though the ADA-IS measured attitude as it was defined in this study, it did so only in a very abstract sense, and should not be the only measure used to discern attitudes. It may be a useful compliment to the ADA-EI, which distinguishes subscales of attitudes, many of which are pertinent to the ADA. In attempting to determine attitudes toward the ADA's employment provisions and inclusion of individuals in the workplace, it might be helpful to employ both the ADA-IS and the ADA-EI, since they both measure attitudes, but with different operational definitions of attitude, and thus different foci on the elements that influence attitude and behavior.

Indirect methods. As has been previously stated, indirect methods require researchers to make indirect inferences about a topic based on information gathered that is purported by the researcher to the participants to concern a different topic. Drawing such indirect inferences may contaminate the true findings.

Possible confounds. The question still stands as to whether the ADA-IS measured attitude or applied knowledge. Another question that makes it important to be cautious about the study's findings, is what attitudes the instrument measured; attitudes toward disability, toward government intervention in the marketplace, or toward something that has yet to be identified in research efforts. These possible confounds may have affected results on the ADA-IS.

Test administration. The researcher or a representative conducted the testing. In the cases of students with disabilities and small business owners/employers, the testing often took place on a one-on-one basis between the administrator and the participant. This method may have failed to eliminate social desirability, since people may have thought the administrator would look at the responses when the testing was finished.

Sampling and generalizability. All participants were volunteers, and thus a bias based on self-selection may have been present in the investigation. It could have been that individuals chose to participate because they are interested in knowing more about the ADA, or are concerned about the law. Those who chose not to participate may have a different opinion of the law, and thus may have yielded different results. Rehabilitation counseling students from Michigan State University may have participated because of personal acquaintance with the researcher. The Michigan

State rehabilitation students constituted the largest group of rehabilitation students in the study. Furthermore, the three samples were drawn from nonrandom accessible populations, and the sample groups were not representative of their populations. This limits generalization of the study's findings beyond the sample used in the study.

A second limitation of the sample was its size. One-hundred-fifty participants were utilized in this sample, and were broken into groups of fifty. Statistical testing on this small sample size may affect the power of the analyses, and thus may be somewhat imprecise. Future studies should include larger samples.

Evolution of the case law. The items in the ADA-IS may or may not have the same correct response in the future. The case law is evolving, and correct general knowledge item response may change as they are debated in the legal arena. Thus, this is an emerging instrument, and in order to keep it relevant, case law will have to be followed closely.

#### Implications and recommendations for the rehabilitation profession

Research. This study should be replicated, in order to further investigate the efficacy of the error-choice method to distinguish among groups, and to determine if the inferred attitudes were directly related to behavior that indicates inclusion of individuals with disabilities in the

workplace. Although there were significant differences among the three groups on the factual obscure items, the actual scores were quite close. Antonak and Livneh (1995b) and Hammond (1948) suggested that in constructing an error-choice instrument, there should be twice as many obscure items as general knowledge questions. Another 25 obscure items might be added to the instrument, to determine whether that widens the actual score differences.

The instrument might be improved by re-incorporating the two types of items that were left out for this study; truth determinable and controversial, and truth indeterminable and controversial. Adding these two types of items may increase the possibility of measuring attitude. The instrument may also profit from reverting back to the original method of developing responses for the items; offering only incorrect responses, and forcing respondents to choose between them. If one response is erroneous in a pro-ADA/disability manner, and one is erroneous in a anti-ADA/disability manner, these responses may offer more clear distinctions among the groups. A limitation of offering only erroneous responses is that it would require the researcher to choose hypothetical neutral points, and researcher bias may enter the development process.

Replication should also address validity, internal consistency, and reliability of the ADA-IS. Developing items that would set up subscales to address possible

confounds such as attitude toward government regulation, toward civil rights legislation, and toward perceived cost of inclusion and possible legal problems might help to discern what attitudes are actually being measured.

The nonrandom, accessible, volunteer samples in this study were not representative of the populations from which they were drawn. A randomized representative sample would allow for wider generalization than was possible in the present study.

It may have been that the ADA-EI failed to distinguish among the three groups because in this study it was analyzed as one composite scale, whereas in previous studies it was scored as six independent subscales. Because the researcher was unable to obtain a scoring key for the six subscales, the ADA-EI was used as a global measure of attitude, rather than as a factorial measure. Future research would be strengthened by measuring these subscales.

What counts is behavior, and future research may benefit from applying the ADA-IS and ADA-EI to individuals in two types of work sites; one in which there is a high percentage of inclusion or return to work of workers with disabilities, and one in which there is a low percentage of inclusion or return to work of workers with disabilities. A comparison could be made between the two sites in terms of the level of attitude toward the ADA employment provisions as measured by the ADA-IS and the ADA-EI. If it is

determined that the worksite with the low percentage of inclusion and return to work rates for individuals with disabilities also exhibits low scores on the instruments, then attitude toward disability and/or the ADA employment provisions may play a part in the lack of inclusion and/or return to work. This type of applied research might be beneficial in helping to develop interventions that might improve attitudes and subsequently inclusion and return to work.

It would also be helpful to conduct research concerning the level of understanding of the ADA employment provisions for rehabilitation students and college students with disabilities. Research should be conducted to modify the ADA-IS for different environments. For instance, questions may be added or changed in order to address specific issues in unionized work settings, in small businesses, in government service, and other types of employment settings. This will enable researchers to apply an analysis of the relationship between attitude and inclusion in unique settings.

Research concerning the types of legal cases tried under the employment provisions of the ADA may helpful to both practitioners and students. DeJong and Batavia (1990) stated that 80% of the cases pertain to individuals who are already employed. Of the three hundred cases examined for developing the ADA-IS, none addressed entry into employment.



It could be that those cases were simply missed, or there may be some influences that affect filing cases when an individual feels he or she has been discriminated against in hiring. Research may reveal information that can help in discerning the existence and intensity of those influence, and help practitioners understand the issues that are tried under law may. This may enable them to identify when those issues and conflicts begin to arise, and resolve the situation prior to court battle.

Research to identify the attitudes of students with disabilities toward the employment provisions of the ADA may be limiting due to their age group. Students who were in their first year of college today (1997) were in junior high school and high school when the law was passed. Including a group of adults with disabilities, who are aware of the ADA and its prohibitions in a future study may be appropriate.

Practice. Since their scores on the on general knowledge items suggest that rehabilitation counseling masters students have the highest level of knowledge about the law, it is incumbent upon rehabilitation and disability professionals to educate and inform individuals with disabilities and small business owners/employers about the provisions, mandates, and protections of the ADA's employment provisions. Rehabilitation counselors can help others resolve ambiguities, and assist all stakeholders to avoid legal challenges. Since successful implementation of

social policy aimed at changing behavior should be aimed at small groups and small behavioral changes, it might be beneficial for rehabilitation counselors to work with small groups of individuals and organizations, in order to help them understand the law, and change behaviors.

Education. Given that these three groups are directly affected by the ADA, it was important to understand why these differences existed, and whether they may affect inclusion in the workplace. Today's rehabilitation counseling students are being educated in programs in which the ADA is a topic of study, thus it was not surprising that they held the highest level of knowledge of the three groups. It was not surprising that students with disabilities had the highest level of sympathy, since they are personally affected by disability, and thus likely to be most sympathetic toward disability-related issues. That rehabilitation counseling masters students held lower levels of sympathy than did students with disabilities, and higher levels of sympathy than small business owners/employers also seems logical. Certainly they are advocates and care about individuals with disabilities, and the ADA is an important tool in their attempts to help individuals with disabilities obtain and maintain employment. It was not surprising that small business owners and employers held the lowest level of attitude, since the literature supported the notion that they may be opposed or feel ambiguous about the ADA due to

legal and cost issues.

The researcher administered the research packets to two of the university groups, as well as to all students with disabilities and small business owners/employers. Within that framework, the rehabilitation counseling students took on average 20 minutes longer to respond to the ADA-IS than did the other two groups. On item 4 of the general comments form, participants were asked to offer general comments about the ADA Information Survey. Forty-two (84%) of the rehabilitation counseling students responded with statements pertaining to their lack of knowledge about the ADA. Although they scored significantly higher than the other two groups did on the overall instrument, many were stymied by the cases, and felt unconfident about their level of knowledge. Of the students with disabilities, forty-one (82%) noted similar comments, as did 39 (78%) of the small business owners/employers.

No research could be located to address the level of knowledge of the ADA employment provisions of rehabilitation students and college students with disabilities. There is research that addresses knowledge of the ADA employment provisions for small business employers/owners. Brown (1990) stated that employing the most qualified person, and modifying the job in order to accommodate the person, is contradictory. Jay (1990) argued that the act is vague, but that the vagueness is necessary to garner political support.

McKee (1990) claimed that the vague definition of terms such as reasonable accommodation leaves businesses, "hanging in the wind" (p. 24). Seligman (1992) implied that congress was more interested in patting itself on the back than on defining the fine terms of the bill.

Ownership grants property rights to the owner, and that includes the ability to set rules and regulations. Ownership also implies responsibility for enforcing those rules and regulations (Stevens, 1993). The federal government owns the Americans with Disabilities Act; it sets and enforces the rules of the laws. If there is a feeling of ambiguity about the regulations, transaction and enforcement costs can be high. Transaction costs are the costs of doing business (Stevens, 1993). Because employers feel that there is ambiguity and confusion in the rules of Title I of the ADA, they may expend much time, energy, and money trying to comply. This can influence attitudes toward the legislation. Mazmanian and Sabatier (1983) stated that the target groups for behavior change must be small and identifiable, and that the behavior change must be minor, in order for social public policy to be effectively implemented.

Given all of this, pre- and in-service education for rehabilitation counselors might include examination of ADA legal cases as well as other materials that will help them to not only understand the tenets of the law, but learn how

it is applied, and how to apply it.

Policy. Mazmanian and Sabatier (1983), stated, "Civil rights measures have been much less successful in dealing with widespread problems such as housing discrimination and de facto school segregation" (p. 24). Since it is still in the implementation stage, we do not yet know the long-term impact of the ADA. This law mandates national change in a national population, which is contrary to those conditions under which public policy tends to be successfully implemented. One of the issues that might be addressed in the future is how to design and implement policy that is tractable. One question that policy analysts and researchers have is whether the government can fix a problem that the market cannot seem to fix. Given that civil rights legislation aimed at women and ethnic minority groups has yet to realize its goals, the government may set the example in changing behavior, but it may not be able to force national change. Policy that supports individual and organizational incentives at a micro level may be worth pursuing.

Policy goals should also be aimed at understanding whether socially stigmatizing attitudes toward marginalized groups of people are the primary source of barriers to inclusion of those people in the workforce. It may be that employing certain people with disabilities could be quite costly to employers; it could be that employers resist

legislative compliance because they feel they are being punished, when in fact they would be willing to hire those workers who have the best qualifications for the position, regardless of physical and/or mental functional limitations. Many researchers, educators, advocates, politicians, and individuals with disabilities have made the assumption that it is attitude toward the individuals that warrant the barriers; this assumption is a scientifically unsubstantiated one.

### Conclusion

The ADA-IS was an initial attempt to develop an indirect method of measuring attitudes toward Title I of the Americans with Disabilities Act. The error-choice technique was adapted, and the ADA-IS was developed. A field test was conducted to determine whether it would demonstrate significant differences among three groups with contrasting interest in the ADA. Its effectiveness was compared with that of a direct measure of attitude that may have been constrained by social desirability response set bias. Evidence was mixed regarding the validity and internal consistency of the ADA-IS. The instrument did distinguish among the three participant groups on level of attitude as it was defined in the study, whereas a direct measure, the ADA-EI, did not separate the groups. Due to possible confounding influences, however, the study's findings are open to multiple interpretations. The error-choice

technique may have efficacy in measuring attitudes, and if so, it may be used in the future to determine relationships between attitudes and inclusion of individuals with disabilities in the workplace.

