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Employability of Individuals with Varying Disabilities and Costs of Needed Workplace  
Accommodations

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A thesis  
presented to  
the Faculty of the Department of Psychology  
East Tennessee State University

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In partial fulfillment  
of the requirements for the degree  
Master of Arts in Psychology

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by  
Bram Cassidy Bevins  
May 2003

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Dr. David Marx, Chair  
Dr. Roger Bailey  
Dr. Otto Zinser

Keywords: Disability, Employment, Workplace, Accommodations

## ABSTRACT

### Employability of Individuals with Varying Types of Disabilities and Costs of Needed Workplace Accommodations

by

Bram Cassidy Bevins

The present study examined the relationship between an individual's disability and needed workplace accommodations and employability. The participants for this study were businessmen and businesswomen in Southwestern Virginia who possessed the ability to hire employees. Results indicated that an individual with a physical disability was thought of as more employable and favorable than a nondisabled individual, a blind individual, and an obese individual. Results also indicated that a physically disabled individual would be hired before a blind individual and an obese individual when workplace accommodations were needed. One possible explanation for these findings is that it is desirable to hire someone with a disability so that a company will possess the appearance of being diversified. Future studies may investigate the differences between small businesses and large businesses as it relates to the employing of individuals with disabilities.

## DEDICATION

I would like to dedicate this thesis, and all the work that has gone into it, to my family. Mom and Dad, without your never-ending support I would have never completed this work or achieved as much, I love you both. Karen and Litaya, both of you have brought nothing but love into my life and given me the perfect family. I owe so much of my success to you, Karen, and I know that you will always support and encourage me throughout any endeavor. And, to numerous others who have supported me throughout the years, I thank you as well.

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# CHAPTER 1

## INTRODUCTION

### Perceptions of Individuals with a Disability

Throughout the years, the perception of disabled individuals has changed with increasing regularity. All too familiar to this group of individuals are the painful and discouraging memories of being referred to as “crippled” and deemed worthless by many in society. In today’s modern culture, individuals with disabilities are seemingly thought of as having more to offer to the general public than merely collecting money from the Government or working in professions that are devoid of responsibility and advancement (Mergenhagen, 1997). Although changes may have occurred related to how individuals with disabilities are perceived by “normal” individuals, this researcher will attempt to discuss why these changes may have occurred.

This project will (a) determine if changes have occurred in the work environment, (b) examine various theories that help to explain why disabled individuals are becoming increasingly socially accepted, (c) review previous studies in the area of disabilities and how people respond to disabled individuals, (d) study research related to disabled individuals and the workplace, and (e) present findings regarding the extent of an individual’s disability and his/her likelihood of employment.

### Theoretical Background

Mere-Exposure Effect. One explanation of the changes in acceptability of the disabled that has occurred over the years is found in the theory of the mere-exposure effect. This theory suggests that stimuli that are most familiar will usually be preferred over novel stimuli. Zajonc (1968) was the major pioneer of research concerned with the mere-exposure effect.

Zajonc (1968) conducted a study in which he instructed participants to rate 154 pairs of English words. The participants were to choose between the words and select the one that was most desirable. He then implemented the use of a word frequency scale to assess how many times the words used in the study appeared in the English language. The majority of the participants chose words that were more prevalent in the English language.

How could this apply to attitudinal changes towards disabled individuals? To put it simply, the more someone is exposed to a person who has a disability, the more likely that the person will like or have a favorable attitude about an individual (Mitchell, Hayes, Gordon, & Wallis, 1984). Today, people who have a disability are out in the public more and are involved in every aspect of society. Even the workforce, which was often a restricted area for individuals with disabilities, is being infiltrated more and more by the disabled. Thus, being out in the workforce and being seen has enabled the general public to become accustomed to disabled individuals and has enabled a change in peoples' perceptions and attitudes.

The Matching Phenomenon. Another theory that could possibly be used to explain changes in people's perceptions of disabled individuals is the matching phenomenon. The matching phenomenon refers to the fact that people typically choose someone to date or to marry who roughly matches their own characteristics in some regard. For instance, John is an average looking guy and because of this, the most attractive females always reject him for dates. However, once John realizes that Alice, who is average looking as well, is available, John approaches Alice and they live happily ever after.

The example of John and Alice might be extended to more than just romantic relationships. Furthermore, this particular theory applies to attitudinal changes towards individuals with disabilities in that people not only match-up with someone who is about as

attractive as they are in dating and marrying situations, but also in friendships and work relationships (Huston, 1973). Although a disability may cause the person to look different in some aspect, most people look at other characteristics of the person and consider the attitudes, beliefs, and feelings of the person, instead of only focusing on his/her disability.

Similarity. Theories on similarity might also assist in explaining the attitudinal and perceptual changes about the disabled. Heider (1967) proposed the notion that individuals prefer cognitive balance to cognitive imbalance. An example of Heider's theory would be when two people are linked together by similar attitudes, such as both of them being Republicans, then they, more than likely, will be in a state of cognitive balance. However, if their attitudes are different, a cognitive imbalance will result and negate the relationship that might have formed.

In applying similarity theory to attitudinal and perceptual changes toward the disabled, consider the situation above somewhat differently. For instance, if an individual with a disability, who also happened to be a republican, engages in conversation with a nondisabled republican, their relationship will be formed on the basis of similar attitudes rather than on the basis of the individual's disability.

Halo Effect. The halo effect is the tendency to evaluate an individual highly on many traits because of a belief that the individual is high on one major trait (Thorndike, 1920). Similar to this is the 'devil effect', whereby a person evaluates another as low on many traits because of a belief that the individual is low on one significant trait. This theory is important in explaining perceptions of those with a disability. If the disabled person is originally viewed as competent and maybe even as a survivor of a bad experience, then he/she are likely to be viewed also as having other good qualities. However, if the disabled person is viewed as a drain on society, then the observer will assign other negative traits to the disabled person as well.

Summary of Theories. Past perceptions and attitudes about disabled individuals perpetuated the notion that not only were disabled individuals physically incompetent, but mentally incompetent as well. Over time, this norm has changed. People may form friendships, even intimate and work relationships, with disabled individuals based on traditional factors like their similar attitudes, feelings, and thoughts on matters from religion to politics.

#### Empirical Research on Disabilities

Reaction of Children to the Disabled. Richardson, Goodman, Hastorf, and Dornbusch (1961) conducted one of the first studies on disability perceptions. They expanded the findings of Richardson's 1957 pilot study (as cited in Richardson et al.) concerning children's reactions to other children with disabilities. In the pilot study, Richardson found that children, when asked to rank pictures of nondisabled and disabled children, ranked the nondisabled children higher than the children who had some form of disability. Thus, for their study, Richardson et al. hypothesized that children would rank the nondisabled child as the most liked and then rank the other children in subsequent order according to the severity of their disabilities.

They selected five testing sites. The first two testing sites were coed summer camps for children from 10 to 11 years of age that included children with disabilities. The third testing site was another camp similar to the first but without any disabled children. The fourth testing site consisted of children from a public school in New York City with generally low incomes and where half of the children had physical disabilities. The fifth and final testing site consisted of children from a rural public school in Missoula, Montana. None of the children attending this school had any form of a physical disability.

At each site, the children were asked to rank pictures of other children showing: (1) a child with no physical handicap, (2) a child with crutches and a brace on his/her left leg, (3) a

child sitting in a wheelchair with a blanket covering both legs, (4) a child with his/her left hand missing, (5) a child with a facial disfigurement on the left side of the mouth, and (6) an obese child. To hold constant the relationship between the sex of the subject and that of a child in the pictures, pictures of both a male and female child for the various conditions were made available, and then presented to the child of the same sex. The children were instructed to look at the pictures for an adequate length of time after which the researcher asked each child “which boy (girl) do you like the best?” The participants were to point to the picture they preferred most and that picture was removed, leaving the remaining pictures to be ranked.