## APPENDIX A



## APPENDIX A

Original version ADA-IS

### **THE AMERICANS WITH DISABILITIES ACT INFORMATION SURVEY**

This questionnaire is an assessment of knowledge about the employment provisions of Title I of the Americans with Disabilities Act. By using your experience and general knowledge you will probably be able to pick the correct answer to many of the questions. Please read each case, then the questions pertaining to it. Select the one alternative that you consider to be the correct answer for each question. Please indicate your response by placing a check mark or letter on the appropriate designated line. THERE IS NO PENALTY FOR GUESSING. There is no time limit for the completion of this test, but you should work as rapidly as you can.

1.       The Americans with Disabilities Act is
  - A.   An Affirmative Action law . . . . .\_\_\_\_\_
  - B.   A Civil Rights law. . . . .\_\_\_\_\_
2.       Under the ADA employment provisions, employers are
  - A.   Required to make special efforts to recruit individuals with disabilities . . . . .\_\_\_\_\_
  - B.   Not required to make special efforts to recruit individuals with disabilities . . . . .\_\_\_\_\_
3.       The most frequent cause of discrimination against individuals with disabilities in the work place stems from
  - A.   Economic rationality based on perceived high costs of employing some individuals with disabilities . . . . .\_\_\_\_\_
  - B.   Employer resentment of federal mandates and regulations which preclude free market enterprise. . . . .\_\_\_\_\_

#### **CASE 1**

- \*       John applied for and was accepted into a police training program.

- \* As part of the training and employment process, John underwent a physical examination. When John informed the examining physician that he has insulin-dependent diabetes he was automatically rejected for the training program.
  - \* The city has a policy of blanket exclusion of all individuals with insulin-dependent diabetes, because city officials believe that the possible complications of diabetes - loss of consciousness, combative and/or irrational behavior - pose a direct threat to the safety of the officer and others.
  - \* Furthermore, the city believes that because of the possible complications, people who are insulin dependent diabetics may be unable to perform the essential functions of the job of police officer.
4. Under the ADA the exclusion policy is
- A. Discriminatory. . . . .\_\_\_\_\_
  - B. Not discriminatory. . . . .\_\_\_\_\_
- \* John decided to fight his rejection. He believes that he does not pose a direct threat to safety, and that with accommodations he will be able to perform the essential functions of the job.
  - \* John was unable to explain to the city, however, why he had had an experience of combative, irrational behavior approximately one year prior to applying for the training program. He stated that it was due to lack of insulin, and that this can be avoided by his requested accommodation.
5. Does John pose a direct threat to himself and others?
- A. Yes . . . . .\_\_\_\_\_
  - B. No. . . . .\_\_\_\_\_
- \* The accommodations he requests are to carry food with him in the patrol car, and to carry a needle with insulin in it on his person.
6. Under the ADA, John's request is
- A. Reasonable. . . . .\_\_\_\_\_
  - B. Not reasonable. . . . .\_\_\_\_\_

**CASE 2**

- \* Cathy was discharged from her job, and claims it was because of her handicap of diabetes and/or because her employer perceived her to be suffering from alcoholism.
- \* She believes diabetes provides her with protection under the ADA as a qualified individual with a disability. She also believes alcoholism is a handicap within the intent of the ADA.
- \* Cathy claims that when her employer perceived her to be intoxicated at work, she was actually suffering from her diabetic condition.
- \* Cathy alleges that her employer stated that
  1. She was intoxicated at work
  2. Intoxication was the reason for her termination
  3. She had been under the influence of alcohol during the past several months.

7. Under the ADA, Cathy's diabetes
  - A. Does not qualify as a protected disability . . . . . \_\_\_\_\_
  - B. Qualifies as a protected disability . . . . . \_\_\_\_\_
8. Under the ADA, an employer may ask whether a job applicant
  - A. Has a contagious disease. . . . . \_\_\_\_\_
  - B. Drinks alcohol, or currently uses illegal drugs . . . . . \_\_\_\_\_
9. In this case, does the employer's perception of alcoholism mean that Cathy was considered to have a disability?
  - A. No. . . . . \_\_\_\_\_
  - B. Yes . . . . . \_\_\_\_\_
10. Is the employer protected under the ADA in this case of diabetes?
  - A. Yes . . . . . \_\_\_\_\_
  - B. No. . . . . \_\_\_\_\_

11. Under the ADA Cathy's dismissal was  
A. Discriminatory. . . . .\_\_\_\_  
B. Not discriminatory. . . . .\_\_\_\_

**CASE 3**

- \* An employment agency representative interviews George for a position of janitorial supervisor.
  - \* Prior to the interview, George told the employment agency representative that he is illiterate, due to a learning disability.
12. Under the ADA, employment agencies are  
A. Considered covered entities . . . . .\_\_\_\_  
B. Not considered covered entities . . . . .\_\_\_\_
- \* The employment agency representative informs George that George will have to take a written employment test for this particular job, because an essential function of the job is reading.
  - \* George argues that this test will screen out all people who are illiterate.
13. Under the ADA, the test is  
A. Not discriminatory. . . . .\_\_\_\_  
B. Discriminatory. . . . .\_\_\_\_

**CASE 4**

- \* Jane worked as a service representative for a telecommunications company.
- \* Her job duties required Jane to spend approximately six hours per day on the phone and at the computer keyboard.
- \* Although her performance and sales statistics were exemplary, Jane had a history of attendance problems at work.
- \* Jane complained to her supervisor that she was experiencing pain in her hands and arms, and was subsequently diagnosed with carpal tunnel syndrome.
- \* Her physician issued restrictions providing that she was to take fifteen minutes off for each hour of repetitive, digital activity.

- \* Three weeks later Jane's physician issued new restrictions prohibiting all typing and keyboard activity.
- \* She then coached other customer service representatives and performed a variety of office and clerical tasks that did not involve typing or keyboard activity.
- \* One month after the new restrictions, Jane was terminated for tardiness. She had been suspended for tardiness once prior to this date.
- \* Two months after her termination, Jane underwent nerve decompression surgery, and was released from physician care with the following work restrictions:  
It would be unwise to start back on typing and keyboard work.
- \* Jane argues that she was wrongfully terminated from her employment, because she was protected by the ADA.
- \* She wanted reinstatement in her former position.
- \* Jane's physician stated that permanent impairment was not anticipated.
- \* Jane requested indefinite unpaid leave in order to continue treatment for her condition.

14. Did Jane's request qualify as a reasonable accommodation?
- A. Yes. . . . . \_\_\_\_\_
- B. No. . . . . \_\_\_\_\_
15. In a pre-employment interview an employer asks an applicant if he is able to meet the company's attendance requirements. The employer has
- A. Not violated ADA . . . . . \_\_\_\_\_
- B. Violated ADA . . . . . \_\_\_\_\_
16. The employer's termination action was
- A. Discriminatory. . . . . \_\_\_\_\_
- B. Not Discriminatory. . . . . \_\_\_\_\_

**CASE 3**

- \* Zoey is paralyzed from the waist down, and is prone to develop pressure ulcers. When the ulcers develop, treatment requires that she stay at home for several weeks.
  - \* Although she generally works in a team environment, Zoey believes that she could work full-time at home while being treated for the pressure ulcers.
  - \* She requested that her employer install a desk-top computer in her home, so that she could work full-time during treatment.
  - \* Her employer believes there is no duty of reasonable accommodation of pressure ulcers, because they are intermittent.
  - \* Her employer informed her that she would not install the computer, that she would only be able to provide Zoey with part time work while she was home, and that Zoey could additionally draw on her sick time leave in order to avoid any loss of income.
17. The employer's decision to refrain from installing a computer in Zoey's home is is
- A. Discriminatory. . . . . \_\_\_\_\_
  - B. Not discriminatory. . . . . \_\_\_\_\_
18. In determining whether the cost of a particular accommodation creates an undue economic hardship, which of the following will be considered?
- A. The net cost of the accommodation being made for the specific individual . . . . . \_\_\_\_\_
  - B. The number and average costs of accommodations the employer is currently making . . . . . \_\_\_\_\_
19. Under the ADA, the pressure ulcers are
- A. Not protected as a disability . . . . . \_\_\_\_\_
  - B. Protected as a disability . . . . . \_\_\_\_\_

20. Regarding the pressure ulcers, Zoey
- A. Is an otherwise qualified individual with a disability. . . . .\_\_\_\_\_
  - B. Is not an otherwise qualified individual with a disability. . . . .\_\_\_\_\_

**CASE 4**

- \* Michael has a young child who requires extensive medical treatment.
- \* Michael determines that the only way he can stay in his job is to request an accommodation of a modified work schedule.

21. Under the ADA the employer
- A. Has no obligation to grant accommodation in this situation. . . . .\_\_\_\_\_
  - B. Is obliged to grant the accommodation, or to propose an alternative one. . . . .\_\_\_\_\_

**CASE 5**

- \* Charles, a third-year neurosurgical resident at a major metropolitan hospital, was stuck with a needle while treating an individual who may have been infected with HIV.
- \* Charles subsequently tested positive for HIV. Upon learning that Charles was HIV-positive, the hospital suspended him from surgery pending a recommendation of its panel of experts on blood-borne pathogens.
- \* The panel recommended that Charles be allowed to return to surgical practice with the exception of one specific procedure which might involve a risk of transmission of HIV to patients.
- \* After considering the panel's recommendations, the hospital permanently suspended Charles from surgical practice, because they perceived him to be a threat to the health of patients, and offered him alternative residencies in non-surgical fields.
- \* Charles refused the alternative residencies and insisted that he be reinstated with full surgical privileges. He argued that the

restricted procedure was so rare that it needn't be an essential function of his job; someone else could perform that procedure.

- \* Charles was terminated from the residency program.

22. A qualified individual with a disability is a person who has
- A. The training, education, and other prerequisites required for the position, and who can perform the functions of the job with or without reasonable accommodation. . . . .\_\_\_\_\_
  - B. A disability that restricts any major life activity, and who will most likely be able to perform the functions of the job with or without reasonable accommodation. . . . .\_\_\_\_\_
23. Is Charles an otherwise qualified individual with a disability regarding the position of surgical resident?
- A. No. . . . .\_\_\_\_\_
  - B. Yes . . . . .\_\_\_\_\_
24. A qualified individual with a disability is capable of performing
- A. Essential job functions except for those the individual cannot perform because of disability . . . . .\_\_\_\_\_
  - B. Essential and marginal job functions except for those the individual cannot perform because of disability . . . . .\_\_\_\_\_
25. Essential job functions are tasks that are
- A. Most pertinent to the position. . . . .\_\_\_\_\_
  - B. Most frequently performed job tasks . . . . .\_\_\_\_\_



26. Is Charles able to perform the essential functions of his job?  
 A. Yes . . . . .  
 B. No. . . . .
27. Non-essential functions of the job are  
 A. Tasks performed least frequently. . . . .  
 B. Least pertinent job tasks . . . . .
28. Are there work conditions under which an employer can fire or refuse to hire a person with a contagious disease?  
 A. Yes . . . . .  
 B. No. . . . .
29. Under the ADA, Charles' dismissal was  
 A. Not discriminatory. . . . .  
 B. Discriminatory. . . . .

**CASE 6**

- \* Phil is a sales representative, and an alcoholic. He recently changed jobs, after being recruited by his employer.
- \* During his first month of employment, Phil entered a 28-day alcohol detoxification program, but stayed for only three days.
- \* He subsequently told his employer that he might at some time in the future need to complete a full 28-day program. His employer questioned whether Phil really needed to do that.
- \* A few months after that conversation with his employer, Phil drank on the job for one week, although he continued to work, and made sales that exceeded other weeks' sales. He checked himself into a 28-day alcohol detoxification program.
- \* Phil entered the program on Monday morning, and on Tuesday morning Phil's wife notified his employer of Phil's decision to complete the 28-day program.