The results of the study by Richardson et al. (1961) replicated the earlier findings of Richardson 1957 pilot study. The rankings of the pictures were consistent with the hypothesized order. The nondisabled child was ranked as most liked, followed by the child with crutches and a brace, a child sitting in a wheelchair, a child with the left hand missing, a child with a facial disfigurement, and finally the obese child. Moreover, the hypothesized order of rankings was found to be completely confirmed and culturally uniform. Children from all backgrounds, from rich schools or poor schools, from camps with disabled children or camps without disabled children, all ranked the nondisabled child as the most liked.

Attitudes of Children Toward the Disabled. A similar study conducted by Alessi and Anthony (1969) used the same procedures as Richardson et al., (1961). For their study, the selected participants were attending a summer camp for males and females, 10 and 11 years of age, which was designed for underprivileged and disabled children. The procedure for ranking the pictures of the children in the different physical states was identical to the Richardson et al's. procedure.

Alessi and Anthony found that children ranked the pictures in virtually the same manner as did those in the Richardson et al. (1961) study. The nondisabled child was still ranked as the most liked. However, what Alessi and Anthony did find that differed significantly from the Richardson et al. study was that the order found by Richardson et al. only occurred after the mean ranks were generated. This order, being an average order of how much they would like to play with the person in the picture, was not true for a single participant. Alessi and Anthony thought that saying that the majority of children preferred the pictures in a particular order was a bit misleading, and that it was premature and maybe even inaccurate to assume that this order was culturally uniform.

Children's Values and Friendships. Richardson (1971) conducted another study primarily to determine if attitudes of children toward their disabled compatriots changed after more exposure to disabled children. Richardson employed the techniques that were used in his previous study (1959). He used the same ranking procedure and used a technique to determine the children's attitudes and values toward disabled individuals.

Once again, Richardson (1971) used a sample of boys and girls between the ages of 9 and 13 years. Groups attended a summer camp. In the first group, 50% of children were disabled and 50% were nondisabled. The second group consisted of African American and Puerto Rican children from predominantly low-income families. The children completed an attitudes and values scale about disabled individuals on their first day at the camp and after 13 days at the camp. After 13 days, children were instructed to rank the pictures according to whom they would like to play with the most and who they liked best.

He found that children still preferred the nondisabled child to the other choices. He also found that children who held normative values towards disabled individuals were more likely

than not to have chosen a best friend from camp who was nondisabled. However, children who held atypical values on the attitudes and values scale showed a preference for the disabled children. This finding could be due in part to the general attitude about the disabled at the time of the study. Normative values for this time period were still negative towards the disabled. Individuals still viewed the disabled as useless and a drain on society.

Compared to earlier studies by Richardson and others, this study began to show that a change in attitude was taking place. Earlier studies indicated that children, even disabled children, liked a child who was devoid of a disability. Richardson's study (1971) showed that children's attitudes toward the disabled were becoming more favorable. Not only did children cease shunning the disabled children, but they actually preferred them as playmates and friends. Can this be seen in adolescents and older individuals? The following studies will attempt to answer this question.

Attitudes of Medical Students. To assess changes in attitudes towards individuals with disabilities, Mitchell et al. (1984) conducted a study using a sample of medical students. The students were enrolled in a school where medical students came into contact with patients from the first day of their training. While students encountered patients with various conditions, the main clinical problem seen were patients with some form of physical disability.

All participants in this study completed the Attitudes Towards Disabled Person Scale (Yuker, Block, & Young, 1966) during their first year in the program. The scores for men and women were calculated separately because the scale has different scoring methods for men and for women. The scale was also administered at the end of their training to determine if there were any changes in their attitudes.

Examination of the scores from the first administration of the test were significantly lower than scores from the second administration (Mitchel et al., 1984). By using a two-way analysis of variance, significant main effects were found for time of assessment and sex. The basic findings of the research were that attitudes toward the disabled increased as students progressed through their training. Also, the study showed that females held more positive attitudes throughout the study than their male counterparts.

The research conducted by Mitchell et al. showed that a mere-exposure effect does occur. By increasing the exposure to physically disabled people, the medical students began to make connections with the patients leading to the facilitation of more positive attitudes and improved relations with the patients (Mitchell et al., 1984).

Social Ratings by College Students. Thomas and Lee (1990) wanted to see if there were any changes in the college population's perception of disabled individuals. Participants for their study consisted of 120 undergraduates enrolled in introductory behavioral science classes. After considering the earlier findings of Carver, Glass, and Katz (1978) that suggested changes in attitudes toward the disabled, Thomas and Lee hypothesized that their study would show an increasingly positive attitude change toward the disabled as well.

Each participant received a folder containing a picture of a man in one of three conditions: (1) a man seated in a chair, (2) a man seated in a wheelchair, (3) and a man standing with the aid of forearm crutches (Thomas & Lee, 1990). After looking at the pictures, the participants were given a set of social, bipolar descriptors (friendly or unfriendly, honest or dishonest, and pleasant or unpleasant) and a set of academic, bipolar descriptors (motivated to learn or unmotivated to learn, hardworking or lazy, and organized or disorganized). The

participants were then asked to imagine that the person in the pictures was a member of their class and to pick the descriptor that matched the photograph the best.

Thomas and Lee (1990) found a significant main effect for physical body condition. “The results indicated that raters were more likely to describe the person seated in a wheelchair or standing with the aid of crutches as more friendly, honest, and pleasant than persons in the able bodied group.” They concluded, that although there may be changing attitudes towards disabled individuals, these changes may be due to “sympathy effects” instead of diminishing negative attitudes.

In summary, throughout the years perceptions of those with a disability have improved. In children, attitudes concerning the disabled have changed, from being shunned and neglected, as playmates and friends, to actually being the preferred by “normal” children with atypical values (Richardson, 1971). Changes are evident in adolescents and adults as many now view disabled individuals as more likely to succeed and as more hardworking (Thomas & Lee, 1990). Although these changes are immensely important, do these changes extend to the workplace? Current research on the topic of individuals with disabilities in the workplace will be examined in the next section.

## The Disabled in the Workplace

### Introduction

Attitudes and perceptions of the disabled have been slow to improve in the workplace (census data, 2000). In discussing disabilities, a nonsevere disability refers to one not requiring personal assistance in daily activities, while a severe disability refers to one requiring daily personal assistance (see appendix A for further qualifications). Compared to nondisabled individuals, individuals with a nonsevere disability are less likely to be employed, and people

with a severe disability are far less likely to be employed (census data, 2000). For the largest age group of working Americans in the labor market, 21 to 64 years of age, the employment rate for nondisabled Americans was 82.1% compared to 26.1% for disabled individuals. It would appear that Americans with disabilities are less attractive to employers versus their nondisabled counterparts.

With the passage of the Americans with Disabilities Act (ADA) (1990) the rights of disabled individuals have been elevated. Companies are no longer permitted to take discriminatory action against a potential employee because of his/her disability. The ADA was passed to overcome the disadvantages that disabled individuals face when attempting to find gainful employment.

#### Empirical Studies

Employment of Individuals with Severe Disabilities in Large Businesses. A survey of large businesses in the United States in 1991 indicated that more favorable perceptions and attitudes regarding individuals with disabilities are present, more than current employment and census data indicated (Census Data, 2000). Levy, Jessop, Rimmerman, and Levy (1991) constructed a survey and administered it to many large corporations in the US. They wanted to examine the attitudes of personnel and human resource executives towards the employability of individuals with disabilities. They sent questionnaires to 1140 businesses and received 341 completed surveys. Views of most businesses towards the employment of disabled individuals were positive. Results indicated that most executives had favorable attitudes for the employment of disabled individuals, especially if the executives worked in a company that had hired disabled individuals within the past three years. They also found that 66% of responding companies had a policy in place regarding hiring individuals with disabilities.

Employability of Persons with a Disability in Small Businesses. Another study conducted by Levy et al. (1995) compared smaller businesses (fewer than 500 employees) to larger businesses (more than 500 employees). To determine if there were differences in attitudes towards the employment of disabled individuals between these businesses, Levy et al. used the Attitudes Towards the Employability of Persons with Severe Disabilities Scale (ATEPSD). The companies that had fewer than 500 employees held significantly less favorable attitudes towards individuals with disabilities than the companies that had 500 or more employees.

Another interesting finding from this study was that prior contact with the disabled was not as important as previously thought. Levy et al. (1995) found that prior contact had little effect on attitudes towards the disabled; however, a prior negative contact had a substantial effect on the attitudes towards the disabled. If a person had a prior negative contact, they were significantly more likely to have a lower score on the ATEPSD. This finding was congruent with the research on the mere exposure-effect (Zajonc, 1968).

While it has been shown that larger companies favor hiring individuals with disabilities more than small businesses, it is not clear why these differences exist. A possible explanation could be that larger companies have access to more information about those with disabilities and thoroughly train their employees using this information. For example, a large corporation such as Wells Fargo has specific hiring policies in place when considering employing an individual with a disability.

Younes (2001), Senior Executive for Wells Fargo Diversity Initiatives Department, stated that Wells Fargo sees individuals with disabilities as potential and loyal employees instead of “deadweight” that the company does not want to hire. She further stated that individuals with disabilities increases the pool of potential workers in the current tight labor market. Furthermore,

and most importantly, Younes stressed the importance of having a diverse workforce. Because one out of every three individuals in the United States will live with a disability at some point in their lives, it is important to have diverse workers, such as individuals with disabilities, to serve the increasingly diverse consumer.

While it is admirable that large corporations increasingly employ people with progressively diverse backgrounds, this change cannot be attributed solely to access to better information and training on hiring practices. It may be that larger corporations do not want the negative publicity of being unsympathetic to individuals with a disability. They may believe that it would cost the company less to hire the occasional disabled person even if he/she cannot pull his/her own weight. A larger company could absorb the decreased production from these individuals much easier than could a small business where every employee makes a big difference in the company's profits.

Because the goal of most businesses is to make a profit, hiring someone with a disability could potentially be costly in two ways. First, the person with a disability must be qualified and able to carry out the duties of the position so that the company does not lose money. Second, the accommodations for the disabled person must not cost the company too much. For example, a company housed in a two-story building may need to spend thousands of dollars in renovations to accommodate someone in a wheelchair.

### Workplace Accommodations

Not only do disabled individuals face discrimination before being hired, but they also face it after obtaining employment. The main avenue for this discrimination is through workplace accommodations. Many times, employees with disabilities require accommodations that range from restructuring work hours to the acquisition of adaptive equipment such as a

machine that produces documents in brail. Despite the low average cost of accommodations for disabled individuals at \$100 per worker, and some individuals requiring no accommodations, companies still see this cost as a reason for not hiring individuals with disabilities (Gunderson & Hyatt, 1996).

Satcher (1992) also suggested that employers were most concerned about the cost of providing accommodations, particularly accommodations needed by job applicants. Although the cost of the accommodations needed by disabled employees, on average, are minimal, companies still see this as a barrier to hiring individuals with disabilities.

The guidelines for accommodating workers with disabilities are specified by the ADA. The purpose of an accommodation is not to give the disabled worker an upper hand in the work environment; the ultimate goal is to level the playing field so that employees with disabilities have an “equal opportunity to perform the essential functions of the job” (Satcher & Dooley-Dickey, 1992). The ADA is clear in stating that a business or company does not have to provide the best accommodation, but one that is effective for the job, acceptable to the employer and the employee, and practical so as not to cause any undue hardship to the business.

Roessler and Sumner (1997) wanted to examine attitudes towards accommodations for someone who suffers from a chronic illness. Using the National Multiple Sclerosis Society database, 400 businesses were used for testing. Each business was sent a survey consisting of three sections. The first section pertained to the size of the business and other background information. The second section was constructed to obtain personal information pertaining to the participant taking the survey. The third section focused on the participants’ experiences in working with people with chronic illnesses.

Roessler and Sumner found that the costs of accommodations were congruent with other findings (Satcher, 1992; Gunderson & Hyatt, 1996). Sixty-two percent of participants indicated that an acceptable range for an accommodation was \$501 to \$5000, but only seventeen percent of the group indicated that they would actually pay more than \$500. Although employers were willing to provide accommodations for employees with disabilities, the cost of the accommodation was still their chief concern when hiring employees with disabilities.

The finding that larger businesses are more inclined to hire people with disabilities than are smaller businesses may be due to larger businesses' having hiring practices regarding those with disabilities. Smaller businesses may not have such practices. However, it may only be a matter of money. Larger businesses often have more financial resources from which to draw when accommodating an employee with a disability.

#### Statement of the Problem

As noted above, the general public and employers are more accepting of disabled individuals. Based on Richardson's (1971) research, the present study will investigate the employability of three different types of applicants: physically disabled persons, blind persons, and obese persons. Based on Roessler and Sumner's (1997) study, an accommodation amount of \$1,000 or \$6,000 was used.

#### Hypotheses

1. Respondents will be most likely to hire a person with no disability and no need for an accommodation, followed by someone with a physical disability and \$1,000 worth of accommodation, someone who is blind and \$1,000 cost factor, someone who is obese and a \$1,000 worth of accommodation, someone who is physically disabled and a

\$6,000 accommodation, someone who is blind and a \$6,000 accommodation, and someone who is obese and \$6,000 worth of accommodation.

2. People will report that the typical company is more likely to spend \$1,000 for accommodations than \$6,000 and they will be more likely to spend it for a physically disabled person, followed by a blind person, and lastly for an obese person.
3. A multiple regression analysis will be conducted to determine whether a combination of demographic variables along with the independent variables will increase the predictability on each of the dependent variables.

## CHAPTER 2

### METHOD

#### Participants

Participants for the present study were businessmen and businesswomen from Tazewell, Russell, and Buchanan counties in Southwest Virginia. The sample consisted of 115 businesspersons, many of whom were members of their areas Chambers of Commerce. Participants were chosen out of convenience. They were contacted by phone and asked to participate in the current study. Eight participants were excluded from the study because they missed one or more of the “comprehension” questions. The participant’s job titles ranged from automobile repair shop owners to coal company executives. To be included in the present study, all participants surveyed possessed the authority to hire potential employees.

Of the 115 participants, 111 reported their ages. The sample included 62 males and 49 females. The mean ages were 47.29 for males and 47.02 for females. Participants reported hiring a mean number of 45.86 employees, and they were able to hire employees for the past 13.10 years. The educational levels for the participants ranged from high school graduates to Masters Degrees. Forty-eight reported having a relative with a disability, and fifty-eight reported having hired a disabled person in the past.

#### Materials

Each participant received a packet of information containing the following: (1) a cover letter (Appendix B), (2) an Informed Consent Form with no signature required (Appendix C), (3) an instruction page for the questionnaire (Appendix D), (4) level of disability and accommodation scenario page (Appendix E), (5) an understanding of scenario question page

(Appendix F), and (6) a likelihood of hiring questionnaire (see appendix G), a demographics page (Appendix H), and the Marlowe-Crowne Social Desirability Scale (Appendix I).

#### Cover Letter

The cover letter (see appendix B) was the first item in each survey packet and served as an introduction to the researcher's background and purpose of the study. It also provided contact information should the participant require additional information.