- \* On Wednesday the employer notified Phil's wife that Phil was terminated as of that time, because of poor and inadequate work performance.
30. Under the ADA, is Phil protected as an otherwise qualified individual with a disability?
- A. No. . . . . \_\_\_\_\_
- B. Yes . . . . . \_\_\_\_\_
- \* The employer argues that the 28-day detoxification program is not a reasonable accommodation, because Phil did not request it prior to entrance.
- \* Further, the employer argues that notification by Phil's wife does not constitute a request for an accommodation.
31. Are there work conditions under which an employer can fire or refuse to hire a person with a past history of illegal drug use?
- A. Yes . . . . . \_\_\_\_\_
- B. No. . . . . \_\_\_\_\_
32. Under the ADA, the 28-day program would
- A. Be considered a reasonable accommodation. . . . . \_\_\_\_\_
- B. Not be considered a reasonable accommodation. . . . . \_\_\_\_\_
33. Under the ADA, Phil's termination was
- A. Discriminatory. . . . . \_\_\_\_\_
- B. Not discriminatory. . . . . \_\_\_\_\_
34. Under the ADA if an employee completes a drug rehabilitation program, the employer
- A. Does not have the right to request drug tests and results . . . . . \_\_\_\_\_
- B. Has the right to request drug tests and results. . . . . \_\_\_\_\_

**CASE 7**

- \* A worker whose yearly salary is \$40,000 acquires a disability.
- \* In order to provide a reasonable accommodation that will allow the employee to remain in his current position, the employer will have to spend \$4,700.

35. What is the employer's obligation under ADA?

- A. Because the accommodation will cost more than 10% of salary, it could be considered an undue economic hardship, and need not be provided. . . . .\_\_\_\_\_
- B. The relationship between salary and accommodation cost is irrelevant in determining undue economic hardship, thus refusal could be discriminatory . . . . .\_\_\_\_\_

36. An eligible small business employer can receive federal tax credits of up to what amount per year for accommodations?

- A. \$ 5,000 . . . . .\_\_\_\_\_
- B. 15,000 . . . . .\_\_\_\_\_

**CASE 8**

- \* Maureen is an electrical engineer who worked in the nuclear energy field.
- \* After four years in her job, she was diagnosed as having depression, resulting in increased stress with regard to work in areas involving nuclear energy.
- \* In part, because of her concerns with performing nuclear design work, she interviewed for and ultimately received a position in another area of the company, where she was responsible for auditing work performed by others, rather than being directly responsible for nuclear design.
- \* Maureen's stress and anxieties were not significantly lessened by her move, since most of her work continued to deal with nuclear projects.

- \* She offered her resignation to her supervisor, citing her anxiety regarding nuclear power work. Her supervisor refused the resignation; he stated that he was pleased with her level of performance. He suggested she seek help through the company's Employee Assistance Program (EAP), which she did.
- \* Ultimately, the EAP counselor recommended that Maureen should be given approximately one month off from work to alleviate her depression, and she was placed on paid disability leave.
- \* Maureen continued to stay on leave after the month, and was placed on unpaid medical leave of absence.
- \* Her doctors continued to state that she suffered from depression related to working with nuclear energy, and that she should refrain from working in the nuclear field. Maureen remained on an extended leave of absence.
- \* Several months later, Maureen contacted her employer and said that she was ready and able to return to work, but that she wanted a position that did not deal with nuclear power.
- \* Maureen's supervisor advised her that it would be her responsibility to find another position with the company, if she chose not to return to her previous position.
- \* Maureen was terminated as an employee at the company, because the supervisor stated that she didn't have the flexibility to be able to work on nuclear projects, and that all engineers in the company had to have that flexibility.

37. Under the ADA, is Maureen considered to be an otherwise qualified individual?

A. No. . . . . \_\_\_\_\_

B. Yes . . . . . \_\_\_\_\_

- \* Maureen requests an accommodation of lowered productivity standard.

38. What is the employer's responsibility under ADA?
- A. The employer is obligated to make the accommodation . . . . .\_\_\_\_\_
  - B. The employer is not obligated to make the accommodation . . . . .\_\_\_\_\_
39. Under the ADA, the employer's decision regarding accommodations for Maureen is
- A. Not discriminatory. . . . .\_\_\_\_\_
  - B. Discriminatory. . . . .\_\_\_\_\_
40. If the employer offers to reassign Maureen to a lower wage position which will not entail nuclear work, under the ADA the employer must pay the wage consistent with
- A. The pre-disability position . . . . .\_\_\_\_\_
  - B. The new position. . . . .\_\_\_\_\_
41. Under the ADA, Maureen's termination was
- A. Not discriminatory. . . . .\_\_\_\_\_
  - B. Discriminatory. . . . .\_\_\_\_\_

**CASE 9**

- \* Dennis has multiple sclerosis, and uses a wheelchair for mobility. His employer has made several architectural modifications in the work place, to accommodate Dennis.
- \* Recently, the kitchen area of the business was refinished. When developing plans for the kitchen, the employer required that the sink be placed at 34 inches, in order to accommodate Dennis.
- \* The engineers did not notice the request for the 34 inch sink, and it was installed at 36 inches; too high for Dennis to use.
- \* Dennis went to the employer, and requested that the sink be replaced. The cost would have been approximately \$350.
- \* The employer refused to lower the sink, because there is a 34 inch height sink in the men's room, which is adjacent to the kitchen area. The employer believes that

Dennis would suffer no adverse consequences for having to use the bathroom sink.

- \* Dennis states that making him use the bathroom sink sets him apart from all other workers, and fails to provide him with the same benefits as other workers receive.

42. The allowed yearly federal tax deduction under the ADA that a large business may claim for expenses of removing architectural or transportation barriers is
- A. \$15,000 . . . . .\_\_\_\_\_
  - B. \$ 5,000 . . . . .\_\_\_\_\_
43. Under the ADA, the employer's refusal to move the sink is
- A. Discriminatory. . . . .\_\_\_\_\_
  - B. Not discriminatory. . . . .\_\_\_\_\_
44. The ADA specifies factors to be considered in determining undue hardship. How many factors are sufficient to determine undue economic hardship?
- A. All factors . . . . .\_\_\_\_\_
  - B. Any two factors . . . . .\_\_\_\_\_

#### CASE 10

- \* In her attempt to become pregnant, Lois underwent several months' medical treatment for infertility.
- \* Lois' treatment took place during work hours, for which she took sick leave time.
- \* Lois' employment was terminated because the employer felt she was ineligible to take sick time for this treatment, and that she was away from work too much.
- \* She argues that the unpaid leave time was a reasonable accommodation, because she considered her infertility to be a physical impairment that substantially limited a major life activity; pregnancy.

45. Does Lois' condition substantially limit a major life activity?  
 A. Yes . . . . . \_\_\_\_\_  
 B. No. . . . . \_\_\_\_\_
46. Is Lois an otherwise qualified person with a disability?  
 A. No. . . . . \_\_\_\_\_  
 B. Yes . . . . . \_\_\_\_\_
47. Lois' termination was  
 A. Not discriminatory. . . . . \_\_\_\_\_  
 B. Discriminatory. . . . . \_\_\_\_\_

**CASE 11**

- \* Dorothy, a union employee acquired a disability.
- \* It seems that no reasonable accommodations exist that would enable her to return to her present position.
- \* Dorothy could perform the essential functions of a union job that is currently vacant.
- \* The vacant position is at a higher seniority level than Dorothy currently holds.
- \* Dorothy, therefore, would be vying for the job with a union employee who has seniority for the position.

48. Under the ADA, must Dorothy be considered for the position?  
 A. Yes . . . . . \_\_\_\_\_  
 B. No. . . . . \_\_\_\_\_

**CASE 12**

- \* Samantha needs medical treatment during work hours, and has requested additional paid leave as an accommodation.
49. Under the ADA should the leave be considered as an accommodation?  
 A. Yes . . . . . \_\_\_\_\_  
 B. No. . . . . \_\_\_\_\_

- \* She has further requested that her company's health care policy be changed, as an accommodation, because at present it does not include coverage for drugs that she must purchase in order to treat her medical condition.

50. The employer has
- A. An obligation to adjust the health insurance package . . . . . \_\_\_\_\_
  - B. No obligation to adjust the health insurance package . . . . . \_\_\_\_\_



## APPENDIX B

## APPENDIX B

Final version ADA-IS

### **THE AMERICANS WITH DISABILITIES ACT INFORMATION SURVEY**

This questionnaire is an assessment of knowledge about the employment provisions of Title I of the Americans with Disabilities Act. By using your experience and general knowledge you will probably be able to pick the correct answer to many of the questions. Please read each case, then the questions pertaining to it. Select the one alternative that you consider to be the correct answer for each question. Please indicate your response by placing a check mark or letter on the appropriate designated line. It has been legally determined that there is a correct answer for each question, however, **THERE IS NO PENALTY FOR GUESSING.** There is no time limit for the completion of this test, but you should work as rapidly as you can.

1.       **The Americans with Disabilities Act is**
  - A.   An Affirmative Action law. . . . .\_\_\_\_\_
  - B.   A Civil Rights law . . . . .\_\_\_\_\_
2.       **Under the ADA employment provisions, employers are**
  - A.   Required to make special efforts to recruit individuals with disabilities . . . . .\_\_\_\_\_
  - B.   Not required to make special efforts to recruit individuals with disabilities. . . . .\_\_\_\_\_
3.       **The most frequent cause of discrimination against individuals with disabilities in the work place stems from**
  - A.   Economic rationality based on perceived high costs of employing some individuals with disabilities . . . . .\_\_\_\_\_
  - B.   Employer resentment of federal mandates and regulations which preclude free market enterprise. . . . .\_\_\_\_\_

## CASE 1

- \* John applied for and was accepted into a police training program.
  - \* As part of the training and employment process, John underwent a physical examination. When John informed the examining physician that he has insulin-dependent diabetes he was automatically rejected for the training program.
  - \* The city has a policy of blanket exclusion of all individuals with insulin-dependent diabetes, because city officials believe that the possible complications of diabetes - loss of consciousness, combative and/or irrational behavior - pose a direct threat to the safety of the officer and others.
  - \* Furthermore, the city believes that because of the possible complications, people who are insulin dependent diabetics may be unable to perform the essential functions of the job of police officer.
4. Under the ADA the exclusion policy is
- A. Discriminatory. . . . . \_\_\_\_\_
  - B. Not discriminatory. . . . . \_\_\_\_\_
- \* John decided to fight his rejection. He believes that he does not pose a direct threat to safety, and that with accommodations he will be able to perform the essential functions of the job.
  - \* John was unable to explain to the city, however, why he had had an experience of combative, irrational behavior approximately one year prior to applying for the training program. He stated that it was due to lack of insulin, and that this can be avoided by his requested accommodation.
5. Does John pose a direct threat to himself and others?
- A. Yes . . . . . \_\_\_\_\_
  - B. No. . . . . \_\_\_\_\_

- \* The accommodations he requests are to carry food with him in the patrol car, and to carry a needle with insulin in it on his person.

6. Under the ADA, John's request is
- A. Reasonable. . . . .\_\_\_\_\_
  - B. Not reasonable. . . . .\_\_\_\_\_

**CASE 2**

- \* Cathy was discharged from her job, and claims it was because of her handicap of diabetes and/or because her employer perceived her to be suffering from alcoholism.

- \* She believes diabetes provides her with protection under the ADA as a qualified individual with a disability. She also believes alcoholism is a handicap within the intent of the ADA.