#### Informed Consent

The informed consent (see appendix C) was used to clarify the rights and responsibilities of each participant in the study. Most exempt studies require that this information be read to the participants; however, because the sample surveyed was employees of businesses, that would have been impractical. The informed consent did not require a signature to protect the anonymity of each participant.

#### Level of Disability and Accommodation Scenarios

The level of disability scenarios (see appendix E) asked the participants to imagine that they were currently looking to hire an employee for their company. Each scenario was identical except for the potential employee's disability and level of accommodation needed. The different levels of disabilities were as follows: (1) physical disability (leg amputee) with a \$1,000 cost of accommodation, (2) physical disability (leg amputee) with \$6,000 accommodation, (3) obese (5'8" and 350lbs) with a \$1,000 accommodation, and (4) obese (5'8" and 350lbs) with \$6,000 cost factor, (5) blind person with a \$1,000 accommodation, (6) blind person with \$6,000 cost of accommodation, and (7) no disability.

After the participants read the scenarios, the participants were instructed to answer the "understanding" questions on the following page (see appendix F). On the next page were the

dependent variables and these included the likelihood of the participant's hiring the individual, the likelihood that the individual would be successful, hard-working, motivated, and disorganized. All of these questions were answered on a 0% to 50% to 100% scale, on which the participants were instructed to place a check-mark on the line indicating the likelihood that they would hire the individual and that individual would be successful, hard-working, motivated, and disorganized.

For all scenarios, except the no disability one, the last question dealt with how likely a typical company spend either \$1,000 or \$6,000 to provide needed accommodations. This was not included for the "no disability group," because there was no disability involved and thus no accommodation was needed.

#### Demographic Questionnaire

The demographic questionnaire (see Appendix D) consisted of questions concerning the following information about the participants: (1) age, (2) gender, (3) education level, (4) information about their current company and position, as well as (5) information about their experience with people who had some type of disability.

#### Marlowe-Crowne Social Desirability Scale

The Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960) (see appendix J) was the last instrument participants were asked to complete. The scale has a high reliability with alpha ranging from .73 to .88 in published samples. This scale was used to determine if participants were reporting socially desirable answers. A MANCOVA was performed using the Marlowe-Crowne Social Desirability Scale as a covariate with the purpose of determining if participants with high scores on the scale were answering questions in a significantly socially desirable manner. The overall mean score of the Marlowe-Crowne in the

current study was 19.23, with a range of 9 to 31. This is a bit higher than the published means ranging from 13.3 to 16.4 in normal populations. The mean of 19.85 for females in the current study was slightly higher than the mean of 18.76 for males.

### Procedure

The experimenter initially gave a verbal introduction to the study. A packet of information containing a cover letter, an instruction page, scenario pages, a demographics page, and the Marlowe-Crowne Social Desirability Scale was given to the participants. After reading the introduction to the study and the packet of information, the researcher asked if the participants preferred to mail back the survey or to have it picked up. If the participants chose to mail it, they were provided with a self-addressed stamped envelope. The researcher asked if there were any questions before leaving and thanked the participants for their participation. The experimenter returned to pick up 84% of the surveys from the participants with the remaining surveys being mailed back to the experimenter.

### Reliability Procedure

Because the reliability for the dependent variables was unknown, a reliability study was conducted using one disability and accommodation scenario. The participants for the reliability study were 16 undergraduates from a mid-sized southeastern university who were currently enrolled in an introductory psychology class.

The participants for the reliability study were asked to put a four-digit code in the upper right hand corner of the packet. They were then asked to read the scenario and to answer the questions from Appendix G. After a 14-day period, the participants were again given the survey and again asked to record their same four-digit code in the upper right hand corner. This code was used to match an individual's response booklet. Four participants were not present for the

second administration of the survey; this left 12 participants used in the reliability study. A Pearson correlation coefficient was calculated to determine the reliability of each dependent variable. The test – retest reliability coefficient for five out of the six dependent variables was significantly correlated at the .05 level of significance and ranged from  $r = .61$  to  $r = .81$ . One dependent variable had a much lower reliability score at  $r = .26$ , and, therefore, must be interpreted with caution. This dependent variable dealt with the probability that the person would be hardworking in the position. Although this dependent variable was found to have questionable statistical reliability, it was still included in this study because Thomas and Lee (1990) found it to be a pertinent and important variable.

After the second administration, participants were asked to participate in a focus group and to provide feedback about the scenarios and any measures used in the study. This information was used to make changes to the structure of the questions being asked on the demographics page and questions relating to the dependent variables as well.

### Experimental Design

The research design used was a one-way (level of disability by cost of accommodation combined) between groups design with unequal cell sizes, with each subject receiving one combination of the levels of the disability and accommodation variables, or a no disability condition. Data were analyzed using a MANOVA with a Roy-Bargman Step-Down procedure. The dependent variables for the present study were (1) percent chance of hiring the individual, (2) the percent chance of the individual in the position will be successful, (3) how hardworking the individual in the position will be, (4) how motivated the individual in the position will be, and (5) how disorganized the individual in the position will be.

The sixth and final dependent variable was analyzed with a 2 (cost of accommodation) x 3 (level of disability) ANOVA. The category of no disability was not included in this analysis as it was not logical for them to receive the question, “In your opinion, what is the probability that a typical small company will spend this amount of money for the accommodation?” The alpha level was set at  $p \leq .05$  for each of the hypotheses. The Tukey LSD post-hoc test was used to compare all possible pairs of means, after the rejection of the null hypothesis. In cases where equality of error variance was not equal, Dunnett’s C test was used.

A multiple regression analysis was then conducted to evaluate how well the independent variables (physically disabled and \$1,000 accommodation, physically disabled and \$6,000, blind and \$1,000 accommodation, blind and \$6,000 accommodation, obese and \$1,000 accommodation, obese and \$6,000 accommodation, and no disability) and the following demographic variables (age, years able to hire, how many employees have you hired, how many had a disability, how many were blind, how many were physically disabled, how many were obese, number of years employed, size of company, and how many friends or relatives have a disability) predicted each of the dependent variables (how likely you would hire the individual, how likely they would be successful, how likely they would be hardworking, how likely they would be motivated, and how organized they would be in the position).

## CHAPTER 3

### RESULTS

#### Hypothesis 1

A one-factor (combination of levels of disabilities and amounts of accommodations) between subjects MANOVA with a Roy-Bargman step-down procedure was conducted to examine participant's ratings on five dependent variables. The independent variable included 7 combinations: physical disability and \$1,000 accommodation; physical disability and \$6,000 accommodation; blind and \$1,000 accommodation; blind and \$6,000 accommodation; obese and \$1,000 accommodation; obese and \$6,000 accommodation; and finally a no disability group. The five dependent variables for this analysis were: probability of hiring, success in position, hardworking in position, motivated in position, and disorganized in position. The dependent variables were measured on a 0% to 100% ratings scale. The overall MANOVA was found to be significant,  $F(30, 410) = 2.04, p = .001$ . Significant differences were found on three of the five dependent variables (See Table 1) and they are as follows: probability of hiring,  $F(6, 106) = 2.22, p = .046$ , how successful the person would be,  $F(6, 105) = 2.49, p = .027$ , and how hardworking the person would be,  $F(6, 104) = 3.91, p = .001$ .

Post hoc tests using Tukey LSD multiple comparison procedures for the dependent variable of probability of hiring revealed that someone with no disability ( $M = 75.9, SE = 4.8$ ) or a physical disability with a \$1,000 accommodation ( $M = 77.1, SE = 5.5$ ) are much more likely to be hired than anyone requiring a \$6,000 accommodation: Physical \$6,000 ( $M = 58.2, SE = 6.2$ ), Blind \$6,000 ( $M = 60.1, SE = 5.5$ ), Obese \$6,000 ( $M = 59.5, SE = 6.0$ ) (Table 2). The group of

blind \$1,000 and obese \$1,000 were not found to be significantly different from any of the other groups.