- \* Cathy claims that when her employer perceived her to be intoxicated at work, she was actually suffering from her diabetic condition. She neither denied nor admitted that she is an alcoholic.

- \* Cathy alleges that her employer stated that
  1. She was intoxicated at work
  2. Intoxication was the reason for her termination
  3. She had been under the influence of alcohol during the past several months.

7. Under the ADA, Cathy's diabetes
- A. Does not qualify as a protected disability. . . . .\_\_\_\_\_
  - B. Qualifies as a protected disability . . . . .\_\_\_\_\_

8. An employer asks whether a job applicant drinks alcohol, and/or currently uses illegal drugs. The employer
- A. Has violated the ADA. . . . .\_\_\_\_\_
  - B. Has not violated the ADA. . . . .\_\_\_\_\_

9. In this case, does the employer's perception of alcoholism mean that Cathy was considered to have a disability?  
 A. No. . . . . \_\_\_\_\_  
 B. Yes . . . . . \_\_\_\_\_
10. Is the employer protected under the ADA in this case of diabetes?  
 A. Yes . . . . . \_\_\_\_\_  
 B. No. . . . . \_\_\_\_\_
11. Under the ADA Cathy's dismissal was  
 A. Discriminatory. . . . . \_\_\_\_\_  
 B. Not discriminatory. . . . . \_\_\_\_\_

**CASE 3**

- \* An employment agency representative interviews George for a position of janitorial supervisor.
- \* Prior to the interview, George told the employment agency representative that he is illiterate, due to a learning disability.
12. Under the ADA, employment agencies are  
 A. Considered covered entities . . . . . \_\_\_\_\_  
 B. Not considered covered entities . . . . . \_\_\_\_\_
- \* The employment agency representative informs George that George will have to take a written employment test for this particular job, because an essential function of the job is reading.
- \* George argues that this test will screen out all people who are illiterate.
13. Under the ADA, the test is  
 A. Not discriminatory. . . . . \_\_\_\_\_  
 B. Discriminatory. . . . . \_\_\_\_\_

**CASE 4**

- \* Jane worked as a service representative for a telecommunications company.
- \* Her job duties required Jane to spend approximately six hours per day on the phone and at the computer keyboard.
- \* Although her performance and sales statistics were exemplary, Jane had a history of attendance problems at work.
- \* Jane complained to her supervisor that she was experiencing pain in her hands and arms, and was subsequently diagnosed with carpal tunnel syndrome.
- \* Her physician issued restrictions providing that she was to take fifteen minutes off for each hour of repetitive, digital activity.
- \* Three weeks later Jane's physician issued new restrictions prohibiting all typing and keyboard activity.
- \* She then coached other customer service representatives and performed a variety of office and clerical tasks that did not involve typing or keyboard activity.
- \* One month after the new restrictions, Jane was terminated for tardiness. She had been suspended for tardiness once prior to this date.
- \* Two months after her termination, Jane underwent nerve decompression surgery, and was released from physician care with the following work restrictions:
  - It would be unwise to start back on typing and keyboard work.
- \* Jane argues that she was wrongfully terminated from her employment, because she was protected by the ADA.
- \* She wanted reinstatement in her former position.
- \* Jane's physician stated that permanent impairment was not anticipated.

- \* Jane requested indefinite unpaid leave in order to continue treatment for her condition.
- 14. Did Jane's request qualify as a reasonable accommodation?
  - A. Yes. . . . . \_\_\_\_\_
  - B. No. . . . . \_\_\_\_\_
- 15. In a pre-employment interview an employer asks an applicant if he is able to meet the company's attendance requirements. The employer has
  - A. Not violated ADA . . . . . \_\_\_\_\_
  - B. Violated ADA . . . . . \_\_\_\_\_
- 16. The employer's termination action was
  - A. Discriminatory. . . . . \_\_\_\_\_
  - B. Not Discriminatory. . . . . \_\_\_\_\_

**CASE 3**

- \* Zoey is paralyzed from the waist down, and is prone to develop pressure sores. When the sores develop, treatment requires that she stay at home for several weeks.
- \* Although she generally works in a team environment, Zoey believes that she could work full-time at home while being treated for the pressure sores.
- \* She requested that her employer install a desk-top computer in her home, so that she could work full-time during treatment.
- \* Her employer believes there is no duty of reasonable accommodation of pressure sores, because they are intermittent.
- \* Her employer informed her that she would not install the computer, that she would only be able to provide Zoey with part time work while she was home, and that Zoey could additionally draw on her sick time leave in order to avoid any loss of income.

17. The employer's decision to refrain from installing a computer in Zoey's home is is
    - A. Discriminatory. . . . .\_\_\_\_\_
    - B. Not discriminatory. . . . .\_\_\_\_\_
  18. In determining whether the cost of a particular accommodation creates an undue economic hardship, which of the following will be considered?
    - A. The net cost of the accommodation being made for the specific individual . . . . .\_\_\_\_\_
    - B. The number and average costs of accommodations the employer is currently making . . . . .\_\_\_\_\_
  19. Under the ADA, the pressure sores are
    - A. Not protected as a disability . . . . .\_\_\_\_\_
    - B. Protected as a disability . . . . .\_\_\_\_\_
  20. Regarding the pressure sores, Zoey
    - A. Is an otherwise qualified individual with a disability. . . . .\_\_\_\_\_
    - B. Is not an otherwise qualified individual with a disability . . . . .\_\_\_\_\_
- CASE 4**
- \* Michael has a young child who requires extensive medical treatment.
  - \* Michael determines that the only way he can stay in his job is to request an accommodation of a modified work schedule.
21. Under the ADA the employer
    - A. Has no obligation to grant accommodation in this situation . . . . .\_\_\_\_\_
    - B. Is obliged to grant the accommodation, or to propose an alternative one. . . . .\_\_\_\_\_



**CASE 5**

- \* Charles, a third-year neurosurgical resident at a major metropolitan hospital, was stuck with a needle while treating an individual who may have been infected with HIV.
- \* Charles subsequently tested positive for HIV. Upon learning that Charles was HIV-positive, the hospital suspended him from surgery pending a recommendation of its panel of experts on blood-borne pathogens.
- \* The panel recommended that Charles be allowed to return to surgical practice with the exception of one specific procedure which might involve a risk of transmission of HIV to patients.
- \* After considering the panel's recommendations, the hospital permanently suspended Charles from surgical practice, because they perceived him to be a threat to the health of patients, and offered him alternative residencies in non-surgical fields.
- \* Charles refused the alternative residencies and insisted that he be reinstated with full surgical privileges. He argued that the restricted procedure was so rare that it needn't be an essential function of his job; someone else could perform that procedure.
- \* Charles was terminated from the residency program.

22. A person who has the training, education, and other prerequisites required for the position, and who can perform the functions of the job with or without reasonable accommodation
- A. Is a qualified person with a disability. . . . . \_\_\_\_\_
  - B. Is not a qualified person with a disability . . . . . \_\_\_\_\_
23. Is Charles an otherwise qualified individual with a disability regarding the position of surgical resident?
- A. No. . . . . \_\_\_\_\_
  - B. Yes . . . . . \_\_\_\_\_

24. Is a qualified individual with a disability a person who is capable of performing essential and marginal job functions except for those the individual cannot perform because of a disability?  
 A. Yes . . . . .  
 B. No. . . . .
25. Essential job functions are tasks that are  
 A. Most pertinent to the position . . . . .  
 B. Most easily performed . . . . .
26. Is Charles able to perform the essential functions of his job?  
 A. Yes . . . . .  
 B. No. . . . .
27. Are non-essential functions of the job those tasks performed least frequently?  
 A. Yes . . . . .  
 B. No. . . . .
28. Are there work conditions under which an employer can fire or refuse to hire a person with a contagious disease?  
 A. Yes . . . . .  
 B. No. . . . .
29. Under the ADA, Charles' dismissal was  
 A. Not discriminatory. . . . .  
 B. Discriminatory. . . . .

**CASE 6**

- \* Phil is a sales representative, and an alcoholic. He recently changed jobs, after being recruited by his employer.
- \* During his first month of employment, Phil entered a 28-day alcohol detoxification program, but stayed for only three days.

- \* He subsequently told his employer that he might at some time in the future need to complete a full 28-day program. His employer questioned whether Phil really needed to do that.
  - \* A few months after that conversation with his employer, Phil drank on the job for one week, although he continued to work, and made sales that exceeded other weeks' sales. He checked himself into a 28-day alcohol detoxification program.
  - \* Phil entered the program on Monday morning, and on Tuesday morning Phil's wife notified his employer of Phil's decision to complete the 28-day program.
  - \* On Wednesday the employer notified Phil's wife that Phil was terminated as of that time, because of poor and inadequate work performance.
30. Under the ADA, is Phil protected as an otherwise qualified individual with a disability?
- A. No. . . . . \_\_\_\_\_
  - B. Yes . . . . . \_\_\_\_\_
- \* The employer argues that the 28-day detoxification program is not a reasonable accommodation, because Phil did not request it prior to entrance.
  - \* Further, the employer argues that notification by Phil's wife does not constitute a request for an accommodation.
31. Are there work conditions under which an employer can fire or refuse to hire a person with a past history of illegal drug use?
- A. Yes . . . . . \_\_\_\_\_
  - B. No. . . . . \_\_\_\_\_

32. Under the ADA, the 28-day program would
- A. Be considered a reasonable accommodation. . . . .\_\_\_\_\_
  - B. Not be considered a reasonable accommodation . . . . .\_\_\_\_\_
33. Under the ADA, Phil's termination was
- A. Discriminatory. . . . .\_\_\_\_\_
  - B. Not discriminatory. . . . .\_\_\_\_\_
34. Under the ADA if an employee completes a drug rehabilitation program, the employer
- A. Does not have the right to request drug tests and results . . . . .\_\_\_\_\_
  - B. Has the right to request drug tests and results . . . . .\_\_\_\_\_

**CASE 7**

- \* A worker whose yearly salary is \$40,000 acquires a disability.
  - \* In order to provide a reasonable accommodation that will allow the employee to remain in his current position, the employer will have to spend \$4,700.
35. What is the employer's obligation under ADA?
- A. Because the accommodation will cost more than 10% of salary, it could be considered an undue economic hardship, and need not be provided. . . . .\_\_\_\_\_
  - B. The relationship between salary and accommodation cost is irrelevant in determining undue economic hardship, thus refusal could be discriminatory. . . . .\_\_\_\_\_
36. An eligible small business employer can receive federal tax credits of up to what amount per year for accommodations?
- A. \$ 5,000 . . . . .\_\_\_\_\_
  - B. 15,000 . . . . .\_\_\_\_\_

**CASE 8**

- \* Maureen is an electrical engineer who worked in the nuclear energy field.
- \* After four years in her job, she was diagnosed as having depression, resulting in increased stress with regard to work in areas involving nuclear energy.
- \* In part, because of her concerns with performing nuclear design work, she interviewed for and ultimately received a position in another area of the company, where she was responsible for auditing work performed by others, rather than being directly responsible for nuclear design.
- \* Maureen's stress and anxieties were not significantly lessened by her move, since most of her work continued to deal with nuclear projects.
- \* She offered her resignation to her supervisor, citing her anxiety regarding nuclear power work. Her supervisor refused the resignation; he stated that he was pleased with her level of performance. He suggested she seek help through the company's Employee Assistance Program (EAP), which she did.
- \* Ultimately, the EAP counselor recommended that Maureen should be given approximately one month off from work to alleviate her depression, and she was placed on paid disability leave.
- \* Maureen continued to stay on leave after the month, and was placed on unpaid medical leave of absence.
- \* Her doctors continued to state that she suffered from depression related to working with nuclear energy, and that she should refrain from working in the nuclear field. Maureen remained on an extended leave of absence.
- \* Several months later, Maureen contacted her employer and said that she was ready and able to return to work, but that she wanted a position that did not deal with nuclear power.

- \* Maureen's supervisor advised her that it would be her responsibility to find another position with the company, if she chose not to return to her previous position.
  - \* Maureen was terminated as an employee at the company, because the supervisor stated that she didn't have the flexibility to be able to work on nuclear projects, and that all engineers in the company had to have that flexibility.
37. Under the ADA, is Maureen considered to be an otherwise qualified individual?
- A. No. . . . . \_\_\_\_\_
  - B. Yes . . . . . \_\_\_\_\_
- \* Maureen requests an accommodation of lowered productivity standard.
38. What is the employer's responsibility under ADA?
- A. The employer is obligated to make the accommodation . . . . . \_\_\_\_\_
  - B. The employer is not obligated to make the accommodation . . . . . \_\_\_\_\_
39. Under the ADA, the employer's decision regarding accommodations for Maureen is
- A. Not discriminatory. . . . . \_\_\_\_\_
  - B. Discriminatory. . . . . \_\_\_\_\_
40. If the employer offers to reassign Maureen to a lower wage position which will not entail nuclear work, under the ADA the employer must pay the wage consistent with
- A. The pre-disability position . . . . . \_\_\_\_\_
  - B. The new position. . . . . \_\_\_\_\_
41. Under the ADA, Maureen's termination was
- A. Not discriminatory. . . . . \_\_\_\_\_
  - B. Discriminatory. . . . . \_\_\_\_\_

**CASE 9**

- \* Dennis has multiple sclerosis, and uses a wheelchair for mobility. His employer has made several architectural modifications in the work place, to accommodate Dennis.
- \* Recently, the kitchen area of the business was refinished. When developing plans for the kitchen, the employer required that the sink be placed at 34 inches, in order to accommodate Dennis.
- \* The engineers did not notice the request for the 34 inch sink, and it was installed at 36 inches; too high for Dennis to use.
- \* Dennis went to the employer, and requested that the sink be replaced. The cost would have been approximately \$350.
- \* The employer refused to lower the sink, because there is a 34 inch height sink in the men's room, which is adjacent to the kitchen area. The employer believes that Dennis would suffer no adverse consequences for having to use the bathroom sink.
- \* Dennis states that making him use the bathroom sink sets him apart from all other workers, and fails to provide him with the same benefits as other workers receive.

42. The allowed yearly federal tax deduction under the ADA that a large business may claim for expenses of removing architectural or transportation barriers is

A. \$15,000 . . . . . \_\_\_\_\_

B. \$ 5,000 . . . . . \_\_\_\_\_

43. Under the ADA, the employer's refusal to move the sink is

A. Discriminatory. . . . . \_\_\_\_\_

B. Not discriminatory. . . . . \_\_\_\_\_

44. The ADA specifies factors to be considered in determining undue hardship. How many factors are sufficient to determine undue economic hardship?
- A. All factors . . . . . \_\_\_\_\_
- B. Any two factors . . . . . \_\_\_\_\_

**CASE 10**

- \* In her attempt to become pregnant, Lois underwent several months' medical treatment for infertility.
- \* Lois' treatment took place during work hours, for which she took sick leave time.
- \* Lois' employment was terminated because the employer felt she was ineligible to take sick time for this treatment, and that she was away from work too much.
- \* She argues that the unpaid leave time was a reasonable accommodation, because she considered her infertility to be a physical impairment that substantially limited a major life activity; pregnancy.
45. Does Lois' condition substantially limit a major life activity?
- A. Yes . . . . . \_\_\_\_\_
- B. No. . . . . \_\_\_\_\_
46. Is Lois an otherwise qualified person with a disability?
- A. No. . . . . \_\_\_\_\_
- B. Yes . . . . . \_\_\_\_\_
47. Lois' termination was
- A. Not discriminatory. . . . . \_\_\_\_\_
- B. Discriminatory. . . . . \_\_\_\_\_

**CASE 11**

- \* Dorothy, a union employee acquired a disability.
- \* It seems that no reasonable accommodations exist that would enable her to return to her present position.



- \* Dorothy could perform the essential functions of a union job that is currently vacant.
  - \* The vacant position is at a higher seniority level than Dorothy currently holds.
  - \* Dorothy, therefore, would be vying for the job with a union employee who has seniority for the position.
48. Under the ADA, must Dorothy be considered for the position?
- A. Yes . . . . . \_\_\_\_\_
  - B. No. . . . . \_\_\_\_\_
- CASE 12**
- \* Samantha needs medical treatment during work hours, and has requested additional paid leave as an accommodation.
49. Under the ADA should the leave be considered as an accommodation?
- A. Yes . . . . . \_\_\_\_\_
  - B. No. . . . . \_\_\_\_\_
- \* She has further requested that her company's health care policy be changed, as an accommodation, because at present it does not include coverage for drugs that she must purchase in order to treat her medical condition.
50. The employer has
- A. An obligation to adjust the health insurance package. . . . . \_\_\_\_\_
  - B. No obligation to adjust the health insurance package. . . . . \_\_\_\_\_

## APPENDIX C

## APPENDIX C

### Scoring key: ADA-IS (final version)

The term GK stands for general knowledge item. The term FO stands for factual obscure items. In each of the scoring methods, the respondent received one point if the response was the one indicated below. The general knowledge items were not recomputed for sympathetic scoring, so they were not rescored. For example, in item 1, correct scoring would yield a 1 if the response was B. The item was not recoded for sympathetic scoring, so B would still yield one point. In item 7, which is a factual obscure item, correct scoring would yield a 1 if the response was A, while sympathetic scoring would yield 1 point if the response was B.

<u>Item</u>	<u>Type</u>	<u>Correct scoring</u>	<u>Sympathetic scoring</u>
1	GK	B	B
2	GK	B	B
3	GK	B	B
4	FO	A	A
5	FO	B	B
6	FO	A	A
7	FO	A	B
8	GK	B	B
9	FO	A	B
10	FO	A	B
11	FO	B	A

<u>Item</u>	<u>Type</u>	<u>Correct</u>	<u>Sympathetic</u>
12	GK	A	A
13	GK	A	A
14	FO	B	A
15	GK	A	A
16	FO	B	A
17	FO	B	A
18	GK	A	A
19	FO	B	B
20	FO	A	A
21	GK	A	A
22	GK	A	A
23	FO	A	B
24	GK	A	A
25	GK	A	A
26	FO	B	A
27	GK	B	B
28	GK	A	A
29	FO	A	B
30	FO	B	B
31	GK	A	A
32	FO	A	A
33	FO	A	A
34	GK	B	B
35	GK	B	B
36	GK	A	A

<u>Item</u>	<u>Type</u>	<u>Correct</u>	<u>Sympathetic</u>
37	FO	A	B
38	GK	B	B
39	FO	A	B
40	GK	B	B
41	FO	A	B
42	GK	B	B
43	FO	B	A
44	GK	B	B
45	FO	A	A
46	FO	B	B
47	FO	B	B
48	GK	B	B
49	GK	B	B
50	GK	B	B

## APPENDIX D

## APPENDIX D

### Invitation to professors

Dear Dr. \_\_\_\_\_,

April 18, 1997

I would like to invite the master level students in your program to participate in a study of the employment provisions (Title I) of the Americans with Disabilities Act of 1990. The students will be asked to complete two questionnaires that address knowledge of the employment provisions.

Rehabilitation professionals know that the employment provisions of the ADA are important tools in assisting individuals who have disabilities to gain and maintain employment. We are also aware that it is vital that we have thorough knowledge and understanding of the employment provisions in order to provide quality service to those individuals. One purpose of the study is to assess the degree to which rehabilitation counseling students are provided with detailed information about the employment provisions. Thus, **students need not have expert knowledge of the ADA in order to participate**; one aim of the study is to help educators understand where information gaps exist. By completing the questionnaires, students will provide valuable guidance in understanding and assessing the extent to which education about the ADA employment provisions should be expanded.

After the students have completed the questionnaires they will engage in a debriefing session concerning the ADA employment provisions. Students will receive a packet containing information about the ADA. The entire process-completing the questionnaires, discussion, and debriefing-should be completed within approximately one hour.

Please advise the students that all information gathered will be confidential; each will be assigned a number, and they will be unidentifiable in the study. On request within these restrictions, students may request a copy of the research results from the researcher.

Please tell the students that I appreciate their participation; it will enhance the study. Please tell the students that if they have any questions, they are welcome to contact me at (517) 374-7266, or at my e-mail address, [clarkena@pilot.msu.edu](mailto:clarkena@pilot.msu.edu).

Thank you,

Nancy Clarke, Doctoral Candidate  
Rehabilitation Counselor Education Program  
Michigan State University

## APPENDIX E



## APPENDIX E

### Invitation to rehabilitation counseling students

February 24, 1997

**Rehabilitation Counselor Education Program  
335 Erickson Hall, Michigan State University  
East Lansing, MI 48824**

Dear (Student),

As a future rehabilitation professional, you are probably aware that the employment provisions of the Americans with Disabilities Act (ADA) of 1990 are important tools in assisting individuals who have disabilities to gain and maintain employment. You are also aware that it is vital that you have thorough knowledge and understanding of those employment provisions, in order to help those individuals.

One question that educators, rehabilitation professionals, and advocates have is whether rehabilitation counseling students are provided with detailed information about the ADA employment provisions. Two questionnaires have been developed in order to answer that question. After we learn the answers, we can design and implement strategies that will assist rehabilitation counselors to become more familiar with and authoritative about the employment provisions.

By completing the questionnaires, you will provide valuable guidance in understanding and assessing the extent to which education about the ADA employment provisions should be expanded. Participation in this study is voluntary. You may choose not to participate, and/or may choose to discontinue your participation at any time, without penalty. All information gathered from you will be confidential; you will be assigned a number, and your name will appear nowhere. On request within these restrictions, you may request a copy of the research results from the researcher.

You will also be asked to discuss one of the questionnaires; to evaluate the questions, whether they are readable, understandable, pertinent. You will also be asked to offer any suggestions that might help improve the questionnaire. We will also engage in a debriefing/educational sessions concerning the employment provisions of the ADA. The entire process-completing the questionnaires, discussion, and educational information-should take approximately 90 minutes. Any accommodations you may need to complete the questionnaire will be available upon request.

Please complete and mail the enclosed notice. If you

choose to participate, please note the date/time that is convenient for you, or let me know when is a better time. Thank you for taking the time to read this letter, and please consider helping us to help other rehabilitation counseling students become professionals and experts.

For questions, please contact me at (517) 374-7266.

Sincerely,

Nancy E. Clarke  
Michigan State University

## APPENDIX F

## APPENDIX F

### Invitation to students with disabilities

**Rehabilitation Counselor Education Program  
335 Erickson Hall, Michigan State University  
East Lansing, MI 48824**

March 18, 1997

Dear Student,

As you engage in your college career, you are probably becoming excited about moving on to your professional working career. The Americans with Disabilities Act (ADA) of 1990 includes employment provisions that may help you to achieve your career goals.

One question that individuals who have disabilities, educators, and advocates have is whether individuals who have disabilities are provided with enough thorough information about the ADA employment provisions to ensure it protects us. Two questionnaires have been developed in order to address that question. After we learn the answers, we can design and implement strategies that will assist individuals who have disabilities to become more familiar with and authoritative about the employment provisions.

If you will fill out the questionnaires, you would provide valuable guidance in understanding and assessing the extent to which education about the ADA employment provisions should be expanded. Participation in this study is voluntary. You may choose not to participate, and/or may choose to discontinue your participation at any time, without penalty. All information gathered from you will be confidential; you will be assigned a number, and your name will appear nowhere. On request within these restrictions, you may request a copy of the research results from the researcher.