Variable		SS	DF	MS	F	p
<u>Hire</u>						
	Between	7,149	6	1192	2.22	.046*
	Within	56,796	106	536		
<u>Successful</u>						
	Between	3684	6	614	2.48	.027*
	Within	25,935	105	247		
<u>Hardworking</u>						
	Between	4,650	6	775	3.90	.001**
	Within	20,592	104	198		
<u>Motivated</u>						
	Between	264	6	44	.49	.812
	Within	9,270	103	90		
<u>Organized</u>						
	Between	4,512	6	752	1.31	.262
	Within	58,752	102	576		
* Significant when tested at $p < .05$						
** Significant when tested at $p < .01$						

For the dependent variable of probability of success in the position, the post hoc test that was chosen was Dunnett's C due to Levene's Test of Equality of Error Variance being

Table 2								
<i>Tukey LSD Method for Dependent Variable of Hire</i>								
Variable	Means	Difference Between Means (Xj - Xk)						
1 Physical \$1000	77.11							
2 Physical \$6000	58.21	18.90*						
3 Blind \$1000	62.15	14.96	-3.94					
4 Blind \$6000	60.11	17.00*	-1.90	2.04				
5 Obese \$1000	60.42	16.69	-2.21	1.73	-0.31			
6 Obese \$6000	59.53	17.58*	-1.32	2.62	0.58	0.89		
7 No Disability	75.91	1.20	-17.70*	-13.76	-15.80*	-15.49	-16.38*	
* p < .05								
** p < .01								

Table 3								
<i>Dunnett's C Method for Dependent Variable of Being Successful</i>								
Variable	Means	Difference Between Means (Xj - Xk)						
1 Physical \$1000	87.67							
2 Physical \$6000	84.86	2.81						
3 Blind \$1000	78.92	8.74	5.93					
4 Blind \$6000	75.89	11.78	8.96	3.03				
5 Obese \$1000	72.91	14.75	11.94	6.01	2.97			
6 Obese \$6000	66.87	20.80	17.99	12.06	9.02	6.05		
7 No Disability	77.13	10.54	7.72	1.79	-1.24	-4.21	-10.26	
* p < .05								
** p < .01								

significant ( $F(6, 106) = 2.35, p = .036$ ). Dunnett's C revealed no significant differences between the groups (See Table 3).

For the final significant dependent variable of probability of being hardworking, Dunnett's C was also used due to the significance of Levene's Test ( $F(6, 106) = 2.52, p = .026$ ). Someone who is obese and requiring \$1,000 accommodation ( $M = 64.67, SE 5.0$ ) is less likely to be hardworking than someone who is physically disabled and requiring a \$1,000 accommodation ( $M = 85.94, SE = 4.05$ ), physical disabled and requiring a \$6,000 accommodation ( $M = 85.64, SE = 4.69$ ), and blind and requiring a \$1,000 accommodation ( $M = 91.39, SE = 4.76$ ) (Table 4). No significant differences were found between the obese \$6,000 group and the blind \$6,000 group.

Variable	Means	Difference Between Means ( $X_j - X_k$ )					
1 Physical \$1000	85.94						
2 Physical \$6000	85.64	0.30					
3 Blind \$1000	91.38	-5.44	-5.74				
4 Blind \$6000	83.5	2.44	2.14	7.88			
5 Obese \$1000	64.67	21.28*	20.98*	26.72*	18.83		
6 Obese \$6000	73.93	12.01	11.70	17.45	9.57	-9.27	
7 No Disability	74.61	11.34	11.03	16.78*	8.89	-9.94	-0.68
* $p < .05$							
** $p < .01$							

The final analysis involved the calculation of Omega Squared, which enables researchers to assess how much the variance in the dependent variable is accounted for by the independent variable(s). For the significant dependent variable of hiring, the omega squared value was found to be .10, which means that 10% of the variance in hiring is being explained by the disability and accommodation variable. For the significant variable of being successful, the omega-squared value was found to be .10 (10%). For the dependent variable of hardworking, omega squared was found to be .17 (17%). For the final significant dependent variable, percent chance of a company making this amount of accommodation, the main effect of disabled had an omega-squared value of .090 (9%). Along with Omega squared, the effect size for the present study was also computed and found to be .397.

### Hypothesis 2

A 2 (cost of accommodation) x 3 (level of disability) between subjects ANOVA with unequal cell size was conducted to evaluate the relationship between an individual's disability (leg amputee, blind, or obese) and the percent chance that a company would spend varying amounts of money on accommodations (\$1,000 or \$6,000) for the individual. The dependent variable was once again measured on a 0% to a 100% ratings scale. The main effect of disability was found to be significant ( $F(2, 83) = 4.68, p = .012$ ). Tukey LSD revealed that someone who is obese ( $M = 29.33, SE = 4.82$ ) (table 5) has a significantly lower probability of having a typical small company spend this amount of money on his/her accommodations than does a person with a physical disability ( $M = 49.31, SE = 4.53$ ) or a blind person ( $M = 42.67, SE = 4.53$ ). No main effect on cost of accommodation was found. Also, no significant interactions were found. The effect size for disability was found to be .353, which can be considered a moderate effect size.

The omega squared for this analysis was found to be .18, which means that 18% of the variance is accounted for by the independent variable.

Table 5						
<i>Tukey LSD Method for Dependent Variable of Accommodation</i>						
Variable	Means	Difference Between Means (X <sub>j</sub> - X <sub>k</sub> )				
1 Physical \$1000	51.17					
2 Physical \$6000	47.46	3.71				
3 Blind \$1000	44.35	6.63	2.92			
4 Blind \$6000	40.83	10.33	6.62	3.71		
5 Obese \$1000	36.34	14.83	11.12	8.21	4.50	
6 Obese \$6000	22.34	28.83*	25.12*	22.21*	18.50*	14.00
* p < .05						
** p < .01						

### Hypothesis 3

A correlation matrix was performed using Pearson's r to assess relationships between each of the variables (See appendix J). The following dependent variables were analyzed: (1) percent chance your company would hire the individual, (2) percent chance the individual would be successful, (3) percent chance the individual would be hardworking, (4) percent chance the individual would be motivated in the position, (5) percent chance the individual would be organized, and (6) percent chance that a typical company would spend \$1,000 or \$6,000 for an accommodation as well as the following demographics variables: (7) age, (8) number of years in position to hire, (9) number of employees hired, (10) number of disabled employees hired, (11) number of blind employees hired, (12) number of physically disabled hired, (13) number of

obese employees hired, (14) number of years employed, (15) number of employees in company, (16) number of relatives and friends with disabilities. The following pairs of variables are correlated at  $p < .01$  and have a  $r$  value of greater than .50: (1) chance of being hardworking and chance of being successful, (2) chance of being successful and chance of being motivated, (3) chance of being hardworking and chance of being motivated, (4) age and number of years in position to hire, (5) age and numbers of years employed, (6) number of years in position to hire and number of years employed, (7) number of employees hired and number of physically disabled hired, (8) number of employees hired and number of obese employees hired, (9) number of physically disabled employees hired and number of obese employees hired, (10) physically disabled hired and number of employees in company, (11) number of obese employees hired and number of disabled employees hired, and (12) number of employees in company and number of employees hired.