After the questionnaires are completed, we will engage in a debriefing/educational session concerning the employment provisions of the ADA. The entire process-completing the questionnaires and discussion-should take approximately one hour. Any accommodations you may need to complete the questionnaire will be available upon request.

Please return the enclosed form and indicate whether you choose to participate. If you choose to participate, please indicate which date will be appropriate for you. If none of the listed times are appropriate, please indicate when you could be available. Also, please note if you need

accommodations for the session. Thank you for taking the time to read this letter, and please consider helping us to help individuals who have disabilities achieve our goals! If you have any questions, please contact me at (517) 374-7266, or at [clarkena@pilot.msu.edu](mailto:clarkena@pilot.msu.edu).

Sincerely,

Nancy E. Clarke, Michigan State University

## APPENDIX G

APPENDIX G

Invitation to small business owners/employers

XXX

February 24, 1997

Rehabilitation Counselor Education Program  
335 Erickson Hall, Michigan State University  
East Lansing, MI 48824

Dear \_\_\_\_\_,

As a small business employer you are asked to comply with a plethora of federal and state regulatory statutes concerning employment issues. As you most certainly know, thorough knowledge and understanding of these statutes is essential in order for you to feel in control of your business. The Americans with Disabilities Act (ADA) is one of the regulatory statutes with which you must comply. One question that disability professionals have is whether small business employers are provided with detailed information about the ADA. Two questionnaires have been developed in order to answer that question. After we learn the answers, we can design and implement strategies to help you and other small business employers to become more familiar with and authoritative about the employment provisions.

Your help is needed. If you will fill out the questionnaires you would provide valuable guidance in understanding and assessing the extent to which education about the ADA employment provisions should be expanded. All information will be confidential; you will be assigned and number, and your name will appear nowhere.

You will also be asked to discuss one of the questionnaires. The entire process--completing the questionnaires and discussion--will take approximately 90 minutes.

Please complete and mail the enclosed notice. Meeting times and places will be arranged, to fit your schedule. Thank you for taking the time to consider this project. If you have any questions, please contact me at (517) 374-7266, or at [clarkena@pilot.msu.edu](mailto:clarkena@pilot.msu.edu).

Sincerely,

Nancy E. Clarke  
Rehabilitation Counselor Education Program  
Michigan State University

## APPENDIX H



APPENDIX H

Agreement to participate form

Rehabilitation Counselor Education Program  
335 Erickson Hall  
Michigan State University  
Lansing, MI 48824

I agree to participate in the ADA questionnaire study \_\_\_\_\_

I decline to participate in the ADA questionnaire study \_\_\_\_\_

If you choose to participate, please indicate below which session you will attend. If you are unable to attend any of the sessions, please indicate times and dates that are more convenient for you.

Monday, April 7; 5:00 - 6:30, C304 Wells Hall \_\_\_\_\_

Tuesday, April 8; 5:00 - 6:30, C304 Wells Hall \_\_\_\_\_

Wednesday, April 9; 7:00 - 8:30, C303 Wells Hall \_\_\_\_\_

Thursday, April 10; 7:00 - 8:30, C303 Wells Hall \_\_\_\_\_

Other: Weekday \_\_\_\_\_, Date \_\_\_\_\_, Time \_\_\_\_\_

**FOR ACCOMMODATIONS**

If you need an accommodation, please indicate the need. Please give your name and how you can be reached, so that proper arrangements can be made with your input.

## APPENDIX I

APPENDIX I

Letter of confirmation

**Rehabilitation Counselor Education Program  
335 Erickson Hall  
Michigan State University  
Lansing, MI 48824**

Dear \_\_\_\_\_,

Thank you for agreeing to participate in the upcoming ADA questionnaire study. Your willingness to give your time to this effort is appreciated. I may have made a mistake in my records, and it is unclear whether I previously sent you a letter of confirmation. My apology!

This letter is to confirm your attendance on Thursday, April 10, 7:00 -8:30 p.m., C303 Wells Hall. I look forward to seeing you then.

Please call me at 374-7266 if you have any questions, or are unable to attend on the above date and time.

Thank you,

Nancy E. Clarke

## APPENDIX J

APPENDIX J

Informed consent form

---

**Informed consent: ADA questionnaire study**

Please read the following information carefully. If you choose to participate in this study, please sign and date this form after you have read it.

The purpose of this research is to understand the degree to which people affected by the employment provisions of the Americans with Disabilities Act of 1990 have knowledge and understanding of the provisions. You will be asked to complete two questionnaires concerning the employment provisions of the Act, and to provide comments about the construction of one of them. You will also be asked to participate in individual debriefing sessions wherein any concerns you may have about the instruments will be addressed, and an ADA resource guide will be given to you. The total time required of each participant is approximately 90 minutes.

\* \* \* \* \*

I understand that I freely consent to participate. I may choose not to participate at all, I may choose not to answer all questions, and/or I may choose to refuse or discontinue my participation at any time, without penalty. I further understand that results of this study will be treated with strict confidence, and that my identity will remain anonymous in any report of research findings.

If you have any questions or concerns about participating in this study, please contact Nancy Clarke at 335 Erickson Hall, Michigan State University, E. Lansing, MI 48824, or (517) 374-766.

**I have read the above, and agree to participate.**

---

(Signature of participant)

---

(Date of signature)

## APPENDIX K

## APPENDIX K

### General comments form

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#### GENERAL COMMENTS FORM

1. Were the cases understandable? If some were not, please indicate which ones, and comment on how you think they could be written to be better understood

2. Were the questions understandable? If some were not, please indicate which ones, and comment on how you think they could be better written in order to be understood.

3. How difficult did you find this questionnaire? Please comment if you choose.

4. General comments about the ADA Information Survey.

**THANK YOU!!!**

## APPENDIX L



APPENDIX L

ADA-EI for rehabilitation counseling students

Ready or not:

**THE ADA IS HERE!**

YOUR CHANCE TO HAVE A SAY....

The Americans with Disabilities Act  
Employment Survey

Rehabilitation Institute  
Southern Illinois University  
at Carbondale

in association with the:  
Illinois Rehabilitation Association

1. From which sources have you heard about what employers must do under the ADA? (please check all sources, and double check the main source, e.g. XX)

☐ I have not seen or heard any information  
☐ Magazines, periodicals  
☐ TV, radio, or newspapers  
☐ Center for Independent Living  
☐ Private consultants  
☐ State or federal rehabilitation organization  
☐ Workshop or discussion sessions at work  
☐ Academic/Professional journals  
☐ Other, please specify.....

2. At present, how would you describe your knowledge about the employment provisions of the ADA? (Please check the category which is closest to your knowledge level)

☐ No knowledge at all: limited awareness  
☐ Some general knowledge about who is covered and what an employer should do  
☐ Some specific knowledge about ADA and the workplace  
☐ In depth knowledge, sometimes I am asked for my opinion on specific ADA matters

3. How satisfied are you with the level of knowledge you have about the employment provisions of the ADA? (Please check the category which best describes your situation)

☐ I have enough knowledge for what I need to do  
☐ My knowledge level is O.K., but I would like to know more  
☐ I really need to know more about employment and the ADA  
☐ I am concerned about how little I know at the moment about employment and the ADA

The following is a very brief summary of what is contained in Title I of the ADA. It is intended to remind you of the different parts of the title and can be used as a quick reference guide as you answer the questions that follow.

Please turn the page

Title I of the Americans with Disabilities Act relates to employment practices. It says that employers covered by the Act cannot discriminate against a qualified person with a disability because of that person's disability in regard to:

- \* hiring
- \* promotion
- \* selection
- \* employee compensation
- \* job training, or any other terms, conditions and privileges of employment

It also says that employers must make "reasonable accommodations" to the workplace for a person with a disability, provided that this accommodation does not place an "undue hardship" on the business. "Reasonable accommodations" can mean making:

- \* the workplace physically accessible
- \* changing job specifications and job structure, and
- \* may require further assistance to be provided such as an interpreter for a hearing impaired employee

Deciding whether an accommodation will mean "undue hardship" for a business depends on the cost of the accommodation, the structure and type of business it is, how much money the business has.

Please turn the page

Please read the following statements, then circle the answer which most closely describes your attitude regarding that statement.

- |   | 1        | 2      | 3        | 4        | 5        | 6        |
|---|----------|--------|----------|----------|----------|----------|
|   | Strongly | Mostly | Unsure,  | Unsure   | Mostly   | Strongly |
|   | agree    | agree  | probably | probably | disagree | disagree |
|   |          |        | agree    | disagree |          |          |
| 4. In most cases modifying the workplace to meet the needs of a worker with a disability will be costly . . . . .   | .1       | 2      | 3        | 4        | 5        | 6        |
| 5. Most employers will be angry about how much the ADA will cost them . . . .   | .1       | 2      | 3        | 4        | 5        | 6        |
| 6. The cost of the ADA employment provisions will be harder on small businesses. . . . .  | .1       | 2      | 3        | 4        | 5        | 6        |
| 7. Small business owners will be more frustrated than large business owners about how much the ADA will cost them . . . . .   | .1       | 2      | 3        | 4        | 5        | 6        |
| 8. The extra cost of modifying the workplace for a person with a disability is a good investment if that person is best qualified for the job . . . . .                         | .1       | 2      | 3        | 4        | 5        | 6        |
| 9. If a person with a disability is the most qualified for the job, most employers will be happy to modify the workplace for that person . . . . .                              | .1       | 2      | 3        | 4        | 5        | 6        |
| 10. Most employers think that modifying the workplace for a worker with a disability is fair. . . . .   | .1       | 2      | 3        | 4        | 5        | 6        |
| 11. State and federally funded rehabilitation agencies (e.g. DORS) should help employers meet the extra cost of modifying the workplace for a worker with a disability. . . . . | .1       | 2      | 3        | 4        | 5        | 6        |
| 12. The ADA will mean many changes to the hiring, firing and promotion practices of most businesses. . . . .  | .1       | 2      | 3        | 4        | 5        | 6        |

Please turn to next page

13. Most employers will feel overwhelmed by the changes that the ADA will require to their staffing practices. . . . .1 2 3 4 5 6
14. In reality, a lot of what the ADA expects employers to do is impractical . . . . .1 2 3 4 5 6
15. Many employers will be frustrated because the ADA is impractical. . . . .1 2 3 4 5 6
16. Most employers will willingly make the changes to staffing procedures that the ADA requires . . . . .1 2 3 4 5 6
17. Many sections of the ADA employment provisions are unclear. . . . .1 2 3 4 5 6
18. Many employers will be confused by the lack of clarity in the ADA. . . . .1 2 3 4 5 6
19. Most employers will not have any problems understanding what is required under the employment provisions of the ADA . . . . .1 2 3 4 5 6
20. Many employers will need to hire consultants to help them understand the employment provisions of the ADA . . . . .1 2 3 4 5 6
21. Over the next five years the ADA will lead to a significant increase in the number of people with disabilities in jobs . . . . .1 2 3 4 5 6
22. An increase in the number of people with disabilities in jobs will benefit the whole community . . . . .1 2 3 4 5 6
23. Bureaucratic red tape will limit the effectiveness of the ADA in helping people with disabilities fight employment discrimination . . . .1 2 3 4 5 6
24. People with disabilities will be frustrated by the red tape that limits effectiveness of the ADA . . . .1 2 3 4 5 6

Please turn to next page

25. As the number of people with disabilities in the workforce increases, employers' attitudes towards people with disabilities will improve. . . . .1 2 3 4 5 6
26. Employers will be committed to making the ADA an effective piece of legislation in removing the barriers to the employment of people with disabilities. . . . .1 2 3 4 5 6
27. Employment discrimination against people with disabilities is the major reason so many are unemployed . . . .1 2 3 4 5 6
28. Federal laws which are passed to stop discrimination against people with disabilities are a good thing for society in general. . . . .1 2 3 4 5 6
29. The Federal government has a role to play in ensuring that employment practices are fair to all . . . . .1 2 3 4 5 6
30. Regardless of whether they think the ADA is fair, some employers will be angry about Federal laws regulating business practices. . . . .1 2 3 4 5 6
31. Most employers were prepared to meet the costs of modifying the workplace for a person with a disability before the ADA was passed . . . . .1 2 3 4 5 6
32. Many people with disabilities rely heavily on state and federal income maintenance programs (e.g. SSI and SSDI) . . . . .1 2 3 4 5 6
33. Reliance on income maintenance programs means that many people with disabilities are reluctant to seek paid work . . . . .1 2 3 4 5 6
34. In general, people with disabilities would much rather be out working than staying at home. . . . .1 2 3 4 5 6

Please turn to next page

35. People with disabilities who could work, but stay at home, are a drain on America's resources. . . . .1 2 3 4 5 6
36. People with disabilities find it harder to get work than other people. .1 2 3 4 5 6
37. People with disabilities who get work perform better than most able-bodied employees . . . . .1 2 3 4 5 6
38. Please check the type of rehabilitation agency you work for:
- \_\_\_\_\_ State rehabilitation agency
- \_\_\_\_\_ Private, for profit rehabilitation agency or service
- \_\_\_\_\_ Private, not for profit rehabilitation agency
- \_\_\_\_\_ Self-employed
- \_\_\_\_\_ Other (please specify).....
39. What types of disabilities do your clients have?  
(Please check all relevant disability types and double check the most common disability type, e.g. XX)
- \_\_\_\_\_ Physical
- \_\_\_\_\_ Visual impairment
- \_\_\_\_\_ Hearing impairment
- \_\_\_\_\_ Psychiatric
- \_\_\_\_\_ Emotional
- \_\_\_\_\_ Developmental
- \_\_\_\_\_ Other (please specify).....
40. For how many years have you worked as a rehabilitation service provider?
- \_\_\_\_\_
41. In what age group were you in on your last birthday?
- \_\_\_15-20 \_\_\_21-30 \_\_\_31-40 \_\_\_41-50 \_\_\_51-60 \_\_\_over 60
42. What is your present job title? .....

## APPENDIX M



APPENDIX M

ADA-EI for students with disabilities

Ready or not:

**THE ADA IS HERE!**

YOUR CHANCE TO HAVE A SAY....

The Americans with Disabilities Act  
Employment Survey

Rehabilitation Institute  
Southern Illinois University  
at Carbondale

in association with the:  
Illinois Rehabilitation Association

1. From which sources have you heard about what employers must do under the ADA? (please check all sources, and double check the main source, e.g. XX)

☐ I have not seen or heard any information  
☐ Magazines, periodicals  
☐ TV, radio, or newspapers  
☐ Center for Independent Living  
☐ Disability advocacy organization  
☐ State or federal rehabilitation organization  
☐ Workshop or discussion sessions at work  
☐ Academic/Professional journals  
☐ Other, please specify.....

2. At present, how would you describe your knowledge about the employment provisions of the ADA? (Please check the category which is closest to your knowledge level)

☐ No knowledge at all: limited awareness  
☐ Some general knowledge about who is covered and what an employer should do  
☐ Some specific knowledge about ADA and the workplace  
☐ In depth knowledge, sometimes I am asked for my opinion on specific ADA matters

3. How satisfied are you with the level of knowledge you have about the employment provisions of the ADA? (Please check the category which best describes your situation)

☐ I have enough knowledge for what I need to do  
☐ My knowledge level is O.K., but I would like to know more  
☐ I really need to know more about employment and the ADA  
☐ I am concerned about how little I know at the moment about employment and the ADA

The following is a very brief summary of what is contained in Title I of the ADA. It is intended to remind you of the different parts of the title and can be used as a quick reference guide as you answer the questions that follow.

Please turn to next page

Title I of the Americans with Disabilities Act relates to employment practices. It says that employers covered by the Act cannot discriminate against a qualified person with a disability because of that person's disability in regard to:

- \* hiring
- \* promotion
- \* selection
- \* employee compensation
- \* job training, or any other terms, conditions and privileges of employment

It also says that employers must make "reasonable accommodations" to the workplace for a person with a disability, provided that this accommodation does not place an "undue hardship" on the business. "Reasonable accommodations" can mean making:

- \* the workplace physically accessible
- \* changing job specifications and job structure, and
- \* may require further assistance to be provided such as an interpreter for a hearing impaired employee

Deciding whether an accommodation will mean "undue hardship" for a business depends on the cost of the accommodation, the structure and type of business it is, how much money the business has.

Please turn the page

Please read the following statements, then circle the answer which most closely describes your attitude regarding that statement.

- |   | 1                 | 2               | 3                            | 4                              | 5                  | 6                    |
|---|-------------------|-----------------|------------------------------|--------------------------------|--------------------|----------------------|
|   | Strongly<br>agree | Mostly<br>agree | Unsure,<br>probably<br>agree | Unsure<br>probably<br>disagree | Mostly<br>disagree | Strongly<br>disagree |
| 4. In most cases modifying the workplace to meet the needs of a worker with a disability will be costly . . . . .   | .1                | 2               | 3                            | 4                              | 5                  | 6                    |
| 5. Most employers will be angry about how much the ADA will cost them . . . . .   | .1                | 2               | 3                            | 4                              | 5                  | 6                    |
| 6. The cost of the ADA employment provisions will be harder on small businesses. . . . .  | .1                | 2               | 3                            | 4                              | 5                  | 6                    |
| 7. Small business owners will be more frustrated than large business owners about how much the ADA will cost them . . . . .   | .1                | 2               | 3                            | 4                              | 5                  | 6                    |
| 8. The extra cost of modifying the workplace for a person with a disability is a good investment if that person is best qualified for the job . . . . .                         | .1                | 2               | 3                            | 4                              | 5                  | 6                    |
| 9. If a person with a disability is the most qualified for the job, most employers will be happy to modify the workplace for that person . . . . .                              | .1                | 2               | 3                            | 4                              | 5                  | 6                    |
| 10. Most employers think that modifying the workplace for a worker with a disability is fair. . . . .   | .1                | 2               | 3                            | 4                              | 5                  | 6                    |
| 11. State and federally funded rehabilitation agencies (e.g. DORS) should help employers meet the extra cost of modifying the workplace for a worker with a disability. . . . . | .1                | 2               | 3                            | 4                              | 5                  | 6                    |

Please turn to next page

12. The ADA will mean many changes to the hiring, firing and promotion practices of most businesses. . . . .1 2 3 4 5 6
13. Most employers will feel overwhelmed by the changes that the ADA will require to their staffing practices. . . . .1 2 3 4 5 6
14. In reality, a lot of what the ADA expects employers to do is impractical . . . . .1 2 3 4 5 6
15. Many employers will be frustrated because the ADA is impractical. . . . .1 2 3 4 5 6
16. Most employers will willingly make the changes to staffing procedures that the ADA requires . . . . .1 2 3 4 5 6
17. Many sections of the ADA employment provisions are unclear. . . . .1 2 3 4 5 6
18. Many employers will be confused by the lack of clarity in the ADA. . . . .1 2 3 4 5 6
19. Most employers will not have any problems understanding what is required under the employment provisions of the ADA . . . . .1 2 3 4 5 6
20. Many employers will need to hire consultants to help them understand the employment provisions of the ADA . . . . .1 2 3 4 5 6
21. Over the next five years the ADA will lead to a significant increase in the number of people with disabilities in jobs . . . . .1 2 3 4 5 6
22. An increase in the number of people with disabilities in jobs will benefit the whole community . . . . .1 2 3 4 5 6

Please turn to next page

23. Bureaucratic red tape will limit the effectiveness of the ADA in helping people with disabilities fight employment discrimination . . . .1 2 3 4 5 6
24. People with disabilities will be frustrated by the red tape that limits effectiveness of the ADA . . . .1 2 3 4 5 6
25. As the number of people with disabilities in the workforce increases, employers' attitudes towards people with disabilities will improve. . . . .1 2 3 4 5 6
26. Employers will be committed to making the ADA an effective piece of legislation in removing the barriers to the employment of people with disabilities. . . . .1 2 3 4 5 6
27. Employment discrimination against people with disabilities is the major reason so many are unemployed . . . .1 2 3 4 5 6
28. Federal laws which are passed to stop discrimination against people with disabilities are a good thing for society in general. . . . .1 2 3 4 5 6
29. The Federal government has a role to play in ensuring that employment practices are fair to all . . . . .1 2 3 4 5 6
30. Regardless of whether they think the ADA is fair, some employers will be angry about Federal laws regulating business practices. . . . .1 2 3 4 5 6
31. Most employers were prepared to meet the costs of modifying the workplace for a person with a disability before the ADA was passed . . . . .1 2 3 4 5 6
32. Many people with disabilities rely heavily on state and federal income maintenance programs (e.g. SSI and SSDI) . . . . .1 2 3 4 5 6
- Please turn to next page

33. Reliance on income maintenance programs means that many people with disabilities are reluctant to seek paid work . . . . .1 2 3 4 5 6
34. In general, people with disabilities would much rather be out working than staying at home. . . . .1 2 3 4 5 6
35. People with disabilities who could work, but stay at home, are a drain on America's resources. . . . .1 2 3 4 5 6
36. People with disabilities find it harder to get work than other people. .1 2 3 4 5 6
37. People with disabilities who get work perform better than most able-bodied employees . . . . .1 2 3 4 5 6
38. Please check the category that includes you:
- \_\_\_\_\_ I am a person with a disability
- \_\_\_\_\_ I am completing this questionnaire with a person who has a disability as a family member, or advocate
- \_\_\_\_\_ I work as a rehabilitation service provider.
- \_\_\_\_\_ Please do not answer questions 39-45
- \_\_\_\_\_ Other (please specify).....

**If you are completing this form as a family member or advocate, please remember that questions 39-45 relate to the person that you are completing the form with.**

39. What type of disability do you have? (you can check more than one)

_____ physical	_____ emotional
_____ visual impairment	_____ developmental
_____ hearing impairment	_____ other
_____ psychiatric	_____ please specify.....

40. Do you think that your disability is visible to most people? (Please circle your answer)

Yes                  No

41. In what age group were you in on your last birthday?

\_\_\_10-20 \_\_\_21-30 \_\_\_31-40 \_\_\_41-50 \_\_\_51-60 \_\_\_over 60

Please answer the following questions: (please circle your answer)

- |  |      |          |    |
|--|------|----------|----|
| 42. Do you have a job?                                     | Yes  | No       |    |
| 43. If you do have a job, is this paid, or unpaid work?    | Yes  | No       | NA |
| 44. If you do have a job, is this part, or full time work? | Part | Fulltime | NA |
| 45. If you do not have a job, are you looking for work?    | Yes  | No       | NA |



## APPENDIX N

APPENDIX N

ADA-EI for small business employers/owners

Ready or not:

**THE ADA IS HERE!**

**YOUR CHANCE TO HAVE A SAY....**

**The Americans with Disabilities Act  
Employment Survey**

**Rehabilitation Institute  
Southern Illinois University  
at Carbondale**

**in association with the:**

**Illinois Rehabilitation Association**

1. From which sources have you heard about what employers must do under the ADA? (please check all sources, and double check the main source, e.g. XX)

☐ I have not seen or heard any information  
☐ Magazines, periodicals  
☐ TV, radio, or newspapers  
☐ Chamber of commerce  
☐ Trade association  
☐ Informal contacts with business colleagues  
☐ Private consultants  
☐ State or federal rehabilitation organization  
☐ Workshop or discussion sessions at work  
☐ Other, please specify.....