Following the correlation matrix analysis, a multiple regression was performed. The multiple regression analysis revealed the following results. For the first criterion variable of “how likely you would hire the individual,” the linear combination of the predictors was not significantly related to this criterion variable,  $F(10, 100) = 1.21, p = .30$ . For the dependent variable of “how likely the individual would be successful”, the linear combination of the predictors was not significantly related,  $F(10, 100) = .68, p = .74$ . For the dependent variable of “how hardworking the individual would be in the position”, the linear combination of the predictors was not significantly related,  $F(10, 100) = 1.12, p = .36$ . For the dependent variable of “how likely the individual would be motivated in the position”, the linear predictors of the demographics was not significantly related,  $F(10, 100) = 1.07, p = .393$ . Finally, the last dependent variable of “how likely the individual would be disorganized in the position” was

found to be significant,  $F(10, 100) = 1.96, p = .04$ . The sample multiple correlation coefficient was .42, indicating that approximately 18% of the variance of the dependent variable (disorganized) of the sample can be accounted for by the linear combination of the demographics.

Various indices are presented to indicate the relative strength of the individual predictors (Table 6). Seven of the ten bivariate correlations between the predictors and the dependent variable were negative, and three of the ten indices were statistically significant ( $p < .05$ ). The four partial correlations that were significant were (1) how many employees have you hired (2) how many employees you hired have a disability, (3) how many were physically disabled, and (4) how many obese individuals you have hired. On the basis of these correlational analyses, it is tempting to conclude that the only useful predictors are these four demographics. They accounted for 27% of the variance ( $6\% + 6\% + 9\% + 6\%$ ). However, judgments about the relative importance of these predictors are difficult because they are correlated with each other.

#### Marlowe-Crowne

Realizing that this survey tapped into personal issues, the Marlowe-Crowne Social Disability Scale was included as part of the survey packet. Means for men ( $M = 18.76, SE = .87$ ) and women ( $M = 19.85, SE = .94$ ) were much higher than reported in previous literature (Paulhus, 1984). Because of the higher than normal scores on the Marlowe-Crowne Scale, an independent variable, total score of the Marlowe-Crowne, was computed for use as a covariate.

Table 6		
Bivariate and Partial Correlation of the Predictors with Variable Disorganized		
Predictors	Correlation between each predictor and disorganized	Correlation between each predictor and disorganized controlling for all other predictors
Number employees hired	-.13*	.25
Number with a disability	-.12*	-.25
Number physically disabled	-.14**	-.28
Number that were obese	-.10*	-.24
*p ≤ .05, **p ≤ .01		

Using this covariate and the six dependent variables for the study, a MANCOVA was performed. The following three dependent variables were found significant in the MANCOVA: (1) how likely would you be to hire this applicant ( $F(6, 70) = 2.17, p = .05$ ), (2) how successful would the applicant be in the position ( $F(6, 70) = 2.35, p = .04$ ), and (3) how hardworking would the applicant be in the position ( $F(6, 70) = 3.16, p = .01$ ). The dependent variables of how motivated the applicant would be in the position ( $F(6, 70) = 1.70, p = .14$ ) and how disorganized the applicant would be in the position ( $F(6, 70) = 1.63, p = .15$ ) were not significant.

## CHAPTER 4

### DISCUSSION

#### Support for Hypotheses

##### Hypothesis 1

The first hypothesis, which concerned the disability and accommodation combination, was not supported. It was hypothesized that someone with no disability would have the highest chance of being hired; however, this hypothesis was not supported. The physical disability and \$1,000 accommodation combination was actually found to be higher than the no disability group. Although this finding was not expected, it agrees with many of the past research findings on attitudinal changes toward the disabled (Alessi & Anthony, 1969; Mitchel et al., 1981; Richardson, 1971; Thomas & Lee, 1990). Changes have occurred over the years and this finding, while not hypothesized, adds support to earlier studies purporting more positive attitudes toward the disabled.

Another possible explanation for this finding could partly be due to social influences that make it desirable to employ persons with a visible disability that is not a financial burden to the company (Roessler & Sumner, 1997). By hiring someone with a disability, who will not cause substantial financial hardship, the business will be able to reach a wider range of clientele presenting a diversified appearance to consumers. This will not only be a positive effect for potential consumers who are disabled, but for other diversified groups as well. Groups that are now socially unaccepted, such as homosexuals, will be more likely to frequent a business that accepts people who are different from the norm.

Relating the findings of the first hypothesis to the theories talked about earlier in this report may also help to explain why differences were found. The mere exposure effect (Zajonc, 1968) which purports that stimuli that are most familiar will usually be preferred over novel stimuli, could possibly explain why the physically disabled group was more likely to be hired than any other group. People with disabilities are out in the public more now than in the past and the physically disabled is the group most likely to be noticed. If individuals have frequent contact with individuals who have a physical disability, or any disability, their exposure may foster positive feelings toward the disabled.

Another theory that may provide insight into the findings contained in the first hypothesis is the halo effect (Thorndike, 1920). People who are physically disabled are seen in a better light than those individuals who are disabled due to obesity. This may be due to the way in which people become disabled. If a person is physically disabled, it is rare that this is a self-inflicted disability; therefore, these people have had to deal with and overcome many personal struggles in order to be a competitive candidate for a job. This might prompt the halo effect in that, if a person who is physically disabled is qualified for and applies for a job, we might attribute many good qualities to the person in light of their victories over their many hardships. However, a person who is obese, may be seen as self-inflicting their disability and most likely will not be looked on favorably. They may be seen as not able to handle personal health and therefore not able to handle other details of life. These obese individuals are on the flip side of the halo effect in that they are attributed as having one bad characteristic due to their obesity, and following with this theory they are also attributed as having other bad characteristics.

Although these findings are significant, it is important to consider lingering sympathy effects toward the disabled. It may be completely true that attitudes are actually changing;

however, participants may have responded in a socially desirable manner, rather than expressing their true beliefs. The means for the current study were higher than normally reported for the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960); however, the means were not found to be significant. Thus, it would be appropriate to say that, social desirability had some effect, but it was small.

What impact do the findings of the first hypothesis have on the general public? The findings could be used to stress that attitudes toward the disabled are changing in the business world, and that the number of disabled applicants applying for jobs will increase. As more disabled individuals begin to enter the work force, the amount of financial assistance they require from state and Government agencies should decrease.

## Hypothesis 2

The second hypothesis dealt with the 2 levels of accommodation and 3 levels of disability) analysis. It was hypothesized that a typical company would be more likely to spend \$1,000 for accommodations than \$6,000 and they would be more likely to spend it for a physically disabled person, followed by a blind person, then for an obese person. The two different dollar amounts of accommodations were not significantly different from each other. This finding is congruent with the research by Roessler and Sumner (1997) in which they found that most companies would not pay for any accommodation above \$500, even if the company felt it was the proper action.

This could also be due in part to the geographical area studied. The present study was conducted in small towns located in Southwestern Virginia, where the economy is not great and where the businesses and agencies are small to medium in size. Thus, either amount of

accommodation would be a hardship on most businesses in this area, and no differences between the amounts were found because of this effect.

The second part of the hypothesis, which dealt with the level of disability, was supported. Participants indicated that a typical company would hire someone with a physical disability who required an accommodation first, followed by someone who is blind requiring an accommodation, and then an obese person requiring an accommodation. Once again, this effect might possibly be due to the mere exposure or the halo effect. Physically disabled individuals are more visible in public than a blind person, and they are also seen as being disabled more than an obese individual. This more frequent exposure might possibly lead to the physically disabled individuals' being preferred over the blind or the obese. Accommodations, such as a ramp or an elevator, for the physically disabled might also benefit other employees or customers of the business well. The physically disabled are also often seen as overcoming obstacles because of their disability, whereas the obese are not. This could lead to people rationalizing that because the physically disabled person, who has one good trait, is more likely to be good in all aspects because of this positive trait. This might lead a business to make an accommodation for someone who is physically disabled.

### Hypothesis 3

Hypothesis 3 dealt with the multiple regression analysis and was conducted to assess if there were any demographics that were significant predictors of the dependent variables. While 4 demographics proved significant, they were inter-correlated so interpretation is difficult. An unusual finding of the multiple regression analysis was that the independent variable of scenario did not prove significant. This means that although there were significant differences between the scenarios, they were not significant predictors of any of the dependent variables.