2. At present, how would you describe your knowledge about the employment provisions of the ADA? (Please check the category which is closest to your knowledge level)

☐ No knowledge at all: limited awareness  
☐ Some general knowledge about who is covered and what an employer should do  
☐ Some specific knowledge about ADA and the workplace  
☐ In depth knowledge, sometimes I am asked for my opinion on specific ADA matters

3. How satisfied are you with the level of knowledge you have about the employment provisions of the ADA? (Please check the category which best describes your situation)

☐ I have enough knowledge for what I need to do  
☐ My knowledge level is O.K., but I would like to know more  
☐ I really need to know more about employment and the ADA  
☐ I am concerned about how little I know at the moment about employment and the ADA

The following is a very brief summary of what is contained in Title I of the ADA. It is intended to remind you of the different parts of the title and can be used as a quick reference guide as you answer the questions that follow.

Please turn the page

Title I of the Americans with Disabilities Act relates to employment practices. It says that employers covered by the Act cannot discriminate against a qualified person with a disability because of that person's disability in regard to:

- \* hiring
- \* promotion
- \* selection
- \* employee compensation
- \* job training, or any other terms, conditions and privileges of employment

It also says that employers must make "reasonable accommodations" to the workplace for a person with a disability, provided that this accommodation does not place an "undue hardship" on the business. "Reasonable accommodations" can mean making:

- \* the workplace physically accessible
- \* changing job specifications and job structure, and
- \* may require further assistance to be provided such as an interpreter for a hearing impaired employee

Deciding whether an accommodation will mean "undue hardship" for a business depends on the cost of the accommodation, the structure and type of business it is, how much money the business has.

Please turn the page

Please read the following statements, then circle the answer which most closely describes your attitude regarding that statement.

- |   | 1        | 2      | 3        | 4        | 5        | 6        |
|---|----------|--------|----------|----------|----------|----------|
|   | Strongly | Mostly | Unsure,  | Unsure   | Mostly   | Strongly |
|   | agree    | agree  | probably | probably | disagree | disagree |
|   |          |        | agree    | disagree |          |          |
| 4. In most cases modifying the workplace to meet the needs of a worker with a disability will be costly . . . . .   | .1       | 2      | 3        | 4        | 5        | 6        |
| 5. Most employers will be angry about how much the ADA will cost them . . . . .   | .1       | 2      | 3        | 4        | 5        | 6        |
| 6. The cost of the ADA employment provisions will be harder on small businesses. . . . .  | .1       | 2      | 3        | 4        | 5        | 6        |
| 7. Small business owners will be more frustrated than large business owners about how much the ADA will cost them . . . . .   | .1       | 2      | 3        | 4        | 5        | 6        |
| 8. The extra cost of modifying the workplace for a person with a disability is a good investment if that person is best qualified for the job . . . . .                         | .1       | 2      | 3        | 4        | 5        | 6        |
| 9. If a person with a disability is the most qualified for the job, most employers will be happy to modify the workplace for that person . . . . .                              | .1       | 2      | 3        | 4        | 5        | 6        |
| 10. Most employers think that modifying the workplace for a worker with a disability is fair. . . . .   | .1       | 2      | 3        | 4        | 5        | 6        |
| 11. State and federally funded rehabilitation agencies (e.g. DORS) should help employers meet the extra cost of modifying the workplace for a worker with a disability. . . . . | .1       | 2      | 3        | 4        | 5        | 6        |

Please turn to next page

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12. The ADA will mean many changes  
to the hiring, firing and  
promotion practices of most  
businesses. . . . .1 2 3 4 5 6
13. Most employers will feel  
overwhelmed by the changes that  
the ADA will require to their  
staffing practices. . . . .1 2 3 4 5 6
14. In reality, a lot of what the  
ADA expects employers to do is  
impractical . . . . .1 2 3 4 5 6
15. Many employers will be frustrated  
because the ADA is impractical. . . . .1 2 3 4 5 6
16. Most employers will willingly make  
the changes to staffing procedures  
that the ADA requires . . . . .1 2 3 4 5 6
17. Many sections of the ADA employment  
provisions are unclear. . . . .1 2 3 4 5 6
18. Many employers will b confused by  
the lack of clarity in the ADA. . . . .1 2 3 4 5 6
19. Most employers will not have any  
problems understanding what is  
required under the employment  
provisions of the ADA . . . . .1 2 3 4 5 6
20. Many employers will need to hire  
consultants to help them  
understand the employment  
provisions of the ADA . . . . .1 2 3 4 5 6
21. Over the next five years the  
ADA will lead to a significant  
increase in the number of people  
with disabilities in jobs . . . . .1 2 3 4 5 6
22. An increase in the number of people  
with disabilities in jobs will  
benefit the whole community . . . . .1 2 3 4 5 6
23. Bureaucratic red tape will limit  
the effectiveness of the ADA in  
helping people with disabilities  
fight employment discrimination . . . .1 2 3 4 5 6

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24. People with disabilities will be frustrated by the red tape that limits effectiveness of the ADA . . . .1 2 3 4 5 6
25. As the number of people with disabilities in the workforce increases, employers' attitudes towards people with disabilities will improve. . . . .1 2 3 4 5 6
26. Employers will be committed to making the ADA an effective piece of legislation in removing the barriers to the employment of people with disabilities. . . . .1 2 3 4 5 6
27. Employment discrimination against people with disabilities is the major reason so many are unemployed . . . .1 2 3 4 5 6
28. Federal laws which are passed to stop discrimination against people with disabilities are a good thing for society in general. . . . .1 2 3 4 5 6
29. The Federal government has a role to play in ensuring that employment practices are fair to all . . . . .1 2 3 4 5 6
30. Regardless of whether they think the ADA is fair, some employers will be angry about Federal laws regulating business practices. . . . .1 2 3 4 5 6
31. Most employers were prepared to meet the costs of modifying the workplace for a person with a disability before the ADA was passed . . . . .1 2 3 4 5 6
32. Many people with disabilities rely heavily on state and federal income maintenance programs (e.g. SSI and SSDI) . . . . .1 2 3 4 5 6
33. Reliance on income maintenance programs means that many people with disabilities are reluctant to seek paid work . . . . .1 2 3 4 5 6

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34. In general, people with disabilities would much rather be out working than staying at home. . . . .1 2 3 4 5 6
35. People with disabilities who could work, but stay at home, are a drain on America's resources. . . . .1 2 3 4 5 6
36. People with disabilities find it harder to get work than other people. .1 2 3 4 5 6
37. People with disabilities who get work perform better than most able-bodied employees . . . . .1 2 3 4 5 6
38. What category of business do you work in? (Please check the relevant category)
- \_\_\_\_\_ Manufacturing business
- \_\_\_\_\_ Service business
- \_\_\_\_\_ Other (please specify).....
39. How many people are employed at your work site?
- \_\_\_\_\_ 1-14
- \_\_\_\_\_ 15-24
- \_\_\_\_\_ 25 or more
40. Does your business have federal contracts worth at least \$2,500 per year? Please circle the correct response:
- Yes                      No                      Not sure
41. What is your job title?.....
42. In what age group were you in on your last birthday?
- \_\_\_15-20 \_\_\_21-30 \_\_\_31-40 \_\_\_41-50 \_\_\_51-60 \_\_\_over 60

## APPENDIX O

## APPENDIX O

### Attitude question

---

Please circle the number below that best represents your level of agreement or disagreement with the following question:

#### HOW WOULD YOU DESCRIBE YOUR ATTITUDE TOWARD THE ADA EMPLOYMENT PROVISIONS?

Strongly Against	Against	Somewhat Against	Neutral	Somewhat Favorable	Favorable	Strongly Favorable
1	2	3	4	5	6	7

## APPENDIX P

## APPENDIX P

### Instructions to participants

#### Instructions

You will receive two packets, one marked A, and one marked B. Please open packet A. Please complete the informed consent forms, which are on the first page of packet A. When they are completed, I will collect them."

(Collect completed forms). The administrator will then read the directions at the top of the ADA-IS, as suggested by Antonak and Livneh (1995a):

The questionnaire in front of you should be titled the ADA Information Survey. Is that what you all have? (respond as necessary). This questionnaire is a test of knowledge about the employment provisions of Title I of the Americans with Disabilities Act. By using your experience and general knowledge you will probably be able to pick the correct answer to many of the questions. Please read each question carefully and select the one alternative that you consider to be the most correct answer. It has been legally determined that there is a correct answer for each question, however, THERE IS NO PENALTY FOR GUESSING. There is no time limit for the completion of this test, but you should work as rapidly as you can. After you complete the packet with the

survey, please complete the general comments form. When you finish, you are welcome to take a break outside the room until all everyone has finished.

When all participants have completed the ADA-IS and the comments sheet, they may have a short break. The group will reconvene in order to complete the ADA-EI (Moore & Crimando, 1995), which will be described by the administrator as an opinion survey.

**Instructions (PACKET B)**

Welcome back. Please open packet B. The first page should read: 'Ready or not, the ADA is here.' This is the ADA Employment Inventory, an opinion survey about the ADA employment provisions. Again, please respond to each question, and please respond with the answer that most truly reflects your own opinions. THERE ARE NO RIGHT OR WRONG ANSWERS TO THIS SURVEY. Please complete the survey as quickly as possible. When you have completed the survey, complete the sheet with one question on it, which you should respond to in a manner that most reflects your beliefs. After you complete the sheet, please place it in packet B, and then you are welcome to leave the room for a short break. We will reconvene when everyone has completed the exercise, and has had an opportunity to take a break. Are there any questions or concerns at this point? (respond as needed). Please begin the Employment Inventory.



After the participants finish, the researcher will collect packet B. Participants may leave the room for a break.

When the group is reconvened, they will receive instructions for the debriefing session.

APPENDIX Q

## APPENDIX Q

### Debriefing instructions

Thank you for participating in this project. First, I (we) will offer you an explanation of the goals of the research project. After that, as each of you leave, please speak with me (one of us) individually, in order to share your concerns or feelings about completing the instrument. At that time you will receive an ADA information packet.

Then the debriefer(s) will explain the underlying goals of the research, as stated below:

1. All of the questions on the ADA-IS provided one correct and one incorrect response among the choices offered. Half of the questions were obscure, so it may have been difficult to choose the correct response.
2. The underlying purpose of this research is to develop a method that may help educators and others to understand the degree to which people who are directly affected by the employment provisions of the ADA are familiar with them. The reason that half the questions were obscure was to help us understand what people believe to be true when the truth is not easily evident. Do you have any questions or comments at this time?

Respond as necessary.

3. The rationale for constructing the questionnaire in

this way was to help educators understand what people do or do not know about the employment provisions of the ADA, and to what degree people may have received either erroneous or inadequate information. Do you have any questions or comments at this time?

Respond as necessary.

4. The purpose of Title I is to (a) create a level playing field for individuals with disabilities to obtain/maintain employment, and (b) protect employers by articulating explicit guidelines that help them understand who must be considered in hiring/promotion, and what steps employers must take in order to comply with the law. If we can understand what information people are either lacking or misinformed about, educators and other stakeholders can design information and training curriculum and programs aimed at expanding knowledge that will assist all affected parties in understanding, communicating, and acting within the legal parameters of the ADA. Full information for all stakeholder groups can help to protect their self interests, and eliminate problems in instituting the ADA's employment provisions. Do you have any questions or comments at this time?

Respond as necessary.

Ask individual participants about their general reactions to taking the ADA-IS, and whether it triggered any feelings of

discomfort. The debriefer will address those issues with individual participants. Give each student a packet.

## LIST OF REFERENCES

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