### Additional Findings

Other interesting findings of the study dealt with the variables of how likely that the individual would be successful and hardworking. Obese individuals were considered to be significantly less hardworking and less successful than any other group in the analysis. There seems to be a negative stereotype associated with being overweight, where one is thought to be lazy and unmotivated (Jasper & Klassen, 1990). This could perpetuate the notion that obese individuals would be less successful and hardworking.

This effect could also be explained by Attribution Theory (Ross, 1977), which holds that we tend to overemphasize personal causes for other people's behavior and to underemphasize personal causes for our own behavior. According to this theory, individuals with a disability such as obesity are seen as having a disability that is within their control and they should exert more willpower to be thinner. Those with a physical disability such as having a limb amputated or being blind are seen as having a disability that is not chosen and is out of the person's control. For those individuals who were dealt the disability card (physical disability and blindness), they are perceived as hardworking because they are attempting to overcome their disability. However, individuals who are overweight, are perceived as choosing this state, are seen as impeding the progress of other individuals who also have to make a living and can control their eating habits (Koop, 2002).

Many of the findings in this study could also be because obesity, although defined as a disability by the ADA, the Food and Drug Administration, and the National Institutes of Health, is not seen as a disability by members of the general public (Dausch, 2001). Until obesity is defined as being a biological or physiological disability, many in the general public will not view someone who is overweight in a positive manner.

## Conclusion

In summary, it was expected that the nondisabled applicant would be ranked higher than the other groups; however, it was not expected that the physically disabled would be viewed as more hireable (See Table 1). The findings concerning the obese were also unexpected. Research on the perceptions of obesity indicated obese people would not be ranked as highly as the nondisabled. However, they were viewed more negatively than any of the other groups in this study. No differences were found between the \$1,000 and \$6,000 amounts of accommodations required. This is somewhat surprising, but not unexpected due to the area studied. The type of disability did have an effect on businesses and accommodations. It was found that businesses would be more willing to make an accommodation for someone who has a physical disability, than someone who is blind or obese.

## Limitations

One of the limitations for the present study is the number of participants. To more accurately assess differences between the groups, a larger N (500 or more) would be most desirable. Although the number of participants was small, this was not done without reason. The number of participants needed for this study was somewhat reduced because actual business personnel were surveyed. Since the present study used actual business owners, the results may be more generalizable to the actual target group of business owners and businesses.

The types of businesses surveyed could also be viewed as a limitation of the study. Many of the participants' companies were small in size and some organizations were federally or state funded. It may prove beneficial to study a broader range of businesses, from retail stores to Fortune 500 companies in future experiments.

Another limitation was the geographical area chosen for the study. By recruiting all of the participants from small, Southwestern Virginia towns, the results cannot be generalized to larger business in larger cities and towns. While the results may not be generalized to larger businesses or national businesses, the results do indicate that businesses in Southwest Virginia have employment preferences when considering individuals with disabilities.

### Practical Implications

One implication provided by the current study is that employers still discriminate against disabled individuals when hiring employees. Because the results indicate that overweight people are viewed as the most negative group, and not even disabled, a change in the language of the ADA would be most appropriate. Sensitivity training would also be helpful regarding the stereotyping of disabled groups, especially the obese groups. Instead of assuming someone is lazy and unmotivated because he or she is obese, businesses could educate employees to consider other explanations like medical and genetic causes for obesity.

It would also be most beneficial to businesses to understand that hiring someone with a disability, whether physically disabled, blind, or obese, is not necessarily cost prohibitive. Spending \$1,000 or even \$6,000 to procure someone for a position for which he or she is qualified may be in the best interest of the business. This is particularly true, if the individual has gone through the tedious and demanding process of obtaining a college degree, he or she will, more likely than not be productive employees.

### Future Research

Additional research should be done to compare small businesses and large businesses on hiring practices relating to the disabled. It would be interesting to explore this avenue of research and whether or not there are differences in the way big businesses as opposed to small businesses

would respond to hiring someone with a disability. Furthermore, it would be interesting to learn more about how larger businesses would react to potential employees who are obese.

Considering that more than 60% of the United States population is overweight, larger businesses have more contact with obese people and disabled people in general. Additional questions for further research include: (1) are there differences between how men and women perceive a potential employee who is disabled; (2) does the amount of previous contact with disabled individuals have a mediating effect on people's perceptions; (3) are there differences in hiring practices between public and private companies; (4) does the educational level of the person doing the hiring have any effect on his or her willingness to hire a disabled person.

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## APPENDICES

### APPENDIX A

#### Definitions for Non-severely Disabled and Severely Disabled

**Severe Disability:** Severe disability is defined by the Survey of Income and Program Participation (SIPP) as follows: People 15 and over were identified as having a severe disability if they were unable to perform one or more functional activities; needed personal assistance with an ADL or IADL; used a wheelchair; were a long-term user of a cane, crutches, or a walker; had a developmental disability or Alzheimer's disease; were unable to do housework; were receiving federal disability benefits; or were 16 to 67 years old and unable to work at a job or business.

**Non-severe Disability:** In the SIPP, people are classified as having a non-severe disability if they meet the criteria for disability, but do not meet the criteria for severe disability. For example, a person who has difficulties with activities of daily living (one of the criteria for disability) but who does not need personal assistance with activities of daily living, would be classified as having a non-severe disability (unless that person met other criteria for severe disability).

## APPENDIX B

### Cover Letter

Bram C. Bevins  
Department of Psychology, ETSU  
PO Box 70649  
Johnson City, TN 37604

Dear Manager or other hiring personnel:

My name is Bram Bevins and I am currently a graduate student in the General Psychology Program at ETSU. The topic for my thesis involves employability of various types of persons in the workforce. The best data for my thesis can only be obtained from individuals such as yourself, who have the power to hire employees for your company.

The attached survey will only take approximately 15 minutes of your time. The very first page of the survey packet is an Informed Consent Form, required by the ETSU Institutional Review Board. After reading that page, if you choose to be a participant, proceed to page 2, which will give you instructions on how to fill out the survey questions.

Since many businesses are dedicated to assisting students in their pursuit of education, it is my hope that I will get a good representation of the businesses in this area. If you would like to have a copy of the findings of this study, please send your request to the above address. Thank you very much for being a participant.

Sincerely,

Bram C. Bevins

## APPENDIX C

### Informed Consent

The purpose of this research study is to investigate the employability of various types of people in the workforce. The survey booklet you have received will take approximately 15 minutes to complete. There are no known risks or discomforts that are associated with participation in this research study. Participation in this study will give you a better understanding of psychological research and how it is conducted. If you are 18 years or older you are invited to participate. If you are under 18 years old you may not participate.

If you have any questions or problems you may contact myself at 439-4424 or Dr. Marx, Chair of the Psychology Department, at 439-4424. You may call the Chairman of the Institutional Review Board at 423-439-6134 for any questions you may have about your rights as a research participant.

Every attempt will be made to see that the study results are kept confidential. Your participation will be kept anonymous due to the fact that the survey does not ask for any identifying information about you or your company. The results of this study may be published and/or presented at meetings without naming you or your company as a participant. Although your rights and privacy will be maintained, the Secretary of the Department of Health and Human Services, the East Tennessee State University Institutional Review Board, and the ETSU Department of Psychology have access to the study records. These records will be kept completely confidential according to current legal requirements. They will not be revealed unless required by law or as noted above. The benefits and risks of this research project have been explained to you to the best of my abilities. You are free to ask questions and withdraw from the project at any time.

APPENDIX D

Instruction Sheet

The booklet you've received contains questionnaires that will ask you about hiring practices. Please make sure that you DO NOT place your name, social security number, or any other identifying information anywhere on this survey booklet. Please take your time and answer all questions to the best of your ability, making sure to complete the entire booklet. Remember, your answers will be completely anonymous.

**Instructions:**

This survey mostly contains one type of questions. Below is an example.

- 1.** You will be presented with a scenario on the very next page. Then you will be asked for your opinion about the person described in the scenario. Some of the questions will ask for you to put a mark on the line indicating your thoughts.

For example, what is the chance that profits this month will exceed last December's profits?

0%-----/-----50%-----100%

## APPENDIX E

### Scenarios

#### Scenario 2

Assume your company has a job opening for an Assistant Personnel Manager. Approximately 100 people applied for the position. Chris is one of the finalists. Chris received a BA in Business from the University of Virginia. During the interview, Chris was well dressed, spoke clearly and distinctly, and overall gave an excellent impression. Chris has all the necessary skills for the position. Chris is also blind. Chris will need a special computer program that will verbally read aloud company documents. This accommodation will cost your company approximately \$1,000.00.

Note: this is a sample of seven different scenarios. The only information that changed between six of the scenarios is the type of disability (physically disabled, blind, or obese) and amount of accommodation needed (\$1,000 or \$6,000). The seventh scenario was regarding someone with no disability and therefore required no accommodations.

APPENDIX F

Understanding Questions

1. Where did Chris graduate?
  - A. University of Wisconsin
  - B. University of Virginia
  - C. University of Kentucky
  
2. Chris's BA was in??
  - A. Biology
  - B. Business
  - C. Education
  
3. Chris is:
  - A. Blind
  - B. A Leg amputee
  - C. Obese
  - D. No disability
  
4. Did Chris have all the necessary skills for the position?
  - A. Yes
  - B. No
  
5. What type of accommodation did Chris require?
  - A. None
  - B. Special software
  - C. A brailer

APPENDIX G

Dependent Variables

1. What is the probability that you would hire this individual for this open position?

0%-----50%-----100%

2. In your opinion, what is the probability that Chris will be successful in this position?

0%-----50%-----100%

3. In your opinion, what is the probability that Chris will be hardworking in this position?

0%-----50%-----100%

4. In your opinion, what is the probability that Chris will be motivated in this position?

0%-----50%-----100%

5. In your opinion, what is the probability that Chris will be disorganized in this position?

0%-----50%-----100%

6. In your opinion, what is the probability that a typical small company will spend this amount of money for the accommodation?

0%-----50%-----100%

APPENDIX H

Demographic Questions

1. Age \_\_\_\_\_
2. Gender:        Male \_\_\_\_\_                      Female \_\_\_\_\_
3. Educational Level:  
      \_\_\_\_\_ Less than High School Diploma  
      \_\_\_\_\_ High School Diploma  
      \_\_\_\_\_ Some College  
      \_\_\_\_\_ Associates Degree  
      \_\_\_\_\_ Bachelors Degree  
      \_\_\_\_\_ Graduate Degree  
      \_\_\_\_\_ Other \_\_\_\_\_
4. Are you in a position to hire employees?    Yes \_\_\_\_\_                      No \_\_\_\_\_
5. How many years have you been in a position to hire employees? \_\_\_\_\_ Yrs.
6. Approximately, how many people have you hired? \_\_\_\_\_
7. How many of the people in the question above, to your knowledge, had the following conditions on the day that you hired them? (Note: The total of the following should equal the number of people that you have hired.)  
  
      Nondisabled \_\_\_\_\_  
      Blind \_\_\_\_\_  
      Physically disabled \_\_\_\_\_  
      obese \_\_\_\_\_
8. Number of years employed at current company: \_\_\_\_\_ Yrs.
9. How many employees does the company that you work for employ? \_\_\_\_\_
10. How many of your relatives or friends have a disability? \_\_\_\_\_
11. What best describes your type of company/agency?  
      \_\_\_\_\_ Retail/Sales                      \_\_\_\_\_ Government/State Agencies  
      \_\_\_\_\_ Services                              \_\_\_\_\_ Other \_\_\_\_\_

**Thank you for your participation in this survey.**

APPENDIX I

Marlowe-Crowne Social Desirability Scale

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you. Check the appropriate box.

		True	False
1	Before voting, I thoroughly investigate the qualifications of all the candidates		
2	I never hesitate to go out of my way to help someone in trouble		
3	It is sometimes hard for me to go on with my work if I am not encouraged		
4	I have never intensely disliked anyone		
5	On occasion I have doubts about my ability to succeed in life		
6	I sometimes feel resentful when I don't get my way		
7	I am always careful about my manner of dress		
8	My table manners at home are as good as when I eat out in a restaurant		
9	If I could get into a movie without paying and be sure I was not seen, I would probably do so		
10	On a few occasions, I have given up doing something because I thought too little of my ability		
11	I like to gossip at times		
12	There have been times when I felt like rebelling against people in authority even though I knew there were right		
13	No matter who I'm talking to, I'm always a good listener		
14	I can remember "playing sick" to get out of something		
15	There have been occasions when I took advantage of someone		
16	I'm always willing to admit it when I make a mistake		
17	I always try to practice what I preach		
18	I don't find it particularly difficult to get along with loudmouthed, obnoxious people		
19	I sometimes try to get even, rather than forgive and forget		
20	When I don't know something I don't mind at all admitting it		
21	I am always courteous, even to people who are disagreeable		
22	At times, I have really insisted on having things my way		
23	There have been occasions when I felt like smashing things		
24	I would never think of letting someone else be punished for my wrongs		
25	I never resent being asked to return a favor		
26	I have never been irked when people expressed ideas very different from my own		
27	I never make a long trip without checking the safety of my car		
28	There have been times when I was quite jealous of the good fortune of others		
29	I have almost never felt the urge to tell someone off		
30	I am sometime irritated by people who ask favors of me		
31	I have never felt that I was punished without cause		
32	I sometimes think when people have a misfortune they only got what they deserved		
33	I have never deliberately said something that hurt someone's feelings		

APPENDIX J

Correlation Matrix

<b>Appendix J - Correlation Matrix</b>																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 % Chance of Hiring	1	.49**	.31**	.31**	-.09	.46**	-.11	-.15	-.19*	-.17	.15	-.10	-.21*	-.16	-.03	.06
2 % Chance Being Successful		1	.58**	.51**	-.13	.48**	-.17	-.17	-.11	-.13	.04	.01	-.04	-.13	.06	-.02
3 % Chance being Hardworking			1	.85**	-.29**	.26*	.03	-.01	.02	.01	.03	.11	.04	-.08	-.03	.00
4 % Chance being Motivated				1	-.31**	.22*	.02	.02	-.06	.01	.03	-.12	-.14	-.09	-.18	-.06
5 % Chance being Disorganized					1	-.22*	-.28**	-.20*	-.15	-.14	-.04	-.17	-.12	-.13	.00	-.03
6 % Chance of Accommodating						1	.06	.09	.02	.05	.05	-.02	-.05	.17	.03	-.06
7 Age							1	.69**	.19*	.22*	.05	.12	.08	.62**	.04	.03
8 Years able to hire								1	.33**	.34**	.09	.22*	.16	.62**	.04	-.02
9 # Employees Hired									1	.95**	.06	.67**	.85**	.17	.51**	.13
10 # Disabled Hired										1	.02	.47**	.65**	.17	.35**	.07
11 # Blind Hired											1	.32**	-.05	-.01	-.04	.48**
12 # Physical Disabled Hired												1	.75**	.10	.59**	.30**
13 # Obese Hired													1	.12	.12	.10
14 # Years Employed														1	.21*	.13
15 # Employees in Company															1	.20*
16 # Relatives/Friends Disabled																1
* p<.05																
** p<.01																
Note: Horizontal numbers correspond to vertical numbers and labels																

VITA

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